Final Cleanup Action Report

Simplot Grower Solutions
J.R. Simplot Company

Warden, Washington
August 22, 2023

Prepared by:
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Prepared for:
J.R. Simplot Company

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1800 W. 1st Street
Warden, WA 98857

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Acronyms

Acronym	Definition
µg/L	micrograms per liter
µg/Kg	micrograms per kilogram
AO	Agreed Order
bgs	below ground surface
CAICMP	cleanup action implementation compliance monitoring plan
CAP	*Cleanup Action Plan*
CUL	cleanup level
CY	cubic yard
DQO	data quality objectives
Ecology	Washington State Department of Ecology
EDB	ethylene dibromide
GAC	granular activated carbon
GrayMar	GrayMar Environmental
HASP	health and safety plan
HDPE	high-density polyethylene
IDW	investigation derived waste
MCL	maximum contaminant level
MTCA	Model Toxics Control Act
MW	monitoring well
PGG	Pacific Groundwater Group
PID	photoionization meter
PTP	performance test plan
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAPP	quality assurance project plan
RI/FS	remedial investigation/feasibility study
SGS	Simplot Grower Solutions
Simplot	J.R. Simplot Company
SVE	soil vapor extraction
TOC	total organic carbon
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WAC	Washington Administrative Code
WDOH	Washington State Department of Health

1 Introduction

This *Cleanup Action Report* describes the remediation activities that the J.R. Simplot Company (Simplot) has performed to date at the Simplot Grower Solutions (SGS) facility in the City of Warden, Washington (City). Simplot is conducting the cleanup action pursuant to Agreed Order (AO) DE 16890 (AO; Ecology 2020) and the Model Toxics Control Act (MTCA) regulations (Chapter 173-340 Washington Administrative Code [WAC]) to implement the remedies specified in the *Cleanup Action Plan* (CAP; Ecology 2019).

Simplot entered into AO DE 16890 with Washington State Department of Ecology (Ecology) on May 7, 2020, to implement the CAP in accordance with the scope of work and schedule attached to the AO DE 16890.

1.1 Background Information

Simplot currently uses the SGS property for storing agricultural products (e.g., packaged fertilizers) in warehouses. The property consists of two warehouse buildings, an unpaved parking area, and several storage bins. The property also hosts groundwater monitoring wells (MWs).

Figure 1 depicts the location of the SGS facility and **Figure 2** is an aerial photograph of the site and surrounding area. Land use within 1 mile of the property includes commercial and light industry, open space (undeveloped), and agricultural. Simplot anticipates continuing to use the SGS property for storing agricultural products for the near future and has not identified any long-term changes to property use.

Simplot previously used the SGS facility (formerly known as Simplot Soilbuilders), as a retail outlet for agri-chemicals (fertilizers, pesticides, and soil amendments) and offered customized fertilizer blending, application services, and consulting.

Simplot actively operated the Soilbuilders facility from 1971 through 1992, where they stored, blended, and transported agri-chemicals, including ethylene dibromide (EDB), a soil fumigant. During that time, EDB was stored on site until 1984, when EDB was banned from use. Little information is available about the storage and use of EDB and if there were any spills.

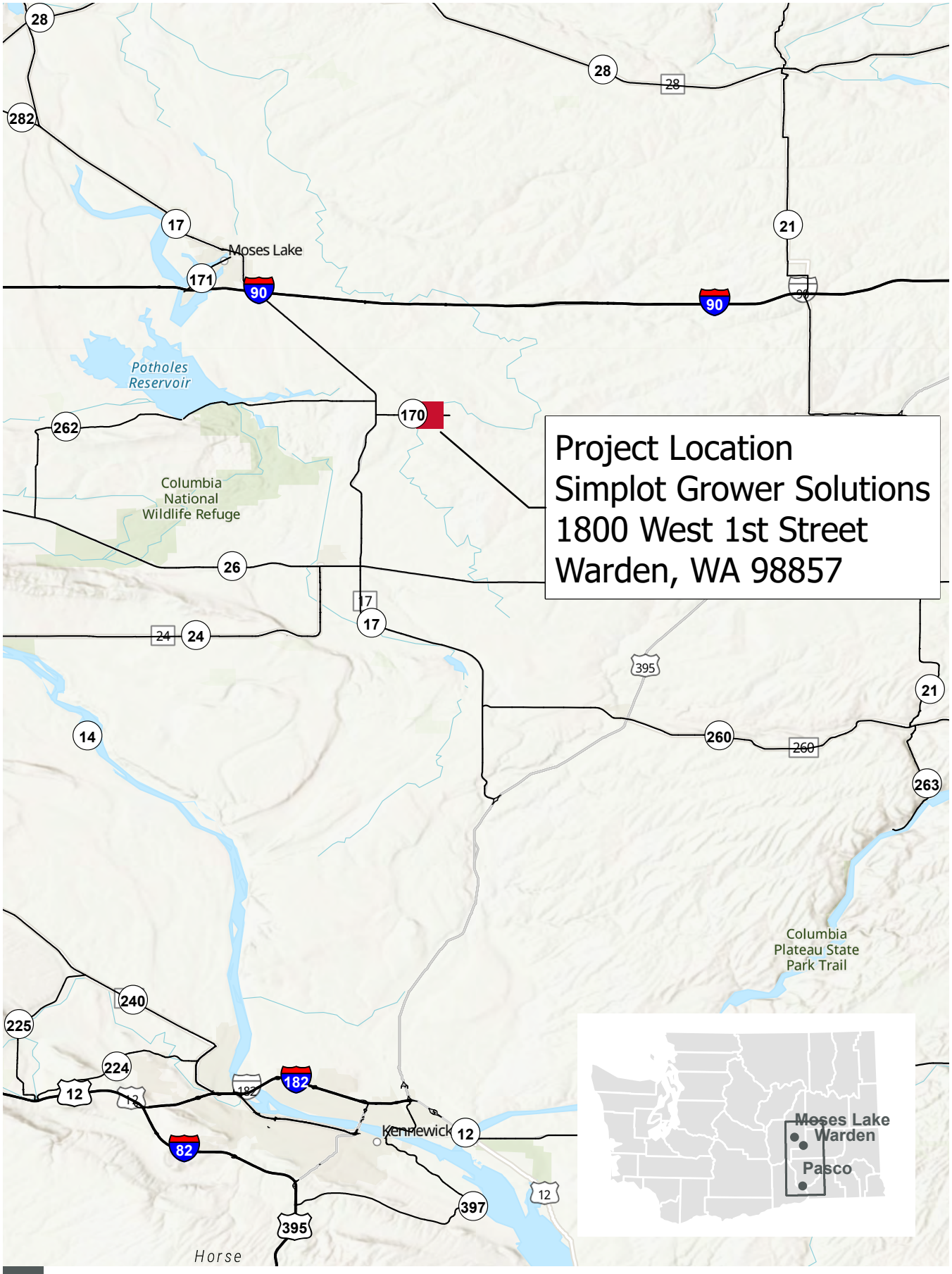
In general, EDB was used in the past as a pesticide for potato crops and as an additive for leaded gasoline fuel. Potato crops are grown in the Warden area, and there are potato processing facilities adjacent to the west end of the SGS facility. The City observed EDB contamination in City-operated Wells No. 4 and 5 starting in 1989. Well No. 4 was located approximately 200 feet northwest of the SGS facility (decommissioned in 2011), while Well No. 5 is located over 800 feet west of the west end of the facility (refer to **Figure 3**). In June 2003, the City reported EDB concentrations exceeding federal and state maximum allowable EDB concentration of 0.05 micrograms per liter (µg/l) in drinking water to Ecology. Ecology conducted two initial investigations—one in 2004 (Gray and Osborne 2004) and one in 2009 (Ecology 2009)—and discovered EDB contamination in soils and shallow water on Simplot's nearby property to the east and southeast of the affected City wells.

In 2011, Ecology and Simplot entered into an AO, under which Simplot/HDR Engineering, Inc. (HDR) conducted a remedial investigation and feasibility study (RI/FS; HDR 2018). The purpose of the RI/FS study, which was finalized in 2018, was to delineate the EDB source in soil and

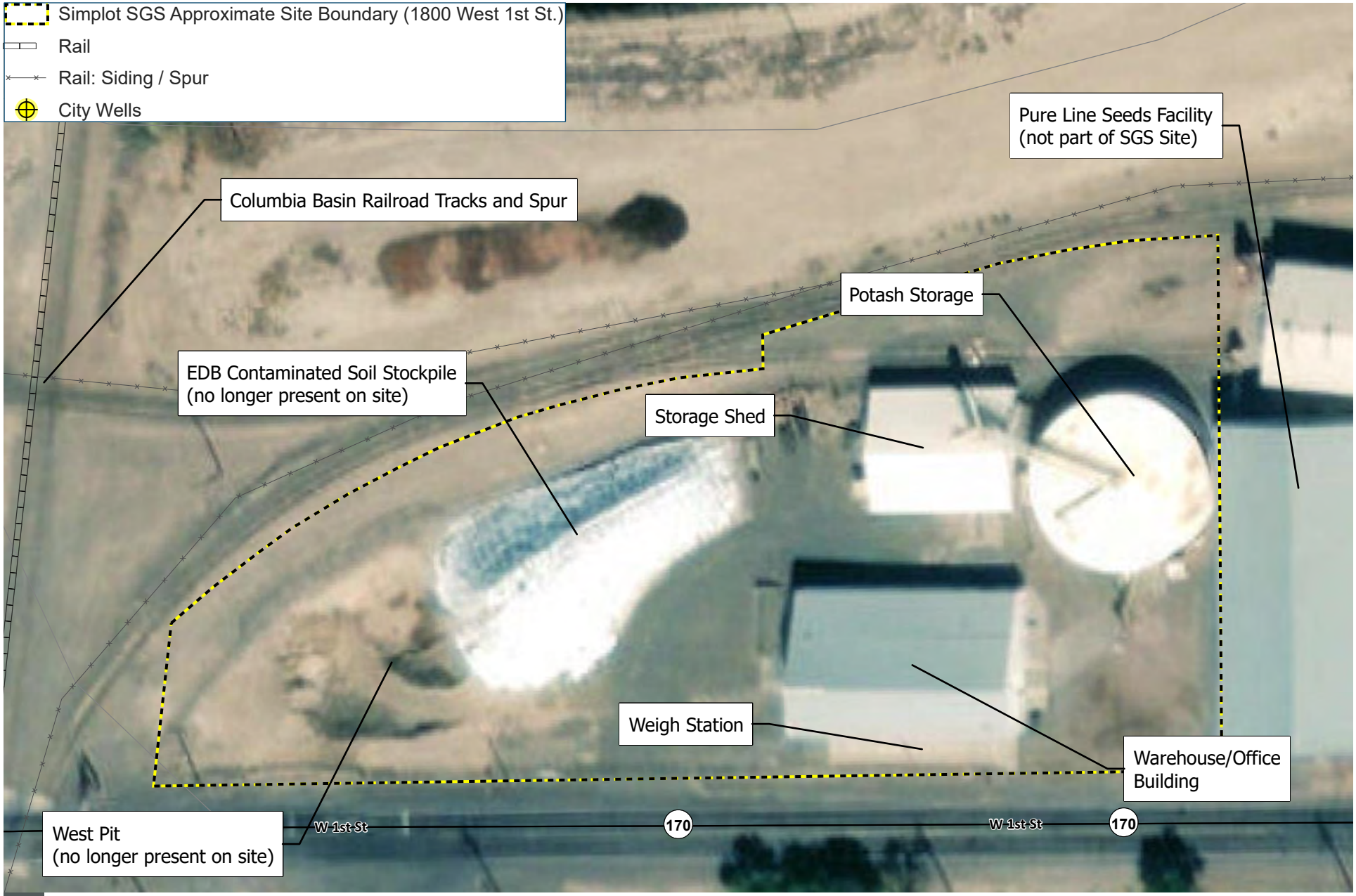
groundwater and to select a remedial action for the site. The results from the RI showed EDB-contaminated soil in the western portion of the site with one detection of EDB in soil at the central portion of the site. Contaminated groundwater was encountered on site in shallow groundwater.

Ecology issued the CAP in May 2019, which presents Ecology's selected cleanup action for the site, based on four alternatives proposed by Simplot/HDR.

Ecology selected proposed Alternative 3: Institutional Controls, Soil Excavation and Treatment, and Monitored Natural Attenuation of Groundwater as the cleanup alternative. Simplot, in partnership with HDR and GrayMar Environmental (GrayMar), excavated contaminated soil and completed the on-site ex-situ soil vapor extraction (SVE) remediation operation. These activities were conducted from spring 2021 to fall 2022 and are discussed in detail in the following sections.



VICINITY MAP
Figure 1



HDR Simplot

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PROJECT SITE MAP

Figure 2

Q:\SIMPLOT\CITYOFWARDEN_ARCGISPRO\7.2_WORKING\MAP_DOCS\WARDEN SVE WORKING MAP.APRX DATE: 5/18/2023

1.2 Site Description

Table 1. Site Description

Site Name	Simplot Growers Solutions Warden, Washington Site (in Agreed Order, Ecology refers to site as "Warden City Water Supply Wells 4 & 5")
Ecology Facility/sites ID	2802409
Agreed Order	No. DE 16890
Cleanup Site ID (CSID)	No. 1618 (Warden City Water Supply Wells 4 & 5)
Address	1800 West 1st Street Warden, WA 98857
Location:	GPS: 46.97025 46° 58' 13" North and -119.060309 -119° 3' 37" West UTM: Zone 11 N; 343279.18, 5203918.33 Legal: SW T17N R30E S9 Parcel: 060697000 County: Grant Washington
Ecology Site Manager	Christer Loftenius, LG, LHG State of Washington Department of Ecology Toxics Cleanup Program, Eastern Region 4601 N Monroe Street Spokane, Washington 99205-1295 clof461@ecy.wa.gov509.329.3400
Potentially Liable Person (PLP)	J.R. Simplot Company P.O. Box 27 Boise, Idaho 83707
PLP Contact	Molly Dimick, MBA Environmental Engineer J.R. Simplot Company PO Box 912 1130 W. Hwy 30 Pocatello, ID 83204 208.235.5682 molly.dimick@simplot.com
Site Owner	Same as PLP
Report Preparer	HDR Engineering Tyler Allen 412 East Park Center Boulevard, Suite 100 Boise, Idaho 83706 Tyler.allen@hdrinc.com 208.387.7018

2 Remediation Activities

This section describes the remedial activities that Simplot has conducted at the SGS site through May 2023. Under contract with Simplot, HDR is responsible for monitoring, sampling, and reporting to support remedial actions at the SGS site. Simplot hired GrayMar, a remedial contractor, to implement the CAP, which included soil excavation, soil stockpiling, and construction and operation of an SVE system.

2.1 Historical Studies and Investigations

Table 2 lists the EDB investigation and remediation history at the SGS site, starting in 2004 with an Ecology early notice letter to the City. This list represents the actions and studies that helped guide or inform the remedial activities undertaken at the facility.

Table 2. EDB Investigation History

Date	Type	Description/Trigger
March 1989	Water Quality Report.	EDB detected in City Wells #4 and #5.
May 18, 2004	Ecology Early Notice Letter to City of Warden	Informing city of EDB contamination in City Wells #4 and #5 and City of Warden's obligation to investigate.
August 2004	EDB Mitigation Project Report, Gray and Osborne, Inc. for City of Warden	Options for addressing EDB in City of Warden water supply. Project funding needed: $2.3M.
September 2005	Site Hazard Assessment, Washington State (WA) Department of Health	Ranking of 3 for groundwater/human health, indicating presence of contaminated subsurface soil/groundwater.
July 1, 2005	Remedial Action Grant Agreement, Ecology and City of Warden	Drill City Well #7 and reconstruct Wells #5 and #6: $2M grant.
September 19, 2005	Public Health Evaluation, WA Dept of Health	
January 24, 2006	Dave George to John Roland, Ethylene Dibromide Groundwater Contamination, Site Investigation and Data Collection Summary	Ecology memo summarizing groundwater conditions.
April 20, 2007	Preliminary Investigation of Ethylene Dibromide Contamination, Pacific Groundwater Group (PGG) for Ecology	PGG, prepared for Ecology. Installed Monitoring Wells #1 through #5, and numerous soil borings. Four of these five wells were installed offsite (north and west of the SGS site), and one well, MW-5, was installed within the Simplot SGS property.
April 2009	Phase II Preliminary Investigation, Ecology	Additional groundwater sampling and soil borings were drilled on Simplot property.
April 6, 2010	Notice of Potential Liability under MTCA for Release of Hazardous Substances, Ecology to Simplot	Letter of finding of liability. Request Simplot enter into an Agreed Order.

Table 2. EDB Investigation History

Date	Type	Description/Trigger
May 27, 2011	Final Agreed Order 8421	Between Ecology and Simplot; required completion of RI/FS.
October 2011	Final RI/FS Project Plan submitted to Ecology	HDR prepared for Simplot.
2011, 2012, and 2013	RI/FS activities - additional monitoring well installation on site, geophysical survey, soil sampling, City Well #5 pump test, and site investigation reports and groundwater sampling results	As part of the R/IFS Work Plan.
June 2014	Revised draft RI/FS submitted to Ecology	HDR prepared for Simplot.
May 2015	Well MW-4 decommissioned at request of site owner (off-site well)	HDR prepared well closure memo and submitted to Ecology May 27, 2015.
September 2017	Ecology response letter to 2014 draft RI/FS	
December 2017	Groundwater Sampling	Update to groundwater quality to support RI/FS.
March 2018	Updated RI/FS	Updated to include December 2017 groundwater monitoring.
May 2019	Final Cleanup Action Plan, Ecology	Selected cleanup alternative.
May 7, 2020	Final Agreed Order 16890, Simplot & Ecology	Between Ecology and Simplot.
Spring 2021	Excavation of EDB-contaminated soil	Excavated by GrayMar with HDR sampling, oversight, and reporting.
Summer – Fall 2022	Ex-situ soil vapor extraction treatment of excavated contaminated soil	Treated by GrayMar with HDR sampling, oversight, and reporting.

EDB = ethylene dibromide; MTCA = Model Toxics Control Act; RI/FS = remedial investigation/feasibility study

2.1.1 City of Warden Wells

The City's drinking water system is comprised of a series of wells that are located throughout the city. The system serves approximately 4,700 customers. **Table 3** shows the status of each city well.

Table 3. City of Warden Wells

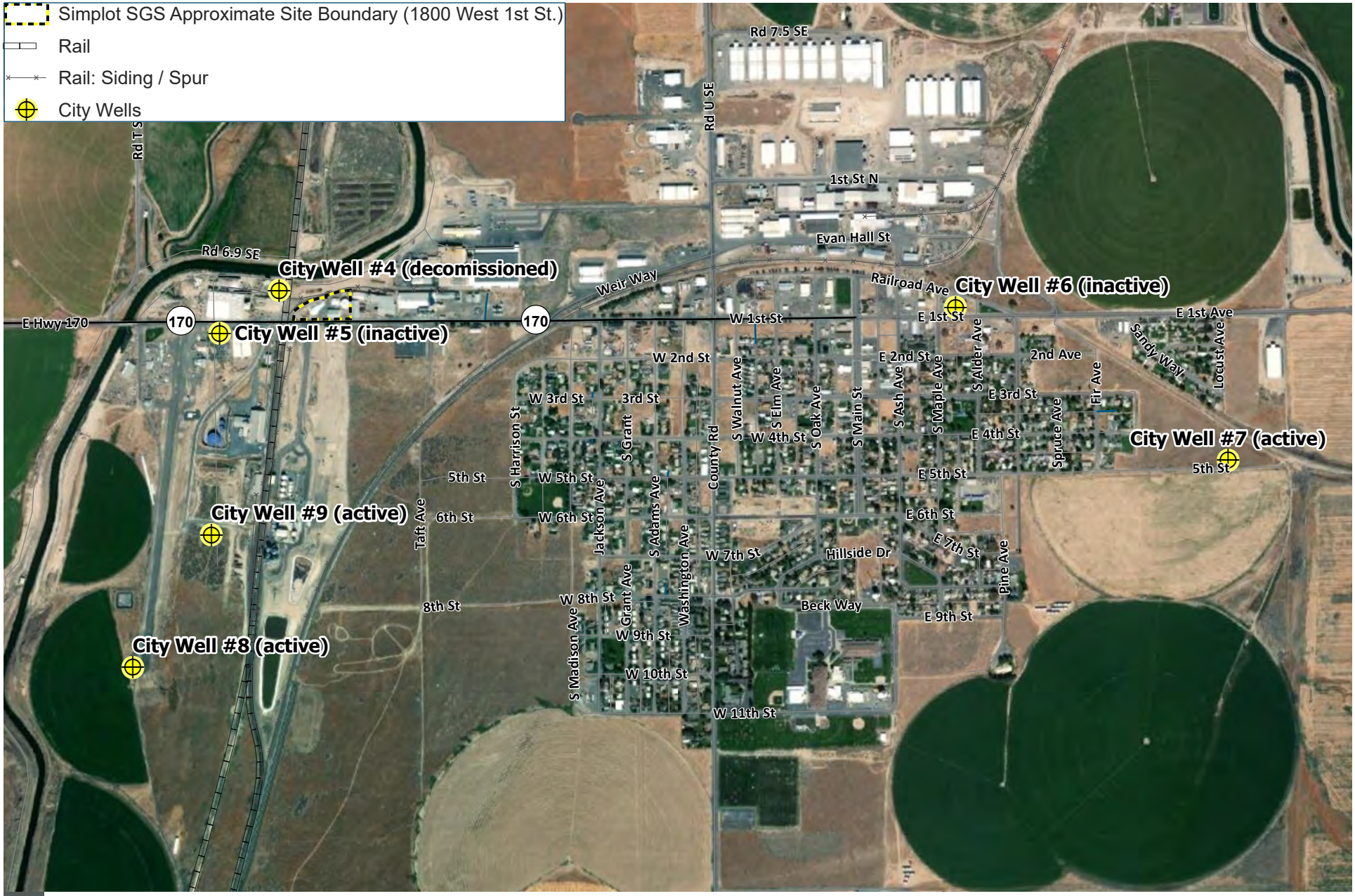
Well	Status
Source 01 - Well #4 - AFA142	Decommissioned (January 2011)
Source 02 - Well #5 - AFA141	Inactive as of 9/3/2014. Well only used for emergency purposes.
Source 03 - Well #6 - AFA140	Inactive as of 3/31/2020. Well only used for emergency purposes.
Source 04 - Well #7 - AAS175	Active
Source 05 - Well #8 - BHT112	Active
Source 06 - Well #9 - BHT111	Active

City Wells #1 through 3 were previously part of the water system but are no longer listed on the Washington State Department of Health's (WDOH) public water system online database (WDOH 2022). City Well #4 was located between two potato-processing facilities owned by the Washington Potato Company. In August 2004, Ecology conducted video logging of the City Well #4 to assess the

competency of the well and water-bearing zones (Gray and Osborne 2004). City Well #4 was drilled in 1957 to a depth of 319 feet below ground surface (bgs) and completed as an open hole below 80 feet. EDB was discovered in City Well #4, with a concentration exceeding the maximum contaminant level (MCL) of 0.05 µg/L in March 1989. Of the samples collected in City Well #4, EDB concentrations above the MCL were detected in 60 percent of the samples between 1989 and 2007. The City permanently decommissioned the well in January 2011 due to the presence of EDB and WDOH's concerns that the well's shallow casing depth and its proximity to Washington Potato Company's operations and Burlington Northern railroad lines could pose a risk to wellhead protection (industrial activities took place within the well's 100-foot sanitary control area). This well is shown in the table above for historical context only.

City Well #5 is located approximately 800 feet west-southwest of the SGS site. EDB was detected in groundwater collected from City Well #5 in February 1990. For City Well #5, EDB concentrations above the MCL were detected in 72 percent of the samples between 1990 and 2013. The City installed a packer in this well in 2004 to isolate the lower portion of the well for water production and to prevent shallow EDB-impacted water (if present) from entering the well. The City periodically pumps the well for irrigation use at a wastewater land application site. City Well #5 was completed in the Wanapum aquifer. It pre-dates state regulations and was not constructed in a manner to effectively seal the shallow aquifer from the Wanapum aquifer. City Well #5 is no longer used as a source for public drinking water.

Static water levels in City Wells #5, #8, and #9 range from 40 to 80 feet bgs. Static water levels in City Wells #6 and #7 range from 175 to 275 feet bgs. City Well #7 was completed in the Grande Ronde aquifer and its depth is approximately 857 feet bgs. City Well #6 is the next deepest well at 830 feet bgs. Depths of City Wells #5, #8, and #9 range from approximately 319 to 525 feet bgs.



HDR Simplot

0 0.5 Miles

CITY WELLS MAP

Figure 3

2.1.2 Preliminary Investigation of Ethylene Dibromide Contamination (PGG 2007)

Pacific Groundwater Group's (PGG) *Preliminary Investigation of Ethylene Dibromide Contamination* (PGG 2007) describes a preliminary investigation of the City's well field in response to the discovery of EDB in City Wells #4 and #5. Under contract with Ecology, PGG drilled and constructed groundwater MWs; measured water levels; surveyed wells; sampled soil and groundwater, local food industry process waters, and canal sediment; and researched historic land ownership. Field activities occurred in August and late October 2006. The following summarizes PGG's investigation activities and findings.

- Shallow groundwater was encountered during investigation activities in unconsolidated sediment from 11 to 20 feet bgs. The extent of the investigation was the well field that surrounded City Wells #4 and #5, which was an approximately 0.5-mile radius circle centered at the intersection of 1st Street and the Columbia Basin Railroad Track. PGG constructed five borings that were converted to MWs (MW-1 through MW-5, only one of which was located within the Simplot SGS site. This well later became known as MW-5D. MW-1 through MW-4 were located north and west of the SGS site. Each boring was advanced to competent bedrock (basalt) with the contact confirmed by drilling 2 to 5 feet of open hole into the basalt. The MWs were constructed of 2-inch diameter, schedule 40 polyvinyl chloride (PVC) riser pipe, and 10-foot long, 10-slot PVC screens. The base of each 10-foot screen was placed in the weathered basalt and hard basalt. The weathered basalt is considered part of the shallow aquifer (hydraulically connected). Unconsolidated sediment thicknesses ranged from 43 to 64 feet in these wells.
- PGG measured static groundwater levels in August (water in the canal) and late October/early November (no water in the canal) 2006. During the August water level survey, PGG determined that the East Low Canal was losing water to groundwater and groundwater flowed away from the canal to the north and south. In the October/November sampling event, the elevation of the canal bottom was lower than groundwater levels in the MWs and a component of the groundwater flowed toward the canal.
- PGG collected soil samples during drilling activities for each boring at depths of 10, 30, and 60 feet bgs. EDB was not detected in any of the soil samples except for the MW-5 boring at 10 feet bgs at the SGS site.[1] The concentration at 10 feet was 6.22 micrograms per kilogram (µg/Kg); EDB was non-detect in soil samples from the same boring at 30 and 40 feet bgs. The 10-foot sample was within the caliche interlayer.
- In a single sampling event in October/November 2006, PGG collected groundwater samples from the MW network, City Well #5, and City Well #6 (City Well #4 was not sampled). EDB was non-detect in groundwater samples.
- At the Washington Potato Company facility (to the west of the SGS site), PGG collected two process water samples: the first sample from the potato wash water in the receiving bays

[1] The *Preliminary Investigation of Ethylene Dibromide Contamination* report refers to Ecology's well MW-5 as MW-5D.

and the other sample from the process wastewater in the final clarifying tank. EDB was not detected in the wash water sample, but was detected in the final clarifying tank sample at 0.015 µg/L.

- PGG collected three water samples from the City's wastewater treatment ponds. The first sample was collected from the input point to the system, the second sample from wastewater pond 5A, and the third sample collected from wastewater pond 8. EDB was not detected in the wastewater treatment plant samples.
- As a follow up to the 2007 PGG investigation, Ecology sampled the MWs every other month starting in November 2006 through February 2009. EDB was not detected in the wells, except for MW-5D, where EDB concentrations ranged from 0.1 to 132 µg/L. For the last six sampling events (March 2008 through February 2009), the average EDB concentration was 2.5 µg/L.

2.1.3 Phase II Preliminary Investigation (Ecology 2009)

The *Phase II Preliminary Investigation* summarizes Ecology's Phase II investigation activities in November and December 2008, which focused on the SGS site and the north adjacent property. The purpose of the Phase II investigation was to gather information about potential sources of the EDB found in groundwater. The following summarizes Ecology's Phase II investigation activities and findings.

- One soil sample from MW-5D boring had a detectable level of EDB at 10 feet bgs within caliche interbeds. Ecology focused on additional sampling in the soil caliche during Phase II due to caliche having a high potential for trapping volatile chemicals such as EDB. The investigation focused on the area adjacent to MW-5D, since this was the only well that had detectable levels of EDB in the shallow aquifer of the five MWs installed as part of Phase I activities.
- Using a hydraulic push probe unit to collect soil samples, Ecology advanced a total of 22 borings ranging in depth from 9 to 24 feet bgs. These depths varied because the push probe had difficulty penetrating into the caliche layer at some locations. Ecology collected one soil sample from each of the 22 borings for EDB analysis.
- Assessment of soil borings revealed that there was a caliche layer throughout the sampling area; however, the caliche was thinner and not well-defined in the center of the property, south of the railroad spur.
- EDB was detected in 2 of 22 borings at concentrations of 8.4 and 3.2 µg/Kg for SB-5 and SB-12, respectively. Both borings were located in the open lot area of the SGS site.
- The report summarized groundwater elevations and EDB concentrations for MW-5D from October 2006 through February 2009. Depth to groundwater ranged from 19 feet bgs in early October (end of irrigation season) to 33 feet bgs in late March (end of non-growing season). EDB concentration ranged from non-detect in November 2006 to a high of 132 µg/L in March 2007. For the last six sampling events (March 2008 through February 2009), the average EDB concentration dropped to 2.5 µg/L.

The Phase II investigation report also provided additional information on process water samples collected from Washington Potato Company and Ochoa Foods. Ecology concluded:

> *"Results from both Washington Potato and Ochoa Foods indicate occasional detections of EDB in various processing streams. However, the concurrent sampling of the city water supply as it entered the plants shows that EDB is present prior to any processing. EDB presence is likely due to its presence in the city water supply."*

2.2 2018 Remedial Investigation/Feasibility Study

Simplot conducted RI/FS activities under AO 8241, which required completion of the RI/FS, primarily from November 2011 through December 2017. Simplot submitted an updated RI/FS report to Ecology in May 2018 (HDR 2018). RI/FS activities were summarized in the *Final Remedial Investigation and Feasibility Study Report* (HDR 2018).

The purpose of the RI/FS study was to delineate the EDB source in soil and groundwater and select a remedial action for the site. The results from the RI showed EDB-contaminated soil primarily in the western portion of the SGS site and one detection of EDB in soil at the central portion of the site. Contaminated groundwater was encountered on-site in shallow groundwater.

Simplot proposed three remedial alternatives in the FS. Ecology completed an evaluation of the alternatives and selected Alternative 3 as the remedy. The remedial action consisted of excavating and treating EDB-contaminated soil using an applied vacuum to the soil and collection of the EDB vapors from the soil. The vapors would be captured using a filter and treated through destruction in an incinerator. Clean soils would be removed and stockpiled so that contaminated soils could be excavated, treated, and returned to the excavation. Treated soils with EDB concentrations less than the soil cleanup level (CUL) of 0.27 µg/Kg would be returned to the excavation and the ground restored to its original condition. Upon completion of the soil cleanup action, compliance groundwater monitoring would take place to evaluate the effectiveness of the cleanup action with regards to groundwater protection.

2.3 2019 Cleanup Action Plan

After completing the RI/FS, and in cooperation with Simplot, Ecology completed a *Cleanup Action Plan* (CAP) in May 2019 (Ecology 2019). This CAP was required as part of the site cleanup process under the MTCA, Chapter 70.105D Revised Code of Washington (RCW), implemented by Ecology under WAC Chapter 173-340. The CAP is Ecology's decision document for the site and provides the rationale for selecting the cleanup alternative. The CAP outlines the following:

- The history of operations, ownership, and activities at the site,
- The nature and extent of contamination as presented in the RI,
- Cleanup levels for the site that are protective of human health and the environment,
- The selected remedial action for the site, and
- Any required compliance monitoring and institutional controls.

In summary, Ecology concluded:

> *Ecology completed an evaluation of the alternatives and has determined that Alternative 3 is Ecology's selected remedy. The remedial action consists of excavation and treatment of EDB-contaminated soil using an applied vacuum to the soil and collection of the EDB vapors from the soil. The vapors will be captured using a filter and treated.*

> *Clean soils will be removed and stockpiled so that contaminated soils can be excavated, treated, and returned to the excavation. Treated soils with EDB concentrations less than the soil cleanup level (CUL) of 0.27 micrograms per kilogram (µg/kg) will be returned to the excavation and the ground restored to its original condition. Upon completion of the soil cleanup action, compliance groundwater monitoring will take place in order to evaluate the effectiveness of the cleanup action with regards to groundwater protection.*

Simplot entered into another AO (DE 16890) with Ecology on May 7, 2020, to address EDB remedial actions, which required Simplot to implement the CAP in accordance with the scope of work and schedule attached to AO DE 16890.

2.4 Spring 2021 EDB Contaminated Soil Excavation Activities

Simplot conducted EDB contaminated soil excavation activities from March to April 2021, in accordance with WAC 173-340-410, the *Cleanup Action Implementation Compliance Monitoring Plan* (CAICMP; HDR 2021a), and the *Quality Assurance Project Plan* (QAPP; HDR 2021b). These activities are shown in the photographs presented in Appendix A.

Using earth moving equipment, both clean surface material and EDB-impacted soils, including caliche, were excavated from the west and east excavation areas, which are also referred to as the West Pit and the East Pit. Soil samples were collected from the East and West pits and were analyzed for EDB via U.S. Environmental Protection Agency (USEPA) Method 8011. Samples were collected following these protocols, which are specified in the CAICMP (HDR 2021a):

- One sample every 20 feet horizontally along the side walls (sample name denoted with “Wall” in Appendix A and Figure 4)
- One sample every 400 square feet of the exposed pit bottom (sample names denoted with “Bottom” in Appendix A and Figure 4)

Laboratory analysis was conducted on a rush schedule, and sample results were generally received by close of business the day following sample collection. When results indicated EDB levels in soil were above the CUL, excavation was advanced horizontally and/or vertically until results were below the CUL. **Figure 4** depicts the final confirmational samples that comprise the horizontal and vertical delineation of EDB-impacted soils at the site. EDB detections in soil samples during the excavation ranged from 0.037 to 100 µg/Kg. High concentrations were observed in the northeast corner of the west pit at depths of 25-33 feet bgs. Excavation depths in the West Pit ranged from 25 feet bgs in the southern half to 37 feet bgs in the northern half. A soil sampling summary table and excavation laboratory reports are included in Appendix B.

Throughout the excavation operation, ambient air was screened for volatile organic compound (VOC) using a photoionization meter (PID). Any PID responses above 1 part per million (ppm) were not observed during excavation activities. The actionable air concentration was 50 ppm, which is the OSHA five-minute maximum peak level. If this concentration was detected by the PID, onsite employees would have referenced Table 1 in the Heath and Safety Plan (GrayMar 2021) for chemical information.

Approximately 13,000 cubic yards (CY) of soil were excavated from both pits, cumulatively. Of the 13,000 CY excavated, approximately 6,500 – 7,200 CY were determined to be contaminated with

EDB. This range is estimated based on the number of SVE treatment batches because the final contaminated pile was not surveyed prior to the SVE operation. See additional discussion in Section 2.7.

Contaminated soils above the EDB CUL were excavated except for an area near the northern edge of the west pit due to railroad right-of-way constraints. Suspected EDB-impacted soil that was left in place is depicted in the grading plan provided in Appendix G. The quantity of EDB contaminated soil exceeded the extent proposed in the February 2021 *Final Engineering Design Report* (HDR 2021c) based on confirmation sampling conducted during excavation activities. Contaminated soils were stockpiled along the northern perimeter of the site in an approximately 7,500-square-foot area (150 feet x 50 feet). The clean soil above the EDB-impacted soil was excavated, also referred to as "overburden" soil, was stockpiled separately, tested, and used to backfill the excavated pits to permit ongoing use of the space-constrained site. Contaminated stockpiles were developed on top of 6-mil plastic sheeting. Approximately 70 tons of broken concrete, rebar, and other solid debris (metal, wood, plastic sheeting, and plastic containers) was encountered during the excavation and were disposed of offsite at an approved landfill. Based on landfill tickets, 49.55 tons of concrete was disposed at the Waste Connections – Wasco County landfill in The Dalles, OR. Other solid materials, totaling 20.52 tons, was disposed at the Grant County Landfill in Ephrata, WA. Concrete was considered "non-hazardous waste" due to physical extraction of EDB-contaminated soils from the concrete surface, which met the "clean debris surface" standard in 40 CFR 268.45. Contractor provided waste stream documentation is provided in Appendix H. Contaminated soil and temporary clean material stockpile locations are presented in **Figure 5**.

To date, both the West and East Pits have been backfilled with clean material, some of which was brought onsite as clean borrow material. Approximately 1,735 cubic yards of clean borrow material was sourced from Frenchman Hills Quarry in Othello, WA. The borrow material was sampled on April 13th, 2021, and analyzed for VOCs and SVOCs. The results for the two borrow material samples were non-detect for VOCs and SVOCs. The laboratory report is included in Appendix C. Ecology approved the use of the borrow material in an email on April 15th, 2021. Contractor provided compaction test results are provided in Appendix D.

The contaminated soil stockpile remained on site until SVE operations began in late May 2022 and was maintained by GrayMar in accordance with the *Ex-Situ Soil Stockpile Protection Plan* (HDR 2021e), which included the following protective actions:

- Ensured the closure of perimeter fence gates.
- Prepared overburden, caliche material, and EDB-impacted soil stockpile areas with the placement of high-density polyethylene (HDPE) liners with a minimum thickness of 20 mils beneath contaminated soil stockpile.
- Covered the soil stockpile with 7-mil HDPE sheeting, weighed down with networked rubber rings and rope.
- Conducted weekly inspections by site staff with contractor on standby for repairs, if required.
- Erected temporary fencing to prevent access to the west pit and constructed a compacted soil berm to reduce stormwater entry to the West Pit.

HDR Simplot

0 100 Feet

EXCAVATION CONFIRMATION SAMPLES MAP

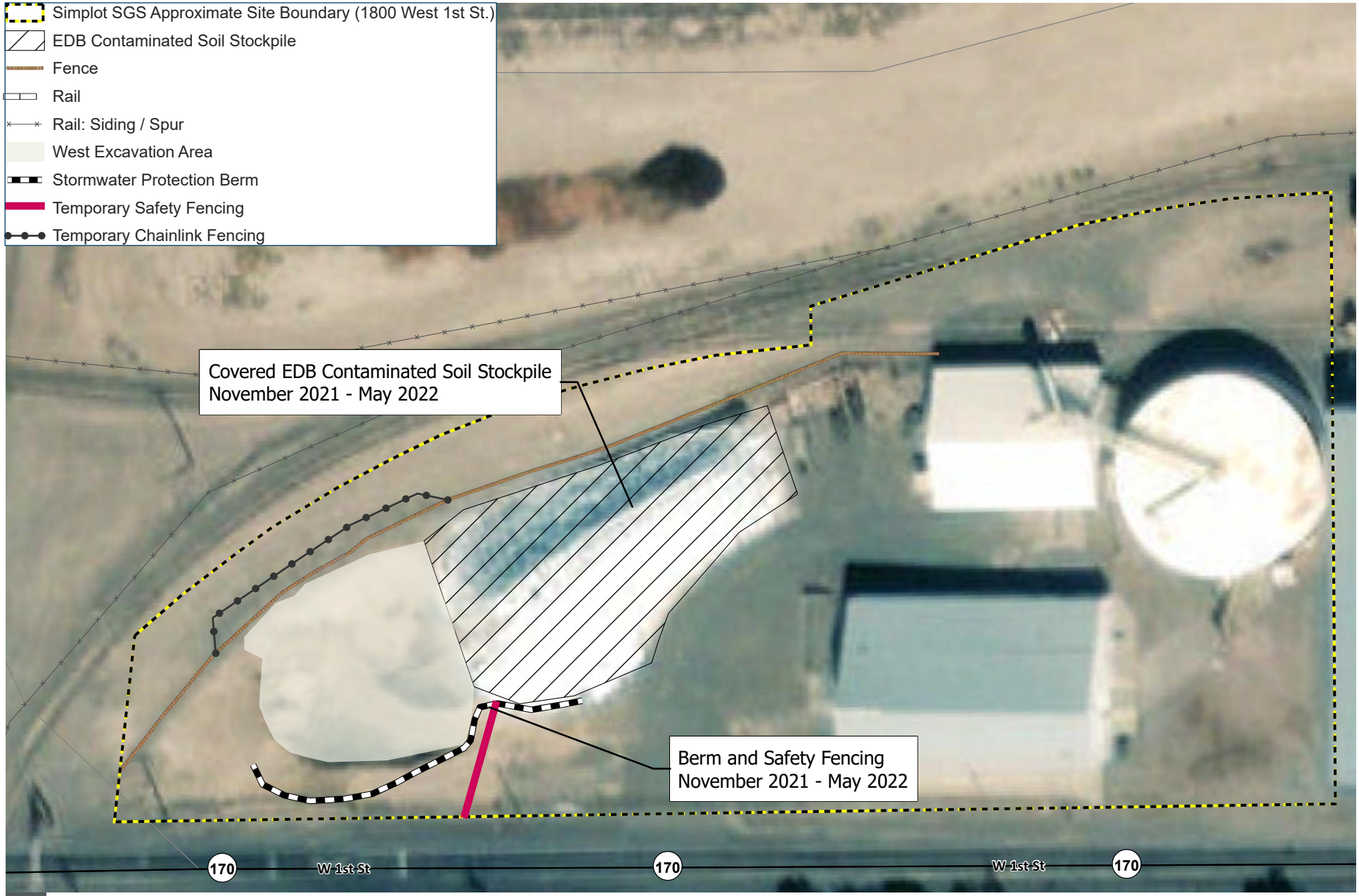
Figure 4

HDR Simplot

0 100 Feet

SOIL STOCKPILE LAYOUT MAP

Figure 5



HDR Simplot

0 100 Feet

SOIL STOCKPILE WINTER PROTECTION PLAN

Figure 6

2.5 December 2021 Cleanup Action Implementation Compliance Monitoring Plan and Quality Assurance Project Plan Updates

The CAICMP (HDR 2021a) describes the procedures that Simplot performed during the cleanup action at the SGS site in Warden, Washington. Compliance monitoring includes protection monitoring, performance monitoring, and confirmational monitoring. The CAICMP, which was updated in December 2021, describes the monitoring that was performed during the construction, remedial operations and maintenance, and during the confirmation period of the cleanup action.

The QAPP (HDR 2021b) describes the sampling plan, quality standards, and procedures for conducting soil sampling as outlined in the CAICMP (HDR 2021a). The QAPP was developed according to the corresponding USEPA guidance, *Guidance for Quality Assurance Project Plans* (USEPA 2002), and Ecology guidance. The QAPP was updated in December 2021. Under contract with Simplot, HDR is assisting with monitoring, sampling, and reporting to support Simplot's remedial actions at the SGS site. GrayMar implemented the CAP, which included soil excavation, soil stockpiling, and construction and operation of an ex-situ SVE system. Field teams collected proposed field samples, including the quality control samples, and shipped and transferred custody of the samples to the designated laboratory (Eurofins TestAmerica). Eurofins TestAmerica was responsible for quality assurance/quality control (QA/QC) within their laboratory operations, with HDR responsible for data validation of the reported test values.

2.6 December 2021 Performance Test Plan

HDR developed a *Performance Test Plan* (PTP; HDR 2021d), which describes the procedures by which an ex-situ SVE pilot test and full implementation would be conducted to assess SVE effectiveness. The purpose of the PTP was to satisfy the requirements of WAC 173-340-400(4)(a) and those established under the AO. The PTP describes the procedure and requirements used during the cleanup action and provides sufficient information to assess SVE system effectiveness and determination when the soil CUL was met.

2.7 2022 Ex-Situ Soil Vapor Extraction Remedial Action

Approximately 6,500 – 7,200 CY of EDB-impacted soil from the excavation were treated on site with an ex-situ SVE system in accordance with the December 2021 PTP (HDR 2021d). Treatment batch volumes ranged from approximately 80 – 150 cubic yards per batch. The variability in treatment was due to inward bowing of the wooden treatment cell walls and variability in compaction of soils. Most treatment batches achieved the maximum treatment volume of 150 cubic yards.

SVE operations took place from late May to November 2022. The SVE system consisted of EDB-contaminated soil placed over a network of permeable geotextile, gravel, and perforated PVC aboveground piping, to which a vacuum was applied to encourage volatilization of EDB, as presented in **Figure 7** and **Figure 8**. EDB-contaminated soils from the contaminated stockpile were placed in a 10-foot-wide by 80-foot-long treatment cell consisting of a 5-foot excavation with ¾-inch plywood walls and an impermeable liner, which was used in a "burrito-wrap" configuration to prevent volatile emissions and prevent the soil from becoming saturated by precipitation. Three 4-inch diameter 0.20 slotted PVC well-screen pipes were placed laterally above the layer of material to ensure equally distributed flow and vacuum throughout the entire pile. The 0.20 slotted well-screen

was chosen to minimize clogging while maximizing the flow rate and contact time. The perforated lateral pipes were connected to a solid piping manifold (SVE manifold), which ran directly to the SVE system.

The SVE system was comprised of a fresh air inlet for diluting influent vapors, a moisture knockout drum, which removed moisture from the soil vapors, and a 7.5-horsepower regenerative blower with a capacity of 250 to 350 cubic feet per minute (cfm) air flow rate. Directly post-blower, a temperature gage and a pitot tube with a magnehelic gage were utilized to calculate and record flowrate and field parameters. Two 55-gallon vapor phase granular activated carbon (GAC) vapor treatment drums were used to treat vapors. Treated vapors were discharged into the air following results of the pilot test. The SVE system was continuously operated using a control panel and powered by a portable 25-kilovolt-ampere (KvA) diesel-powered GenSet generator.

HDR conducted soil sampling on each batch of soil according to the CAICMP (HDR 2021a), QAPP (HDR 2021b), and the PTP (HDR 2021d). A summary of soil sampling and laboratory reports are provided in Appendix E.

2.7.1 Pilot Test

Simplot, HDR, and GrayMar conducted a pilot study of the SVE system from May 31, 2022 through June 5, 2022, in accordance with the PTP to gather performance data necessary for full-scale remediation at the site. The main objectives of the SVE pilot test were to:

- Collect vacuum/pressure, flow rate, and temperature data to determine full-scale implementation parameters for the SVE system; and,
- Collect soil and vapor samples for laboratory analyses to assess treatment efficacy, potential vapor treatment requirements and other full-scale operational parameters.

As part of the pilot study, GrayMar mobilized components necessary to construct a properly-sized, skid-mounted SVE-system and associated treatment cell. SVE system diagrams are presented in **Figure 7** and **Figure 8**. General procedures for the pilot test included loading the treatment cell and wrapping in HDPE sheeting, collecting four discrete pre-treatment samples, running the SVE system for five consecutive days, and collecting four discrete post-treatment samples. Additionally, soil vapor samples were collected prior, during, and after SVE treatment of the pilot study batch. Pre- and post-treatment soil samples collected during the pilot study were all non-detect for EDB. Pilot study soil samples were also analyzed for total organic carbon (TOC). Pre-treatment TOC levels ranged from 1,400 to 2,300 mg/Kg. Post-treatment TOC levels ranged from 1,100 to 1,500 mg/Kg. Soil vapor samples were collected during the pilot study at the beginning (June 1, 2022), middle (June 2-4, 2022), and end (June 5, 2022) of the pilot study. Soil vapor samples were analyzed for EDB via USEPA Method TO-15 at the Eurofins Air Toxics analytical laboratory in Folsom, California. Soil vapor samples were non-detect for EDB.

After completing the pilot-test phase, GrayMar, HDR, and Simplot incorporated the data and experience gained from the pilot test to develop processing times to treat the large volume stockpile of EDB-contaminated soil. Target flow rates and vacuum rates were not developed in the Performance Test Plan (HDR 2022); rather, the presence of vacuum conditions was documented using visual observations. Blower outlet flow rates ranged from 60 to 300 cfm, with an average flow rate of 229 cubic feet per meter (cfm). Generally, the blower was operated close to maximum

capacity (300 cfm). Vacuum presence was achieved in all treatment batches and is documented on the data collection forms in Appendix F. Prescribed processing times were not developed since Pre- and Post-treatment soil samples were non-detect for EDB by the laboratory. Every soil batch which underwent treatment with the ex-situ SVE system reported pre-treatment samples from the laboratory as non-detect or below the CUL for EDB. Therefore, each soil batch were treated under the following procedure:

1. Day 1: Soil batch placed in ex-situ SVE system by GrayMar.
2. Day 1: Pre-treatment soil samples collected by HDR and delivered to Eurofins Test America in Spokane Valley, WA.
3. Day 1: GrayMar seals soil batch, starts SVE system and collects initial system readings.
4. Day 2: GrayMar or Simplot employees onsite collect daily system readings.
5. Day 2: Receive pre-treatment results (either non-detect or below CUL).
6. Day 2: Notify Simplot and GrayMar of sample results and prepare for batch swapout following day.
7. Day 3: Shut down SVE system and start soil batch swapout.

Under the above procedure, average treatment times of soil batches with pre-treatment soil sample results with non-detect or below CUL were approximately a minimum of 36 to 48 hours.

Figure 7. SVE System Process Diagram

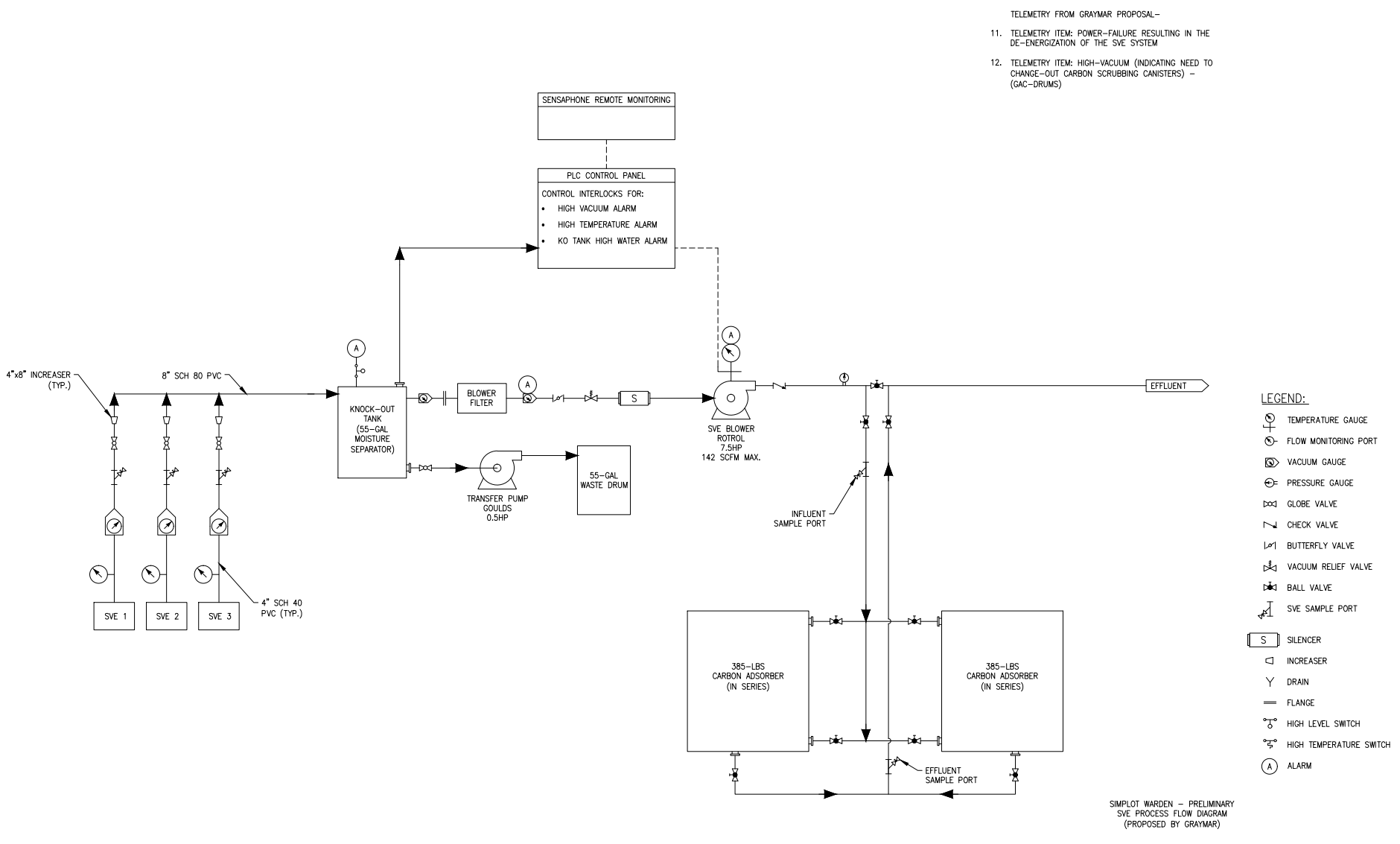
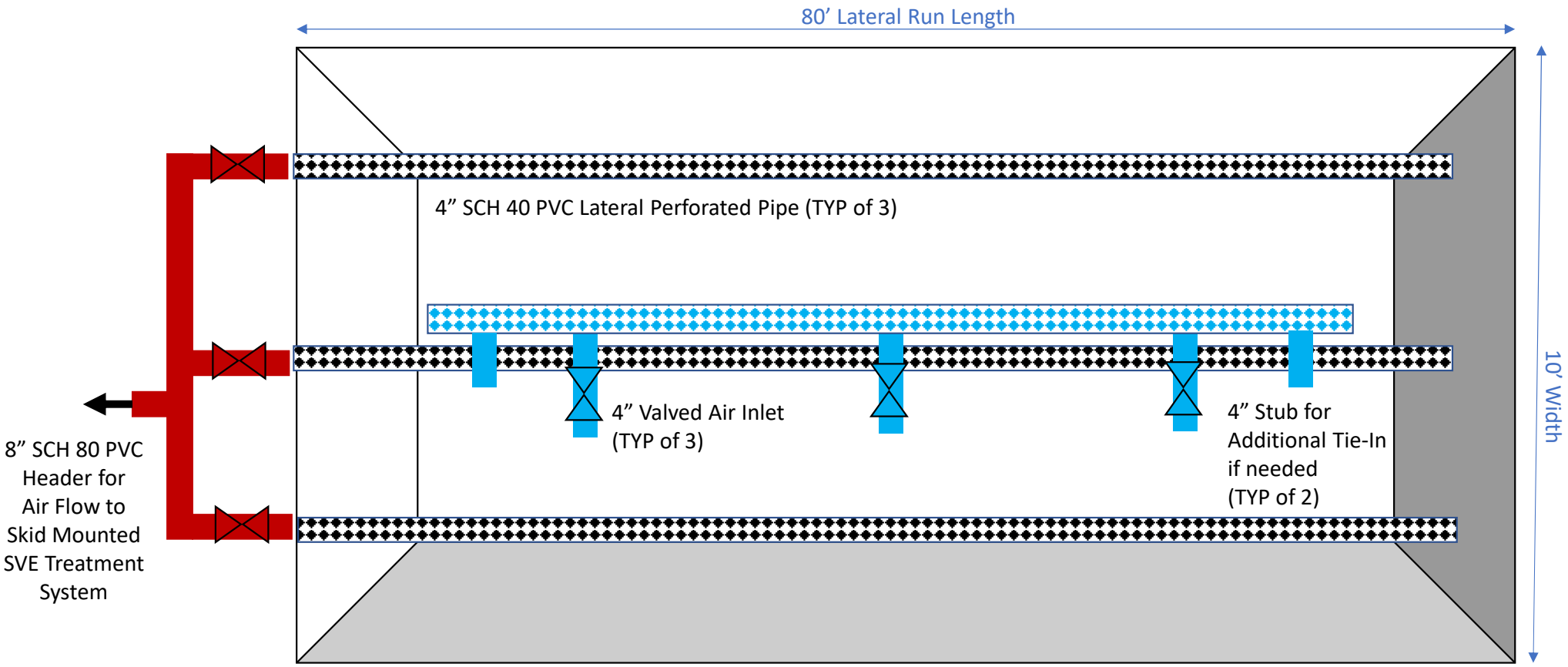


Figure 8. SVE Treatment Cell Diagram



Notes:

1. 4-inch diameter perforated pipes to be placed laterally on the layer of crushed-stone on approximately 2-foot centers.
2. 4-inch diameter valved air inlet pipes to be laterally on the geotextile on the layer of contaminated soil.

2.7.2 Compliance Monitoring

During the full-scale ex-situ SVE remediation operation, the 6,000 CY volume of contaminated soil stockpile was treated in 53 batches. After each batch was placed in the treatment cell, four random pre-treatment soil samples were collected from the cell (pre-treatment samples). Sampling procedures of the treatment cell volume followed the CAICMP (HDR 2021a). The pre-treatment samples were then submitted to the Eurofins TestAmerica analytical laboratory in Spokane, Washington, for EDB analyses using USEPA Method 8011. While the pre-treatment samples were being analyzed, the SVE system remained operational.

HDR collected 210 parent samples along with 13 duplicate samples for a total of 223 soil samples. Pre-treatment soil samples collected for all batches were below the CUL. Of the 223 total soil samples, most samples (99 percent) were non-detect for EDB. Two samples, SVE-Soil-Sept15-31Pre4 and SVE-Soil-Oct5-38Pre4 detected EDB levels at 0.062 µg/Kg and 0.065 µg/Kg, respectively. Per the CAICMP, pre-treatment soils from all batches were removed from the treatment cell and used as backfill once laboratory results were received and confirmed all four samples were below the CUL.

Prior to SVE design and implementation, calculations were performed to quantify anticipated air emissions from EDB volatilization during excavation activities. Anticipated air emissions were calculated based on detected soil concentrations of EDB above the CUL during the remedial investigation phase, with the following assumptions:

- 100% of EDB volatilizes from the soil into the air during excavation activities.
- 86,000 cubic feet (3,185 cubic yards) of soil with EDB concentrations above the CUL
- Average EDB concentration of 10 µg/Kg
- Soil density of 1.9 g/cm^3

An estimated annual VOC discharge rate of 0.1 pounds per year was calculated. The actual volume of soil was approximately 6,000 CY, which may have increased the anticipated result of 0.1 lbs/year to 0.2 lbs/year. Ecology's New Source Review regulations (WAC 173-400-110) include exemptions from the requirement to file a Notice of Construction (NOC) application for projects with emissions levels below a specified threshold. The estimated emissions rate of 0.1-0.2 lbs/year is well below the threshold for VOCs of two tons per year presented in WAC 173-400-110(5)(d). Additionally, soil stockpiles were covered on a daily basis during excavation activities to minimize volatilization. The contaminated soil stockpile was covered and inspected regularly according to the *Ex-Situ Soil Stockpile Protection Plan* (HDR 2021e), which minimized volatilization until SVE remediation activities began in May 2022.

The only deviation from the CAICMP occurred with Batch 40. Two of the four pre-treatment soil samples collected on October 9, 2022, for Batch 40, were damaged during transport to the laboratory and were unusable. To confirm soils had been treated, two post-treatment samples were collected on October 11, 2022. Pre- and post-treatment samples from Batch 40 were all non-detect for EDB. Sampling plan deviations are further discussed in Section 2.7.5.

2.7.2.1 FIELD DATA COLLECTION

In addition to soil sampling, HDR and GrayMar documented the following field data parameters, which were required per the PTP (HDR 2021d).

1. Recorded visual observations indicating negative pressure (vacuum) on top of the treatment pile was achieved at the start of the SVE operation and, then approximately twice a day during the operational period.
2. Blower inlet vacuum, dilution air flowrate, blower outlet flow rate, and blower outlet temperature were recorded at the start of the SVE operation and then, on 4-hour intervals for the first day in the first 8-hour period and then twice a day for remaining treatment duration.

Field data was recorded on field forms, which are presented in Appendix F, which also includes sample location diagrams and field notes from each batch.

2.7.2.2 DATA VALIDATION

HDR collected QA/QC samples during the ex-situ SVE remediation process. Data quality objectives (DQOs) included the following:

- Confirmation that hold times were met
- Documented method blank qualifiers
- Documented surrogate recovery percentage from the method blank within limits (pass/fail)
- Documented spike recovery percentage from the laboratory control sample (pass/fail)
- Documented pass/fail of field blind duplicate samples
- Documented pass/fail of laboratory duplicates
- Documented pass/fail of matrix spike and matrix spike duplicate samples
- Documented pass/fail of laboratory report completeness
- Documented whether method detection limits were below the CUL (pass/fail)
- Documented chain-of-custody forms

A data validation summary is presented in Appendix E. QA/QC samples generally passed DQOs and the data was determined to be acceptable.

2.7.3 Waste Characterization and Management

HDR collected investigative derived waste (IDW) and containerized SVE knockout water samples on October 21 and November 7, 2022. Results from the October 21 water samples were non-detect for EDB except for sample IDW-Water-Drum-3-10212022, which had a result of 0.0039(J) µg/L, which is below the groundwater CUL of 0.05 µg/L. HDR sampled the GAC drums on November 14, 2022. GAC drum contents were classified as Resource Conservation and Recovery Act (RCRA) hazardous waste (code D033) and were disposed of at the Chemical Waste Management of the Northwest Landfill in Arlington, Oregon.

Upon completion of the SVE operation in November 2022, GrayMar dissembled the SVE treatment system and disposed of the disposable components (wood, plastic sheeting, etc.) as construction waste at the local Grant County Landfill. Waste stream disposal invoices and manifest documentation for the SVE treatment system components and containerized waste is provided in Appendix H. **Table 4** presents a summary of waste materials for the 2021 Excavation and 2022 SVE Operation.

Table 4. Waste Stream Summary

Waste Item	Waste Classification	Investigation Phase	Quantity Generated	Disposal Location	Unique Identifiers
Broken Concrete	Non-hazardous	2021 Excavation	49.55 tons	Waste Connections – Wasco County Landfill	Weight Ticket IDs 374321, 3744490, and 374677
Other Solid Waste	Non-hazardous	2021 Excavation	20.52 tons	Grant County Landfill	Invoice Number 250421
GAC Drum Spent Carbon	Hazardous (Waste Code: D033 and WP02)	2022 SVE Operation	880 pounds	Chemical Waste Management of the Northwest, Arlington, OR	Manifest Tracking Number: 018038233 FLE
IDW and Knockout Tank Waste	Non-hazardous	2022 SVE Operation	Knockout Water: 800 lbs IDW: 1,650 lbs	Waste Connections – Finley Buttes Regional Landfill, Boardman, OR	Manifest Tracking Number: 0309232FB JRP
SVE Appurtenances and Broken Concrete from Excavated Treatment Bed	Non-hazardous	2022 SVE Operation	57.71 tons	Grant County Landfill	Invoice Numbers 328249, 328215, 328290

2.7.4 Site Grading

GrayMar graded the site according to the *Simplot Warden Grading Plan* (WSP 2022) (Appendix G). Upon completion of grading activities, GrayMar measured elevation levels at multiple locations to confirm the site was graded according to the grading plan. Confirmational elevation levels are recorded on sheet number 2 in the grading plan (Appendix G).

2.7.5 Sampling Plan Deviations

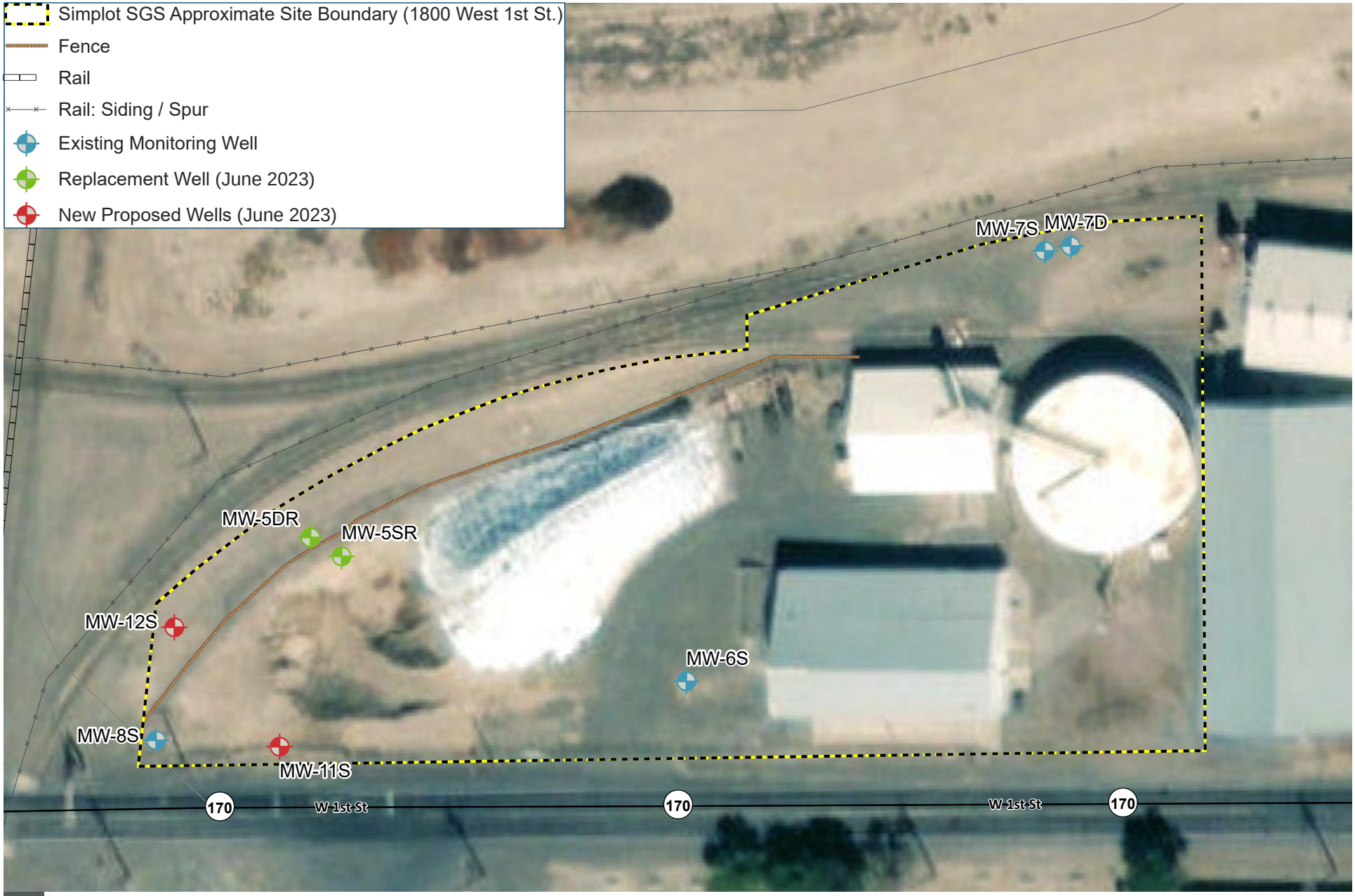
GrayMar was unable to source a blower flow meter prior to commencement of the pilot test due to supply chain issues. GrayMar attempted to use an anemometer in lieu of the flow meter; however, the anemometer was maxed out as air speeds were over 100 miles per hour. A flow meter was eventually sourced by the time Batch 12 began. While the absence of the flow meter for the pilot test and Batches 2 through 11 is considered a deviation from the sampling plan, it does not restrict HDR/Simplot's ability to demonstrate that the CUL was met in all treatment batches based on soil analytical results, which was the requirement in the *Cleanup Action Implementation Compliance Monitoring Plan* (HDR 2021a).

One deviation from the PTP occurred during October. Two samples from Batch 40 (collected on 10/9/2022) were discovered to be damaged during transit/handling; HDR collected 2 additional samples approximately 48 hours after treatment started to supplement missing samples. This is a deviation only because 2 of 4 samples were collected prior to commencement treatment. Four samples were collected from this treatment batch were reported as non-detect for EDB.

3 Projected Remediation Activities

The next remediation activity planned for the site is to initiate semi-annual groundwater compliance monitoring. Groundwater MW installation took place in June 2023, with semi-annual groundwater compliance monitoring to begin in August 2023. Groundwater monitoring well installation activities are detailed under separate cover, and included installation of two replacement wells and two new downgradient wells.

Figure 9 shows the locations of the site's MW network.



HDR Simplot

0 100 Feet

MONITORING WELL NETWORK MAP

Figure 9

4 References

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2021b. *Quality Assurance Project Plan.* August 2021.

2021c. *Final Engineering Design Report*. Simplot Grower Solutions, Warden, Washington. February 2021.

2021d. *Performance Test Plan*. December 2021.

2021e. *Ex-Situ Soil Stockpile Protection Plan*. December 2021.

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A

Photo Log

	
Photo 1. View of SGS site storage shed and east pit prior to excavation. Photo facing northeast, taken on March 8, 2021.	**Photo 2. View of SGS site warehouse/office building. Photo taken on March 8, 2021.**
	
Photo 3. View of east pit facing southeast, taken on March 9, 2021.	**Photo 4. Detail of signage used to label clean overburden soil stockpiles during excavation activities.**

	
Photo 5. Detail of signage used to label contaminated soil stockpile during excavation activities.	**Photo 6. View of contractor's trailer, rock track pad, and MW-6S. Photo facing west, taken on March 10, 2021.**
	
Photo 7. View of east pit excavation area on March 15, 2021. Photo facing south.	**Photo 8. View of west pit excavation area on March 15, 2021. Photo facing northwest.**

	
Photo 9. View of clean overburden soil stockpile near loading dock. Photo taken on March 15, 2021, facing south.	**Photo 10. View compaction activities in east pit. Photo taken on April 2, 2021.**
	
Photo 11. View of broken concrete in dumpster. Photo taken on March 11, 2021.	**Photo 12. View of broken concrete stockpile near western fence line. Concrete was disposed of at the Waste Connections Landfill in The Dalles, OR. Photo taken on March 30, 2021, facing west.**

	
Photo 13. View of backfilled east pit. Photo taken on April 6, 2021, facing east.	**Photo 14. View of northwestern fence line, contaminated soil pile, and railroad tracks facing east. Photo taken on April 21.**
	
Photo 15. View of final soil contaminated pile with winter protection practices implemented. Photo taken on October 4, 2021.	**Photo 16. View of safety fencing placed in the northeast corner of the SGS site near the railroad line. Photo taken on October 4, 2021.**

	
Photo 17. View of SVE treatment system. SVE treatment system was located along the southern fence line. Photo taken on June 1, 2022.	**Photo 18. View of SVE treatment system located along the southern fence line. Photo taken on June 1, 2022.**
	
Photo 19. View of SVE treatment system skid. Photo taken on June 1, 2022.	**Photo 20. View of vapor sample collection on June 1, 2022.**

	
Photo 21. View of negative pressure observed during SVE treatment. Photo taken on June 15, 2022.	**Photo 22. View of west pit backfilling. Photo taken on August 10, 2022, facing southwest.**
	
Photo 23. View of contaminated pile during SVE treatment operation. Photo taken on October 12, 2021.	**Photo 24. View of compaction activities in north portion of west pit. Photo taken on October 20, 2021.**

	
Photo 25. View of backfilled west pit at end of SVE operation. Photo taken on November 7, 2022, facing north.	**Photo 26. View of SGS site after final grading operations were completed. Photo taken from southwestern boundary facing northeast. Photo taken on March 27, 2023.**

B

Excavation Soil Sampling Summary and Laboratory Reports

Due to the large file size, the excavation laboratory reports will be provided if requested.

West Pit Excavation Sample Summary

Sample above 0.27 ug/Kg

Indicates Confirmational Sample

Lab Sample ID	Client Sample ID	Collection Date	Result	Unit	Flag	Notes
North						
590-14863-1	WP-N-Bottom-22.6-19	3/30/2021	0.16	µg/Kg		
590-14863-2	WP-N-Bottom-24-20	3/30/2021	0.085	µg/Kg		
590-14863-3	WP-N-Bottom-28-21	3/30/2021	0.057	µg/Kg		
Northeast						
590-14863-4	WP-NE-Wall-23-22	3/30/2021	0.62	µg/Kg		
590-14863-5	WP-NE-Wall-30.5-23	3/30/2021	3.1	µg/Kg		
590-14873-1	WP-NNE-Wall-25-24	4/1/2021	32	µg/Kg		Northernmost wall sample obtainable in original WP geometry
590-14873-2	WP-NNE-Wall-33-25	4/1/2021	100	µg/Kg		Northernmost wall sample obtainable in original WP geometry
590-14881-4	WP-NE1-Wall-23.5-32	4/2/2021	0.67	µg/Kg		Approx. 20 FT south of NE
590-14881-5	WP-NE1-Wall-32.5-33	4/2/2021	1.8	µg/Kg		Approx. 20 FT south of NE
590-14881-6	WP-NE1-Bottom-21.5-34	4/2/2021	ND	µg/Kg		Approx 10 FT west of NE1-Wall
590-14881-7	WP-NE1-Bottom-25-35	4/2/2021	0.04	µg/Kg	J	Approx 10 FT west of NE1-Wall
590-14881-8	WP-NE1-Bottom-33-36	4/2/2021	28	µg/Kg		Approx 10 FT west of NE1-Wall
590-14916-1	WP-NNE20-Wall-34-47	4/7/2021	0.38	µg/Kg	F1 F2	
590-14912-2	WP-NNE20-Wall-26-48	4/7/2021	ND	µg/Kg		
590-14916-10	WP-NNE20-Wall-40-49	4/8/2021	ND	µg/Kg		
590-14916-11	WP-NNE-Wall-42-50	4/8/2021	MND	µg/Kg		
590-14928-1	WP-NE20-Bottom-34.5-51	4/9/2021	0.044	µg/Kg		Approx 20 ft East of NNE-Wall
590-14928-2	WP-NE20-Bottom-33-52	4/9/2021	ND	µg/Kg		
590-14928-3	WP-NE20-Bottom-26-53	4/9/2021	ND	µg/Kg		
590-14928-4	WP-NE20-Wall-26-54	4/9/2021	ND	µg/Kg		
590-14928-5	WP-NE20-Wall-33-55	4/9/2021	ND	µg/Kg		
590-14928-6	WP-NE20-Wall-34.5-56	4/9/2021	ND	µg/Kg		
590-14928-7	WP-NE1.20-Bottom-33-57	4/9/2021	ND	µg/Kg		
590-14928-8	WP-NE1.20-Bottom-34.5-58	4/9/2021	0.082	µg/Kg		
590-14928-9	WP-NE1.20-Bottom-26-59	4/9/2021	0.056	µg/Kg		
590-14928-10	WP-NE1.20-Wall-34.5-60	4/9/2021	ND	µg/Kg		
590-14928-11	WP-NE1.20-Wall-32-61	4/9/2021	ND	µg/Kg		
590-14928-12	WP-NE1.20-Wall-26-62	4/9/2021	ND	µg/Kg		
East						
590-14808-5	WP-E-Wall-23.3-15	3/19/2021	0.3	µg/Kg		
590-14808-6	WP-E-Wall-25-16	3/19/2021	0.21	µg/Kg		
Southeast						
580-101745-1	WP-SE-Bottom-23-3	3/12/2021	0.16	µg/Kg		
580-101745-3	WP-SE-Wall-18-5	3/12/2021	0.11	µg/Kg		
580-101745-2	WP-SE-Wall-23-4	3/12/2021	0.17	µg/Kg		Corner of SE
590-14787-6	WP-SE1-Wall-23.5-7	3/15/2021	0.48	µg/Kg		Approx. 20 FT north of SE-Wall
590-14804-6	WP-SE1-WALL-25-10	3/18/2021	0.12	µg/Kg		Approx. 20 FT north of SE-Wall
South						
580-101745-4	WP-S-Bottom-24-6	3/12/2021	0.037	µg/Kg	J	
590-14787-5	WP-SWI-Wall-26.7-9	3/15/2021	0.15	µg/Kg		
Southwest						
580-101727-6	WP-SW-Bottom-22-1	3/11/2021	0.037	µg/Kg		
580-101727-7	WP-SW-Wall 20-2	3/11/2021	ND	µg/Kg		
590-14787-4	WP-SW1-Wall-24.7-8	3/15/2021	0.09	µg/Kg		Approx. 20 FT north of SW-Wall
590-14787-5	WP-SW1-Wall-26.7-9	3/15/2019	0.15	µg/Kg		Approx. 20 FT north of SW-Wall
West						
590-14808-1	WP-W-Wall-24-11	3/18/2021	ND	µg/Kg		
590-14808-2	WP-W-Wall-25-12	3/18/2021	ND	µg/Kg		
Northwest						
590-14863-6	WP-NW-Wall-23-24	3/31/2021	0.059	µg/Kg		
590-14863-7	WP-NW-Wall-26-25	3/31/2021	0.15	µg/Kg		
590-14863-8	WP-NW-Wall-33.5-26	3/31/2021	0.86	µg/Kg		
590-14881-1	WP-NW1-23-29	4/2/2021	0.12	µg/Kg		Approx. 20 FT south of NW
590-14881-2	WP-NW1-Wall-31.2-30	4/2/2021	0.34	µg/Kg		Approx. 20 FT south of NW
590-14881-3	WP-NW1-Wall-33-31	4/2/2021	0.99	µg/Kg		Approx. 20 FT south of NW
590-14881-9	WP-NW1-Bottom-23-37	4/2/2021	0.55	µg/Kg		Approx. 10 FT east of NW1-Wall
590-14881-10	WP-NW1-Bottom-32.5-38	4/2/2021	2.2	µg/Kg		Approx. 10 FT east of NW1-Wall
590-14942-4	WP-NW5-Wall-26-67	4/12/2021	0.037	µg/Kg		
590-14942-5	WP-NW5-Wall-33-66	4/12/2021	0.12	µg/Kg		
590-14942-6	WP-NW5-Wall-36-68	4/12/2021	0.1	µg/Kg		
590-14942-3	WP-NW1.5-Wall-38-65	4/12/2021	ND	µg/Kg		
590-14942-2	WP-NW1.5-Wall-33-64	4/12/2021	0.67	µg/Kg		
590-14942-1	WP-NW1.5-Wall-37-63	4/12/2021	0.58	µg/Kg		
590-14950-3	WP-NE1.10-Wall-26-71	4/13/2021	ND	µg/Kg		
590-14950-1	WP-NE1.10-Wall-33-72	4/13/2021	0.073	µg/Kg		
590-14950-2	WP-NE1.10-Wall-35-73	4/13/2021	ND	µg/Kg		
590-14947-1	WP-NW1-Bottom-35-75	4/13/2021	ND	µg/Kg		
590-14947-2	WP-NW1-Wall-35-74	4/13/2021	ND	µg/Kg		
Middle						
590-14808-3	WP-M-Bottom-22.5-13	3/19/2021	0.13	µg/Kg		
590-14808-4	WP-M-Bottom-24-14	3/19/2021	0.33	µg/Kg		
590-14894-1	WP-MW-Bottom-23.5-39	4/5/2021	ND	µg/Kg		
590-14893-2	WP-MW-Bottom-26-40	4/5/2021	ND	µg/Kg		
590-14894-3	WP-MW-Bottom-30-41	4/5/2021	0.062	µg/Kg		
590-14894-4	WP-ME-Bottom-23-42	4/5/2021	0.076	µg/Kg		
590-14894-5	WP-ME-Bottom-27-43	4/5/2021	0.23	µg/Kg		
590-14894-5	WP-ME-Bottom-32-44	4/5/2021	0.19	µg/Kg		

Notes:

µg/Kg = micrograms per liter; J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value; F1 = MS and/or MSD recovery exceeds control limits; F2 = MS/MSD RPD exceeds control limits.

East Pit Excavation Sample Summary

Sample above 0.27 ug/Kg

Indicates Confirmational Sample

Lab Sample ID	Client Sample ID	Collection Date	Result	Unit	Flag	Notes
North						
590-14766-15	EP-N-Wall-5-11	3/11/2021	0.14	µg/Kg		
590-14766-14	EP-N-Wall-12-7	3/11/2021	0.15	µg/Kg		
590-14766-13	EP-N-Bottom-14-6	3/11/2021	11	µg/Kg		
580-101745-5	EP-N Bottom-17-11	3/12/2021	5	µg/Kg		
590-14794-6	EP-N8-WALL-21-22	3/17/2021	ND	µg/Kg		represent bottom
590-14794-5	EP-N8-WALL-23-21	3/17/2021	ND	µg/Kg		represent bottom
NE						
590-14766-16	EP-NE-Wall-12-8	3/11/2021	0.55	µg/Kg		
580-101745-6	EP – NE-Wall-17-12	3/12/2021	4.5	µg/Kg		
590-14794-1	EP-NE8-WALL-21-18	3/17/2021	ND	µg/Kg		
590-14794-2	EP-NE8-WALL-23-17	3/17/2021	ND	µg/Kg		
590-14794-7	EP-NE-BOTTOM-23-23	3/17/2021	ND	µg/Kg		
East						
590-14766-17	EP-E-Wall-13-9	3/11/2021	0.40	µg/Kg		
580-101745-7	EP-E-Wall-17-3-13	3/12/2021	2.2	µg/Kg		
590-14794-4	EP-E8-WALL-21-19	3/17/2021	ND			
590-14794-3	EP-E8-WALL-23-20	3/17/2021	ND			
SE						
590-14766-18	EP-SE-Wall-14-10	3/11/2021	1.1	µg/Kg		
590-14787-1	EP-SE-Wall-21-14	3/15/2021	2.1	µg/Kg		
590-14804-4	EP-SE8-WALL-24-27	3/18/2021	ND	µg/Kg		
590-14804-3	EP-SE8-WALL-25-26	3/18/2021	ND	µg/Kg		
590-14804-7	EP-SE-BOTTOM-23-28	3/18/2021	0.79	µg/Kg		
590-14804-1	EP-SE-BOTTOM-24.5-24	3/18/2021	1.3	µg/Kg		
	EP-SE-Bottom-31-29	3/22/2021	ND	µg/Kg		Groundwater observed at 30 FT
South						
590-14766-9	EP-S-Wall-14-2	3/11/2021	0.29	µg/Kg		
590-14787-2	EP-S-Wall-21-15	3/15/2021	0.19	µg/Kg		
590-14766-8	EP-S-Bottom-16-1	3/11/2021	2.1	µg/Kg		
590-14787-3	EP-S-Bottom-21-16	3/15/2021	0.97	µg/Kg		
590-14804-2	EP-S-BOTTOM-25.5-25	3/18/2021	1.5	µg/Kg		
	EP-SE-Bottom-31-30	3/22/2021	ND	µg/Kg		Groundwater observed at 30 FT
SW						
590-14766-10	EP-SW-Wall-14-3	3/11/2021	0.049	µg/Kg	F1	
West						
590-14766-11	EP-W-Wall-14-4	3/11/2021	ND	µg/Kg		
NW						
590-14766-12	EP-NW-Wall-13-5	3/11/2021	ND	µg/Kg		

Notes:

µg/Kg = micrograms per liter; F1 = MS and/or MSD recovery exceeds control limits.

Overburden, Contamination, and Borrow Samples

Sample above 0.27 ug/Kg

Overburden Samples

Lab Sample ID	Client Sample ID	Collection Date	Result	Unit	Flag	Notes	
590-14766-1	S-1-1	3/10/2021	0.077	ug/Kg		From East Pit	Backfill for East Pit
590-14766-2	S-1-2	3/10/2021	1.1	ug/Kg		From East Pit	Moved to S-2
590-14787-7	S-1-2-Top	3/15/2021	0.19	ug/Kg		From East Pit	Backfill for East Pit
590-14787-8	S-1-2-Toe	3/15/2021	1.8	ug/Kg		From East Pit	Moved to S-2
590-14766-3	S-1-3	3/10/2021	0.51	ug/Kg		From East Pit	Moved to S-2
590-14787-9	S-1-3-E	3/15/2021	13	ug/Kg		From East Pit	Moved to S-2
590-14787-10	S-1-3 W	3/15/2021	1.1	ug/Kg		From East Pit	Moved to S-2
590-14766-4	S-1-4	3/10/2021	ND	ug/Kg		From East Pit	Backfill for East Pit
590-14766-5	S-1-5	3/10/2021	0.043	ug/Kg		From East Pit	Backfill for East Pit
590-14766-6	S-1-6	3/10/2021	ND	ug/Kg		From East Pit	Backfill for East Pit
590-14766-7	S-1-7	3/10/2021	0.062	ug/Kg		From East Pit	Backfill for East Pit
580-101727-1	S-1W-1	3/11/2021	0.068	ug/Kg		From West Pit	Backfill for East Pit
580-101727-2	S-1W-2	3/11/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
580-101727-3	S-1W-3	3/11/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
580-101727-4	S-1W-4	3/11/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
580-101727-5	S-1W-5	3/11/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-11	S-1WW-1	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-12	S-1WW-2	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-13	S-1WW-3	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-14	S-1WW-4	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-15	S-1WW-5	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-16	S-1WW-6	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-17	S-1WW-7	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14787-18	S-1WW-8	3/15/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-1	S-1-8	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-2	S-1-9	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-3	S-1-10	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-4	S-1-11	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-5	S-1-12	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-6	S-1-13	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-7	S-1-14	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14846-8	S-1-15	3/26/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-1	S-1-16	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-2	S-1-17	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-3	S-1-18	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-4	S-1-19	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-5	S-1-20	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-6	S-1-21	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14583-7	S-1-22	3/29/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14863-9	S-1-23	3/31/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14863-10	S-1-24	3/31/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14863-11	S-1-25	3/31/2021	0.071	ug/Kg		From West Pit	Backfill for East Pit
590-14863-12	S-1-26	3/31/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14863-13	S-1-27	3/31/2021	ND	ug/Kg		From West Pit	Backfill for East Pit
590-14881-11	S-1WW-9	4/2/2021	ND	ug/Kg		From West Pit Ramp	Future backfill for West Pit
590-14881-12	S-1WW-10	4/2/2021	ND	ug/Kg		From West Pit Ramp	Future backfill for West Pit
590-14881-13	S-1WW-11	4/2/2021	ND	ug/Kg		From West Pit Ramp	Future backfill for West Pit
590-14881-14	S-1WW-12	4/2/2021	ND	ug/Kg		From West Pit Ramp	Future backfill for West Pit
590-14881-15	S-1WW-13	4/2/2021	ND	ug/Kg		From West Pit Ramp	Future backfill for West Pit
590-14916-3	S-1-28	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit
590-14816-4	S-1-29	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit
590-14816-5	S-1-30	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit
590-14816-6	S-1-31	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit
590-14816-7	S-1-32	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit
590-14916-8	S-1-33	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit
590-14816-9	S-1-34	4/8/2021	ND	ug/Kg		From West Pit Easterly Extension	Future backfill for West Pit

Borrow Samples

Lab Sample ID	Client Sample ID	Collection Date	Result	Unit	Flag	Notes
590-14824-3	Borrow-Pit-1	03/19/21	ND	ug/Kg	H	Received out of holding time at lab on 3/24/2021 and therefore rejected by Ecology. Resampled and submitted to lab on 3/26/21.
590-14846-9	Borrow-Pit-3	03/26/21	ND	ug/Kg		From Frenchman Hills Quarry. Approved by Ecology 3/29/2021. Backfilled 4/5/2021.
590-14846-10	Borrow-Pit2-1	03/26/21	SVOCs	ug/Kg	J	Hits in SVOCs, from alternative borrow east of site
590-14947-3	Borrow 1	04/13/21	ND	ug/Kg		From Frenchman Hills Quarry.
590-14947-4	Borrow 2	04/13/21	ND			

C

Borrow Material Clean Fill Certifications

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 590-14947-1
Client Project/Site: Simplot Warden Feb. 2021

For:
HDR Inc
412 E. Parkcenter Blvd.
Suite 100
Boise, Idaho 83706-6659

Attn: Dr. Michael Murray

M. Elaine Walker

Authorized for release by:
4/14/2021 5:09:32 PM

Elaine Walker, Project Manager II
(253)248-4972
m.elaine.walker@eurofinset.com

Table of Contents

Case Narrative

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Job ID: 590-14947-1

Laboratory: Eurofins TestAmerica, Spokane

Narrative

Job Narrative
590-14947-1

Receipt
Five samples were received on 4/13/2021 2:14 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 4.3º C.

Receipt Exceptions

The following samples were activated for PAH and VOCs analysis by the client on 4/13/21: Borrow 1 (590-14947-3) and Borrow 2 (590-14947-4). This analysis was not originally requested on the chain-of-custody (COC). The client called the lab and requested it to be added.

GC/MS VOA
Method 8260D: The LCS associated with batch 590-31259 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

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

GC/MS Semi VOA
Method 8270E SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 590-31257 and analytical batch 590-31252 recovered outside control limits for the following analytes: Indeno[1,2,3-cd]pyrene, Dibenz(a,h)anthracene and Benzo[g,h,i]perylene.

Method 8270E SIM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 590-31257 and analytical batch 590-31252 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8270E SIM: Surrogate recovery for the following samples were outside the upper control limit: Borrow 1 (590-14947-3) and Borrow 2 (590-14947-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

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: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
590-14947-1	WP-NW1-Bottom-35-75	Solid	04/13/21 10:35	04/13/21 14:14	
590-14947-2	WP-NW1-Wall-35-74	Solid	04/13/21 10:30	04/13/21 14:14	
590-14947-3	Borrow 1	Solid	04/13/21 11:48	04/13/21 14:14	
590-14947-4	Borrow 2	Solid	04/13/21 11:48	04/13/21 14:14	
590-14947-5	Trip Blank	Solid	04/13/21 11:50	04/13/21 14:14	

Definitions/Glossary

Client: HDR Inc
Job ID: 590-14947-1
Project/Site: Simplot Warden Feb. 2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

Client Sample ID: WP-NW1-Bottom-35-75
Lab Sample ID: 590-14947-1
Date Collected: 04/13/21 10:35
Matrix: Solid
Date Received: 04/13/21 14:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.1		0.01	0.01	%			04/14/21 07:07	1
Percent Solids	79.9		0.01	0.01	%			04/14/21 07:07	1

Client Sample ID: WP-NW1-Bottom-35-75
Lab Sample ID: 590-14947-1
Date Collected: 04/13/21 10:35
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 79.9

Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.061	0.043	ug/Kg	☼	04/14/21 12:32	04/14/21 13:44	1

Client Sample ID: WP-NW1-Wall-35-74
Lab Sample ID: 590-14947-2
Date Collected: 04/13/21 10:30
Matrix: Solid
Date Received: 04/13/21 14:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.7		0.01	0.01	%			04/14/21 07:07	1
Percent Solids	82.3		0.01	0.01	%			04/14/21 07:07	1

Client Sample ID: WP-NW1-Wall-35-74
Lab Sample ID: 590-14947-2
Date Collected: 04/13/21 10:30
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 82.3

Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.060	0.042	ug/Kg	☼	04/14/21 12:32	04/14/21 14:33	1

Client Sample ID: Borrow 1
Lab Sample ID: 590-14947-3
Date Collected: 04/13/21 11:48
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 91.6

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.096	0.027	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Chloromethane	ND	*-	0.48	0.040	mg/Kg	☼	04/13/21 14:54	04/14/21 14:18	1
Vinyl chloride	ND		0.058	0.019	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Bromomethane	ND		0.48	0.032	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Chloroethane	ND	*+	0.19	0.054	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Trichlorofluoromethane	ND		0.19	0.031	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1-Dichloroethene	ND		0.096	0.033	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Methylene Chloride	ND		0.34	0.19	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
trans-1,2-Dichloroethene	ND		0.096	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1-Dichloroethane	ND		0.096	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
2,2-Dichloropropane	ND		0.096	0.023	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
cis-1,2-Dichloroethene	ND		0.096	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Bromochloromethane	ND		0.096	0.038	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Chloroform	ND		0.096	0.023	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1,1-Trichloroethane	ND	*+	0.096	0.017	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Carbon tetrachloride	ND		0.096	0.011	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1-Dichloropropene	ND		0.096	0.017	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Client Sample ID: Borrow 1
Date Collected: 04/13/21 11:48
Date Received: 04/13/21 14:14

Lab Sample ID: 590-14947-3
Matrix: Solid
Percent Solids: 91.6

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019	0.0096	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2-Dichloroethane	ND		0.096	0.015	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Trichloroethene	ND		0.024	0.0073	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2-Dichloropropane	ND		0.12	0.029	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Dibromomethane	ND		0.096	0.021	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Bromodichloromethane	ND		0.096	0.060	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
cis-1,3-Dichloropropene	ND		0.096	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Toluene	ND		0.096	0.013	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
trans-1,3-Dichloropropene	ND		0.096	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1,2-Trichloroethane	ND		0.096	0.034	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Tetrachloroethene	ND		0.038	0.017	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,3-Dichloropropane	ND		0.096	0.028	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Dibromochloromethane	ND		0.19	0.016	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2-Dibromoethane (EDB)	ND		0.096	0.032	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Chlorobenzene	ND		0.096	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Ethylbenzene	ND		0.096	0.016	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1,1,2-Tetrachloroethane	ND		0.096	0.018	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,1,2,2-Tetrachloroethane	ND		0.096	0.028	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
m,p-Xylene	ND		0.38	0.028	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
o-Xylene	ND		0.19	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Styrene	ND		0.096	0.023	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Bromoform	ND		0.19	0.018	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Isopropylbenzene	ND		0.096	0.030	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Bromobenzene	ND		0.096	0.021	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
N-Propylbenzene	ND		0.096	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2,3-Trichloropropane	ND		0.19	0.035	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
2-Chlorotoluene	ND		0.096	0.016	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,3,5-Trimethylbenzene	ND		0.096	0.031	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
4-Chlorotoluene	ND		0.096	0.0083	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
tert-Butylbenzene	ND		0.096	0.019	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2,4-Trimethylbenzene	ND		0.096	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
sec-Butylbenzene	ND		0.096	0.018	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,3-Dichlorobenzene	ND		0.096	0.012	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
p-Isopropyltoluene	ND		0.096	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,4-Dichlorobenzene	ND		0.096	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
n-Butylbenzene	ND		0.096	0.026	mg/Kg	☼	04/13/21 14:54	04/14/21 14:18	1
1,2-Dichlorobenzene	ND		0.096	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2-Dibromo-3-Chloropropane	ND		0.48	0.058	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2,4-Trichlorobenzene	ND		0.096	0.018	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
1,2,3-Trichlorobenzene	ND		0.096	0.032	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Hexachlorobutadiene	ND		0.096	0.016	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Naphthalene	ND		0.19	0.027	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1
Methyl tert-butyl ether	ND		0.048	0.029	mg/Kg	☼	04/13/21 14:54	04/14/21 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*	*04/13/21 14:54*	*04/14/21 03:49*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*	*04/13/21 14:54*	*04/14/21 14:18*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 122*	*04/13/21 14:54*	*04/14/21 03:49*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 122*	*04/13/21 14:54*	*04/14/21 14:18*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*	*04/13/21 14:54*	*04/14/21 03:49*	*1*

Client Sample ID: Borrow 1

Date Collected: 04/13/21 11:48
Date Received: 04/13/21 14:14

Lab Sample ID: 590-14947-3

Matrix: Solid
Percent Solids: 91.6

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 120*	*04/13/21 14:54*	*04/14/21 14:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 129*	*04/13/21 14:54*	*04/14/21 03:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 129*	*04/13/21 14:54*	*04/14/21 14:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		10	2.3	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
2-Methylnaphthalene	ND		10	3.2	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Acenaphthene	ND	F2	10	2.6	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Acenaphthylene	ND		10	3.4	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Anthracene	ND		10	2.1	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Benzo[a]anthracene	ND		10	2.2	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Benzo[a]pyrene	ND		10	4.4	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Benzo[b]fluoranthene	ND		10	3.6	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Benzo[g,h,i]perylene	ND	*1	10	2.4	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Benzo[k]fluoranthene	ND		10	2.6	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Chrysene	ND		10	1.6	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Dibenz(a,h)anthracene	ND	*1	10	2.9	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Fluoranthene	ND		10	2.6	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Fluorene	ND		10	2.3	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Indeno[1,2,3-cd]pyrene	ND	*1	10	3.1	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Naphthalene	ND		10	2.2	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Phenanthrene	ND		10	3.7	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1
Pyrene	ND		10	3.9	ug/Kg	☼	04/14/21 10:34	04/14/21 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*47 - 120*	*04/14/21 10:34*	*04/14/21 12:35*	*1*
Nitrobenzene-d5	*87*		*33 - 120*	*04/14/21 10:34*	*04/14/21 12:35*	*1*
p-Terphenyl-d14	*122*	*S1+*	*74 - 120*	*04/14/21 10:34*	*04/14/21 12:35*	*1*

Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg	☼	04/14/21 12:32	04/14/21 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.4**		0.01	0.01	%			04/14/21 07:07	1
Percent Solids	**91.6**		0.01	0.01	%			04/14/21 07:07	1

Client Sample ID: Borrow 2

Date Collected: 04/13/21 11:48
Date Received: 04/13/21 14:14

Lab Sample ID: 590-14947-4

Matrix: Solid
Percent Solids: 93.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.11	0.030	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Chloromethane	ND	*-	0.53	0.045	mg/Kg	☼	04/13/21 14:54	04/14/21 14:40	1
Vinyl chloride	ND		0.064	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Bromomethane	ND		0.53	0.035	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Chloroethane	ND	*+	0.21	0.060	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Client Sample ID: Borrow 2
Date Collected: 04/13/21 11:48
Date Received: 04/13/21 14:14

Lab Sample ID: 590-14947-4
Matrix: Solid
Percent Solids: 93.5

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.21	0.035	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1-Dichloroethene	ND		0.11	0.036	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Methylene Chloride	ND		0.37	0.21	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
trans-1,2-Dichloroethene	ND		0.11	0.024	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1-Dichloroethane	ND		0.11	0.028	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
2,2-Dichloropropane	ND		0.11	0.026	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
cis-1,2-Dichloroethene	ND		0.11	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Bromochloromethane	ND		0.11	0.043	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Chloroform	ND		0.11	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1,1-Trichloroethane	ND	*+	0.11	0.018	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Carbon tetrachloride	ND		0.11	0.012	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1-Dichloropropene	ND		0.11	0.019	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Benzene	ND		0.021	0.011	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2-Dichloroethane	ND		0.11	0.016	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Trichloroethene	ND		0.027	0.0081	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2-Dichloropropane	ND		0.13	0.032	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Dibromomethane	ND		0.11	0.024	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Bromodichloromethane	ND		0.11	0.066	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
cis-1,3-Dichloropropene	ND		0.11	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Toluene	ND		0.11	0.014	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
trans-1,3-Dichloropropene	ND		0.11	0.028	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1,2-Trichloroethane	ND		0.11	0.038	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Tetrachloroethene	ND		0.043	0.019	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,3-Dichloropropane	ND		0.11	0.032	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Dibromochloromethane	ND		0.21	0.017	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2-Dibromoethane (EDB)	ND		0.11	0.036	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Chlorobenzene	ND		0.11	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Ethylbenzene	ND		0.11	0.017	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1,1,2-Tetrachloroethane	ND		0.11	0.021	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,1,2,2-Tetrachloroethane	ND		0.11	0.031	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
m,p-Xylene	ND		0.43	0.031	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
o-Xylene	ND		0.21	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Styrene	ND		0.11	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Bromoform	ND		0.21	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Isopropylbenzene	ND		0.11	0.033	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Bromobenzene	ND		0.11	0.024	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
N-Propylbenzene	ND		0.11	0.028	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2,3-Trichloropropane	ND		0.21	0.039	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
2-Chlorotoluene	ND		0.11	0.017	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,3,5-Trimethylbenzene	ND		0.11	0.034	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
4-Chlorotoluene	ND		0.11	0.0093	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
tert-Butylbenzene	ND		0.11	0.021	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2,4-Trimethylbenzene	ND		0.11	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
sec-Butylbenzene	ND		0.11	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,3-Dichlorobenzene	ND		0.11	0.013	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
p-Isopropyltoluene	ND		0.11	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,4-Dichlorobenzene	ND		0.11	0.022	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
n-Butylbenzene	ND		0.11	0.029	mg/Kg	☼	04/13/21 14:54	04/14/21 14:40	1
1,2-Dichlorobenzene	ND		0.11	0.025	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1

Client Sample ID: Borrow 2

Date Collected: 04/13/21 11:48
Date Received: 04/13/21 14:14

Lab Sample ID: 590-14947-4

Matrix: Solid
Percent Solids: 93.5

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.53	0.064	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2,4-Trichlorobenzene	ND		0.11	0.020	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
1,2,3-Trichlorobenzene	ND		0.11	0.036	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Hexachlorobutadiene	ND		0.11	0.018	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Naphthalene	ND		0.21	0.030	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1
Methyl tert-butyl ether	ND		0.053	0.032	mg/Kg	☼	04/13/21 14:54	04/14/21 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*	*04/13/21 14:54*	*04/14/21 04:10*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*	*04/13/21 14:54*	*04/14/21 14:40*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 122*	*04/13/21 14:54*	*04/14/21 04:10*	*1*
4-Bromofluorobenzene (Surr)	*107*		*76 - 122*	*04/13/21 14:54*	*04/14/21 14:40*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*	*04/13/21 14:54*	*04/14/21 04:10*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*	*04/13/21 14:54*	*04/14/21 14:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 129*	*04/13/21 14:54*	*04/14/21 04:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 129*	*04/13/21 14:54*	*04/14/21 14:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		10	2.3	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
2-Methylnaphthalene	ND		10	3.2	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Acenaphthene	ND		10	2.6	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Acenaphthylene	ND		10	3.4	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Anthracene	ND		10	2.1	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Benzo[a]anthracene	ND		10	2.2	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Benzo[a]pyrene	ND		10	4.4	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Benzo[b]fluoranthene	ND		10	3.6	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Benzo[g,h,i]perylene	ND	*1	10	2.4	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Benzo[k]fluoranthene	ND		10	2.6	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Chrysene	ND		10	1.6	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Dibenz(a,h)anthracene	ND	*1	10	2.9	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Fluoranthene	ND		10	2.6	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Fluorene	ND		10	2.3	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Indeno[1,2,3-cd]pyrene	ND	*1	10	3.1	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Naphthalene	ND		10	2.2	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Phenanthrene	ND		10	3.8	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1
Pyrene	ND		10	3.9	ug/Kg	☼	04/14/21 10:34	04/14/21 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*47 - 120*	*04/14/21 10:34*	*04/14/21 13:44*	*1*
Nitrobenzene-d5	*82*		*33 - 120*	*04/14/21 10:34*	*04/14/21 13:44*	*1*
p-Terphenyl-d14	*121*	*S1+*	*74 - 120*	*04/14/21 10:34*	*04/14/21 13:44*	*1*

Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.049	0.034	ug/Kg	☼	04/14/21 12:32	04/14/21 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.5**		0.01	0.01	%			04/14/21 07:07	1
Percent Solids	**93.5**		0.01	0.01	%			04/14/21 07:07	1

Client Sample Results

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Client Sample ID: Trip Blank

Date Collected: 04/13/21 11:50
Date Received: 04/13/21 14:14

Lab Sample ID: 590-14947-5

Matrix: Solid

Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.047	0.033	ug/Kg		04/14/21 12:32	04/14/21 15:22	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 590-31237/1-A
Matrix: Solid
Analysis Batch: 31246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.10	0.028	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Chloromethane	ND		0.50	0.042	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Vinyl chloride	ND		0.060	0.020	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Bromomethane	ND		0.50	0.033	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Chloroethane	ND		0.20	0.056	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Trichlorofluoromethane	0.107	J	0.20	0.033	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1-Dichloroethene	ND		0.10	0.034	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Methylene Chloride	ND		0.35	0.20	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
trans-1,2-Dichloroethene	ND		0.10	0.023	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1-Dichloroethane	ND		0.10	0.026	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
2,2-Dichloropropane	ND		0.10	0.024	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
cis-1,2-Dichloroethene	ND		0.10	0.021	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Bromochloromethane	ND		0.10	0.040	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Chloroform	ND		0.10	0.024	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1,1-Trichloroethane	ND		0.10	0.017	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Carbon tetrachloride	ND		0.10	0.011	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1-Dichloropropene	ND		0.10	0.017	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Benzene	ND		0.020	0.010	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2-Dichloroethane	ND		0.10	0.015	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Trichloroethene	ND		0.025	0.0076	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2-Dichloropropane	ND		0.12	0.030	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Dibromomethane	ND		0.10	0.022	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Bromodichloromethane	ND		0.10	0.062	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
cis-1,3-Dichloropropene	ND		0.10	0.020	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Toluene	0.0177	J	0.10	0.013	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
trans-1,3-Dichloropropene	ND		0.10	0.026	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1,2-Trichloroethane	ND		0.10	0.035	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Tetrachloroethene	ND		0.040	0.018	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,3-Dichloropropane	ND		0.10	0.030	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Dibromochloromethane	ND		0.20	0.016	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2-Dibromoethane (EDB)	ND		0.10	0.034	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Chlorobenzene	ND		0.10	0.021	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Ethylbenzene	ND		0.10	0.016	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1,1,2-Tetrachloroethane	ND		0.10	0.019	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,1,2,2-Tetrachloroethane	ND		0.10	0.029	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
m,p-Xylene	ND		0.40	0.029	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
o-Xylene	ND		0.20	0.023	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Styrene	ND		0.10	0.024	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Bromoform	ND		0.20	0.019	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Isopropylbenzene	ND		0.10	0.031	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Bromobenzene	ND		0.10	0.022	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
N-Propylbenzene	ND		0.10	0.026	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2,3-Trichloropropane	ND		0.20	0.037	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
2-Chlorotoluene	ND		0.10	0.016	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,3,5-Trimethylbenzene	ND		0.10	0.032	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
4-Chlorotoluene	ND		0.10	0.0087	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
tert-Butylbenzene	ND		0.10	0.020	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2,4-Trimethylbenzene	ND		0.10	0.023	mg/Kg		04/13/21 11:30	04/13/21 22:07	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 590-31237/1-A
Matrix: Solid
Analysis Batch: 31246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10	0.019	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,3-Dichlorobenzene	ND		0.10	0.013	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
p-Isopropyltoluene	ND		0.10	0.020	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,4-Dichlorobenzene	ND		0.10	0.021	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
n-Butylbenzene	ND		0.10	0.028	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2-Dichlorobenzene	ND		0.10	0.023	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.060	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2,4-Trichlorobenzene	ND		0.10	0.019	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
1,2,3-Trichlorobenzene	ND		0.10	0.033	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Hexachlorobutadiene	ND		0.10	0.016	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Naphthalene	ND		0.20	0.028	mg/Kg		04/13/21 11:30	04/13/21 22:07	1
Methyl tert-butyl ether	ND		0.050	0.030	mg/Kg		04/13/21 11:30	04/13/21 22:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*	*04/13/21 11:30*	*04/13/21 22:07*	*1*
4-Bromofluorobenzene (Surr)	*103*		*76 - 122*	*04/13/21 11:30*	*04/13/21 22:07*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*	*04/13/21 11:30*	*04/13/21 22:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 129*	*04/13/21 11:30*	*04/13/21 22:07*	*1*

Lab Sample ID: LCS 590-31237/2-A
Matrix: Solid
Analysis Batch: 31246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.500	0.396		mg/Kg		79	34 - 120
Chloromethane	0.500	0.289	J *-	mg/Kg		58	63 - 120
Vinyl chloride	0.500	0.430		mg/Kg		86	66 - 129
Bromomethane	0.500	0.546		mg/Kg		109	56 - 138
Chloroethane	0.500	0.850	*+	mg/Kg		170	50 - 142
Trichlorofluoromethane	0.500	0.649		mg/Kg		130	64 - 143
1,1-Dichloroethene	0.500	0.552		mg/Kg		110	73 - 135
Methylene Chloride	0.500	0.557		mg/Kg		111	30 - 150
trans-1,2-Dichloroethene	0.500	0.502		mg/Kg		100	80 - 126
1,1-Dichloroethane	0.500	0.502		mg/Kg		100	80 - 129
2,2-Dichloropropane	0.500	0.509		mg/Kg		102	80 - 138
cis-1,2-Dichloroethene	0.500	0.510		mg/Kg		102	80 - 124
Bromochloromethane	0.500	0.412		mg/Kg		82	75 - 135
Chloroform	0.500	0.609		mg/Kg		122	80 - 130
1,1,1-Trichloroethane	0.500	0.654	*+	mg/Kg		131	80 - 130
Carbon tetrachloride	0.500	0.587		mg/Kg		117	72 - 138
1,1-Dichloropropene	0.500	0.601		mg/Kg		120	78 - 132
Benzene	0.500	0.539		mg/Kg		108	76 - 129
1,2-Dichloroethane	0.500	0.638		mg/Kg		128	80 - 129
Trichloroethene	0.500	0.547		mg/Kg		109	79 - 133
1,2-Dichloropropane	0.500	0.464		mg/Kg		93	75 - 121
Dibromomethane	0.500	0.582		mg/Kg		116	80 - 123
Bromodichloromethane	0.500	0.563		mg/Kg		113	80 - 128
cis-1,3-Dichloropropene	0.500	0.512		mg/Kg		102	80 - 126

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 590-31237/2-A
Matrix: Solid
Analysis Batch: 31246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.500	0.520		mg/Kg		104	77 - 131
trans-1,3-Dichloropropene	0.500	0.477		mg/Kg		95	80 - 124
1,1,2-Trichloroethane	0.500	0.523		mg/Kg		105	80 - 125
Tetrachloroethene	0.500	0.597		mg/Kg		119	77 - 134
1,3-Dichloropropane	0.500	0.549		mg/Kg		110	76 - 125
Dibromochloromethane	0.500	0.493		mg/Kg		99	78 - 127
1,2-Dibromoethane (EDB)	0.500	0.557		mg/Kg		111	80 - 121
Chlorobenzene	0.500	0.464		mg/Kg		93	80 - 129
Ethylbenzene	0.500	0.507		mg/Kg		101	77 - 126
1,1,1,2-Tetrachloroethane	0.500	0.478		mg/Kg		96	80 - 128
1,1,2,2-Tetrachloroethane	0.500	0.486		mg/Kg		97	75 - 128
m,p-Xylene	0.500	0.531		mg/Kg		106	78 - 130
o-Xylene	0.500	0.500		mg/Kg		100	77 - 129
Styrene	0.500	0.465		mg/Kg		93	80 - 128
Bromoform	0.500	0.543		mg/Kg		109	72 - 133
Isopropylbenzene	0.500	0.511		mg/Kg		102	78 - 139
Bromobenzene	0.500	0.561		mg/Kg		112	75 - 129
N-Propylbenzene	0.500	0.485		mg/Kg		97	77 - 131
1,2,3-Trichloropropane	0.500	0.579		mg/Kg		116	67 - 131
2-Chlorotoluene	0.500	0.514		mg/Kg		103	77 - 135
1,3,5-Trimethylbenzene	0.500	0.502		mg/Kg		100	76 - 133
4-Chlorotoluene	0.500	0.484		mg/Kg		97	77 - 133
tert-Butylbenzene	0.500	0.530		mg/Kg		106	76 - 130
1,2,4-Trimethylbenzene	0.500	0.516		mg/Kg		103	76 - 132
sec-Butylbenzene	0.500	0.495		mg/Kg		99	76 - 130
1,3-Dichlorobenzene	0.500	0.528		mg/Kg		106	80 - 123
p-Isopropyltoluene	0.500	0.520		mg/Kg		104	80 - 130
1,4-Dichlorobenzene	0.500	0.518		mg/Kg		104	80 - 125
n-Butylbenzene	0.500	0.456		mg/Kg		91	80 - 131
1,2-Dichlorobenzene	0.500	0.541		mg/Kg		108	80 - 124
1,2-Dibromo-3-Chloropropane	0.500	0.649		mg/Kg		130	49 - 139
1,2,4-Trichlorobenzene	0.500	0.538		mg/Kg		108	79 - 126
1,2,3-Trichlorobenzene	0.500	0.574		mg/Kg		115	66 - 130
Hexachlorobutadiene	0.500	0.623		mg/Kg		125	80 - 136
Naphthalene	0.500	0.508		mg/Kg		102	53 - 144
Methyl tert-butyl ether	0.500	0.601		mg/Kg		120	80 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*76 - 122*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 129*

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

Lab Sample ID: MB 590-31257/1-A
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		10	2.2	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
2-Methylnaphthalene	ND		10	3.1	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Acenaphthene	ND		10	2.5	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Acenaphthylene	ND		10	3.3	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Anthracene	ND		10	2.0	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Benzo[a]anthracene	ND		10	2.1	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Benzo[a]pyrene	ND		10	4.2	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Benzo[b]fluoranthene	ND		10	3.5	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Benzo[g,h,i]perylene	ND		10	2.4	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Benzo[k]fluoranthene	ND		10	2.5	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Chrysene	ND		10	1.5	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Dibenz(a,h)anthracene	ND		10	2.8	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Fluoranthene	ND		10	2.5	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Fluorene	ND		10	2.2	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Indeno[1,2,3-cd]pyrene	ND		10	3.0	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Naphthalene	ND		10	2.2	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Phenanthrene	ND		10	3.6	ug/Kg		04/14/21 10:34	04/14/21 11:25	1
Pyrene	ND		10	3.8	ug/Kg		04/14/21 10:34	04/14/21 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*47 - 120*	*04/14/21 10:34*	*04/14/21 11:25*	*1*
Nitrobenzene-d5	*82*		*33 - 120*	*04/14/21 10:34*	*04/14/21 11:25*	*1*
p-Terphenyl-d14	*119*		*74 - 120*	*04/14/21 10:34*	*04/14/21 11:25*	*1*

Lab Sample ID: LCS 590-31257/2-A
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	133	104		ug/Kg		78	44 - 120
2-Methylnaphthalene	133	105		ug/Kg		79	48 - 120
Acenaphthene	133	111		ug/Kg		83	53 - 120
Acenaphthylene	133	110		ug/Kg		82	52 - 120
Anthracene	133	128		ug/Kg		96	60 - 120
Benzo[a]anthracene	133	136		ug/Kg		102	61 - 131
Benzo[a]pyrene	133	134		ug/Kg		100	60 - 126
Benzo[b]fluoranthene	133	133		ug/Kg		100	61 - 127
Benzo[g,h,i]perylene	133	143		ug/Kg		107	58 - 129
Benzo[k]fluoranthene	133	150		ug/Kg		113	63 - 127
Chrysene	133	138		ug/Kg		104	67 - 127
Dibenz(a,h)anthracene	133	148		ug/Kg		111	60 - 121
Fluoranthene	133	139		ug/Kg		104	63 - 127
Fluorene	133	116		ug/Kg		87	55 - 120
Indeno[1,2,3-cd]pyrene	133	148		ug/Kg		111	63 - 128
Naphthalene	133	99.0		ug/Kg		74	45 - 120
Phenanthrene	133	130		ug/Kg		97	57 - 121
Pyrene	133	138		ug/Kg		104	61 - 125

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

Lab Sample ID: LCS 590-31257/2-A
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31257

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	79		47 - 120
Nitrobenzene-d5	73		33 - 120
p-Terphenyl-d14	118		74 - 120

Lab Sample ID: LCSD 590-31257/3-A
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene			133	104		ug/Kg		78	44 - 120	0	15
2-Methylnaphthalene			133	101		ug/Kg		76	48 - 120	4	20
Acenaphthene			133	103		ug/Kg		77	53 - 120	7	15
Acenaphthylene			133	98.5		ug/Kg		74	52 - 120	11	20
Anthracene			133	116		ug/Kg		87	60 - 120	10	18
Benzo[a]anthracene			133	124		ug/Kg		93	61 - 131	9	16
Benzo[a]pyrene			133	122		ug/Kg		92	60 - 126	9	20
Benzo[b]fluoranthene			133	124		ug/Kg		93	61 - 127	7	16
Benzo[g,h,i]perylene			133	110	*1	ug/Kg		83	58 - 129	26	17
Benzo[k]fluoranthene			133	136		ug/Kg		102	63 - 127	10	16
Chrysene			133	127		ug/Kg		95	67 - 127	9	15
Dibenz(a,h)anthracene			133	111	*1	ug/Kg		83	60 - 121	29	18
Fluoranthene			133	123		ug/Kg		92	63 - 127	13	18
Fluorene			133	108		ug/Kg		81	55 - 120	8	21
Indeno[1,2,3-cd]pyrene			133	110	*1	ug/Kg		83	63 - 128	29	18
Naphthalene			133	95.9		ug/Kg		72	45 - 120	3	20
Phenanthrene			133	116		ug/Kg		87	57 - 121	11	18
Pyrene			133	121		ug/Kg		91	61 - 125	13	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	81		47 - 120
Nitrobenzene-d5	73		33 - 120
p-Terphenyl-d14	110		74 - 120

Lab Sample ID: 590-14947-3 MS
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Borrow 1
Prep Type: Total/NA
Prep Batch: 31257

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	ND		139	115		ug/Kg	☼	83	44 - 120
2-Methylnaphthalene	ND		139	119		ug/Kg	☼	86	48 - 120
Acenaphthene	ND	F2	139	116		ug/Kg	☼	83	53 - 120
Acenaphthylene	ND		139	112		ug/Kg	☼	80	52 - 120
Anthracene	ND		139	127		ug/Kg	☼	91	60 - 120
Benzo[a]anthracene	ND		139	137		ug/Kg	☼	99	61 - 131
Benzo[a]pyrene	ND		139	138		ug/Kg	☼	99	60 - 126
Benzo[b]fluoranthene	ND		139	140		ug/Kg	☼	101	61 - 127
Benzo[g,h,i]perylene	ND	*1	139	151		ug/Kg	☼	109	58 - 129
Benzo[k]fluoranthene	ND		139	158		ug/Kg	☼	113	63 - 127

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

Lab Sample ID: 590-14947-3 MS
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Borrow 1
Prep Type: Total/NA
Prep Batch: 31257

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	ND		139	140		ug/Kg	☼	100	67 - 127
Dibenz(a,h)anthracene	ND	*1	139	144		ug/Kg	☼	104	60 - 121
Fluoranthene	ND		139	132		ug/Kg	☼	95	63 - 127
Fluorene	ND		139	125		ug/Kg	☼	90	55 - 120
Indeno[1,2,3-cd]pyrene	ND	*1	139	146		ug/Kg	☼	105	63 - 128
Naphthalene	ND		139	113		ug/Kg	☼	81	45 - 120
Phenanthrene	ND		139	127		ug/Kg	☼	92	57 - 121
Pyrene	ND		139	133		ug/Kg	☼	96	61 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*86*		*47 - 120*
Nitrobenzene-d5	*84*		*33 - 120*
p-Terphenyl-d14	*113*		*74 - 120*

Lab Sample ID: 590-14947-3 MSD
Matrix: Solid
Analysis Batch: 31252

Client Sample ID: Borrow 1
Prep Type: Total/NA
Prep Batch: 31257

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	ND		139	102		ug/Kg	☼	73	44 - 120	13	14
2-Methylnaphthalene	ND		139	103		ug/Kg	☼	75	48 - 120	14	20
Acenaphthene	ND	F2	139	103	F2	ug/Kg	☼	74	53 - 120	12	11
Acenaphthylene	ND		139	98.7		ug/Kg	☼	71	52 - 120	12	20
Anthracene	ND		139	113		ug/Kg	☼	81	60 - 120	12	18
Benzo[a]anthracene	ND		139	125		ug/Kg	☼	90	61 - 131	9	16
Benzo[a]pyrene	ND		139	124		ug/Kg	☼	90	60 - 126	10	20
Benzo[b]fluoranthene	ND		139	124		ug/Kg	☼	89	61 - 127	12	16
Benzo[g,h,i]perylene	ND	*1	139	131		ug/Kg	☼	94	58 - 129	15	17
Benzo[k]fluoranthene	ND		139	143		ug/Kg	☼	103	63 - 127	10	16
Chrysene	ND		139	127		ug/Kg	☼	91	67 - 127	9	15
Dibenz(a,h)anthracene	ND	*1	139	126		ug/Kg	☼	90	60 - 121	14	18
Fluoranthene	ND		139	116		ug/Kg	☼	84	63 - 127	12	18
Fluorene	ND		139	112		ug/Kg	☼	81	55 - 120	11	21
Indeno[1,2,3-cd]pyrene	ND	*1	139	128		ug/Kg	☼	92	63 - 128	13	18
Naphthalene	ND		139	98.3		ug/Kg	☼	71	45 - 120	14	20
Phenanthrene	ND		139	114		ug/Kg	☼	82	57 - 121	11	18
Pyrene	ND		139	122		ug/Kg	☼	88	61 - 125	9	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*47 - 120*
Nitrobenzene-d5	*71*		*33 - 120*
p-Terphenyl-d14	*103*		*74 - 120*

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Method: 8011 - EDB

Lab Sample ID: MB 590-31265/2-A
Matrix: Solid
Analysis Batch: 31264

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		04/14/21 12:32	04/14/21 13:11	1

Lab Sample ID: LCS 590-31265/3-A
Matrix: Solid
Analysis Batch: 31264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31265

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromoethane (EDB)			1.00	0.986		ug/Kg		99	60 - 140		

Lab Sample ID: 590-14947-1 MS
Matrix: Solid
Analysis Batch: 31264

Client Sample ID: WP-NW1-Bottom-35-75
Prep Type: Total/NA
Prep Batch: 31265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromoethane (EDB)	ND		1.20	0.755		ug/Kg	☼	63	60 - 140		

Lab Sample ID: 590-14947-1 MSD
Matrix: Solid
Analysis Batch: 31264

Client Sample ID: WP-NW1-Bottom-35-75
Prep Type: Total/NA
Prep Batch: 31265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.22	0.788		ug/Kg	☼	65	60 - 140	4	20

Method: Moisture - Percent Moisture

Lab Sample ID: 590-14947-1 DU
Matrix: Solid
Analysis Batch: 31249

Client Sample ID: WP-NW1-Bottom-35-75
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	20.1			20.3		%				0.5	20
Percent Solids	79.9			79.8		%				0.1	20

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Client Sample ID: WP-NW1-Bottom-35-75
Lab Sample ID: 590-14947-1
Date Collected: 04/13/21 10:35
Matrix: Solid
Date Received: 04/13/21 14:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			31249	04/14/21 07:07	AMB	TAL SPK

Client Sample ID: WP-NW1-Bottom-35-75
Lab Sample ID: 590-14947-1
Date Collected: 04/13/21 10:35
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.23 g	2 mL	31265	04/14/21 12:32	NMI	TAL SPK
Total/NA	Analysis	8011		1			31264	04/14/21 13:44	NMI	TAL SPK

Client Sample ID: WP-NW1-Wall-35-74
Lab Sample ID: 590-14947-2
Date Collected: 04/13/21 10:30
Matrix: Solid
Date Received: 04/13/21 14:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			31249	04/14/21 07:07	AMB	TAL SPK

Client Sample ID: WP-NW1-Wall-35-74
Lab Sample ID: 590-14947-2
Date Collected: 04/13/21 10:30
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.16 g	2 mL	31265	04/14/21 12:32	NMI	TAL SPK
Total/NA	Analysis	8011		1			31264	04/14/21 14:33	NMI	TAL SPK

Client Sample ID: Borrow 1
Lab Sample ID: 590-14947-3
Date Collected: 04/13/21 11:48
Matrix: Solid
Date Received: 04/13/21 14:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			31249	04/14/21 07:07	AMB	TAL SPK

Client Sample ID: Borrow 1
Lab Sample ID: 590-14947-3
Date Collected: 04/13/21 11:48
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			12.585 g	10 mL	31237	04/13/21 14:54	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	31246	04/14/21 03:49	JSP	TAL SPK
Total/NA	Prep	5035			12.585 g	10 mL	31237	04/13/21 14:54	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	31259	04/14/21 14:18	JSP	TAL SPK
Total/NA	Prep	3550C			15.86 g	2 mL	31257	04/14/21 10:34	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			31252	04/14/21 12:35	NMI	TAL SPK
Total/NA	Prep	8011			10.94 g	2 mL	31265	04/14/21 12:32	NMI	TAL SPK
Total/NA	Analysis	8011		1			31264	04/14/21 14:49	NMI	TAL SPK

Lab Chronicle

Client: HDR Inc
Job ID: 590-14947-1
Project/Site: Simplot Warden Feb. 2021

Client Sample ID: Borrow 2
Lab Sample ID: 590-14947-4
Date Collected: 04/13/21 11:48
Matrix: Solid
Date Received: 04/13/21 14:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			31249	04/14/21 07:07	AMB	TAL SPK

Client Sample ID: Borrow 2
Lab Sample ID: 590-14947-4
Date Collected: 04/13/21 11:48
Matrix: Solid
Date Received: 04/13/21 14:14
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.707 g	10 mL	31237	04/13/21 14:54	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	31246	04/14/21 04:10	JSP	TAL SPK
Total/NA	Prep	5035			10.707 g	10 mL	31237	04/13/21 14:54	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	31259	04/14/21 14:40	JSP	TAL SPK
Total/NA	Prep	3550C			15.51 g	2 mL	31257	04/14/21 10:34	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			31252	04/14/21 13:44	NMI	TAL SPK
Total/NA	Prep	8011			10.86 g	2 mL	31265	04/14/21 12:32	NMI	TAL SPK
Total/NA	Analysis	8011		1			31264	04/14/21 15:05	NMI	TAL SPK

Client Sample ID: Trip Blank
Lab Sample ID: 590-14947-5
Date Collected: 04/13/21 11:50
Matrix: Solid
Date Received: 04/13/21 14:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.55 g	2 mL	31265	04/14/21 12:32	NMI	TAL SPK
Total/NA	Analysis	8011		1			31264	04/14/21 15:22	NMI	TAL SPK

Laboratory References:

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 590-14947-1
Project/Site: Simplot Warden Feb. 2021

Laboratory: Eurofins TestAmerica, Spokane

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-025	01-07-22
Oregon	NELAP	4137	12-07-21
Washington	State	C569	01-06-22

Method Summary

Client: HDR Inc
Project/Site: Simplot Warden Feb. 2021

Job ID: 590-14947-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL SPK
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL SPK
8011	EDB	EPA	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK
3550C	Ultrasonic Extraction	SW846	TAL SPK
5035	Closed System Purge and Trap	SW846	TAL SPK
8011	Microextraction	SW846	TAL SPK

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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

Chain of Custody Record

014156

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

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

Client Contact	Project Manager: Mike Murray	Site Contact: Nigel Baumm	Date: 4/13/2021	COC No: 1
Company Name: HDR	Tel/Fax: 208-484-4689	Lab Contact: Elaine Walker	Carrier:	1 of 1 COCs
Address: 412 E Parkcenter Blvd Ste 100	Analysis Turnaround Time			Sampler:
City/State/Zip: Boise, ID 83706	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 208-387-7113	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Simplot Warden	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO# 10101457	X 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EDB 8011	VOC	Sample Specific Notes:
WP-NW1-Bottom-35-75	4/13/21	1035	G	S	1			X		24 hr TAT
WP-NW1-Wall-35-74	↓	1030	↓	↓	↓			X		↓
Borrow 1		1147						X	X	
Borrow 2		1147						X	X	
Trip Blank		1150						X		

590-14947 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

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

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

Special Instructions/QC Requirements & Comments:
Please email results to Nigel.Baumm@hdrinc.com, katie.krajicek@hdrinc.com, murraydoudict@gmail.com

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 0.6 Corr'd: 0.5 | Therm ID No.: IR0016

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Katie Krajicek	HDR	4/13/21 12:08	Jeff Greenwalt	Simplot	4/13/21 12:10 PM
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Jeff Greenwalt	Simplot	4/13/21 2:15 PM	Maria Toole	TSPO	4/13/21 14:14
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-14947-1

Login Number: 14947
List Number: 1
Creator: O'Toole, Maria C

List Source: Eurofins TestAmerica, Spokane

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

D

Soil Compaction Test Results

East Pit
Compaction Test Results

WESTERN PACIFIC ENGINEERING & SURVEY
1328 E. Hunter Place, Moses Lake, Washington
T: (509)765-1023 F: (509)765-1298

A2LA ACCREDITED # 4142.01

Soil Compaction Test Report

Report To: Graymar Environmental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 3/26/2021
Project #: 20675
Report #: 01

Project Name: Simplot Warden, WA
Contractor: Graymar Environmental
Fill Placement General Location : NE Pit
Technician: Matthew Maygren
Nuclear Gauge #: #0055: M351002911 Density Standard: 26704 Moisture Standard: 10872

Weather: Partly Cloudy
Air Temp. °F: 54
Test Date: 3/26/2021

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	116.1	12.7	Clean Overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: N/A
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	Approx. 11' S & 9' E of NW corner of NE Pit	1235.24 Top of Clean Overburden Subgrade	113.8	12.90	116.1	12.7	98.0	12
2	Approx. 9' N & 12' W of SE corner of NE Pit	1235.24 Top of Clean Overburden Subgrade	111.9	12.20	116.1	12.7	96.4	12
3	Approx. 11' N & 1.5' W of SE corner of NE Pit	1235.65 Top of Clean Overburden Subgrade	111.5	11.80	116.1	12.7	96.0	12
4	Approx. 11' S & 1' E of NW corner of NE Pit	1235.50 Top of Clean Overburden Subgrade	111.6	11.40	116.1	12.7	96.1	12

Remarks:
None

The compaction contractor referred to the East Pit as the "NE Pit" in the above table. All results on this page are for the East Pit.

West Pit
Compaction Test Results

WESTERN PACIFIC ENGINEERING & SURVEY
1328 E. Hunter Place, Moses Lake, Washington
T: (509)765-1023 F: (509)765-1298

ACCREDITED # 4142.01

Soil Compaction Test Report

Report To: Graymar Environmental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 8/29/22
Project #: 22650
Report #: 01

Project Name: Simplot Warden, WA
Contractor: Graymar Environmental
Fill Placement General Location : West Pit
Technician: David Dekker
Nuclear Gauge #: #0055: M351002911 Density Standard: 26112 Moisture Standard: 10896

Weather: Sunny and Clear
Air Temp. °F: 95
Test Date: 8/5/22

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	116.1	12.7	Clean Overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications

Specified Moisture % Range: N/A
Specified % Compaction: 95

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	Approx. 8' W. and 5' S. of NE Corner.	Approx. 18' below grade	110.5	12.60	116.1	12.7	95	12"
2	Approx. 15' W. and 15' S. of NE Corner	Approx. 18' below grade	113.5	9.30	116.1	12.7	98	12"
3	Approx. Middle of pit	Approx. 16" below grade	110.7	8.60	116.1	12.7	95	12"

Remarks:
Elevations are approximate, given by Graymar crew on site.

Deviations: **No**

West Pit
Compaction Test Results

WESTERN PACIFIC ENGINEERING & SURVEY
1328 E. Hunter Place, Moses Lake, Washington
T: (509)765-1023 F: (509)765-1298

A2LA ACCREDITED # 4142.01

Soil Compaction Test Report

Report To: Graymar Environmental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 9/2/22
Project #: 22650
Report #: 02

Project Name: Simplot Warden, WA
Contractor: Graymar Environmental
Fill Placement General Location : West Pit
Technician: David Dekker
Nuclear Gauge #: #0054: M370703787 Density Standard: 28344 Moisture Standard: 9296

Weather: Sunny and Clear
Air Temp. °F: 96
Test Date: 8/31/22

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	116.1	12.7	Clean Overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications

Specified Moisture % Range: N/A
Specified % Compaction: 95

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	Approx. 25' W. and 10' S. of NE Corner	Approx. 12' below grade	110.8	10.60	116.1	12.7	95.4	12"
2	Approx. 15' W. and 15' S. of NE Corner	Approx. 12' below grade	111.0	11.60	116.1	12.7	95.6	12"
3	Approx. 15' W. and 5' S. of NE Corner	Approx. 11' below grade	110.4	11.80	116.1	12.7	95.1	12"
4	Approx. 10' W. and 20' S. of NE Corner	Approx. 11' below grade	112.4	11.00	116.1	12.7	96.8	12"

Remarks:
Elevations are approximate, given by Graymar crew on site.

Deviations: No

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Rolling 1st lift of the day

West Pit
Compaction Test Results

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Soil Compaction Test Report

Report To: Graymar Environmental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 9/16/2022
Project #: 22650
Report #: 3

Project Name: Simplot Warden, WA
Contractor: Graymar Environmental
Fill Placement General Location : West Pit
Technician: Beau Koehn
Nuclear Gauge #: #0054: M370703787 Density Standard: 28232 Moisture Standard: 9456

Weather: Sunny/breezy
Air Temp. °F: 80
Test Date: 9/16/2022

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	113.6	13.8	Clean Overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: N/A
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	East end of pit	Approx. 10' below grade	107.8	10.70	113.6	13.8	95	6
2	West end of pit	Aprox. 10' below grade	108.5	11.50	113.6	13.8	96	6
19								
20								

Remarks:
Elevations are approximate.

Deviations: No

West Pit
Compaction Test Results

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Soil Compaction Test Report

Report To: Graymar Environmental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 10/5/2022
Project #: 22650
Report #: 4

Project Name: Simplot Warden, WA
Contractor: Graymar Environmental
Fill Placement General Location : West Pit
Technician: Scott Henson
Nuclear Gauge #: #0055: M351002911 Density Standard: 25944

Weather: Clear
Air Temp. °F: 80
Test Date: 10/4/2022
Moisture Standard: 10816

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	116.1	13.8	Clean Overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: N/A
Specified % Compaction: 95

Retest? A Retest is Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	East side of pit	Approx. 8' below grade	101.2	11.20	116.1	12.7	87	2
2	West end of pit	Aprox. 8' below grade	106.9	9.60	116.1	12.7	92	6
3	South side of the pit	Aprox. 8' below grade	105.2	9.60	116.1	12.7	91	5

Remarks:
There was a large amount of garbage like tarpsand plastic inside of the material being compacted.
05 October 2022
Compaction failure due to low moisture content from high winds
GrayMar crew will apply water to soil for compaction overnight with mechanical sprinkler-head

06 October 2022
GrayMar requested retest after rolling upon start
Retested the pit at same level as previous day, and all soil compaction tests passed
East-side 95.0%
West-side 95.7%
Center 95.0%

Deviations:
No

West Pit
Compaction Test Results

WESTERN PACIFIC ENGINEERING & SURVEY
1224 S. Pioneer Way, Moses Lake, Washington
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Soil Compaction Test Report

Report To: Graymar Enviromental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 10/12/2022
Project #: 22650
Report #: 05

Project Name: Simplot Warden, WA
Contractor: Graymar Enviromental
Fill Placement General Location : West Pit
Technician: Beau Koehn
Nuclear Gauge #: #0054: M370703787 Density Standard: 28152 Moisture Standard: 9456

Weather: Sunny
Air Temp. °F: 75
Test Date: 10/6/2022

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	116.1	13.8	Clean overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: n/a
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	West end of pit	Approx 6'-7' below surface	111.2	12.80	116.1	13.8	96	8
2	East end of pit	Approx 6'-7' below surface	109.9	13.90	116.1	13.8	95	8
3	N.E. corner	Approx 5'-6' Below surface	114.7	9.80	116.1	13.8	99	8
4	Center of pit	Approx 5'-6' Below surface	112.0	10.00	116.1	13.8	96	8
5	N.W. corner	Approx 5'-6' Below surface	110.0	10.60	116.1	13.8	95	8
6	Center of pit	Approx 3'-4' below surface	116.0	8.90	116.1	13.8	100	8
7	West end of pit	Approx 3'-4' below surface	111.0	9.00	116.1	13.8	96	8
8	S.W. corner	Approx 2'-3' below surface	114.1	9.40	116.1	13.8	98	8
9	East end of pit	Approx 2'-3' below surface	110.1	9.40	116.1	13.8	95	8

Deviations: No

West Pit
Compaction Test Results

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Soil Compaction Test Report

Report To: Graymar Enviromental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 10/12/2022
Project #: 22650
Report #: 06

Project Name: Simplot Warden, WA
Contractor: Graymar Enviromental
Fill Placement General Location : West Pit
Technician: Beau Koehn
Nuclear Gauge #: #0054: M370703787 Density Standard: 28008 Moisture Standard: 9400

Weather: Sunny
Air Temp. °F: 75
Test Date: 10/10/2022

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	116.1	13.8	Clean overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: n/a
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	East/center of pit	Approx 4' from surface	111.0	8.80	116.1	13.8	96	8
2	West/center of pit	Approx 4' from surface	109.8	8.80	116.1	13.8	95	8
3	West end of pit 2nd lift	Approx 3' from surface	116.2	9.60	116.1	13.8	99	8
4	East end of pit 2nd lift	Approx 3' from surface	112.7	10.00	116.1	13.8	97	8
5	East end of pit 3rd lift	Approx 2'-3' from surface	109.8	10.30	116.1	13.8	95	8
6	West end of pit 3rd lift	Approx 2'-3' from surface	114.8	8.20	116.1	13.8	99	8
7	West end of pit 4th lift	Approx 2' from surface	110.6	9.90	116.1	13.8	95	8
8	East end of pit 4th lift	Approx 2' from surface	109.8	9.50	116.1	13.8	95	8

Remarks:
Deviations: No

West Pit
Compaction Test Results

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Soil Compaction Test Report

Report To: Graymar Enviromental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 10/12/2022
Project #: 22650
Report #: 07

Project Name: Simplot Warden, WA
Contractor: Graymar Enviromental
Fill Placement General Location : West Pit
Technician: Scott Henson
Nuclear Gauge #: #0057: MD00805817 Density Standard: 29992 Moisture Standard: 8920

Weather: Sunny
Air Temp. °F: 70
Test Date: 10/12/2022

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20657_26	ASTM D1557	116.1	12.7	Clean overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: n/a
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	SW corner of pit	about 4' below grade	109.9	12.70	116.1	12.7	95	8
2	NE Corner of Pit	About 4' below grade	109.9	11.50	116.1	12.7	95	8
3	NW corner	About 3' below grade	110.2	9.10	116.1	12.7	95	6
4	SE corner	About 3' below grade	112.5	9.40	116.1	12.7	97	7
5	E side	About 2' below grade	110.8	9.80	116.1	12.7	95	8
6	W side	About 2' below grade	114.5	9.40	116.1	12.7	99	8

Remarks:

Deviations: No

West Pit
Compaction Test Results

WESTERN PACIFIC ENGINEERING & SURVEY
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Soil Compaction Test Report

Report To: Graymar Enviromental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 10/14/2022
Project #: 22650
Report #: 08

Project Name: Simplot Warden, WA
Contractor: Graymar Enviromental
Fill Placement General Location : West Pit
Technician: Beau Koehn
Nuclear Gauge #: #0057: MD00805817 Density Standard: 29824

Weather: Sunny
Air Temp. °F: 65
Test Date: 10/14/2022
Moisture Standard: 8928

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20657_26	ASTM D1557	116.1	12.7	Clean overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications

Specified Moisture % Range: n/a
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	East end of pit	6"-1' below final grade	111.0	13.80	116.1	12.7	96	8
2	West end of pit	6"-1' below final grade	109.9	16.40	116.1	12.7	95	8
3	East end of pit	Final grade	109.9	10.00	116.1	12.7	95	8
4	N.W. corner of pit	Final grade	110.0	10.40	116.1	12.7	95	8
5	West/center of pit	Final grade	110.7	10.40	116.1	12.7	95	8

Deviations: No

West Pit
Compaction Test Results

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Soil Compaction Test Report

Report To: Graymar Environmental
Attn: Bob Seitz
1220 N Mondel Dr.
Gilbert, AZ 85223

Date: 11/11/22
Project #: 22650
Report #: 09

Project Name: Simplot Warden, WA
Contractor: Graymar Environmental
Fill Placement General Location : Testing trench
Technician: Beau Koehn
Nuclear Gauge #: #0055: M351002911 Density Standard: 25800 Moisture Standard: 10848

Weather: Overcast
Air Temp. °F: 40
Test Date: 11/11/22

Moisture-Density Relationship Curve

Proctor Sample ID	Proctor Method	Max Dry Density (pcf)	Optimum Moisture %	Soil Description
MD20675_26	ASTM D1557	113.6	13.8	Clean overburden

Summarized below are the results of field density tests performed by Western Pacific Engineering and Survey (WPES), on the above referenced project. These test results relate only to the items tested at the location tested. This report shall not be reproduced, except in full, without the prior written approval of WPES. Unless otherwise noted, our technicians utilized the Nuclear Densometer Method of testing in accordance with ASTM D6938.

Project Specifications
Specified Moisture % Range: N/A
Specified % Compaction: 95

Retest? No Retest Needed

Test No.	Field Test Location	Elevation	Dry Density (pcf)	Moisture Content (%)	Max Dry Density (pcf)	Optimum Moisture (%)	Percent Compaction (%)	Probe Depth (in)
1	East end of test trench	Approx 2' below grade	108.2	11.20	113.6	13.8	95	8
2	Center of test trench	Approx 2' below grade	108.9	12.10	113.6	13.8	96	8
3	West end of test trench	Approx 2' below grade	109.7	10.90	113.6	13.8	97	6

Remarks:

Deviations: No

E

SVE Operation Soil Sampling Summary and Laboratory Reports

Pilot Study Summary

This table summarizes the soil and vapor results from samples collected during the SVE pilot study, which is described further in Section 2.7.1. Soil samples were analyzed for EDB and total organic carbon (TOC), and soil vapor samples were analyzed for EDB.

SVE Pilot Study Sample Summary

Pilot Study Soil Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 1/Pilot Pre-Treatment	5/31/2022	6/7/2022	-	SVE-Soil-May31-1Pre1	5/31/2022	6/2/2022	ND	None	0.038		590-17643-1
				SVE-Soil-May31-1Pre2	5/31/2022	6/2/2022	ND	None	0.036		590-17643-2
				SVE-Soil-May31-1Pre3	5/31/2022	6/2/2022	ND	None	0.037		590-17643-3
				SVE-Soil-May31-1Pre4	5/31/2022	6/2/2022	ND	None	0.038		590-17643-5
				SVE-Soil-May31-1PreDUP	5/31/2022	6/2/2022	ND	None	0.035	Duplicate of SVE-Soil-May31-1Pre3	590-17643-4
Batch 1/Pilot Post-Treatment	6/5/2022	6/7/2022	5	SVE-Soil-June5-1Post1	6/5/2022	6/7/2022	ND	None	0.038		590-17700-1
				SVE-Soil-June5-1Post2	6/5/2022	6/7/2022	ND	None	0.038		590-17700-2
				SVE-Soil-June5-1Post3	6/5/2022	6/7/2022	ND	None	0.037		590-17700-3
				SVE-Soil-June5-1Post4	6/5/2022	6/7/2022	ND	None	0.037		590-17700-4
				SVE-Soil-June5-1PostDUP2	6/5/2022	6/7/2022	ND	None	0.038	Duplicate of SVE-Soil-June5-1Post2	590-17700-5
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**TOC Result (mg/Kg)**	None	**MDL (mg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 1/Pilot Pre-Treatment	5/31/2022	6/7/2022	-	SVE-Soil-May31-1Pre1	5/31/2022	6/2/2022	1400	None	100		590-17643-1
				SVE-Soil-May31-1Pre2	5/31/2022	6/2/2022	2300	None	100		590-17643-2
				SVE-Soil-May31-1Pre3	5/31/2022	6/2/2022	1500	None	100		590-17643-3
				SVE-Soil-May31-1Pre4	5/31/2022	6/2/2022	1900	None	100		590-17643-4
				SVE-Soil-May31-1PreDUP	5/31/2022	6/2/2022	1700	None	100	Duplicate of SVE-Soil-May31-1Pre3	590-17643-5
Batch 1/Pilot Post-Treatment	6/5/2022	6/7/2022	5	SVE-Soil-June5-1Post1	6/5/2022	6/17/2022	1500	None	100		590-17700-1
				SVE-Soil-June5-1Post2	6/5/2022	6/17/2022	1400	None	100		590-17700-2
				SVE-Soil-June5-1Post3	6/5/2022	6/17/2022	1200	None	100		590-17700-3
				SVE-Soil-June5-1Post4	6/5/2022	6/17/2022	1200	None	100		590-17700-4
				SVE-Soil-June5-1PostDUP2	6/5/2022	6/17/2022	1100	None	100	Duplicate of SVE-Soil-June5-1Post2	590-17700-5

Pilot Study Vapor Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/m3)**	**Qualifier**	**Report Limit (µg/m3)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 1/Pilot Pre-Treatment	5/31/2022	6/7/2022	5	SVE-Vap-June1-1Pre1	6/1/2022	6/15/2022	ND	None	8.4		2206179-01A
				SVE-Vap-June1-1Pre2	6/1/2022	6/15/2022	ND	None	8.3		2206179-02A
				SVE-Vap-June1-1Pre3	6/1/2022	6/15/2022	ND	None	8.6		2206179-03A
				SVE-Vap-June1-1Pre4	6/1/2022	6/15/2022	ND	None	8.2		2206179-04A
				SVE-Vap-June1-DUP1	6/1/2022	6/15/2022	ND	None	8.5		2206179-05A
				SVE-Vap-June1-1Pre5	6/1/2022	6/15/2022	ND	None	8.3		2206179-06A
				SVE-Vap-June1-1Pre6	6/1/2022	6/15/2022	ND	None	8.4		2206179-07A
				SVE-Vap-June2-1Mid1	6/1/2022	6/15/2022	ND	None	8.4		2206179-08A
				SVE-Vap-June2-1Mid2	6/1/2022	6/15/2022	ND	None	7.8		2206179-09A
				SVE-Vap-June3-1Mid3	6/1/2022	6/15/2022	ND	None	7.6		2206179-10A
				SVE-Vap-June3-1Mid4	6/1/2022	6/15/2022	ND	None	7.9		2206179-11A
				SVE-Vap-June4-1Mid5	6/1/2022	6/15/2022	ND	None	8.1		2206179-12A
				SVE-Vap-June4-1Mid6	6/1/2022	6/15/2022	ND	None	8.1		2206179-13A
				SVE-Vap-June5-1Post1	6/1/2022	6/15/2022	ND	None	9.1		2206179-14A
				SVE-Vap-June5-1Post2	6/1/2022	6/15/2022	ND	None	8.8		2206179-15A

SVE Soil Sample Summary

This table summarizes SVE soil sample results from the pilot test through Batch 53.

SVE Soil Sample Summary

SVE Operation Soil Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 2	6/9/2022	6/14/2022	5	SVE-Soil-June9-2Pre1	6/9/2022	6/13/2022	ND	None	0.039		590-17742-1
				SVE-Soil-June9-2Pre2	6/9/2022	6/13/2022	ND	None	0.039		590-17742-2
				SVE-Soil-June9-2Pre3	6/9/2022	6/13/2022	ND	None	0.038		590-17742-3
				SVE-Soil-June9-2Pre4	6/9/2022	6/13/2022	ND	None	0.039		590-17742-4
				SVE-Soil-June9-Dup1	6/9/2022	6/13/2022	ND	None	0.038	Duplicate of SVE-Soil-June9-2Pre1	590-17742-5
Batch 3	6/15/2022	6/17/2022	2	SVE-Soil-June15-3Pre1	6/15/2022	6/16/2022	ND	None	0.038		590-17777-1
				SVE-Soil-June15-3Pre2	6/15/2022	6/16/2022	ND	None	0.038		590-17777-2
				SVE-Soil-June15-3Pre3	6/15/2022	6/16/2022	ND	None	0.038		590-17777-3
				SVE-Soil-June15-3Pre4	6/15/2022	6/16/2022	ND	None	0.037		590-17777-4
				SVE-Soil-June15-3DUP	6/15/2022	6/16/2022	ND	None	0.038	Duplicate of SVE-Soil-June15-3Pre3	590-17777-5
Batch 4	6/18/2022	6/20/2022	2	SVE-Soil-June17-4Pre1	6/17/2022	6/20/2022	ND	F1, F2	0.039	F1: MS and/or MSD recovery exceeds control limits. F2: MS/MSD RPD exceeds control limits	590-17806-1
				SVE-Soil-June17-4Pre2	6/17/2022	6/20/2022	ND	None	0.038		590-17806-2
				SVE-Soil-June17-4Pre3	6/17/2022	6/20/2022	ND	None	0.038		590-17806-3
				SVE-Soil-June17-4Pre4	6/17/2022	6/20/2022	ND	None	0.038		590-17806-4
Batch 5	6/21/2022	6/23/2022	2	SVE-Soil-June21-5Pre1	6/21/2022	6/23/2022	ND	None	0.039		590-17825-1
				SVE-Soil-June21-5Pre2	6/21/2022	6/23/2022	ND	F2	0.038	F2: MS/MSD RPD exceeds control limits	590-17825-2
				SVE-Soil-June21-5Pre3	6/21/2022	6/23/2022	ND	None	0.036		590-17825-3
				SVE-Soil-June21-5Pre4	6/21/2022	6/23/2022	ND	None	0.038		590-17825-4
				SVE-Soil-June21-5DUP	6/21/2022	6/23/2022	ND	None	0.037	Duplicate of SVE-Soil-June21-5Pre4	590-17825-5
Batch 6	6/24/2022	6/27/2022	3	SVE-Soil-June24-6Pre1	6/24/2022	6/27/2022	ND	None	0.038		590-17869-1
				SVE-Soil-June24-6Pre2	6/24/2022	6/27/2022	ND	*+	0.036	*+: LCS and/or LCSD is outside acceptance limits, high biased.	590-17869-2
				SVE-Soil-June24-6Pre3	6/24/2022	6/27/2022	ND	None	0.038		590-17869-3
				SVE-Soil-June24-6Pre4	6/24/2022	6/27/2022	ND	None	0.039		590-17869-4
Batch 7	6/29/2022	6/30/2022	1	SVE-Soil-June29-7Pre1	6/29/2022	6/30/2022	ND	None	0.037		590-17901-1
				SVE-Soil-June29-7Pre2	6/29/2022	6/30/2022	ND	None	0.037		590-17901-2
				SVE-Soil-June29-7Pre3	6/29/2022	6/30/2022	ND	None	0.038		590-17901-3
				SVE-Soil-June29-7Pre4	6/29/2022	6/30/2022	ND	None	0.037		590-17901-4
				SVE-Soil-June29-7DUP	6/29/2022	6/30/2022	ND	None	0.037	Duplicate of SVE-Soil-June29-7Pre1	590-17901-5

SVE Operation Soil Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 8	7/1/2022	7/6/2022	5	SVE-Soil-July1-8Pre1	7/1/2022	7/6/2022	ND	F1, F2	0.038	F1: MS and/or MSD recovery exceeds control limits. F2: MS/MSD RPD exceeds control limits	590-17933-1
				SVE-Soil-July1-8Pre2	7/1/2022	7/6/2022	ND	None	0.038		590-17933-2
				SVE-Soil-July1-8Pre3	7/1/2022	7/6/2022	ND	None	0.038		590-17933-3
				SVE-Soil-July1-8Pre4	7/1/2022	7/6/2022	ND	None	0.039		590-17933-4
Batch 9	7/7/2022	7/8/2022	1	SVE-Soil-July7-9Pre1	7/7/2022	7/8/2022	ND	None	0.038		590-17966-1
				SVE-Soil-July7-9Pre2	7/7/2022	7/8/2022	ND	None	0.036		590-17966-2
				SVE-Soil-July7-9Pre3	7/7/2022	7/8/2022	ND	None	0.035		590-17966-3
				SVE-Soil-July7-9Pre4	7/7/2022	7/8/2022	ND	None	0.036		590-17966-4
Batch 10	7/11/2022	7/13/2022	2	SVE-Soil-July11-10Pre1	7/11/2022	7/13/2022	ND	F2	0.036	F2: MS/MSD RPD exceeds control limits	590-17997-1
				SVE-Soil-July11-10Pre2	7/11/2022	7/13/2022	ND	None	0.038		590-17997-2
				SVE-Soil-July11-10Pre3	7/11/2022	7/13/2022	ND	None	0.039		590-17997-3
				SVE-Soil-July11-10Pre4	7/11/2022	7/13/2022	ND	None	0.036		590-17997-4
Batch 11	7/13/2022	7/15/2022	2	SVE-Soil-July13-11Pre1	7/13/2022	7/15/2022	ND	F2	0.038	F2: MS/MSD RPD exceeds control limits	590-18027-1
				SVE-Soil-July13-11Pre2	7/13/2022	7/15/2022	ND	None	0.037		590-18027-2
				SVE-Soil-July13-11Pre3	7/13/2022	7/15/2022	ND	None	0.038		590-18027-3
				SVE-Soil-July13-11Pre4	7/13/2022	7/15/2022	ND	None	0.038		590-18027-4
Batch 12	7/21/2022	7/22/2022	1	SVE-Soil-July21-12Pre1	7/21/2022	7/22/2022	ND	None	0.032		590-18119-1
				SVE-Soil-July21-12Pre2	7/21/2022	7/22/2022	ND	None	0.035		590-18119-2
				SVE-Soil-July21-12Pre3	7/21/2022	7/22/2022	ND	None	0.035		590-18119-3
				SVE-Soil-July21-12Pre4	7/21/2022	7/22/2022	ND	None	0.034		590-18119-4
				SVE-Soil-July21-12DUP	7/21/2022	7/22/2022	ND	None	0.034	Duplicate of SVE-Soil-July21-12Pre2	590-18119-5
Batch 13	7/25/2022	7/26/2022	1	SVE-Soil-July25-13Pre1	7/25/2022	7/26/2022	ND	F2	0.034	F2: MS/MSD RPD exceeds control limits	590-18150-1
				SVE-Soil-July25-13Pre2	7/25/2022	7/26/2022	ND	None	0.034		590-18150-2
				SVE-Soil-July25-13Pre3	7/25/2022	7/26/2022	ND	None	0.034		590-18150-3
				SVE-Soil-July25-13Pre4	7/25/2022	7/26/2022	ND	None	0.033		590-18150-4
Batch 14	7/27/2022	7/28/2022	1	SVE-Soil-July27-14Pre1	7/27/2022	7/28/2022	ND	None	0.036		590-18172-1
				SVE-Soil-July27-14Pre2	7/27/2022	7/28/2022	ND	None	0.037		590-18172-2
				SVE-Soil-July27-14Pre3	7/27/2022	7/28/2022	ND	None	0.036		590-18172-3
				SVE-Soil-July27-14Pre4	7/27/2022	7/28/2022	ND	None	0.038		590-18172-4
Batch 15	7/29/2022	8/1/2022	3	SVE-Soil-July29-15Pre1	7/29/2022	8/1/2022	ND	None	0.036		590-18194-1
				SVE-Soil-July29-15Pre2	7/29/2022	8/1/2022	ND	None	0.036		590-18194-2
				SVE-Soil-July29-15Pre3	7/29/2022	8/1/2022	ND	None	0.038		590-18194-3
				SVE-Soil-July29-15Pre4	7/29/2022	8/1/2022	ND	None	0.036		590-18194-4
				SVE-Soil-July29-15DUP	7/29/2022	8/1/2022	ND	None	0.033		590-18194-5

SVE Operation Soil Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 16	8/2/2022	8/3/2022	1	SVE-Soil-Aug2-16Pre1	8/2/2022	8/3/2022	ND	None	0.039		590-18216-1
				SVE-Soil-Aug2-16Pre2	8/2/2022	8/3/2022	ND	None	0.038		590-18216-2
				SVE-Soil-Aug2-16Pre3	8/2/2022	8/3/2022	ND	None	0.039		590-18216-3
				SVE-Soil-Aug2-16Pre4	8/2/2022	8/3/2022	ND	None	0.037		590-18216-4
Batch 17	8/4/2022	8/5/2022	1	SVE-Soil-Aug4-17Pre1	8/4/2022	8/5/2022	ND	None	0.039		590-18252-1
				SVE-Soil-Aug4-17Pre2	8/4/2022	8/5/2022	ND	None	0.038		590-18252-2
				SVE-Soil-Aug4-17Pre3	8/4/2022	8/5/2022	ND	None	0.036		590-18252-3
				SVE-Soil-Aug4-17Pre4	8/4/2022	8/5/2022	ND	None	0.038		590-18252-4
Batch 18	8/8/2022	8/9/2022	1	SVE-Soil-Aug8-18Pre1	8/8/2022	8/9/2022	ND	F1	0.038	F1: MS and/or MSD recovery exceeds control limits.	590-18283-1
				SVE-Soil-Aug8-18Pre2	8/8/2022	8/9/2022	ND	None	0.037		590-18283-2
				SVE-Soil-Aug8-18Pre3	8/8/2022	8/9/2022	ND	None	0.038		590-18283-3
				SVE-Soil-Aug8-18Pre4	8/8/2022	8/9/2022	ND	None	0.038		590-18283-4
				SVE-Soil-Aug8-18Pre5	8/8/2022	8/9/2022	ND	None	0.038		590-18283-5
Batch 19	8/10/2022	8/11/2022	1	SVE-Soil-Aug10-19Pre1	8/10/2022	8/11/2022	ND	F1, F2	0.038	F1: MS and/or MSD recovery exceeds control limits. F2: MS/MSD RPD exceeds control limits	590-18300-1
				SVE-Soil-Aug10-19Pre2	8/10/2022	8/11/2022	ND	None	0.037		590-18300-2
				SVE-Soil-Aug10-19Pre3	8/10/2022	8/11/2022	ND	None	0.037		590-18300-3
				SVE-Soil-Aug10-19Pre4	8/10/2022	8/11/2022	ND	None	0.037		590-18300-4
Batch 20	8/12/2022	8/15/2022	3	SVE-Soil-Aug12-20Pre1	8/12/2022	8/15/2022	ND	F1	0.038	F1: MS and/or MSD recovery exceeds control limits.	590-18326-1
				SVE-Soil-Aug12-20Pre2	8/12/2022	8/15/2022	ND	None	0.038		590-18326-2
				SVE-Soil-Aug12-20Pre3	8/12/2022	8/15/2022	ND	None	0.039		590-18326-3
				SVE-Soil-Aug12-20Pre4	8/12/2022	8/15/2022	ND	None	0.038		590-18326-4
Batch 21	8/16/2022	8/17/2022	1	SVE-Soil-Aug16-21Pre1	8/16/2022	8/17/2022	ND	F1	0.039		590-18339-1
				SVE-Soil-Aug16-21Pre2	8/16/2022	8/17/2022	ND	None	0.040		590-18339-2
				SVE-Soil-Aug16-21Pre3	8/16/2022	8/17/2022	ND	None	0.039		590-18339-3
				SVE-Soil-Aug16-21Pre4	8/16/2022	8/17/2022	ND	None	0.040		590-18339-4
Batch 22	8/18/2022	8/19/2022	1	SVE-Soil-Aug18-22Pre1	8/18/2022	8/19/2022	ND	None	0.038		590-18372-1
				SVE-Soil-Aug18-22Pre2	8/18/2022	8/19/2022	ND	None	0.038		590-18372-2
				SVE-Soil-Aug18-22Pre3	8/18/2022	8/19/2022	ND	None	0.038		590-18372-3
				SVE-Soil-Aug18-22Pre4	8/18/2022	8/19/2022	ND	None	0.036		590-18372-4
Batch 23	8/22/2022	8/23/2022	1	SVE-Soil-Aug22-23Pre1	8/22/2022	8/23/2022	ND	None	0.036		590-18391-1
				SVE-Soil-Aug22-23Pre2	8/22/2022	8/23/2022	ND	None	0.036		590-18391-2
				SVE-Soil-Aug22-23Pre3	8/22/2022	8/23/2022	ND	None	0.038		590-18391-3
				SVE-Soil-Aug22-23Pre4	8/22/2022	8/23/2022	ND	None	0.038		590-18391-4
				SVE-Soil-Aug22-23Pre5	8/22/2022	8/23/2022	ND	None	0.039		590-18391-5

SVE Operation Soil Samples											
Batch Number	Batch Startup Date	Batch Close Date	Treatment Length (days)	Sample Name	Date Collected	Results Received	EDB Result (µg/Kg)	Qualifier	MDL (µg/Kg)	Batch/Sample Notes	Eurofins Lab Sample ID
Batch 24	8/24/2022	8/25/2022	1	SVE-Soil-Aug24-24Pre1	8/24/2022	8/25/2022	ND	None	0.038		590-18410-1
				SVE-Soil-Aug24-24Pre2	8/24/2022	8/25/2022	ND	None	0.039		590-18410-2
				SVE-Soil-Aug24-24Pre3	8/24/2022	8/25/2022	ND	None	0.037		590-18410-3
				SVE-Soil-Aug24-24Pre4	8/24/2022	8/25/2022	ND	None	0.038		590-18410-4
Batch 25	8/25/2022	8/29/2022	4	SVE-Soil-Aug25-25Pre1	8/25/2022	8/29/2022	ND	None	0.037		590-18432-1
				SVE-Soil-Aug25-25Pre2	8/25/2022	8/29/2022	ND	None	0.037		590-18432-2
				SVE-Soil-Aug25-25Pre3	8/25/2022	8/29/2022	ND	None	0.039		590-18432-3
				SVE-Soil-Aug25-25Pre4	8/25/2022	8/29/2022	ND	None	0.039		590-18432-4
Batch 26	8/30/2022	8/31/2022	1	SVE-Soil-Aug30-26Pre1	8/30/2022	8/31/2022	ND	None	0.038		590-18480-1
				SVE-Soil-Aug30-26Pre2	8/30/2022	8/31/2022	ND	None	0.039		590-18480-2
				SVE-Soil-Aug30-26Pre3	8/30/2022	8/31/2022	ND	None	0.039		590-18480-3
				SVE-Soil-Aug30-26Pre4	8/30/2022	8/31/2022	ND	None	0.039		590-18480-4
Batch 27	9/2/2022	9/6/2022	4	SVE-Soil-Sept2-27Pre1	9/2/2022	9/6/2022	ND	F1	0.037		590-18519-1
				SVE-Soil-Sept2-27Pre2	9/2/2022	9/6/2022	ND	None	0.038		590-18519-2
				SVE-Soil-Sept2-27Pre3	9/2/2022	9/6/2022	ND	None	0.038		590-18519-3
				SVE-Soil-Sept2-27Pre4	9/2/2022	9/6/2022	ND	None	0.037		590-18519-4
Batch 28	9/7/2022	9/8/2022	1	SVE-Soil-Sept7-28Pre1	9/7/2022	9/8/2022	ND	None	0.039		590-18541-1
				SVE-Soil-Sept7-28Pre2	9/7/2022	9/8/2022	ND	None	0.037		590-18541-2
				SVE-Soil-Sept7-28Pre3	9/7/2022	9/8/2022	ND	None	0.039		590-18541-3
				SVE-Soil-Sept7-28Pre4	9/7/2022	9/8/2022	ND	None	0.036		590-18541-4
Batch 29	9/9/2022	9/12/2022	3	SVE-Soil-Sept9-29Pre1	9/9/2022	9/12/2022	ND	None	0.036		590-18592-1
				SVE-Soil-Sept9-29Pre2	9/9/2022	9/12/2022	ND	None	0.036		590-18592-2
				SVE-Soil-Sept9-29Pre3	9/9/2022	9/12/2022	ND	None	0.037		590-18592-3
				SVE-Soil-Sept9-29Pre4	9/9/2022	9/12/2022	ND	None	0.037		590-18592-4
Batch 30	9/13/2022	9/14/2022	1	SVE-Soil-Sept13-30Pre1	9/13/2022	9/14/2022	ND	None	0.038		590-18606-1
				SVE-Soil-Sept13-30Pre2	9/13/2022	9/14/2022	ND	None	0.037		590-18606-2
				SVE-Soil-Sept13-30Pre3	9/13/2022	9/14/2022	ND	None	0.039		590-18606-3
				SVE-Soil-Sept13-30Pre4	9/13/2022	9/14/2022	ND	None	0.040		590-18606-4
Batch 31	9/15/2022	9/16/2022	1	SVE-Soil-Sept15-31Pre1	9/15/2021	9/16/2021	ND	None	0.036		590-18636-1
				SVE-Soil-Sept15-31Pre2	9/15/2021	9/16/2021	ND	None	0.039		590-18636-2
				SVE-Soil-Sept15-31Pre3	9/15/2021	9/16/2021	ND	None	0.040		590-18636-3
				SVE-Soil-Sept15-31Pre4	9/15/2021	9/16/2021	0.062	None	0.040		590-18636-4
				SVE-Soil-Sept15-31PreDUP	9/15/2021	9/16/2021	ND	None	0.039		590-18636-5
Batch 32	9/19/2022	9/20/2022	1	SVE-Soil-Sept19-32Pre1	9/19/2022	9/20/2022	ND	F1, F2	0.042	F1: MS and/or MSD recovery exceeds control limits. F2: MS/MSD RPD exceeds control limits	590-18652-1
				SVE-Soil-Sept19-32Pre2	9/19/2022	9/20/2022	ND	None	0.038		590-18652-2
				SVE-Soil-Sept19-32Pre3	9/19/2022	9/20/2022	ND	None	0.040		590-18652-3
				SVE-Soil-Sept19-32Pre4	9/19/2022	9/20/2022	ND	None	0.039		590-18652-4

SVE Operation Soil Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 33	9/21/2022	9/22/2022	1	SVE-Soil-Sept21-33Pre1	9/21/2022	9/22/2022	ND	None	0.039		590-18671-1
				SVE-Soil-Sept21-33Pre2	9/21/2022	9/22/2022	ND	None	0.039		590-18671-2
				SVE-Soil-Sept21-33Pre3	9/21/2022	9/22/2022	ND	None	0.039		590-18671-3
				SVE-Soil-Sept21-33Pre4	9/21/2022	9/22/2022	ND	None	0.037		590-18671-4
				SVE-Soil-Sept21-33DUP	9/21/2022	9/22/2022	ND	None	0.038		590-18671-5
Batch 34	9/23/2022	9/26/2022	3	SVE-Soil-Sept19-32Pre1	9/23/2022	9/26/2022	ND	None	0.037		590-18719-1
				SVE-Soil-Sept19-32Pre2	9/23/2022	9/26/2022	ND	None	0.038		590-18719-2
				SVE-Soil-Sept19-32Pre3	9/23/2022	9/26/2022	ND	None	0.035		590-18719-3
				SVE-Soil-Sept19-32Pre4	9/23/2022	9/26/2022	ND	None	0.036		590-18719-4
Batch 35	9/27/2022	9/28/2022	1	SVE-Soil-Sept27-35Pre1	9/27/2022	9/28/2022	ND	F2	0.038	F2: MS/MSD RPD exceeds control limits	590-18744-1
				SVE-Soil-Sept27-35Pre2	9/27/2022	9/28/2022	ND	None	0.037		590-18744-2
				SVE-Soil-Sept27-35Pre3	9/27/2022	9/28/2022	ND	None	0.038		590-18744-3
				SVE-Soil-Sept27-35Pre4	9/27/2022	9/28/2022	ND	None	0.037		590-18744-4
Batch 36	9/29/2022	9/30/2022	1	SVE-Soil-Sept29-36Pre1	9/29/2022	9/30/2022	ND	None	0.038		590-18784-1
				SVE-Soil-Sept29-36Pre2	9/29/2022	9/30/2022	ND	None	0.035		590-18784-2
				SVE-Soil-Sept29-36Pre3	9/29/2022	9/30/2022	ND	None	0.035		590-18784-3
				SVE-Soil-Sept29-36Pre4	9/29/2022	9/30/2022	ND	None	0.037		590-18784-4
Batch 37	10/3/2022	10/4/2022	1	SVE-Soil-Oct3-37&Pre1	10/3/2022	10/4/2022	ND	None	0.038		590-18815-1
				SVE-Soil-Oct3-37&Pre2	10/3/2022	10/4/2022	ND	None	0.039		590-18815-2
				SVE-Soil-Oct3-37&Pre3	10/3/2022	10/4/2022	ND	None	0.039		590-18815-3
				SVE-Soil-Oct3-37&Pre4	10/3/2022	10/4/2022	ND	None	0.039		590-18815-4
				SVE-Soil-Oct3-37&PreDUP	10/3/2022	10/4/2022	ND	None	0.039		590-18815-5
Batch 38	10/5/2022	10/6/2022	1	SVE-Soil-Oct5-38Pre1	10/5/2022	10/6/2022	ND	F2	0.038	F2: MS/MSD RPD exceeds control limits	590-18869-1
				SVE-Soil-Oct5-38Pre2	10/5/2022	10/6/2022	ND	None	0.037		590-18869-2
				SVE-Soil-Oct5-38Pre3	10/5/2022	10/6/2022	ND	None	0.037		590-18869-3
				SVE-Soil-Oct5-38Pre4	10/5/2022	10/6/2022	0.065	None	0.040		590-18869-4
Batch 39	10/7/2022	10/10/2022	3	SVE-Soil-Oct7-39&Pre1	10/7/2022	10/10/2022	ND	None	0.038		590-18909-1
				SVE-Soil-Oct7-39&Pre2	10/7/2022	10/10/2022	ND	None	0.038		590-18909-2
				SVE-Soil-Oct7-39&Pre3	10/7/2022	10/10/2022	ND	None	0.037		590-18909-3
				SVE-Soil-Oct7-39&Pre4	10/7/2022	10/10/2022	ND	None	0.039		590-18909-4
				SVE-Soil-Oct7-39&PreDUP	10/7/2022	10/10/2022	ND	None	0.037		590-18909-5
Batch 40	10/9/2022	10/12/2022	3	SVE-Soil-Oct9-40Pre1	10/9/2022	10/12/2022	ND	None	0.039		590-18935-1
				SVE-Soil-Oct9-40Pre2	10/9/2022	10/12/2022	ND	None	0.038		590-18935-2
				SVE-Soil-Oct11-40Post1	10/11/2022	10/12/2022	ND	None	0.039		590-18935-3
				SVE-Soil-Oct11-40Post2	10/11/2022	10/12/2022	ND	None	0.039		590-18935-4
Batch 41	10/11/2022	10/12/2022	1	SVE-Soil-Oct11-41Pre1	10/11/2022	10/12/2022	ND	None	0.039		590-18936-1
				SVE-Soil-Oct11-41Pre2	10/11/2022	10/12/2022	ND	None	0.037		590-18936-2
				SVE-Soil-Oct11-41Pre3	10/11/2022	10/12/2022	ND	None	0.038		590-18936-3
				SVE-Soil-Oct11-41Pre4	10/11/2022	10/12/2022	ND	None	0.039		590-18936-4

SVE Operation Soil Samples											
Batch Number	Batch Startup Date	Batch Close Date	Treatment Length (days)	Sample Name	Date Collected	Results Received	EDB Result (µg/Kg)	Qualifier	MDL (µg/Kg)	Batch/Sample Notes	Eurofins Lab Sample ID
Batch 42	10/13/2022	10/14/2022	1	SVE-Soil-Oct13-42Pre1	10/13/2022	10/14/2022	ND	None	0.039		590-18959-1
				SVE-Soil-Oct13-42Pre2	10/13/2022	10/14/2022	ND	None	0.037		590-18959-2
				SVE-Soil-Oct13-42Pre3	10/13/2022	10/14/2022	ND	None	0.037		590-18959-3
				SVE-Soil-Oct13-42Pre4	10/13/2022	10/14/2022	ND	None	0.040		590-18959-4
				SVE-Soil-Oct13-42DUP	10/13/2022	10/14/2022	ND	None	0.038		590-18959-5
Batch 43	10/15/2022	10/18/2022	3	SVE-Soil-Oct15-43Pre1	10/15/2022	10/18/2022	ND	None	0.039		590-18987-1
				SVE-Soil-Oct15-43Pre2	10/15/2022	10/18/2022	ND	None	0.038		590-18987-2
				SVE-Soil-Oct15-43Pre3	10/15/2022	10/18/2022	ND	None	0.038		590-18987-3
				SVE-Soil-Oct15-43Pre4	10/15/2022	10/18/2022	ND	None	0.037		590-18987-4
Batch 44	10/17/2022	10/18/2022	1	SVE-Soil-Oct17-44Pre1	10/17/2022	10/18/2022	ND	None	0.037		590-18988-1
				SVE-Soil-Oct17-44Pre2	10/17/2022	10/18/2022	ND	None	0.039		590-18988-2
				SVE-Soil-Oct17-44Pre3	10/17/2022	10/18/2022	ND	None	0.039		590-18988-3
				SVE-Soil-Oct17-44Pre4	10/17/2022	10/18/2022	ND	None	0.040		590-18988-4
Batch 45	10/19/2022	10/20/2022	1	SVE-Soil-Oct19-45Pre1	10/19/2022	10/20/2022	ND	None	0.038		590-19011-1
				SVE-Soil-Oct19-45Pre2	10/19/2022	10/20/2022	ND	None	0.039		590-19011-2
				SVE-Soil-Oct19-45Pre3	10/19/2022	10/20/2022	ND	None	0.038		590-19011-3
				SVE-Soil-Oct19-45Pre4	10/19/2022	10/20/2022	ND	None	0.039		590-19011-4
Batch 46	10/21/2022	10/24/2022	3	SVE-Soil-Oct21-46Pre1	10/21/2022	10/24/2022	ND	None	0.038		590-19042-1
				SVE-Soil-Oct21-46Pre2	10/21/2022	10/24/2022	ND	None	0.039		590-19042-2
				SVE-Soil-Oct21-46Pre3	10/21/2022	10/24/2022	ND	None	0.038		590-19042-3
				SVE-Soil-Oct21-46Pre4	10/21/2022	10/24/2022	ND	None	0.039		590-19042-4
				SVE-Soil-Oct21-46PreDUP	10/21/2022	10/24/2022	ND	None	0.038		590-19042-5
Batch 47	10/23/2022	10/26/2022	3	SVE-Soil-Oct23-47Pre1	10/23/2022	10/26/2022	ND	None	0.039		590-19064-1
				SVE-Soil-Oct23-47Pre2	10/23/2022	10/26/2022	ND	None	0.038		590-19064-2
				SVE-Soil-Oct23-47Pre3	10/23/2022	10/26/2022	ND	None	0.037		590-19064-3
				SVE-Soil-Oct23-47Pre4	10/23/2022	10/26/2022	ND	None	0.037		590-19064-4
Batch 48	10/25/2022	10/26/2022	1	SVE-Soil-Oct25-47Pre1	10/25/2022	10/26/2022	ND	None	0.038		590-19065-1
				SVE-Soil-Oct25-47Pre2	10/25/2022	10/26/2022	ND	None	0.038		590-19065-2
				SVE-Soil-Oct25-47Pre3	10/25/2022	10/26/2022	ND	None	0.038		590-19065-3
				SVE-Soil-Oct25-47Pre4	10/25/2022	10/26/2022	ND	None	0.037		590-19065-4
Batch 49	10/28/2022	10/31/2022	3	SVE-Soil-Oct28-49Pre1	10/28/2022	10/31/2022	ND	None	0.039		590-19120-1
				SVE-Soil-Oct28-49Pre2	10/28/2022	10/31/2022	ND	None	0.038		590-19120-2
				SVE-Soil-Oct28-49Pre3	10/28/2022	10/31/2022	ND	None	0.037		590-19120-3
				SVE-Soil-Oct28-49Pre4	10/28/2022	10/31/2022	ND	None	0.037		590-19120-4
				SVE-Soil-Oct28-49PreDUP	10/28/2022	10/31/2022	ND	None	0.038		590-19120-5
Batch 50	10/30/2022	11/2/2022	3	SVE-Soil-Oct30-50Pre1	10/30/2022	11/2/2022	ND	None	0.037		590-19133-1
				SVE-Soil-Oct30-50Pre2	10/30/2022	11/2/2022	ND	None	0.036		590-19133-2
				SVE-Soil-Oct30-50Pre3	10/30/2022	11/2/2022	ND	None	0.036		590-19133-3
				SVE-Soil-Oct30-50Pre4	10/30/2022	11/2/2022	ND	None	0.039		590-19133-4
Batch 51	11/1/2022	11/2/2022	1	SVE-Soil-Nov1-51Pre1	11/1/2022	11/2/2022	ND	None	0.038		590-19132-1
				SVE-Soil-Nov1-51Pre2	11/1/2022	11/2/2022	ND	None	0.039		590-19132-2
				SVE-Soil-Nov1-51Pre3	11/1/2022	11/2/2022	ND	None	0.038		590-19132-3
				SVE-Soil-Nov1-51Pre4	11/1/2022	11/2/2022	ND	None	0.038		590-19132-4

SVE Operation Soil Samples											
Batch Number	**Batch Startup Date**	**Batch Close Date**	**Treatment Length (days)**	**Sample Name**	**Date Collected**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Lab Sample ID**
Batch 52	11/3/2022	11/4/2022	1	SVE-Soil-Nov03-52Pre1	11/3/2022	11/4/2022	ND	None	0.035		590-19167-1
				SVE-Soil-Nov03-52Pre2	11/3/2022	11/4/2022	ND	None	0.033		590-19167-2
				SVE-Soil-Nov03-52Pre3	11/3/2022	11/4/2022	ND	None	0.034		590-19167-3
				SVE-Soil-Nov03-52Pre4	11/3/2022	11/4/2022	ND	None	0.035		590-19167-4
				SVE-Soil-Nov03-52PreDUP	11/3/2022	11/4/2022	ND	None	0.033		590-19167-5
Batch 53	11/7/2022	11/8/2022	1	SVE-Soil-Nov7-53Pre1	11/7/2022	11/8/2022	ND	None	0.037		590-19191-1
				SVE-Soil-Nov7-53Pre2	11/7/2022	11/8/2022	ND	None	0.037		590-19191-2
				SVE-Soil-Nov7-53Pre3	11/7/2022	11/8/2022	ND	None	0.038		590-19191-3
				SVE-Soil-Nov7-53Pre4	11/7/2022	11/8/2022	ND	None	0.038		590-19191-4

Data Validation Summary

This table summarizes the pass/fail of Data Quality Objectives listed in Section 2.7.2.2 for all laboratory results during SVE operation.

SVE Samples Data Validation Summary Table

Sample Set	Lab Report ID	Sample Date	Report Date	Hold Time Met?	Method Blank Qualifier	Surrogate Recovery % (Method Blank)	Spike Recovery % (LCS)	Field Duplicates	Lab Duplicates	Matrix Spike	Matrix Spike Duplicate	Completeness	Method Detection Limits (MDL)(µg/Kg)	Lab Control Samples	Chain-of-Custody Forms	Lab Qualifiers	Data Validated as Useable Overall	Notes
Pilot Study Soil Samples																		
Batch 1/Pilot Pre-treatment (EDB Results)	590-17643-1	5/31/2022	6/2/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	one revision on lab report due to HDR request to change header
Batch 1/Pilot Post-treatment (EDB Results)	590-17700-1	6/5/2022	6/7/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 1/Pilot Pre-treatment (TOC Results)	590-17643-2	5/31/2022	6/13/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 1/Pilot Post-treatment (TOC Results)	590-17700-2	6/5/2022	6/17/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Pilot Study Vapor Samples																		
Batch 1/Pilot Pre-treatment (Vapor Results)	2206179-01A	6/1/2022-6/5/2022	6/15/2022	Yes	None	Pass	Pass	Pass	Pass	N/A	N/A	Pass	Pass	Pass	Complete	None	Yes	
SVE Operation Soil Samples (EDB)																		
Batch 2 Pre-treatment	590-17742-1	6/9/2022	6/13/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 3 Pre-treatment	590-17777-1	6/15/2022	6/16/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Complete	F1, F2 for lab MS and MSD Samples	Yes	some samples received outside temp criteria, still accepted by lab.
Batch 4 Pre-treatment	590-17806-1	6/17/2022	6/20/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 5 Pre-treatment	590-17825-1	6/21/2022	6/23/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	F1 for SVE-Soil-June21-5Pre2	Yes	
Batch 6 Pre-treatment	590-17869-1	6/24/2022	6/27/2022	Yes	None	Pass	Fail	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	*+ for LCS	Yes	some samples received outside temp criteria, still accepted by lab.
Batch 7 Pre-treatment	590-17901-1	6/29/2022	6/30/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 8 Pre-treatment	590-17933-1	7/1/2022	7/6/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Pass	Pass	Pass	Pass	Complete	F1, F2 for lab MS and MSD Samples	Yes	
Batch 9 Pre-treatment	590-17966-1	7/7/2022	7/8/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 10 Pre-treatment	590-17997-1	7/11/2022	7/12/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F2 for MS and MSD	Yes	
Batch 11 Pre-treatment	590-18027-1	7/13/2022	7/15/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Fail	Pass	Pass	Pass	Complete	F2 for MS and MSD	Yes	
Batch 12 Pre-treatment	590-18119-1	7/21/2022	7/22/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	F3 for DU	Yes	
Batch 13 Pre-treatment	590-18150-1	7/25/2022	7/26/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Fail	Pass	Pass	Pass	Complete	F2 for MS and MSD	Yes	
Batch 14 Pre-treatment	590-18172-1	7/27/2022	7/28/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 15 Pre-treatment	590-18194-1	7/29/2022	8/1/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Complete	F2 for MS and MSD	Yes	
Batch 16 Pre-treatment	590-18216-1	8/2/2022	8/3/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 17 Pre-treatment	590-18252-1	8/4/2022	8/5/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 18 Pre-treatment	590-18283-1	8/8/2022	8/9/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1 for MS and MDS	Yes	
Batch 19 Pre-treatment	590-18300-1	8/10/2022	8/11/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1, F2 for lab MS and MSD Samples	Yes	
Batch 20 Pre-treatment	590-18326-1	8/12/2022	8/15/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1 for MS and MDS	Yes	
Batch 21 Pre-treatment	590-18339-1	8/16/2022	8/17/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1 for MS and MDS	Yes	
Batch 22 Pre-treatment	590-18372-1	8/18/2022	8/19/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 23 Pre-treatment	590-18391-1	8/22/2022	8/23/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 24 Pre-treatment	590-18410-1	8/24/2022	8/25/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 25 Pre-treatment	590-18432-1	8/25/2022	8/29/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 26 Pre-treatment	590-18480-1	8/30/2022	8/31/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 27 Pre-treatment	590-18519-1	9/2/2022	9/6/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1 for MS and MDS	Yes	
Batch 28 Pre-treatment	590-18541-1	9/7/2022	9/8/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 29 Pre-treatment	590-18592-1	9/9/2022	9/12/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 30 Pre-treatment	590-18606-1	9/13/2022	9/14/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 31 Pre-treatment	590-18636-1	9/15/2022	9/16/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 32 Pre-treatment	590-18652-1	9/19/2022	9/20/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1, F2 for lab MS and MSD Samples	Yes	
Batch 33 Pre-treatment	590-18671-1	9/21/2022	9/22/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 34 Pre-treatment	590-18719-1	9/23/2022	9/26/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 35 Pre-treatment	590-18744-1	9/27/2022	9/28/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F2 for MS and MSD	Yes	
Batch 36 Pre-treatment	590-18784-1	9/29/2022	9/30/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 37 Pre-treatment	590-18815-1	10/3/2022	10/4/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete	None	Yes	
Batch 38 Pre-treatment	590-18869-1	10/5/2022	10/6/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F2 for MS and MSD	Yes	
Batch 39 Pre-treatment	590-18909-1	10/7/2022	10/10/2022	Yes	None	Pass	Pass	Pass	Pass	N/A	N/A	Pass	Pass	Pass	Complete		Yes	
Batch 40 Pre-treatment	590-18935-1	10/9/2022	10/12/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 41 Pre-treatment	590-18936-1	10/11/2022	10/12/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
IDW 10-5-2022	590-18870-1	10/5/2022	10/13/2022	Yes	None	Pass	Pass	N/A	Pass	Fail	Fail	Pass	Pass	Pass	Complete	F1 for MS and MDS	Yes	
Batch 42 Pre-treatment	590-18959-1	10/13/2022	10/14/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	Samples received outside temp criteria, acceptable because they were delivered to the lab the same day they were collected.
Batch 43 Pre-treatment	590-18987-1	10/15/2022	10/18/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 44 Pre-treatment	590-18988-1	10/17/2022	10/18/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 45 Pre-treatment	590-19011-1	10/19/2022	10/20/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 46 Pre-treatment	590-19042-1	10/21/2022	10/24/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 47 Pre-treatment	590-19064-1	10/23/2022	10/26/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 48 Pre-treatment	590-19065-1	10/25/2022	10/26/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
IDW 10-21-2022	590-19044-1	10/21/2022	10/27/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 49 Pre-treatment	590-19120-1	10/28/2022	10/31/2022	Yes	None	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 50 Pre-treatment	590-19133-1	10/30/2022	11/2/2022	Yes	None	Pass	Pass	N/A	Pass	N/A	N/A	Pass	Pass	Pass	Complete		Yes	No MS/MSD samples from lab
Batch 51 Pre-treatment	590-19132-1	11/1/2022	11/2/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 52 Pre-treatment	590-19167-1	11/3/2022	11/4/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
Batch 53 Pre-treatment	590-19191-1	11/7/2022	11/8/2022	Yes	None	Pass	Pass	N/A	Pass	Pass	Pass	Pass	Pass	Pass	Complete		Yes	
IDW 11-7-2022	590-19192-1	11/7/2022	11/30/2022	Yes	J	Pass	Pass	N/A	Pass	N/A	N/A	Pass	Pass	Fail	Complete	Multiple flags on SVOC results.	No	Too many flags on SVOC results for data to be usable. IDW planned to be resampled.
IDW 1-4-2023	590-19547-1	1/4/2023	1/17/2023	Yes	None	Pass	Pass	N/A		N/A	N/A	Pass	Pass	Pass	Complete		Yes	

Note: IDW 1-4-2023 was a resample of IDW 11-7-2022 because original samples had several flags on SVOC results.

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SVE Operation Field Data Forms

Table 1 - Soil Vapor Extraction Pilot Test Field Data Collection Example

Date: 6/1/2022		**Personnel:** Jared Newcomb / GrayMar / Blake Urie				**Ambient Temperature:** 65-70 °F			
Treatment Start Time: 815		**Weather:** Sunny ~65°F				**Barometric Pressure:** 30.13 inHg			
		Treatment Pile #	**Extraction System**					**Soil Vapor (PID**	
Test Designation	**Date/Time**	**Visual Observations**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**		**Influent (Prior to GAC)**	**Effluent (After GAC)**
		Indicating Negative Pressure is Present	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**		**(ppm)**	**(ppm)**
~~Pre-Startup~~ Initial	6/1/22; 838	Yes	-- 7.0	--0	-?	-- 125		3.1	0.4
Step 1	853	Yes	7.0	0	?	128		2.4	0.3
Step 1	908	Yes	7.0	0		129		2.4	0.3
Step 1	923	Yes	7.0	0		130		2.1	0.4
Step 2	945	Yes	6.0	~25%		134		1.8	0.3
Step 2	1000	Yes	6.0	~25%		134		1.9	0.1
Step 2	1015	Yes	6.0	~25%		135		1.9	0.2
Step 3	1036	Yes	5.5	~50%		136		1.4	0.2
Step 3	1045	Yes	5.5	~50%		138		1.4	0.2
Step 3	1105	Yes	5.5	~50%		140		1.3	0.3
Constant Rate Test	1325	Yes	7.5	0		144		1.0	0.3
Constant Rate Test	1330	Yes	7.6	0		144		1.5	0.4
Constant Rate Test	1425	Yes	7.0	0		146		1.1	0.6
Constant Rate Test	1527	Yes	7.0	0		144		0.0	0.0
Constant Rate Test	1631	Yes	7.0	0		140		0.0	0.0
Constant Rate Test	1520	Yes	7.0	0		143		0.0	0.0
Constant Rate Test	6/2/22; 847	Yes	7.0	0		132		0.0	0.0
Constant Rate Test	1534	Yes	7.0	0		156		0.0	0.0
Constant Rate Test	6/3/22; 807	Yes	5.0	0		148		0.0	0.0
Constant Rate Test	06/03/22 1525	Yes	7.0	0		153		0.0	1.0
Constant Rate Test	06/04/22 0855	Yes	7.0	0		135		0.0	0.0
Constant Rate Test	06/04/22 1240	Yes	7.0	0		145		0.0	0.1
Constant Rate Test	06/04/22 1550	Yes	6.0	0		165		0.0	1.7
Constant Rate Test	06/05/22-0947	Yes	6.0	0		158		0.0	0.7
	1210	Yes		0		165		0.0	2.2

(1) - Vacuum measured with a Magnehelic gauge.

in H_2O inches of water column

cfm cubic feet per minute

-- Not monitored

Dilution Valve Test 06/05/22

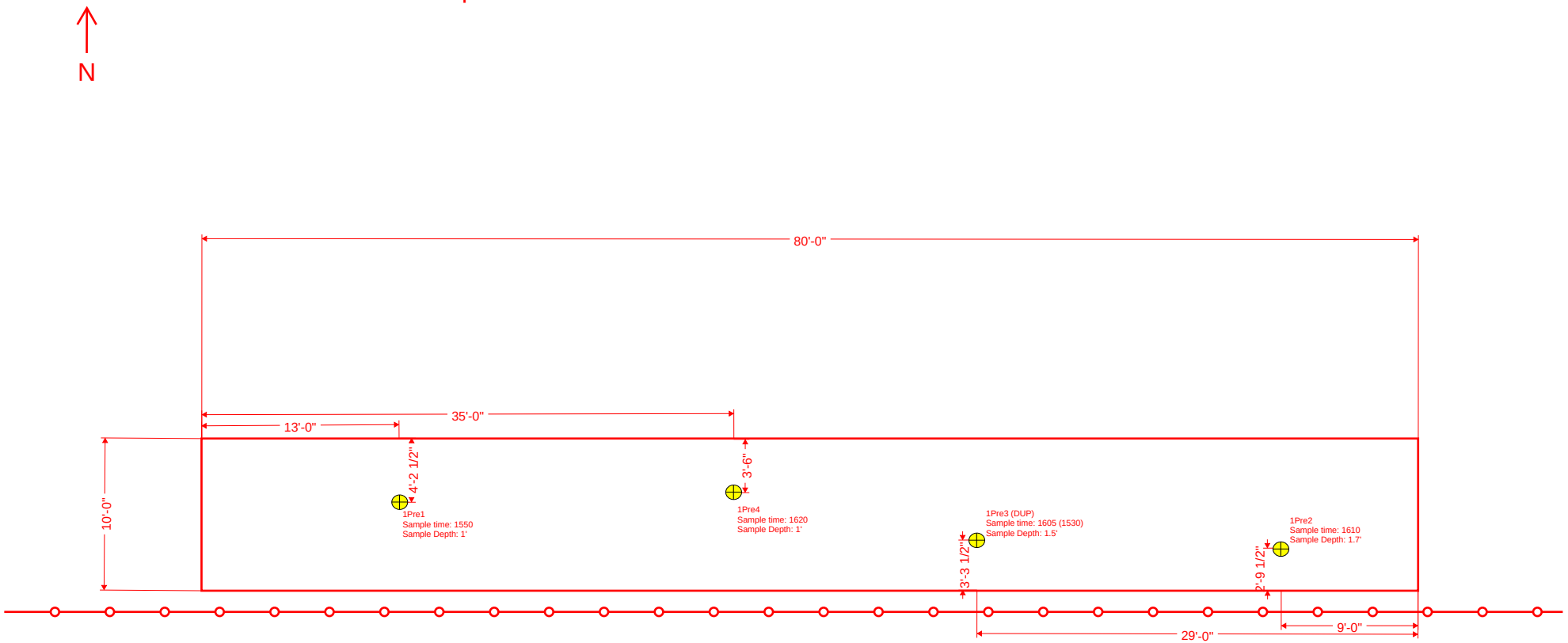
50%; 37 in H_2O

25%; 19 in H_2O

06/04/22 - Rain, windy, overcast in morning, sunny in afternoon

06/05/22 - Cloudy, breezy in morning

Pilot Test/Batch 1 Sample Locations



5/31 Simplot-Warden SVE Pilot study

430 - Leave house

500 - Arrive @ office, load vehicle, mobe

540 - Leave office

640 - Get ice, lunch

730 - Arrive onsite, talk to Graymar and Jeff

800 - Get sampling equipment prepped

815 - Tyler arrives onsite

900 - Graymar filling cell w/ soil

1545 - Finish filling w/ soil — dwyer

1550 - Start Pre soil sampling — H2K

1620 - Finish Pre soil sampling

1720 - Tyler off site

Thayne - H2K, Dwyer (flow calc app)
twastman@glacierenviro.com

1900 - Arrive @ hotel

6/1

815 - Start SVE system

830 - Take Pre treatment vapor samples

830 - start step tests

1100 - Finish step tests

1110 - Confirm w/ Tyler on adequate vacuum under liner
visual confirmation observed

1130 - Start constant rate test

1320 - Take mid day Pre treatment vapor samples

Scale: 1 square = _____

Rite in the Rain

1720 - Finish constant rate test
take end of day pre treatment samples

~~1730 - leave~~

1740 - off site

1600 - Arrive @ hotel

6/2

700 - Leave hotel

847 - Take SVE readings, calibrate PID meter

1200 - Take vapor samples of the day

1534 - 2nd SVE reading

1600 - Leave site

1620 - Arrive @ hotel

6/3

700 - Leave hotel, check out

720 - Arrive onsite

730 - Calibrate PID

807 - 1st SVE reading

1030 - Blake arrives onsite, run through SVE system and procedures

1140 - Take daily vapor samples w/ Blake

1200 - Run through PID calibration / reading procedure

1300 - Off site

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 06/09/22	**Personnel:** ~~Jeff Greenwalt~~ Blake Urie	**Ambient Temperature:** ~ 60°F
Treatment Start Time:	**Weather:** Overcast, breezy	**Barometric Pressure:** 29.90 inHg

			Treatment Pile # #2	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**	
Initial	06/08/22-2100	Yes	6.0	--	--	164	1.0	2.2	
~~Day 1~~	06/09/22-0907	Yes	7.0			170	0.0	3.4	-Startup
Day 1	06/09/22-1420	Yes	6.0			165	0.9	3.6	
Day 2									
Day 3									
Day 4									
Day 5									
Day 6									
Day 7									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

Table 2 - Soil Vapor Extraction Field Data Collection Example Sample of 3 Batch

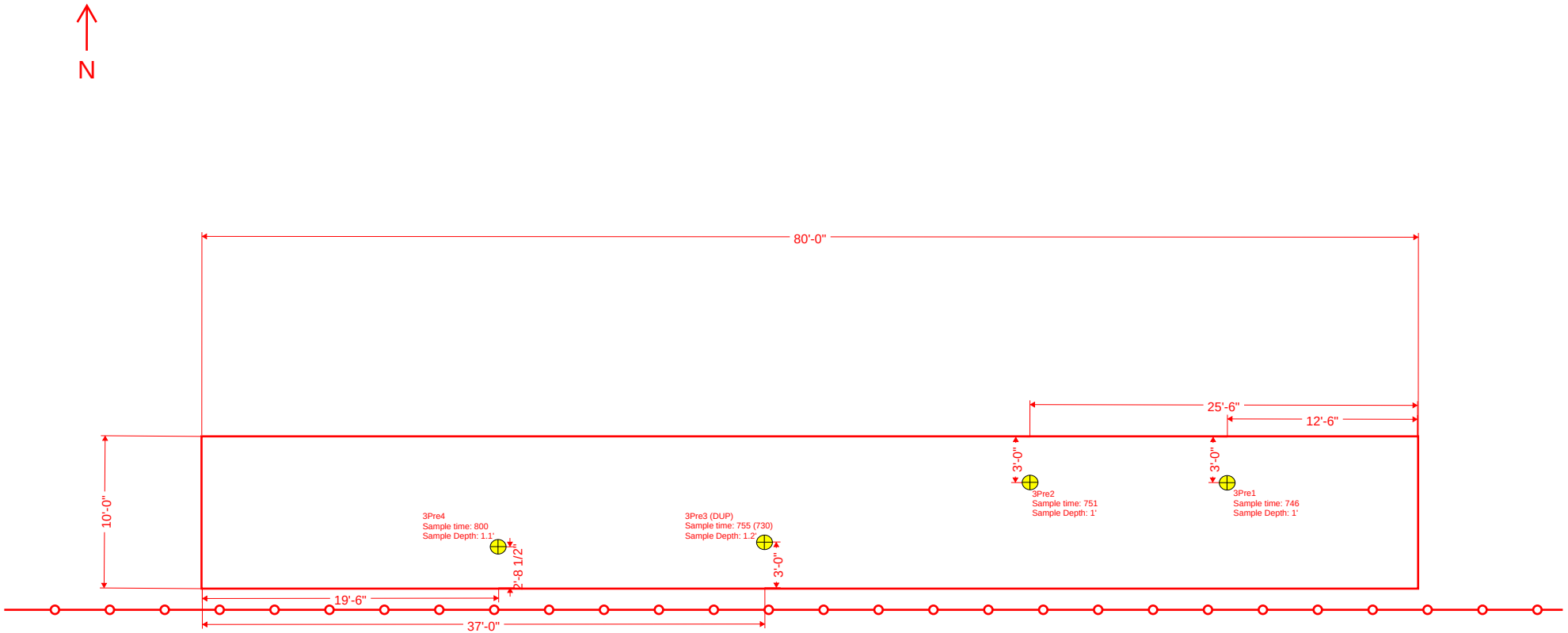
Date: 6/15/22	**Personnel:** *Jeff Greenwalt*	**Ambient Temperature:** ~~40~~ 54°F
Treatment Start Time: 830	**Weather:** mostly sunny, w/ 1-2mph breeze	**Barometric Pressure:** 30.04 inHg

		Treatment Pile # 3	Extraction System Operation Parameters				Soil Vapor (PID Readings)	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
Initial	6/15/22 830	Yes	8	0	--	102	0.0	0.0
Day 1	1145	Yes	7	0	--	150	0.4	0.1
Day 1	1600	Yes	2	NA	NA	169	.0	.0
Day 2	735	Yes	1	NA	NA	160		
Day 3								
Day 4								
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

Batch 3 Sample Locations



Batch 3 Notes

6/15

530 - Leave house
600 - Pick up PID meter @ office
730 - Arrive onsite
745 - Start sampling ~~SS~~ Pretreatment soil
830 - Start SVE system
840 - Take initial SVE reading
1147 - Take 1st daily reading
1215 - Off site
1355 - Prep samples off to lab

Scale: 1 square = _____

Rite in the Rain.

Table 2 - Soil Vapor Extraction Field Data Collection Example Sample of 3 Batch

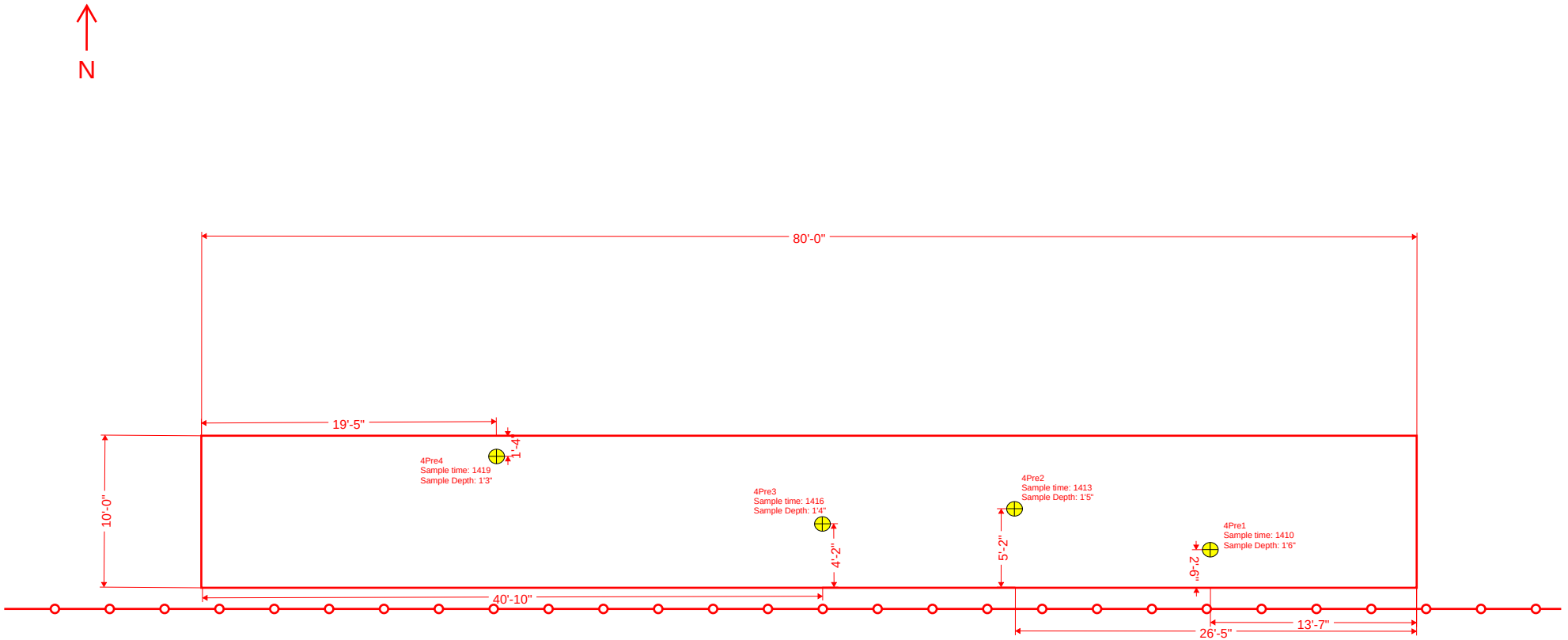
Date: 6/15/22	**Personnel:** *Jeff Greenwalt*	**Ambient Temperature:** ~~40~~ 54°F
Treatment Start Time: 830	**Weather:** mostly sunny, w/ 1-2mph breeze	**Barometric Pressure:** 30.04 inHg

		Treatment Pile # 3	Extraction System Operation Parameters				Soil Vapor (PID Readings)	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
Initial	6/15/22 830	Yes	8	0	--	102	0.0	0.0
Day 1	1145	Yes	7	0	--	150	0.4	0.1
Day 1	1600	Yes	2	NA	NA	169	.0	.0
Day 2	735	Yes	1	NA	NA	160		
Day 3								
Day 4								
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

Batch 4 Sample Locations



6/19

1130 - Leave office

1200 - Pick up cooler w/ trip blanks @ Test America

1330 - Arrive on site, talk to GrayMar, prep sample jars.

1405 - Finish filling Batch 4 into treatment pit

1410 - Start PreT sampling

1420 - Finish

1425 - Take sample location measurements

1440 - GrayMar laying tap PVC pipe

1620 - Finish laying visqueen.

1630 - Start system, piping @ silencer effluent stripped threads. Leave system shutdown until GrayMar fixes piping

1647 - Leave site

1820 - Arrive @ house, drop samples off in morning of 6/18

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 6/17/22 - 6/18/22	**Personnel:** ~~Jeff~~ Greenwalt / Jered Newcomb	**Ambient Temperature:** 90°F	
Treatment Start Time: [redacted] 1621 / 1100	**Weather:** Mostly Sunny, [redacted] slight breeze	**Barometric Pressure:** 29.76 in Hg	

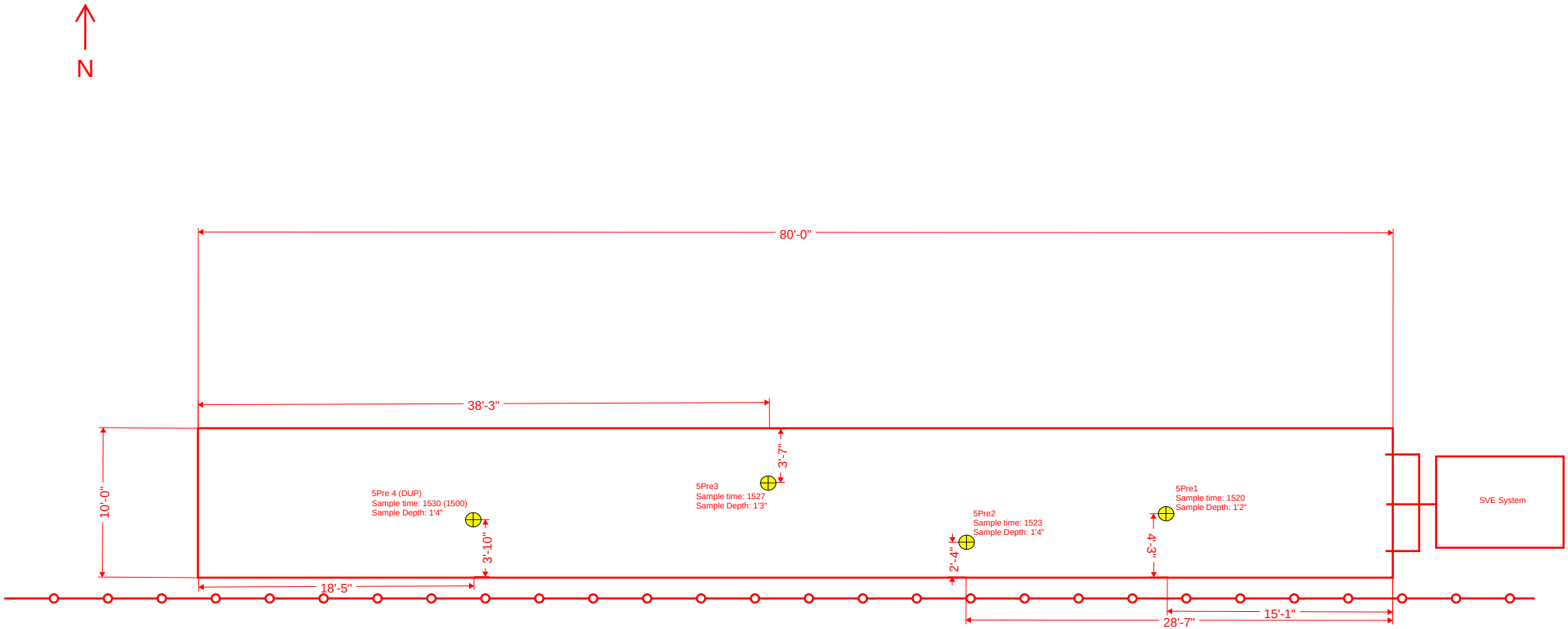
		Treatment Pile # 4	Extraction System Operation Parameters				Soil Vapor (PID Readings)	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
			--	--	--	--		
Day 1*	6/17/22; 1630	Yes	14	0	—	N/A	N/A	N/A
Day 1	[redacted]							
Day 2	6/18/22; 1100	Yes	5	0	—	168	N/A	N/A
Day 3	[redacted]							
Day 4	6/20/22; 1143	Yes	6	0	—	172	N/A	N/A
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

* Piping from Blower ~~out~~ Silencer to GAC drum observed broken. System shutdown until repaired next day.

Batch 5 Sample Locations



6/21 Simplot-Warden Batch 5 PreT Sample

1200 - Leave office

1340 - Arrive onsite

1345 - Checkin w/ Simplot + Gray Mar on swap out progress.

1350 - Prep sample jars.

1515 - Finish loading treatment cell with Batch 5

1520 - Start PreT sampling,,

1530 - Finish ''

1540 - Take measurements of sampling locations.

1550 - Calibrate PID meter (~~0~~ 99.9 ppm VOC)

1635 - Finish sealing/taping treatment cell

1640 - Start SVE system

1645 - Take Rdy Preading

1650 - Off site

1850 - Drop off samples

1920 - Arrive at home

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

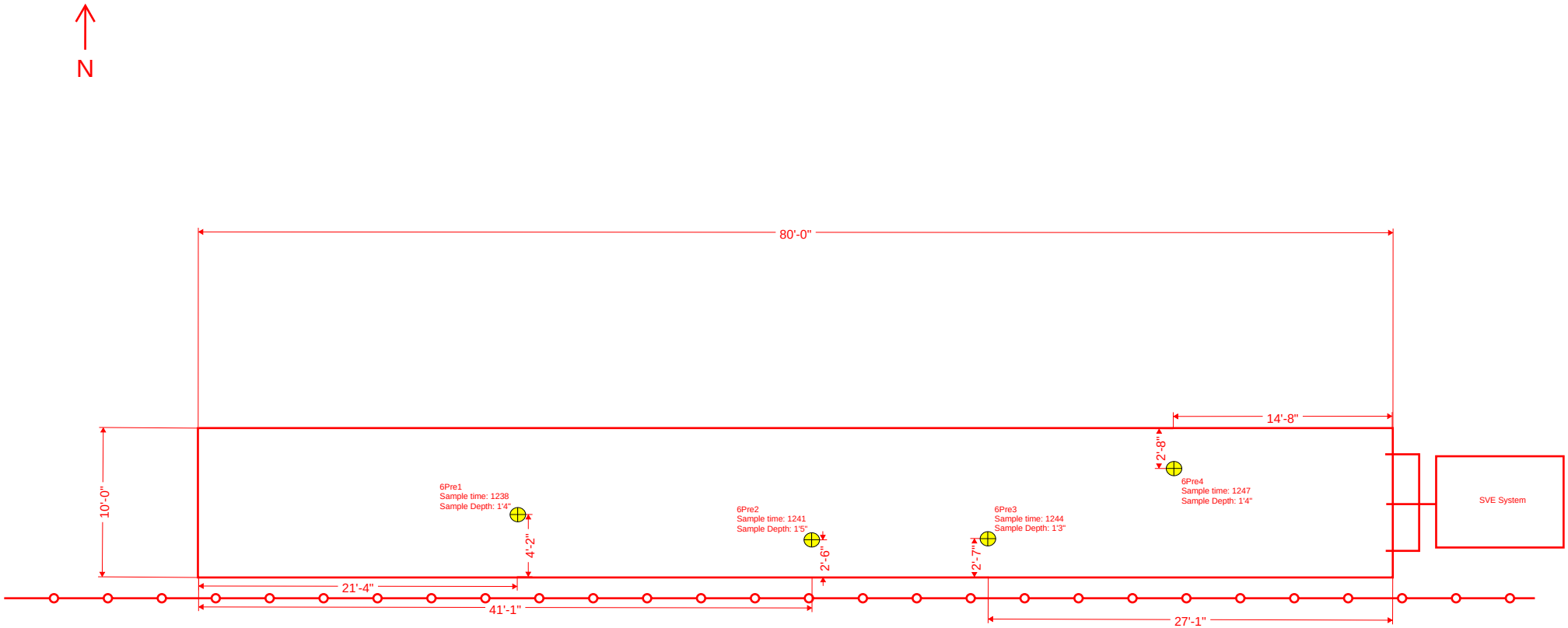
Date: 6/21/2022	**Personnel:** Jeff Greenwalt / Jered Newcomb	**Ambient Temperature:** 88°F	
Treatment Start Time: 1640	**Weather:** Sunny / ~~[illegible]~~ intermittent wind gusts	**Barometric Pressure:** 30.16 in Hg	

		Treatment Pile # 5	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
Day 1 startup	6/21 1645	Yes	--	--	--	--		
Day 1			5	0	-	148	10.9	2.4
Day 2	6/22 704	Yes						
Day 3	6/23 920	Yes	4	0	—	160	0.1	0.1
Day 4			3	0	—	170	0.3	1.0
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

Batch 6


N
80'-0"
14'-8"
10'-0"
2'-8"
6Pre1
Sample time: 1238
Sample Depth: 1'4"
6Pre2
Sample time: 1241
Sample Depth: 1'5"
6Pre3
Sample time: 1244
Sample Depth: 1'3"
6Pre4
Sample time: 1247
Sample Depth: 1'4"
4'-2"
2'-6"
2'-7"
SVE System
21'-4"
41'-1"
27'-1"

6/24 Simplot-Warden Batch Swapout

1040 - Leave office, pickup supplies (cooler, ice, ziplock bags)

1100 - Head to site

1230 - Arrive onsite

1238 - Start PreT sampling for Batch 6,,

1247 - Finish"

1250 - Take sample location measurements

1300 - Leave site

1433 - Drop samples off at Test America

1500 - Arrive @ office, process documentation.

Scale: 1 square = _____

Rite in the Rain.

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 6/24/2022	**Personnel:** Jeff Greenwalt / Jered Newcomb	**Ambient Temperature:** 80.6°F
Treatment Start Time: 15:38	**Weather:** Sunny, w3 - 5mph winds	**Barometric Pressure:** 30.15 inHg

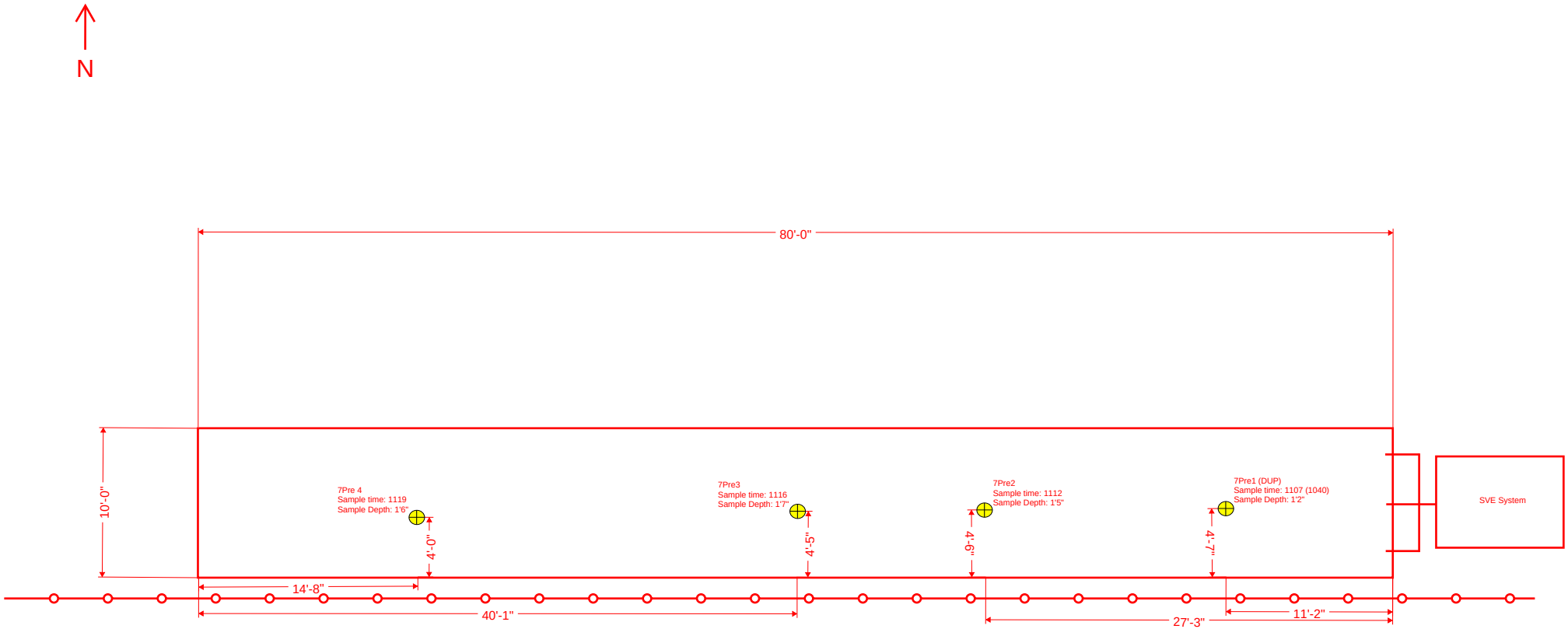
		Treatment Pile # 6	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
			--	--	--	--		
Day 1	6/24 @ 1550	Yes	4	0	—	172	8.0	7.1
Day 1								
Day 2	6/25*							
Day 3	6/26*							
Day 4	6/27 7:19	Yes	4	0	—	169	0.0	0.4
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

* No readings taken over weekend.

Batch 7


N
80'-0"
10'-0"
7Pre 4
Sample time: 1119
Sample Depth: 1'6"
4'-0"
7Pre3
Sample time: 1116
Sample Depth: 1'7"
4'-5"
7Pre2
Sample time: 1112
Sample Depth: 1'5"
4'-6"
7Pre1 (DUP)
Sample time: 1107 (1040)
Sample Depth: 1'2"
4'-7"
SVE System
14'-8"
40'-1"
27'-3"
11'-2"

0745 Simplot - Warden Watch Swapout
615 - Leave house
800 - Arrive onsite
810 - Prep sample jars
910 - Calibrate PPD meter
1100 - Finish filling treatment pit w/ Batch 7
1105 - Start sampling Pre T,
1120 - Finish
1200 - Offsite
1340 - Drop samples off @ TA.
1415 - Arrive @ office

Scale: 1 square = _____

Rite in the Rain.

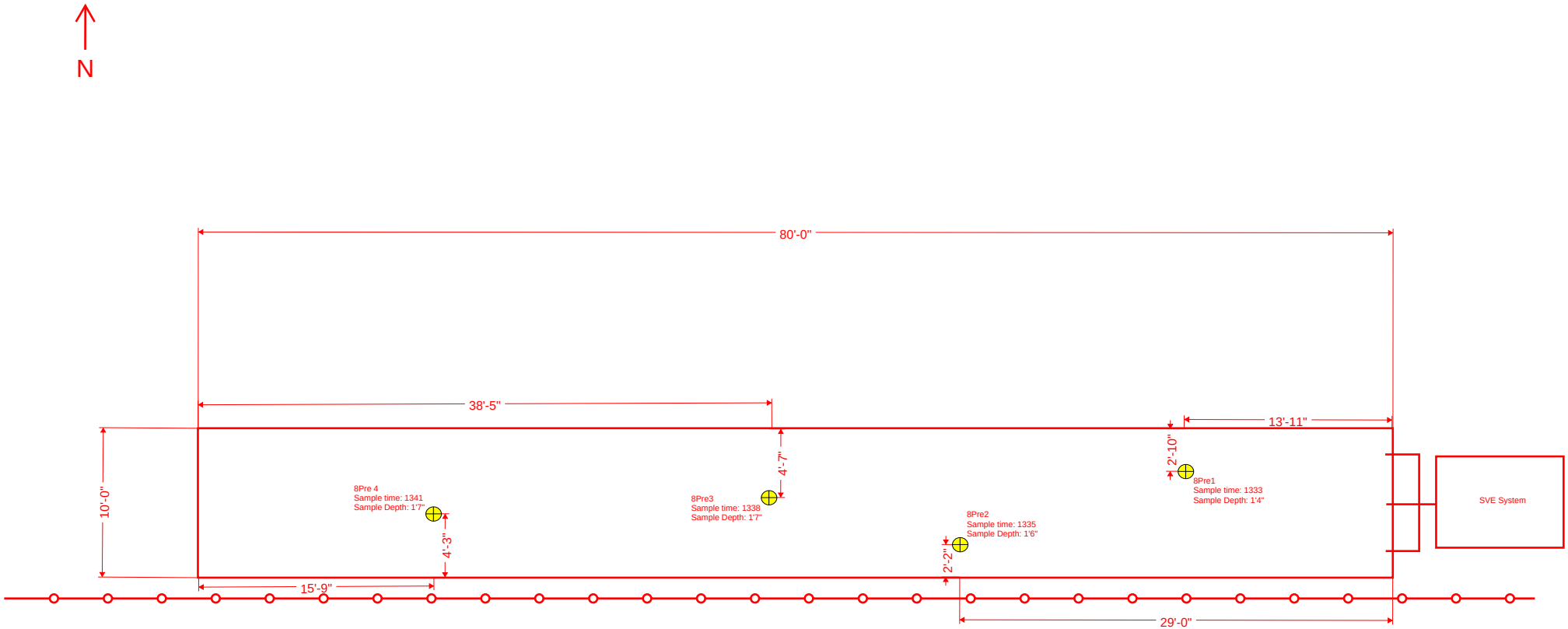
Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 7/1/22	**Personnel:** *Jeff Greenwalt / Jered Newcomb*	**Ambient Temperature:** 81°F
Treatment Start Time: 15:05	**Weather:** Sunny, ~1-2mph breeze	**Barometric Pressure:** 29.95 in Hg

		Treatment Pile # 8	Extraction System Operation Parameters				Soil Vapor (PID Readings)	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
			--	--	--	--		
Day 1	7/1 15:20	Yes	5	0	–	163	7.6	1.2
Day 1								
Day 2								
Day 3								
Day 4								
Day 5	7/5 9:41	Yes	4	0	–	172	0.1	0.3
Day 6	7/6 9:30	Yes	4	0	–	172	0.2	0.2
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored


N
80'-0"
38'-5"
13'-11"
10'-0"
4'-7"
2'-10"
4'-3"
2'-2"
15'-9"
29'-0"
8Pre 4
Sample time: 1341
Sample Depth: 1'7"
8Pre3
Sample time: 1338
Sample Depth: 1'7"
8Pre2
Sample time: 1335
Sample Depth: 1'6"
8Pre1
Sample time: 1333
Sample Depth: 1'4"
SVE System

7/1 Simplot-Warden Batch Swapout

930 - Prep field docs + cooler

1015 Leave office

1150 - Arrive on site

1200 - Prep sample jars.

1330 - Finish placing Batch 8 in treatment cell

1335 - Start Pre-T sampling

1341 - Finish "

1405 - Off site

1545 - Drop off samples

1610 - Arrive @ office

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

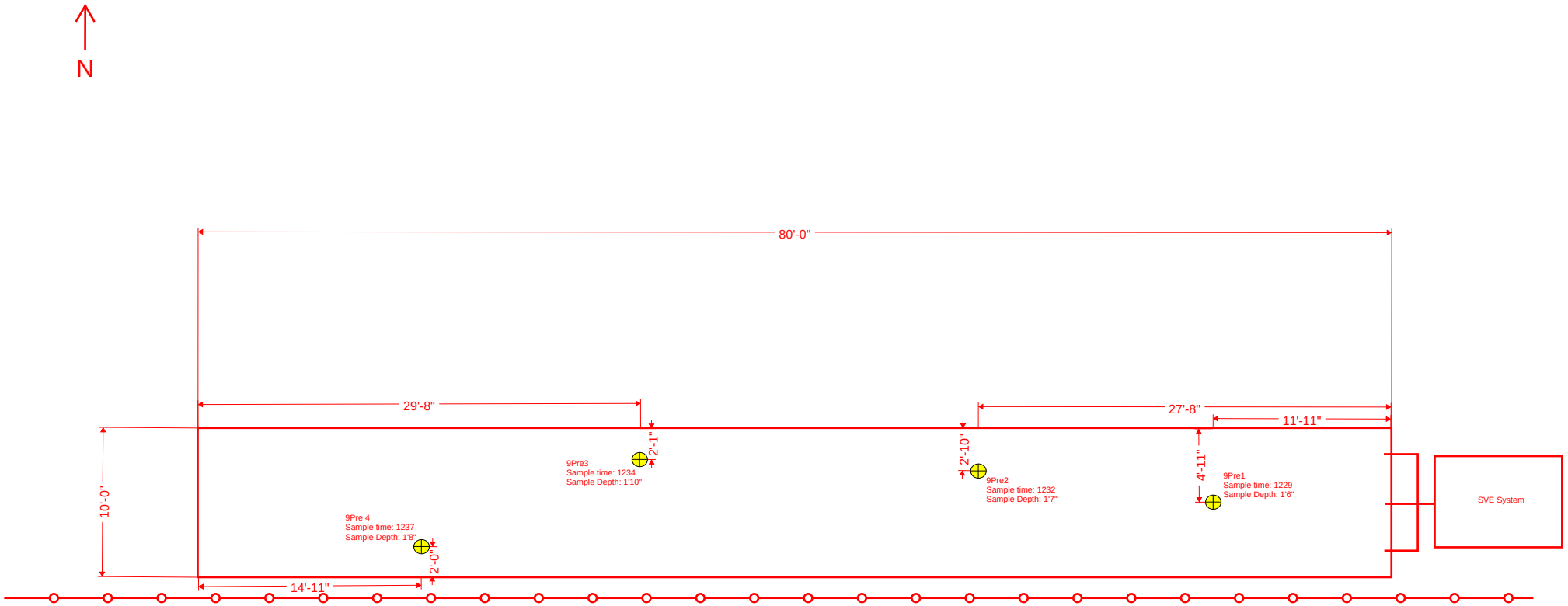
Date: 7/7/2022	**Personnel:** *Jeff Greenwalt / Jered Newcomb*	**Ambient Temperature:** 77°F	
Treatment Start Time: 15:30	**Weather:** Mostly Sunny, ~2mph breeze	**Barometric Pressure:** 29.88 in Hg	

			Treatment Pile # 9	Extraction System Operation Parameters				Soil Vapor (PID Readings)	
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
			(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
				--	--	--	--		
Day 1	7/7	15:45	Yes	7	0	—	164	5.6	4.9
Day 1	7/8	7:30	Yes	7	0	—	176	0.2	0.7
Day 2									
Day 3									
Day 4									
Day 5									
Day 6									
Day 7									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

Batch 9


N
80'-0"
29'-8"
27'-8"
11'-11"
10'-0"
2'-1"
2'-10"
4'-11"
2'-0"
14'-11"
9Pre3
Sample time: 1234
Sample Depth: 1'10"
9Pre2
Sample time: 1232
Sample Depth: 1'7"
9Pre1
Sample time: 1229
Sample Depth: 1'6"
9Pre 4
Sample time: 1237
Sample Depth: 1'8"
SVE System

1610 - Arrive @ office

717 Simplot - Warden Batch Swapout

840 - Leave office

845 - Fuel up truck

1010 - Arrive onsite

1015 - Prep sample Jars

1230 - Finish filling treatment cell

1229 - Start PreT sampling

1237 - Finish

1240 - Take sample location measurements

1250 - Check in w/ Jeff + Cyrus

1305 - Offsite

1443 - Drop off samples

1507 - Refuel truck

1525 - Arrive @ office, process field docs.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

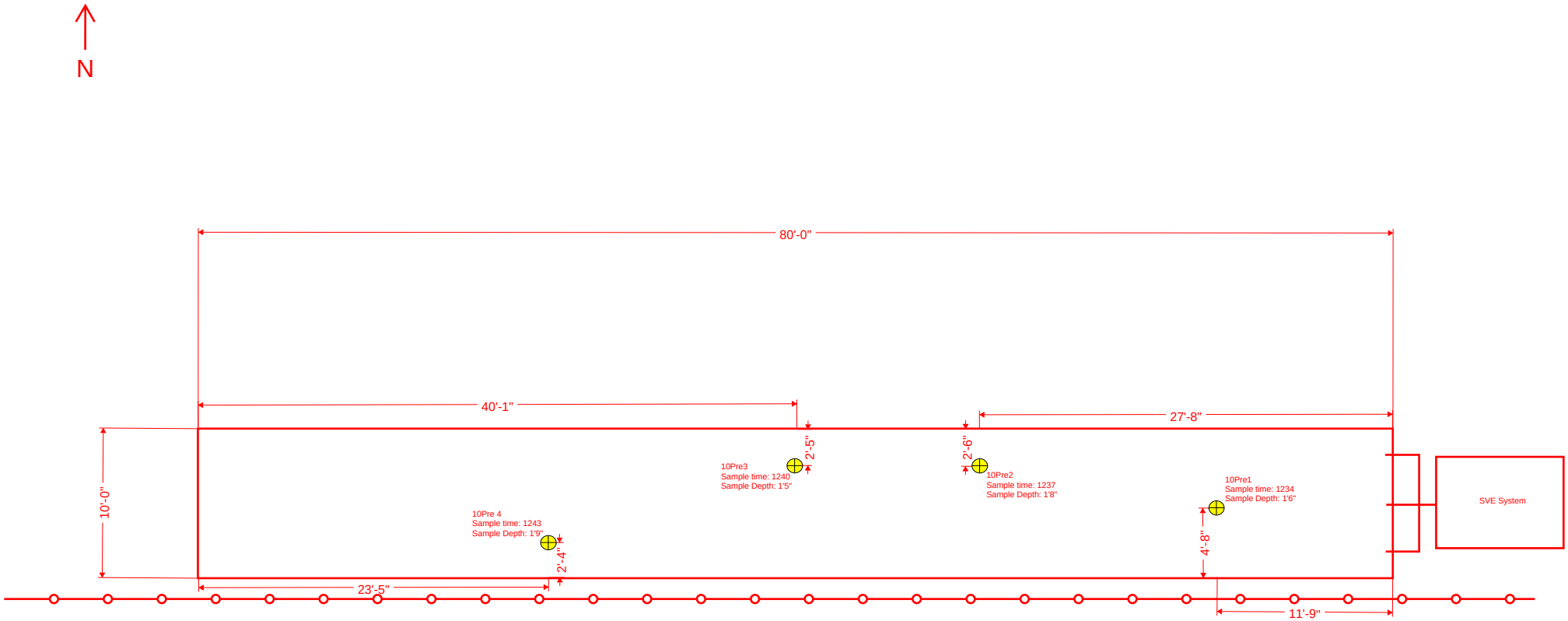
Date: 7/11/22	**Personnel:** *Jeff Greenwalt*	**Ambient Temperature:** 86°F
Treatment Start Time: 15:15	**Weather:** Sunny, w 1 mph wind	**Barometric Pressure:** 29.99 in Hg

		Treatment Pile # 10	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
			--	--	--	--		
Day 1	7/11 1530	Yes	5	0	-	182	~~10.1~~ 0.5	~~9.3~~ 0.9
Day 1	~~7/12~~							
Day 2	7/12 745	Yes	5	0	-	173	0.5	0.9
Day 3								
Day 4								
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

BATCH 10


N
80'-0"
40'-1"
27'-8"
10'-0"
2'-5"
2'-6"
4'-8"
2'-4"
23'-5"
11'-9"
10Pre3
Sample time: 1240
Sample Depth: 1'5"
10Pre2
Sample time: 1237
Sample Depth: 1'8"
10Pre1
Sample time: 1234
Sample Depth: 1'6"
10Pre 4
Sample time: 1243
Sample Depth: 1'9"
SVE System

7/11 Simplot-Warden Batch Swapout

930 - Prep field docs + cooler

1000 - Leave office

1140 - Arrive onsite

1145 - Prep sample jars + COC

1230 - Finish filling treatment cell

1234 - Start Batch 10 PreT sampling,

1243 - Finish "

1300 - Off site

1434 - Drop samples off @ TA

1510 - Arrive @ office

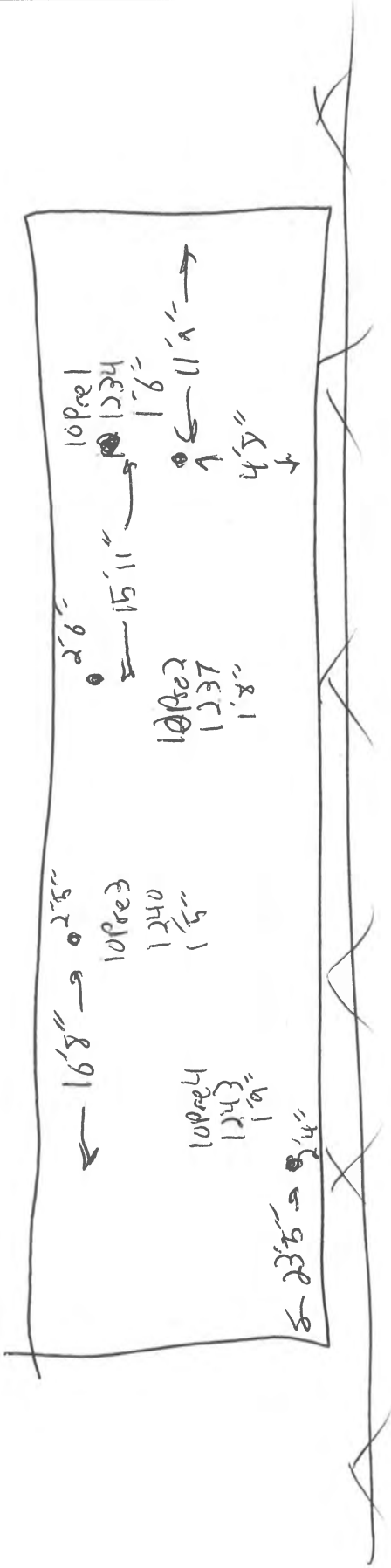
1515 - Demobe + process field docs.

Scale: 1 square = _____

Rite in the Rain

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	

Bath 10



1515 - Demobe + process field docs.
713 Simplot - Warden Batch Swapout
630 - Prep coolers + field docs
730 - Leave office
800 - Pickup 40mL VOAs @ TA
945 - Arrive onsite
1240 - Finish filling cell w/ Batch 11
1247 - Start PreT Batch 11 sampling
1255 - Finish
1300 - Unable to sample 100 Tank (dry)
1452 - Start SVE system
1515 - Try using anemometer, T too ↑ on blower outlet
1555 - Offsite
1740 - Arrive @ office, drop samples off in AM

Scale: 1 square = _____

Rite in the Rain

Air Flow Readings (cfm)

Time	Shower Outlet	Manifold
1519	—	23.7
1524	—	23.7
1529	—	23.7

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

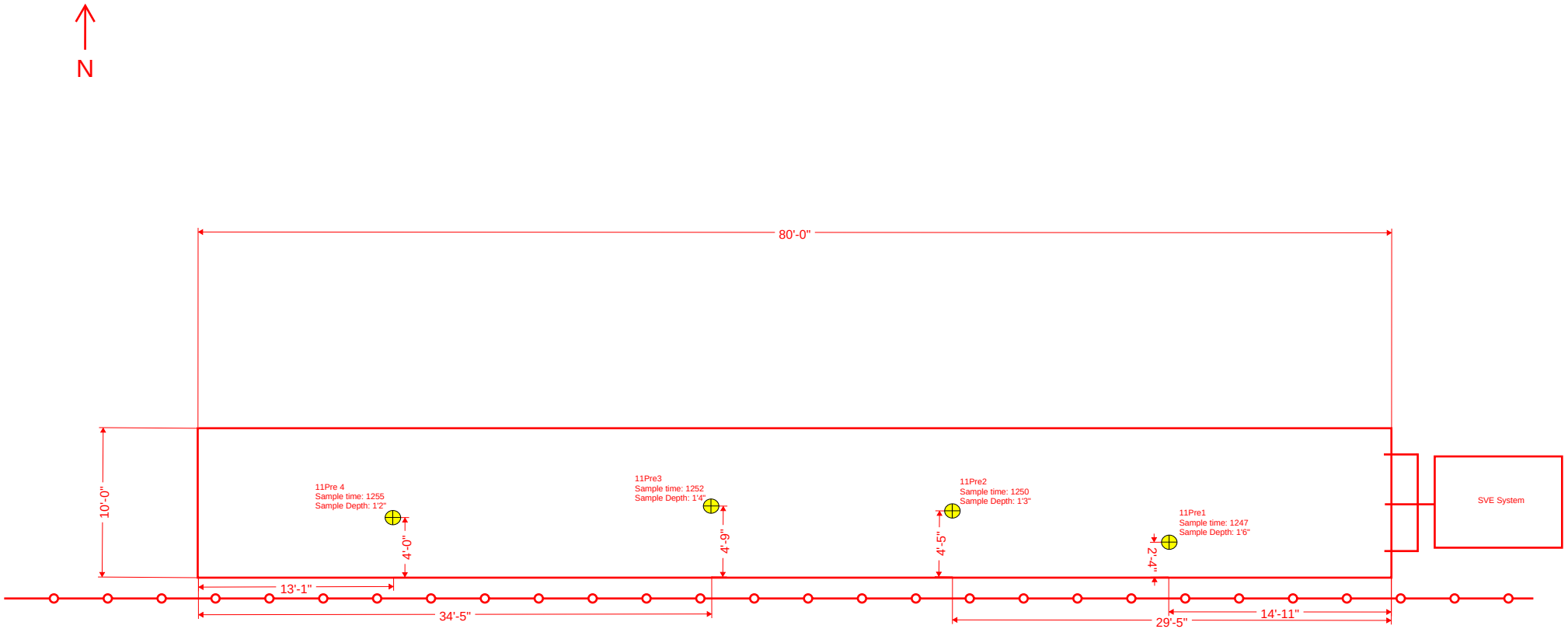
Date: 7/13/22	**Personnel:** Jeff Greenwalt / Jered Nowacki	**Ambient Temperature:** 86°F	
Treatment Start Time: 14:52	**Weather:** Sunny, ~ 5-6 mph gust	**Barometric Pressure:** 28.59 in Hg	

		Treatment Pile # 11	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower ~~Outlet~~ Inlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**
			--	--	--	--		
Day 1	7/13 1551	Yes	7	0	[redacted]	180	3.2	1.9
Day 2	7/14 648	Yes	7	0	--	160	0.4	0.4
Day 3	7/15 807	Yes	7	0	6.3	165	0.5	1.4
Day 4								
Day 5								
Day 6								
Day 7								

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

BATCH 11


N
80'-0"
10'-0"
11Pre 4
Sample time: 1255
Sample Depth: 1'2"
4'-0"
11Pre3
Sample time: 1252
Sample Depth: 1'4"
4'-9"
11Pre2
Sample time: 1250
Sample Depth: 1'3"
4'-5"
11Pre1
Sample time: 1247
Sample Depth: 1'6"
2'-4"
SVE System
13'-1"
34'-5"
14'-11"
29'-5"

7/18 Simplot - Warden SVE Maintenance
600 - Leave office
720 - Arrive onsite
730 - Check in w/ Graymar + Simplot
900 - Finish removing treated batch
910 - Start removing geotextile + Gravel
1200 - Start removing piping + rotary
1300 - Discover water at bottom of treatment cell below piping holding at liner.
1335 - Sample water in treatment cell
1540 - Start removing water from treatment cell, store in totter
1655 - Bob arrives onsite,
• Coordinate plan for tomorrow and timeline
1720 - offsite
1900 - Arrive @ office

7/18 Simplot - Warden SVE Maint. / Swapout
400 - Leave office
530 - Arrive onsite
~~730 - Graymar arrives onsite~~ 900 - Install new gauges
~~1140 - All soil + geotextile out~~
~~1330 - Drive~~ 1620 - Install liner
1705 - Install piping (screened)
1735 - Fill in gravel
2330 - Offsite
0100 - Arrive in Spokane

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

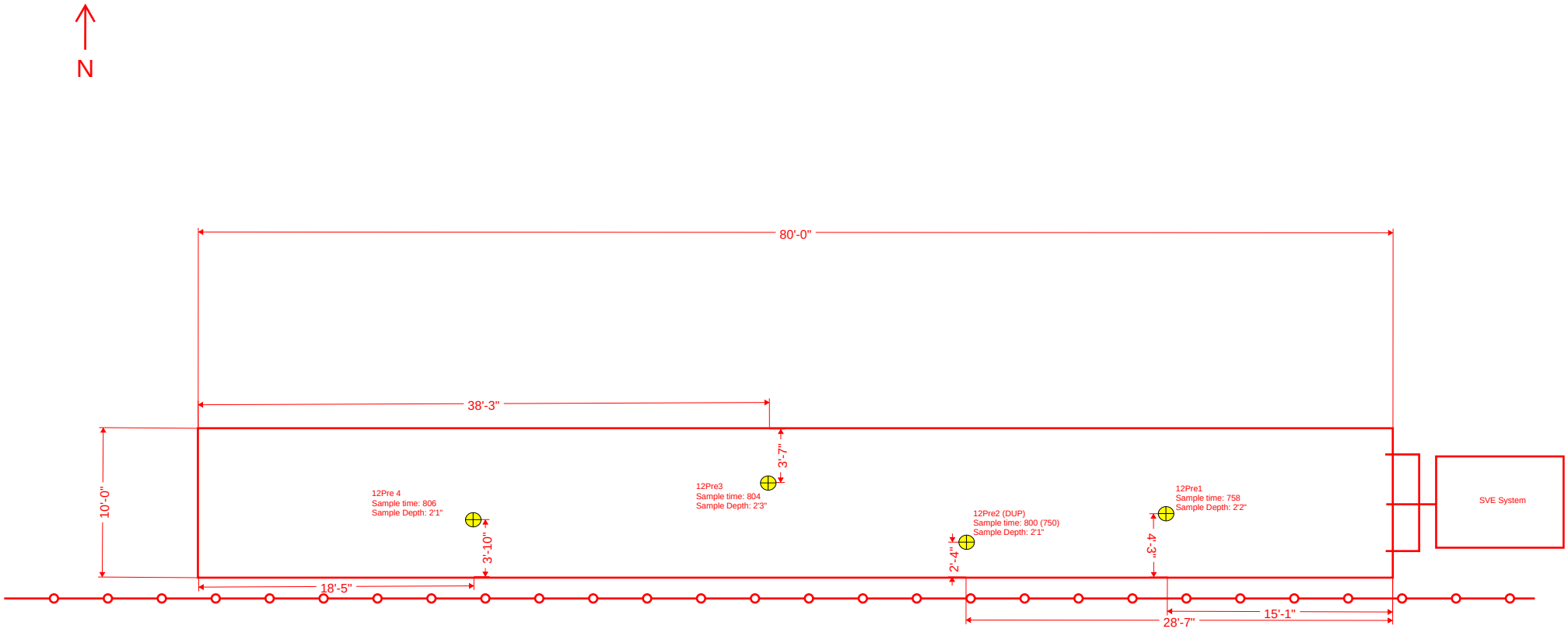
Date: 7/21/22	**Personnel:** Jeff Greenwalt / Jered Newsmith	**Ambient Temperature:** 77°F
Treatment Start Time: 815	**Weather:** Sunny, w 5mph breeze	**Barometric Pressure:** 29.92 in Hg

		Treatment Pile # 12	Extraction System Operation Parameters				Soil Vapor (PID Readings)		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	Manifold Flowrate
		(Yes / No)	(in H_2O) (1)	(cfm)	(cfm)	(°F)	(ppm)	(ppm)	(fm
			--	--	--	--			[illegible]
Day 1	7/21/22 915	Yes	0	0	299.8	160	1.8	1.6	5.085
~~Day 1~~	1015	Yes	0	0	+300*	167	1.2	1.1	5.085
~~Day 2~~	1115	Yes	0	0	+300*	170	1.0	1.9	4.06
~~Day 3~~	1215	Yes	0	0	+300*	170	0.8	1.0	5.51
~~Day 4~~	1300	Yes	0	0	213.5	172	0.8	1.8	5.51
~~Day 5~~	1415	Yes	0	0	224.2	174	0.4	2.3	—
~~Day 6~~	1523	Yes	0	0	[illegible] 205	178	[illegible] 0.7	[illegible] 2.4	—
~~Day 7~~ Day 2	7/22 615	Yes	0	0	211.2	156	0.3	0.9	
Day 2	1508	Yes	4	0	224.5	185	0.7	1.8	
Day 3									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

* Gauge was peaked, needs checking + adjustments


N
80'-0"
38'-3"
10'-0"
3'-7"
12Pre 4
Sample time: 806
Sample Depth: 2'1"
3'-10"
12Pre3
Sample time: 804
Sample Depth: 2'3"
12Pre2 (DUP)
Sample time: 800 (750)
Sample Depth: 2'1"
2'-4"
12Pre1
Sample time: 758
Sample Depth: 2'2"
4'-3"
SVE System
18'-5"
15'-1"
28'-7"

7/21 Simplot - Warden Sampling + Pilot 2.0

630 - Leave office

750 - Arrive onsite

758 - Start Batch 12 PreT sampling,

808 - Finish "

815 - Start system, check mass gauge for proper operation

915 - Take 1st one hour reading, take readings every hour until Offsite to deliver samples.

1315 - Offsite

1455 - Deliver samples to TA

1530 - Arrive @ office

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

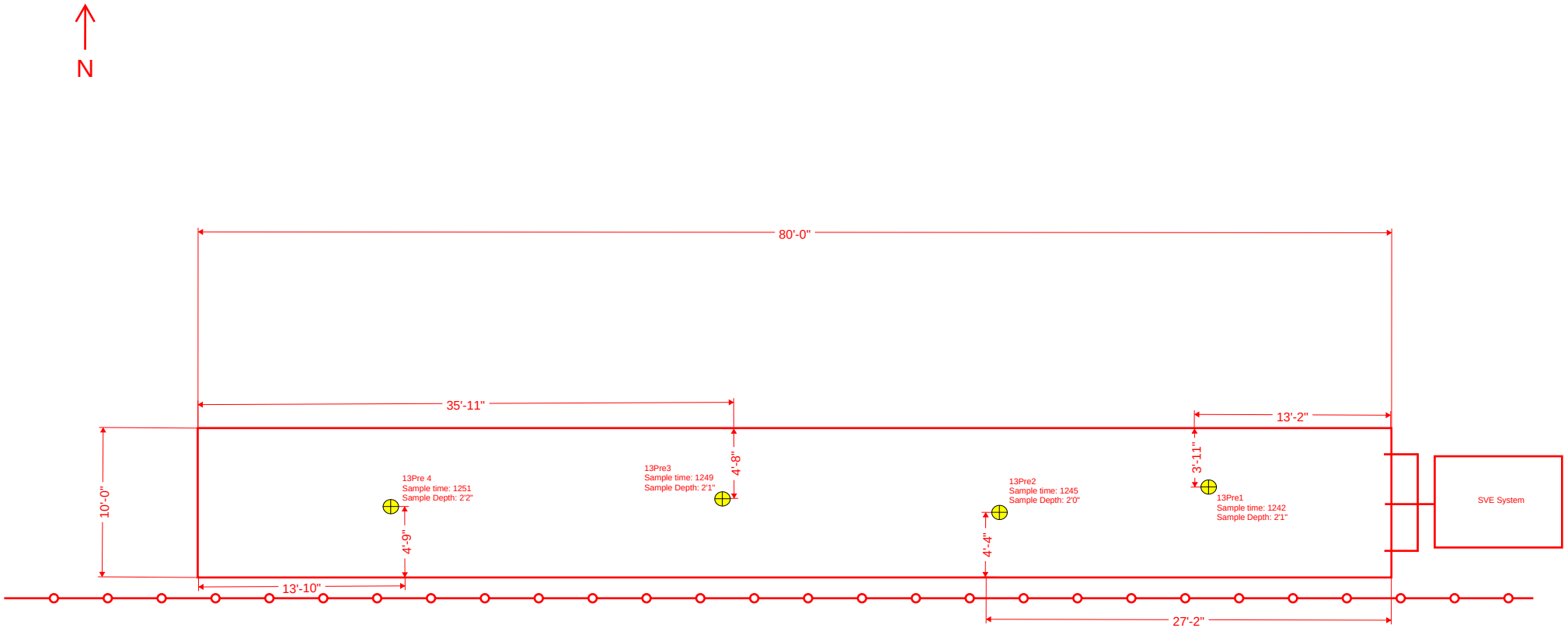
Date: 7/25/22	**Personnel:** *Jeff Greenwalt* / Jerrod Newcomb	**Ambient Temperature:** 98.6
Treatment Start Time: 15:32	**Weather:** Sunny, w 2-3mph breeze	**Barometric Pressure:** 29.86

		Treatment Pile # 13	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**	
			--	--	--	--			
Day 1	7/25 15:47	Yes	1	0	234.4	181	—	—	Did not have access to PID meter
Day 1	7/26 13:19	Yes	1	0	227.4	202	0.8	3.0	
Day 2									
Day 3									
Day 4									
Day 5									
Day 6									
Day 7									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

BATCH 13


N
80'-0"
35'-11"
13'-2"
10'-0"
13Pre 4
Sample time: 1251
Sample Depth: 2'2"
13Pre3
Sample time: 1249
Sample Depth: 2'1"
13Pre2
Sample time: 1245
Sample Depth: 2'0"
13Pre1
Sample time: 1242
Sample Depth: 2'1"
4'-8"
3'-11"
4'-9"
4'-4"
13'-10"
27'-2"
SVE System

7/25 Simplot - Warden Sampling / Batch Swapout
800 - Pick up new vacuum gauges @ Grainger
830 - Arrive @ office, start prep
1000 - Leave office
1130 - Arrive onsite, prep sample jars.
1240 - Start Batch B PreT sampling;
1300 - Leave site
1440 - Drop off samples @ TA
1515 - Arrive @ office

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

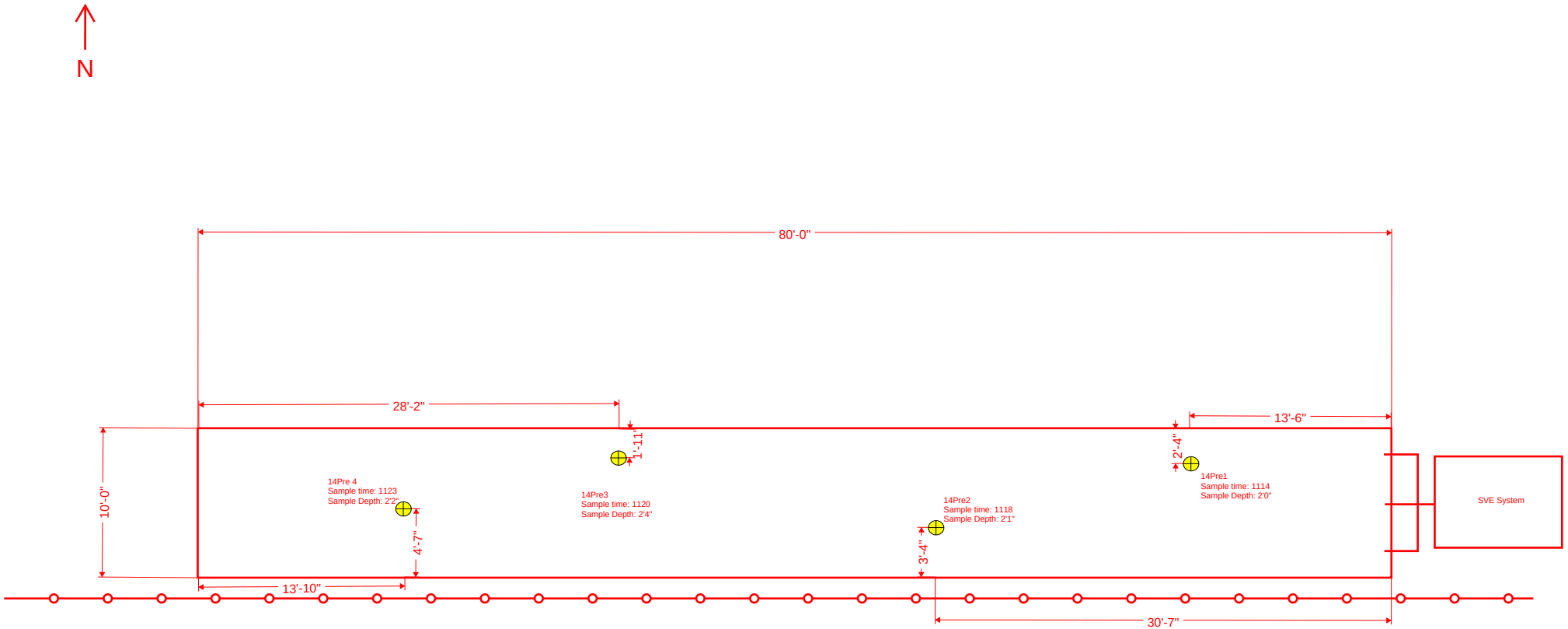
Date: 7/27/22	**Personnel:** Jeff Greenwalt / Jerad Newcomb	**Ambient Temperature:** 99°F
Treatment Start Time: 13:45	**Weather:** Sunny	**Barometric Pressure:** 29.79 inHg

		Treatment Pile # 14	Extraction System Operation Parameters				Soil Vapor (PID Readings)		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	Manifold Flowrate ~~(cfm)~~ (scfm)
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(°F)**	**(ppm)**	**(ppm)**	
			--	--	--	--			—
Day 1	7/27 14:00	Yes	1	0	241.7	174	6.9	7.6	4.237
Day 1	14:50	Yes	1	0	241.4	193	9.3	11.2	—
Day 2	7/28 11:05	Yes	3.4	0	223.8	184	0.6	0.9	—
Day 3									
Day 4									
Day 5									
Day 6									
Day 7									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

BATCH 14


N
80'-0"
28'-2"
13'-6"
10'-0"
1'-11"
2'-4"
14Pre 4
Sample time: 1123
Sample Depth: 2'2"
4'-7"
14Pre3
Sample time: 1120
Sample Depth: 2'4"
14Pre2
Sample time: 1118
Sample Depth: 2'1"
3'-4"
14Pre1
Sample time: 1114
Sample Depth: 2'0"
SVE System
13'-10"
30'-7"

7/27 Simplot-Warden Batch Swapout (14)

600 - Leave office

730 - Arrive onsite, take photos + prep sample jars

835 - Finish backfilling removed batch into pit

845 - Start filling treatment cell w/ Batch 14

1110 - Finish "

1114 - Start Batch 14 PreT sampling "

1120 - Finish "

1130 - Take sampling locations measurements

1155 - Off site

1350 - Arrive @ TA, drop off samples

1500 - Arrive @ office

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

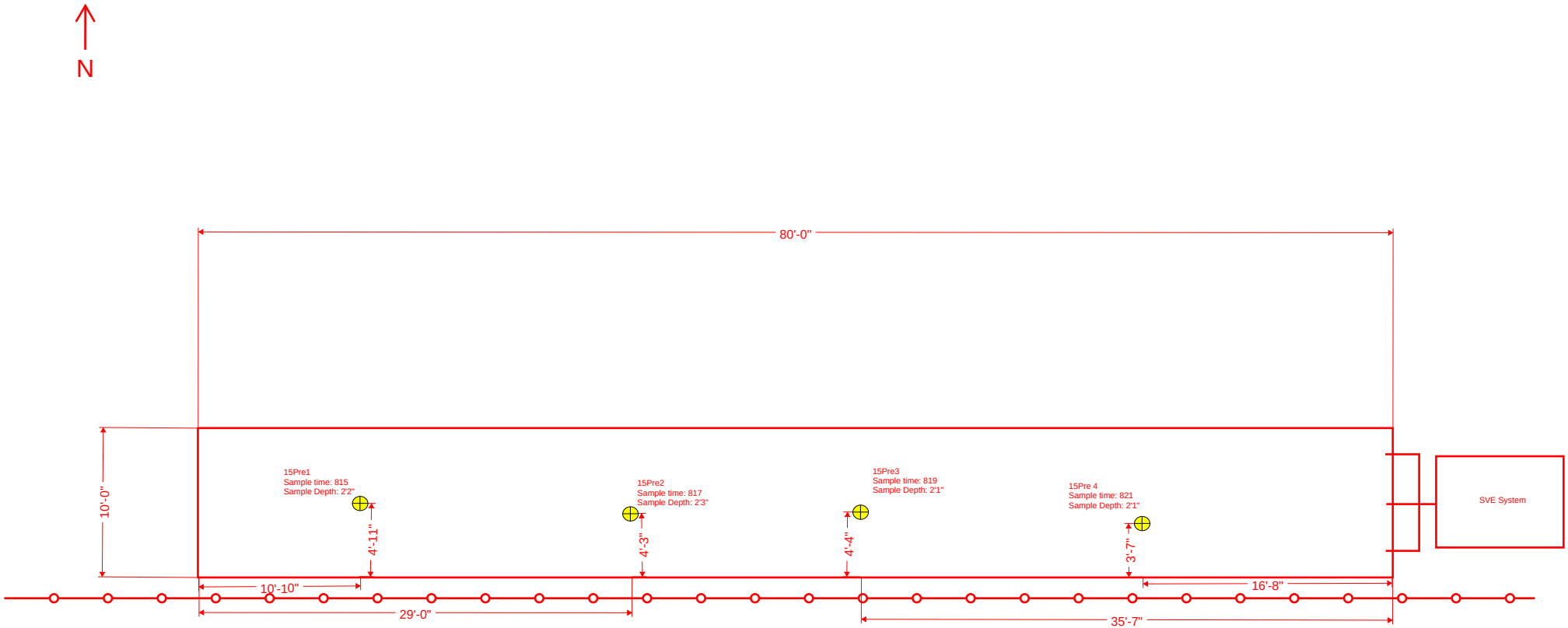
Date: 7/29/22	**Personnel:** *Jeff Greenwalt / Jered Newcomb*	**Ambient Temperature:** 93°F
Treatment Start Time: 11:15	**Weather:** [redacted] Sunny	**Barometric Pressure:** 29.79 in Hg

		Treatment Pile # 15	**Extraction System Operation Parameters**				**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	Manifold Flowrate
		(Yes / No)	(in H_2O) [1]	(cfm)	(cfm)	(°F)	(ppm)	(ppm)	(cfm)
			--	--	--	--			-
Day 1	7/29 11:30	Yes	4.5	0	230.4	175	0.6	2.8	3.814
Day 1	15:25	Yes	2.9	0	[redacted] 216.7	197	0.1	2.6	
Day 2									
Day 3									
Day 4	8/1 16:10	Yes	6.28	0	147.7	153	0.0	0.5	
Day 5									
Day 6									
Day 7									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

BATCH 15


N
80'-0"
10'-0"
15Pre1
Sample time: 815
Sample Depth: 2'2"
4'-11"
15Pre2
Sample time: 817
Sample Depth: 2'3"
4'-3"
15Pre3
Sample time: 819
Sample Depth: 2'1"
4'-4"
15Pre 4
Sample time: 821
Sample Depth: 2'1"
3'-7"
SVE System
10'-10"
29'-0"
16'-8"
35'-7"

500 Arrive @ office

7/29 → Simplot - Warden Batch Swapout (15)

530 - Arrive @ office, prep field docs

615 - Leave office

745 - Arrive onsite, prep sample jars

810 - Finish filling treatment cell

815 - Start Batch 15 PreT sampling

821 - Finish "

830 - Take sampling location measurements

840 - Clean PID meter lamp/show Cyrus how to use digital manometer

850 - Leave site

1030 - Drop off samples @ TA

1100 - Arrive @ office, process field docs.

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

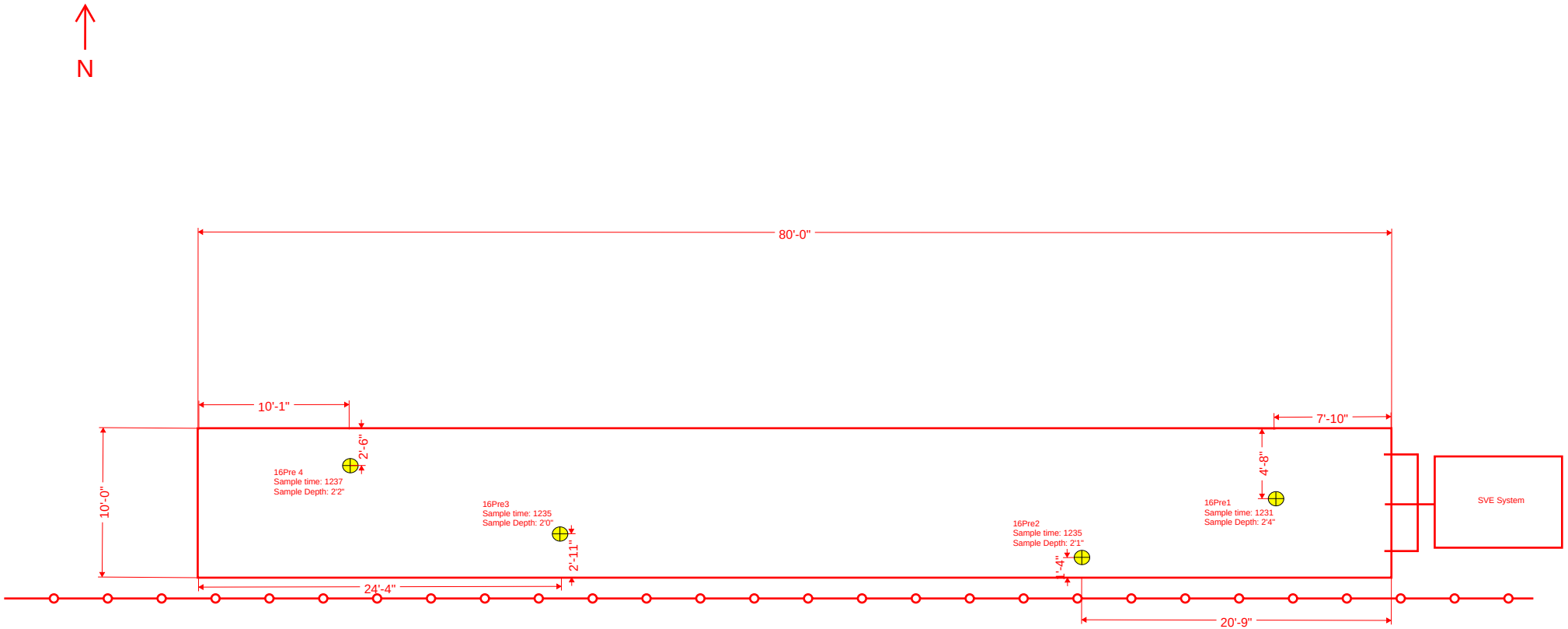
Date: 8/2/22	**Personnel:** *Jeff Greenwalt*	**Ambient Temperature:** 88°F	
Treatment Start Time: 15:45	**Weather:** Sunny, W 19mph Gusts	**Barometric Pressure:** 29.77 in Hg	

		Treatment Pile # 16	Extraction System Operation Parameters				Soil Vapor (PID Readings)		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Blower Outlet Temperature**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	Manifold Flowrate
		(Yes / No)	(in H_2O) (1)	(cfm)	(cfm)	(°F)	(ppm)	(ppm)	(cfm)
			--	--	--	--			--
Day 1	8/2 16:06	Yes	1.81	0	204.1	156	0.6	1.9	4.237
Day 1									
Day 2	8/3 8:07	Yes	2.46	0	154.0	168	0.0	0.7	
Day 3	15:35	Yes	2.24	0	185.3	183	0.0	1.3	
Day 4									
Day 5									
Day 6									
Day 7									

(1) - Vacuum measured with a Magnehelic gauge.

in inches of water column
cf cubic feet per minute
-- Not monitored

BATCH 16


N
80'-0"
10'-1"
7'-10"
2'-6"
4'-8"
10'-0"
16Pre 4
Sample time: 1237
Sample Depth: 2'2"
16Pre3
Sample time: 1235
Sample Depth: 2'0"
16Pre2
Sample time: 1235
Sample Depth: 2'1"
16Pre1
Sample time: 1231
Sample Depth: 2'4"
2'-11"
1'-4"
24'-4"
20'-9"
SVE System

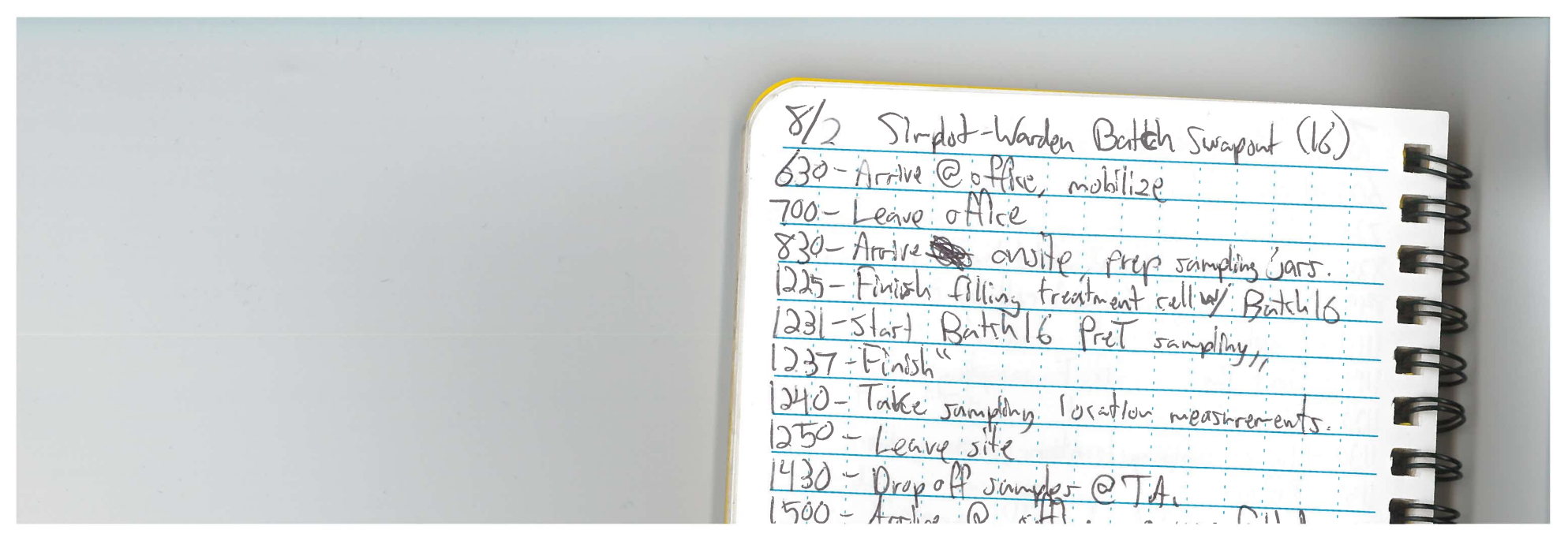

8/2 Slurdot-Warden Batch Swapout (16)
630 - Arrive @ office, mobilize
700 - Leave office
830 - Arrive onsite, prep sampling jars.
1225 - Finish filling treatment cell w/ Batch 16
1231 - Start Batch 16 Pret sampling
1237 - Finish "
1240 - Take sampling location measurements.
1250 - Leave site
1430 - Drop off samples @ TA.
1500 - Arrive @ office, fill

Table 2 - Soil Vapor Extraction Field Data Collection Example

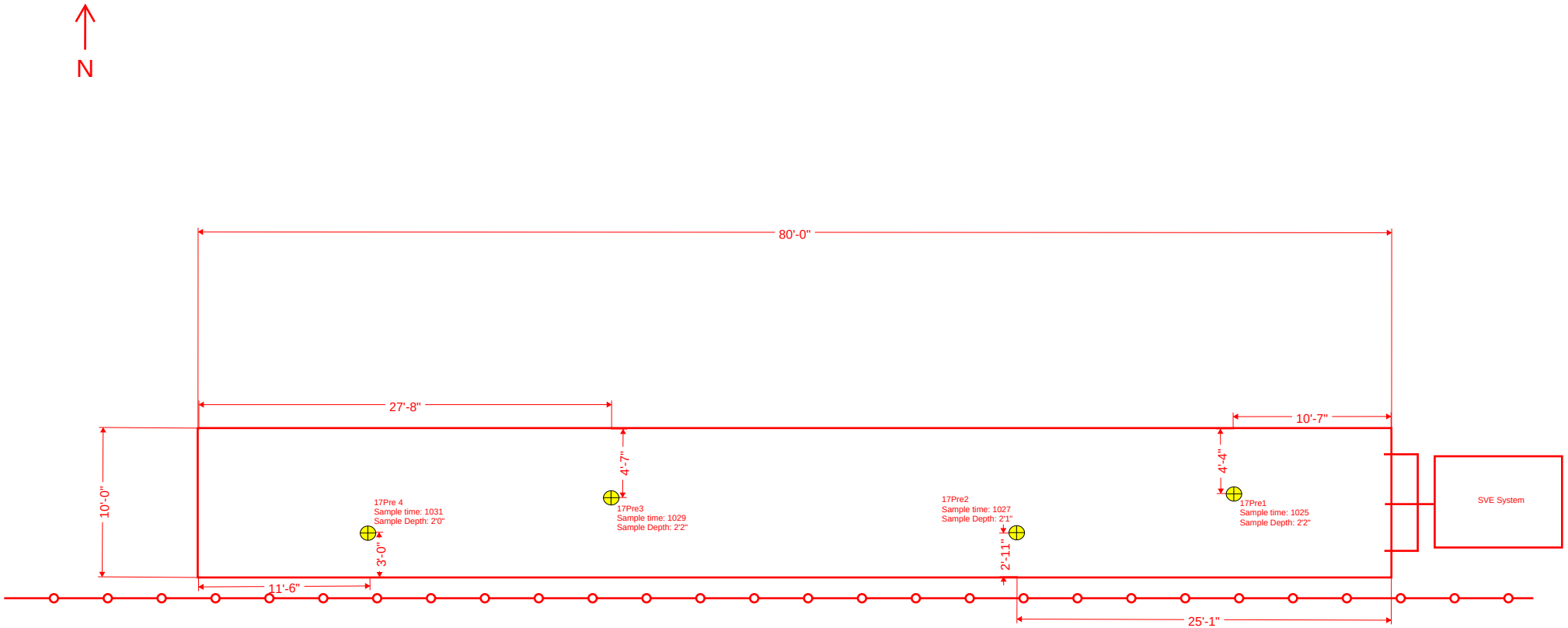
Date: 8/4/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 82°F
Treatment Start Time: 13:45	**Weather:** Sunny, w 18 mph winds	**Barometric Pressure:** 28.62 in Hg

		Treatment Pile # 17	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/4 14:00	Yes	4.63	0		4.237	165	3	2	0.1	0.4
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

BATCH 17


N
80'-0"
27'-8"
10'-7"
10'-0"
4'-7"
4'-4"
17Pre 4
Sample time: 1031
Sample Depth: 2'0"
17Pre3
Sample time: 1029
Sample Depth: 2'2"
17Pre2
Sample time: 1027
Sample Depth: 2'1"
17Pre1
Sample time: 1025
Sample Depth: 2'2"
SVE System
3'-0"
2'-11"
11'-6"
25'-1"

1300 - Arrive @ office, process field docs.

8/4 Simplot - Warden Batch Swapout (17)

730 - Prep field docs + cooler

845 - Leave office

1020 - Arrive onsite

1025 - Start Batch 17 Pret sampling

1031 - Finish "

1040 - Take sample location measurements

1055 - check supplies + calibrate PID

1115 - offsite

1300 - Drop off samples @ TA

1330 - Arrive @ office.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 8/8/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 95°F
Treatment Start Time: 13:35	**Weather:** Sunny, ~8mph gusts	**Barometric Pressure:** 28.86 inHg

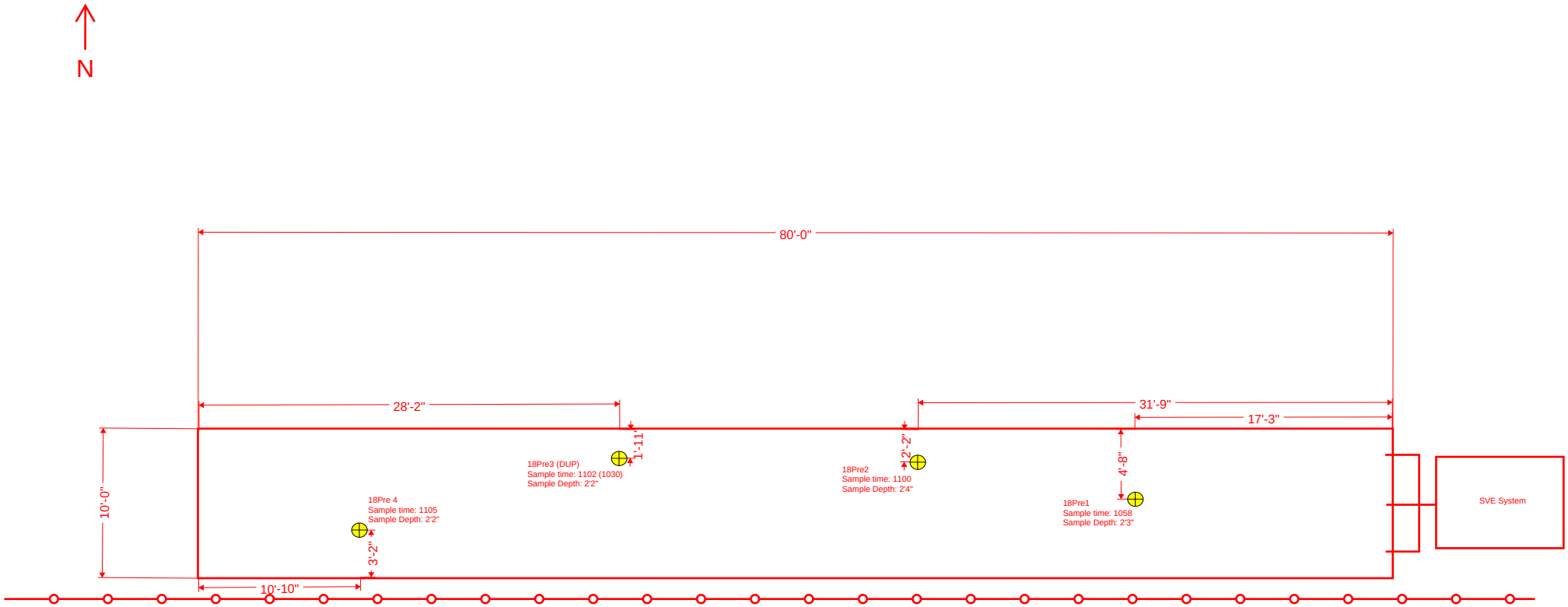
		Treatment Pile # 18	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/8 13:50	Yes	4.3	0	258.3	1.271	180	2	1	3.7	2.7
Day 2	8/9 13:52	Yes	*	0	170.2	4.661	178	3	1	0.0	1.8
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* Did not collect vacuum readings

BATCH 14


N
80'-0"
28'-2"
31'-9"
17'-3"
10'-0"
1'-11"
2'-2"
4'-8"
3'-2"
10'-10"
18Pre3 (DUP)
Sample time: 1102 (1030)
Sample Depth: 2'2"
18Pre2
Sample time: 1100
Sample Depth: 2'4"
18Pre1
Sample time: 1058
Sample Depth: 2'3"
18Pre 4
Sample time: 1105
Sample Depth: 2'2"
SVE System

8/8 Simplot - Warden Swapout (Batch 15)
645 - Prep field docs + cooler
845 - Leave office
1020 - Arrive onsite
1030 - Prep sample jars
1058 - Start Batch 18 PCT sampling
1105 - Finish "
1110 - Take sample location field measurements
1130 - Run SVE system through dilution valve and check mag gauge. Found leak in pipe from silencer to GAC drum #1.
1200 - Leave site
1345 - Drop samples off @ TA
1415 - Arrive @ office, process field docs.

8/ Simplot-Warden Batch Swapout (19)

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 8/10/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 90°F
Treatment Start Time: 12:30	**Weather:** Partly Cloudy, ~5mph breeze	**Barometric Pressure:** 28.68 in Hg

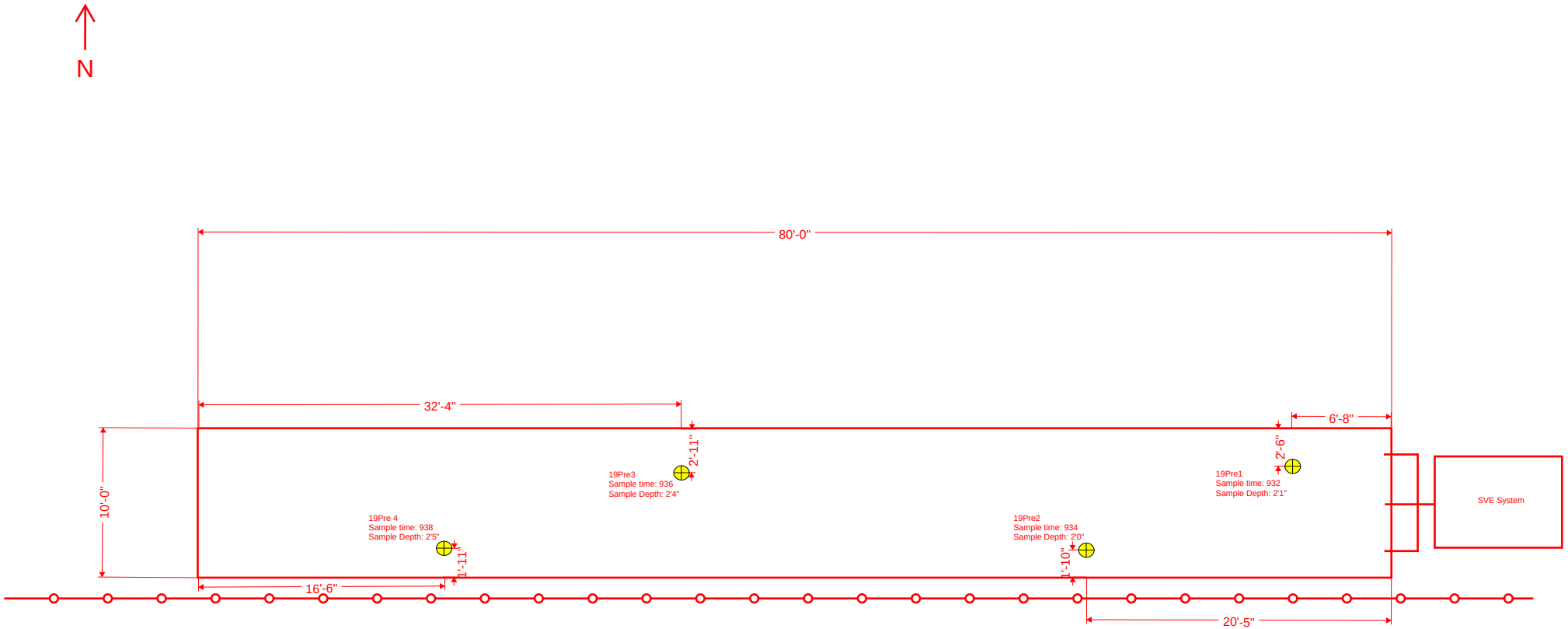
		Treatment Pile # 19	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/10 12:45	Yes	4.94	0	197.7	5.085	160	–	–	0.4	1.4
Day 1	8/11 14:49	Yes	7.88	0	—*	6.356	150	1	0.5	0.0	0.9
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* Magnehelic gauge malfunction. Unable to calculate flow rate.

BATCH 19


N
80'-0"
32'-4"
6'-8"
10'-0"
2'-11"
2'-6"
19Pre3
Sample time: 936
Sample Depth: 2'4"
19Pre1
Sample time: 932
Sample Depth: 2'1"
SVE System
19Pre 4
Sample time: 938
Sample Depth: 2'5"
19Pre2
Sample time: 934
Sample Depth: 2'0"
1'-11"
1'-10"
16'-6"
20'-5"

1415 - Arrive @ office, process field docs.

8/10 Simplot-Warden Batch Swapout (19)

600 - Arrive @ office, mobilize

630 - Leave office

800 - Arrive onsite, prep sample jars

920 - Finish filling treatment cell

932 - start Batch 19 PreT sampling

938 - Finish

940 - Take sampling location measurements

1000 - check equipment/ calibrate PID meter.

1005 - Leave site

1250 - Drop samples off @ TA

1320 - Arrive @ office, process field docs.

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

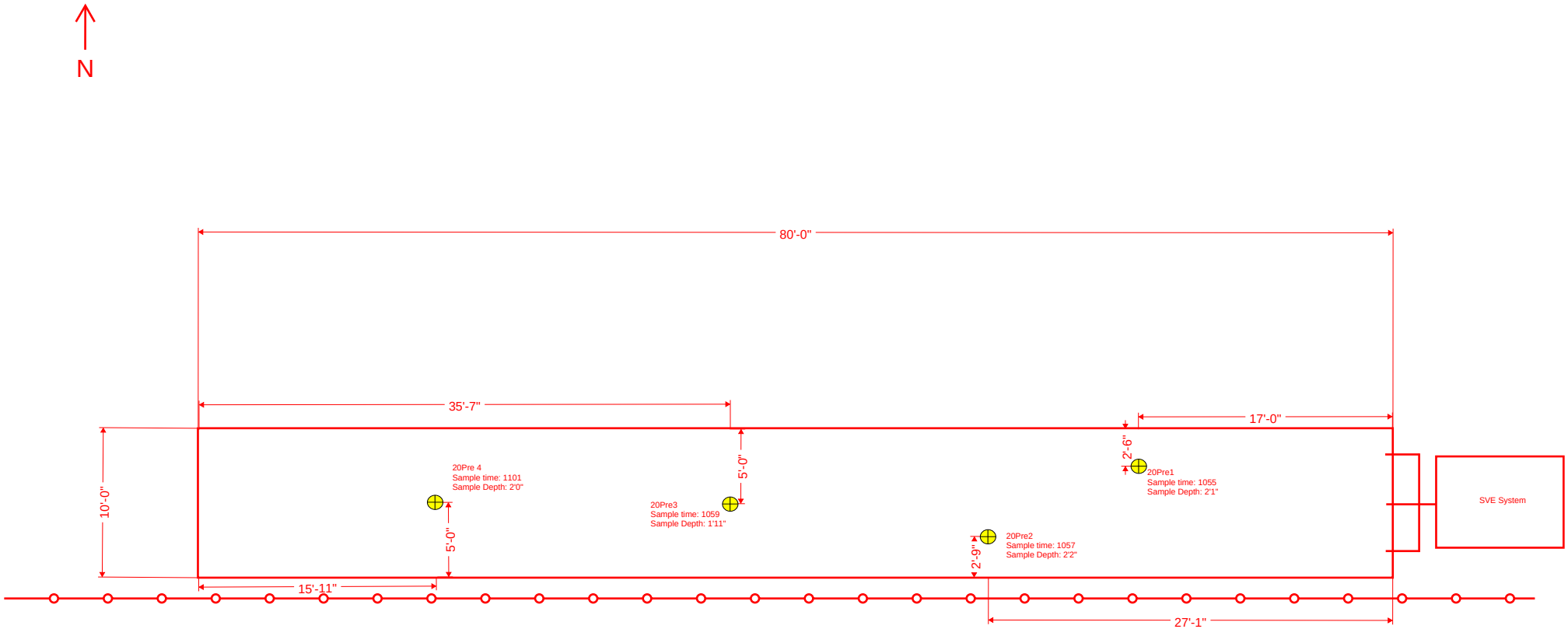
Date: 8/12/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 91°F
Treatment Start Time: 13:45	**Weather:** Sunny,	**Barometric Pressure:** 28.62 in Hg

			Treatment Pile # 20	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
			(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/12	14:00	Yes	~~24~~ 4.64	0	153.6	4.237	170	–	–	2.3	3.3
Day 1	8/15	8:20	Yes	16.29	0	–	5.933	118	2	2	0.0	0.9
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

BATCH 14


N
80'-0"
35'-7"
17'-0"
10'-0"
5'-0"
2'-6"
5'-0"
2'-9"
15'-11"
27'-1"
20Pre 4
Sample time: 1101
Sample Depth: 2'0"
20Pre3
Sample time: 1059
Sample Depth: 1'11"
20Pre2
Sample time: 1057
Sample Depth: 2'2"
20Pre1
Sample time: 1055
Sample Depth: 2'1"
SVE System

8/12 Simplot-Warden Batch Swapout (20)

630 – Arrive @ office, prep field docs

700 – Leave office

830 – Arrive on site

1050 – Finish filling treatment cell

1055 – Start Batch 20 Pret sampling

1101 – Finish "

1110 – Take sample location measurements

1130 – Check / calibrate equip.

1150 – Check in w/ Jeff / Grayson

1200 – Offsite

1345 – Drop samples off @ TA

1420 – Arrive @ office, process field docs.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 8/17/2022	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** @1 87°F
Treatment Start Time: 8:30	**Weather:** Sunny, ~7 mph breeze	**Barometric Pressure:** 28.76 in Hg

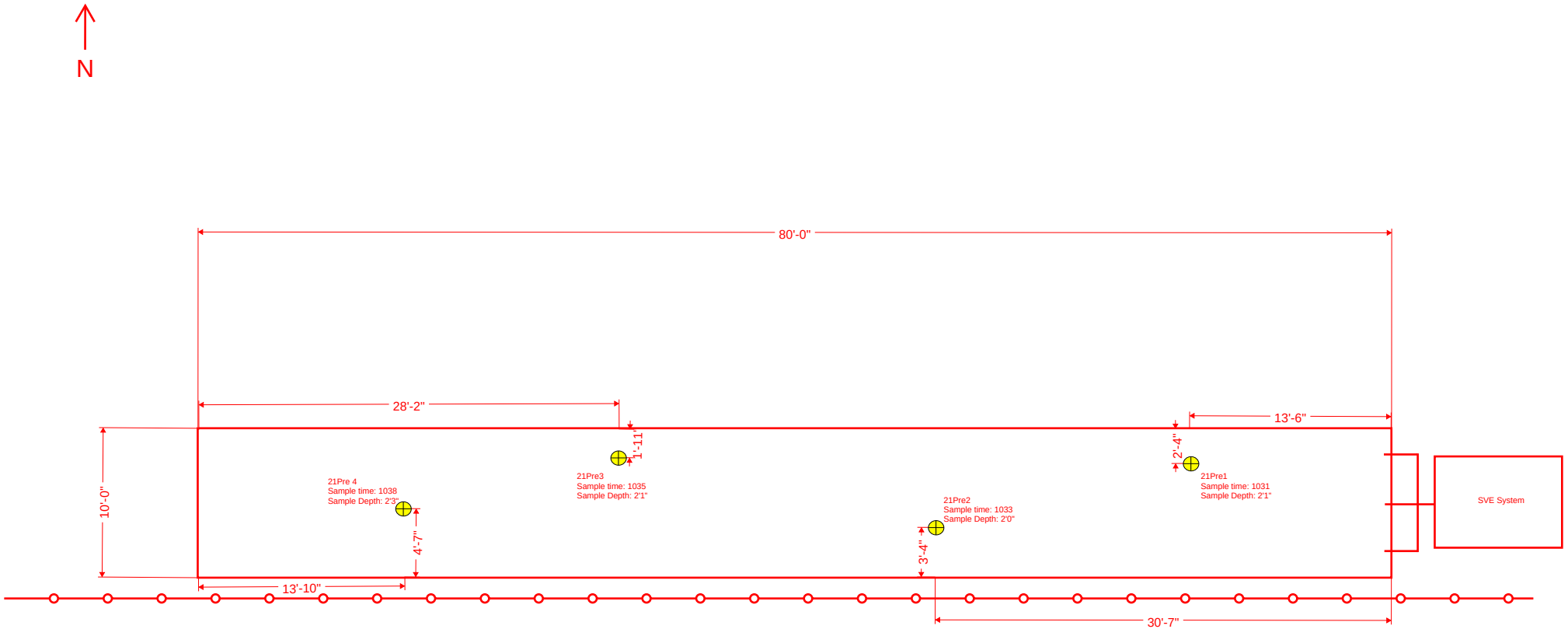
			Treatment Pile # 21	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
			(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/17	10:09	Yes	3.74	0	—	5509	170	3	2	0.0	0.9
Day 1												
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* May gauge malfunction, will diagnose blockage next swapout

BATCH 21


N
80'-0"
28'-2"
13'-6"
10'-0"
1'-11"
2'-4"
21Pre 4
Sample time: 1038
Sample Depth: 2'3"
21Pre3
Sample time: 1035
Sample Depth: 2'1"
21Pre2
Sample time: 1033
Sample Depth: 2'0"
21Pre1
Sample time: 1031
Sample Depth: 2'1"
4'-7"
3'-4"
13'-10"
30'-7"
SVE System

600 - Arrive @ office, prep field docs + cooler
630 - Leave office
800 - Arrive onsite, prep sample jars, calibrate PID
940 - Finish filling treatment cell
1031 - Start Batch 21 PreT sampling
1038 - Finish "
1045 - Take sample location measurements
1220 - Leave site
1400 - Drop samples off @ TA
1430 - Arrive @ office, process field docs

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 8/18/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 105
Treatment Start Time: 14:30	**Weather:** Sunny, w (2 mph wind	**Barometric Pressure:** 28.61 in Hg

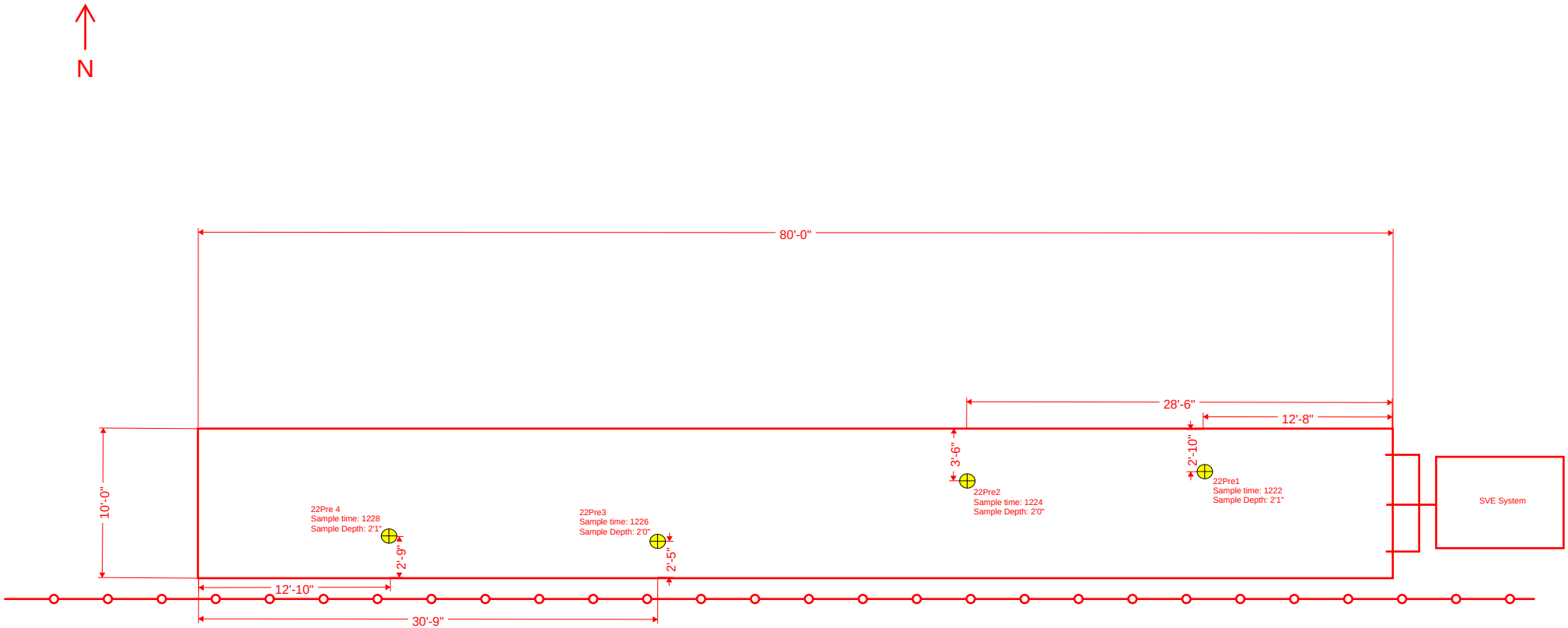
		Treatment Pile # 22	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/18 14:51	Yes	3.80	0	60.4*	5.085	180	2	2	1.4	3.8
Day 1											
Day 2	8/19 9:22	Yes	2.82	0	-*	5.509	177	3	2	0.0	0.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* Continued issues w/ mag gauge + pitot tube

BATCH 22


N
80'-0"
28'-6"
12'-8"
10'-0"
3'-6"
2'-10"
22Pre2
Sample time: 1224
Sample Depth: 2'0"
22Pre1
Sample time: 1222
Sample Depth: 2'1"
SVE System
22Pre 4
Sample time: 1228
Sample Depth: 2'1"
22Pre3
Sample time: 1226
Sample Depth: 2'0"
2'-9"
2'-5"
12'-10"
30'-9"

8/18 Simplot - Warden Batch Sweepout (22)

800 - Leave office

930 - Arrive onsite, prep sample Carr

1222 - Start Batch 22 PreT sampling

1228 - Finish "

1230 - Take sample location measurements / diagnose mag gauge

1250 - Leave site

1430 - Drop samples off @ TA

1500 - Arrive @ office,

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 8/22/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 90°F
Treatment Start Time: 13:45	**Weather:** Sunny, ~ 7mph breeze	**Barometric Pressure:** 28.73 inHg

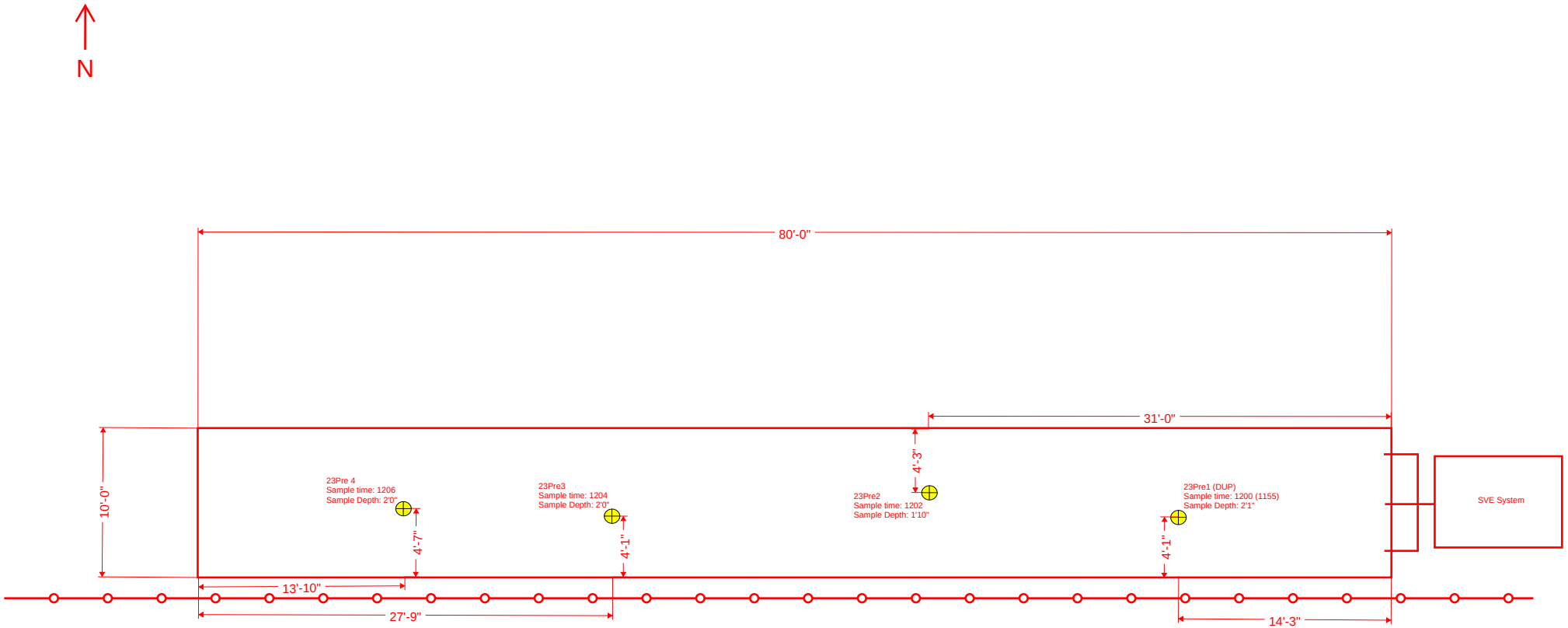
		Treatment Pile # 23	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/22 14:00	Yes	3.87	0	-*	5.085	180	1	0	7.0	5.2
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* May gauge below zero

BATCH 23


N
80'-0"
31'-0"
10'-0"
4'-3"
23Pre 4
Sample time: 1206
Sample Depth: 2'0"
4'-7"
23Pre3
Sample time: 1204
Sample Depth: 2'0"
4'-1"
23Pre2
Sample time: 1202
Sample Depth: 1'10"
23Pre1 (DUP)
Sample time: 1200 (1155)
Sample Depth: 2'1"
4'-1"
SVE System
13'-10"
27'-9"
14'-3"

1500 - Arrive @ office

8/22 Simplot - Warden Batch Swapout (23)

530 - Leave office

700 - Arrive onsite, peep sample jars, [redacted]

1200 - Start Batch 23 PreT sampling,,

1206 - Finish "

1215 - Take sample location measurements

1230 - Take stockpile measurements.

1245 - Leave site

1430 - Drop samples off @ TA

1500 - Arrive @ office, process field docs.

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 8/24/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 90°F
Treatment Start Time: 11:45	**Weather:** Sunny, 15mph wind	**Barometric Pressure:** 28.65 in Hg

			Treatment Pile # 24	Extraction System Operation Parameters							Soil Vapor (PID Readings)	
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
			(Yes / No)	(in H_2O) (1)	(cfm)	(cfm)	(cfm)	(°F)	(psi)	(psi)	(ppm)	(ppm)
Day 1	8/24	12:00	Yes	3.48	0	—*	—**	178	2	1	4.3	3.5
Day 1												
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

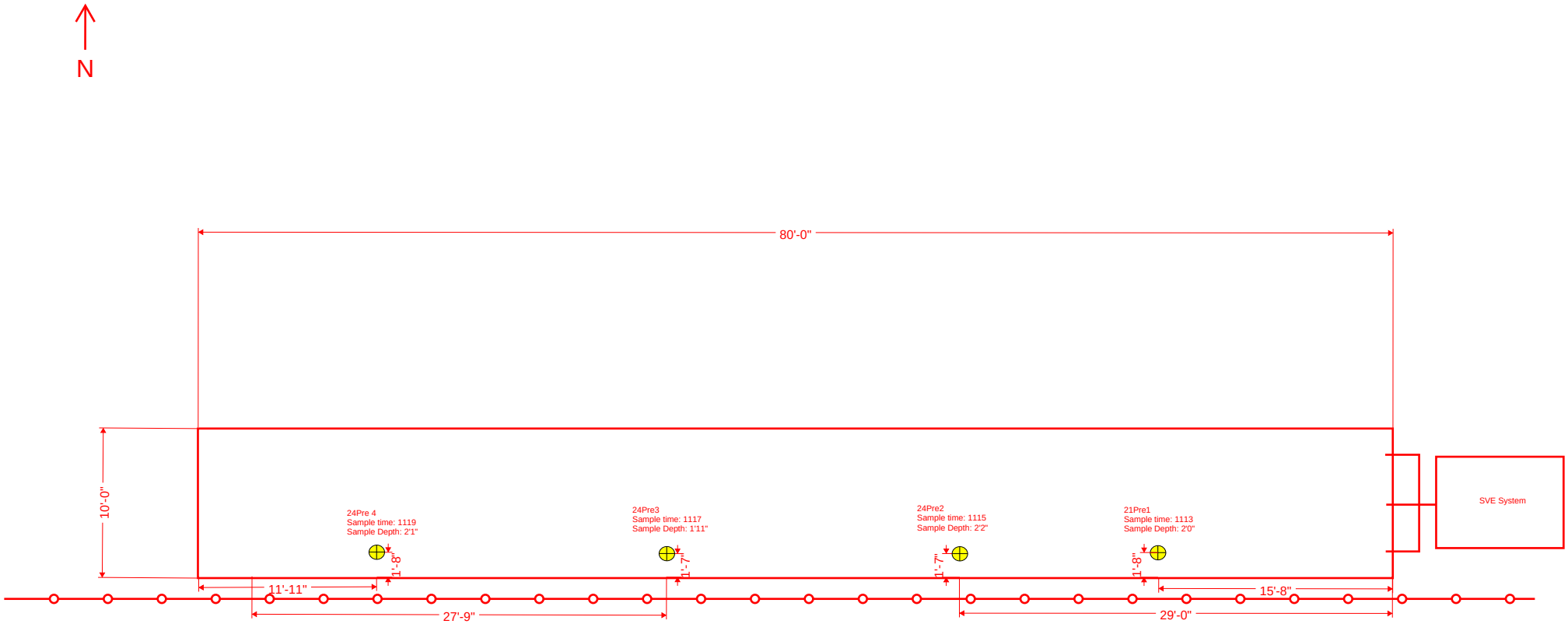
(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* Did not take mag gauge reading

** Hot wire anemometer dead batteries

BATCH 24


N
80'-0"
10'-0"
24Pre 4
Sample time: 1119
Sample Depth: 2'1"
24Pre3
Sample time: 1117
Sample Depth: 1'11"
24Pre2
Sample time: 1115
Sample Depth: 2'2"
21Pre1
Sample time: 1113
Sample Depth: 2'0"
1'-8"
1'-7"
1'-7"
1'-8"
SVE System
11'-11"
27'-9"
15'-8"
29'-0"

8/24 Simplot - Warden Butch Swapout (24)
600 - Head to site
730 - Arrive onsite, prep sampling jars
1113 - Start Batch 24 Pret sampling
1119 - Finish
1130 - Leave site
1300 - Prep samples off @ TA
1380 - Arrive @ home
1600 - Leave for Sunnyside
1800 - Arrive @ Tri-Cities

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

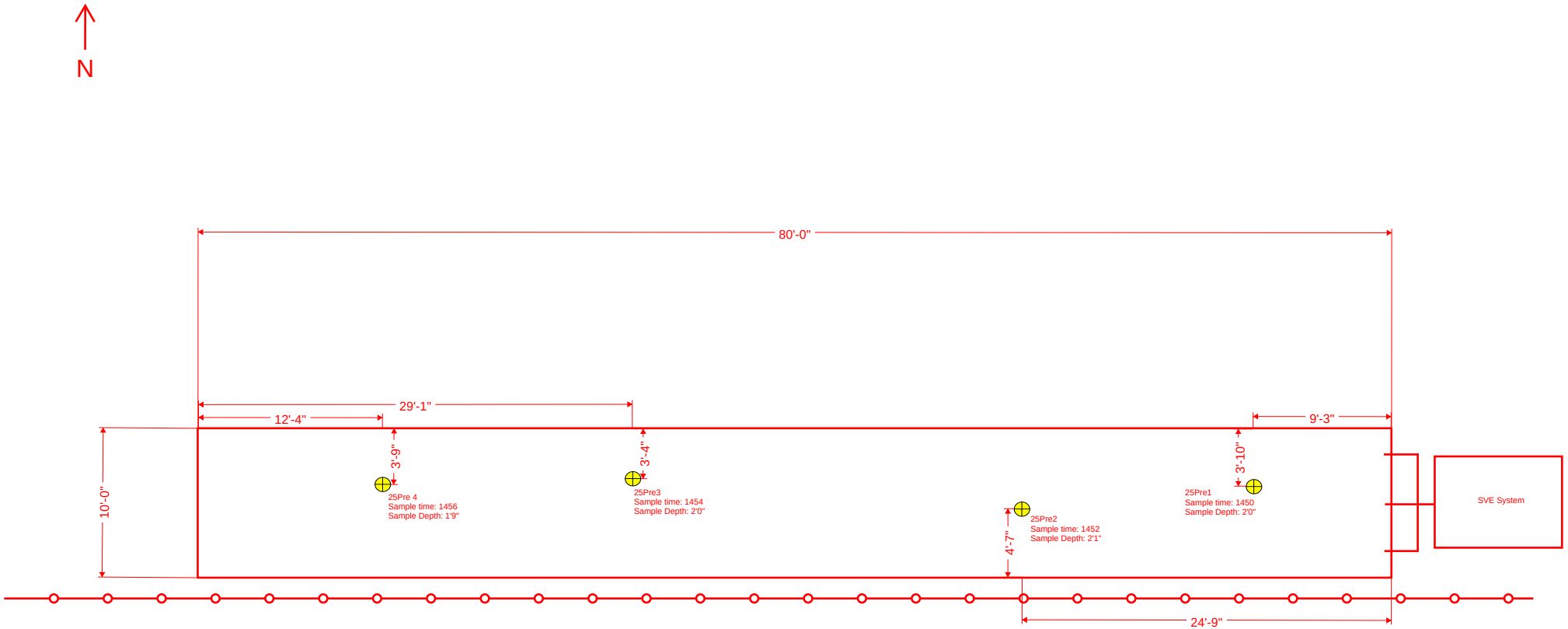
Date: 8/25/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 93°F	
Treatment Start Time: 16:36	**Weather:** Sunny, w 7mph wind	**Barometric Pressure:** 28.63 in Hg	

		Treatment Pile # 25	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	8/25 16:59	Yes	3.68	0	202.1	4.237	176	3	1	2.8	2.1
Day 1											
Day 2	8/26 15:22	Yes	3.51	0	192.6	4.861	182	—	—	0.0	0.2
Day 3											
Day 4											
Day 5	8/29 9:56	Yes	3.34	0	177.3	5.085	170	3	3	0.3	0.3
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

BATCH 25


N
80'-0"
29'-1"
12'-4"
9'-3"
10'-0"
3'-9"
3'-4"
3'-10"
4'-7"
25Pre 4
Sample time: 1456
Sample Depth: 1'9"
25Pre3
Sample time: 1454
Sample Depth: 2'0"
25Pre2
Sample time: 1452
Sample Depth: 2'1"
25Pre1
Sample time: 1450
Sample Depth: 2'0"
SVE System
24'-9"

8/25 Simplot - Warden Batch Swapout (25)
1200 - Leave Sunnyside
1330 - Arrive onsite, prep sample jars
1450 - Start Batch 25 PreT sampling
1456 - Finish "
1500 - Take sampling location measurements
1650 - Drop samples off @ TA
1720 - Arrive @ office, process field docs for Batch 23, 24, 25

Scale: 1 square = _____

Rite in the Rain.

Table 2 - Soil Vapor Extraction Field Data Collection Example

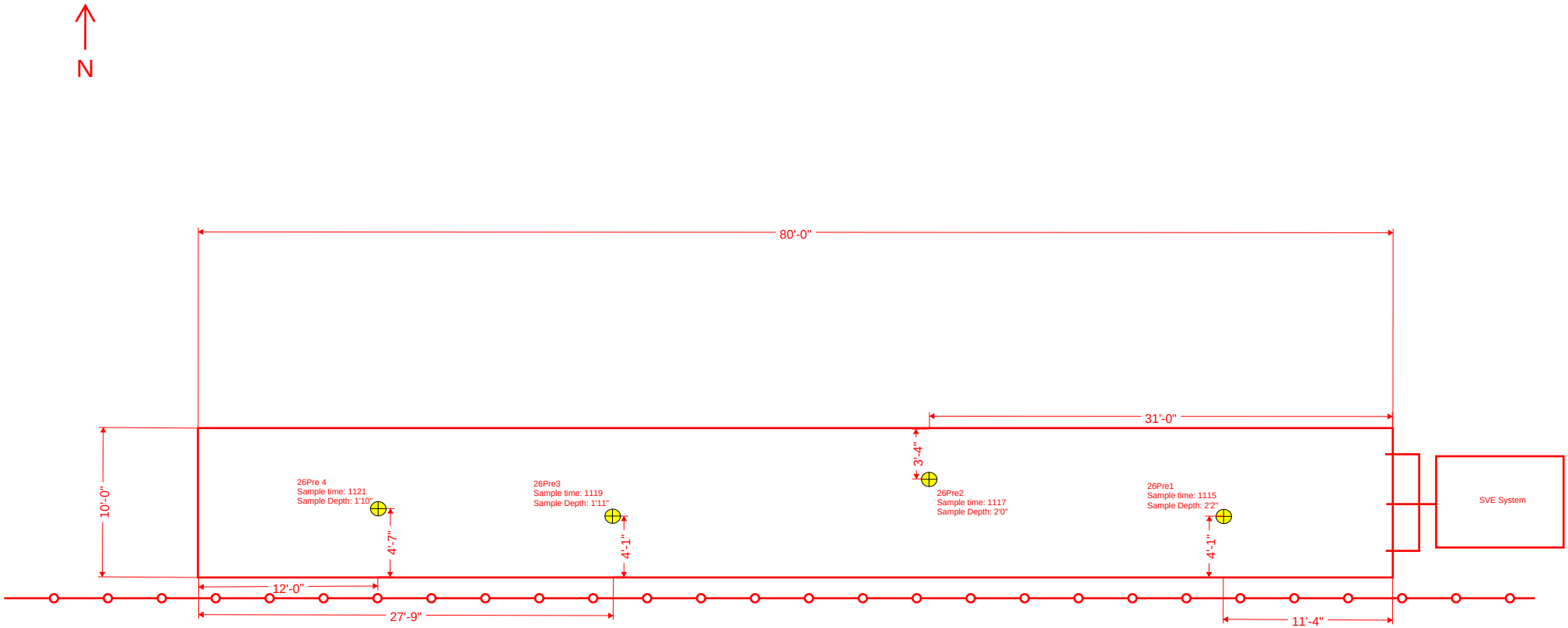
Date: 8/30/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 95°F
Treatment Start Time: 12:25	**Weather:** Sunny	**Barometric Pressure:** 28.77 inHg

			Treatment Pile # 26	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
			(Yes / No)	(in H_2O) (1)	(cfm)	(cfm)	(cfm)	(°F)	(psi)	(psi)	(ppm)	(ppm)
Day 1	8/30	12:50	Yes	3.6	0	189.5	4.237	178	2	1	3.9	5.5
Day 1	[redacted]											
Day 2	8/31	7:44	Yes	[redacted]3.73	0	171.8	5.085	[redacted]160	4	4	0.1	0.6
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

BATCH 26


N
80'-0"
31'-0"
10'-0"
3'-4"
26Pre 4
Sample time: 1121
Sample Depth: 1'10"
26Pre3
Sample time: 1119
Sample Depth: 1'11"
26Pre2
Sample time: 1117
Sample Depth: 2'0"
26Pre1
Sample time: 1115
Sample Depth: 2'2"
4'-7"
4'-1"
4'-1"
SVE System
12'-0"
27'-9"
11'-4"

8/30 Simplot-Warden Batch Swamp
700 - Arrive @ office, prep field docs + coolers
930 - Leave office
1100 - Arrive onsite, prep jars
1115 - start Batch 26 Pict sampling
1121 - Finish "
1130 - Take sampling location measurements
1200 - Leave site
1345 - Drop samples off @ TA
1420 - Arrive @ office, process docs.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/2/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 97°F
Treatment Start Time: 15:00	**Weather:** Sunny, ~ 6mph breeze	**Barometric Pressure:** 28.60 in Hg

		Treatment Pile # 27	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	9										
Day 1											
Day 2											
Day 3											
Day 4	9/6 8:50	Yes	3.55	0	— *	4.661	154	5	4	1.9	1.8
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* Mag gauge peaked indicating blockage

Graymar locked out of Simplot office, no first day readings

FDR

Project:
Subject:
Task:
Job #:

Computed:
Checked:
Page:
No:

Date:
Date:
of:

Batch 27

N

Arrive @ office process docs.
9/1 Simpdot - Warden Battle swapout (27)
1030 - Backhoe leaking oil. Need replacement
1130 - Sample tomorrow
9/2
945 - Start Batch 27 PreT sampling
1015 - Leave site
1200 - Prep samples off @ TA

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/7/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 88°F	
Treatment Start Time: 13:30	**Weather:** Cloudy, ~12mph wind	**Barometric Pressure:** 28.71 in Hg	

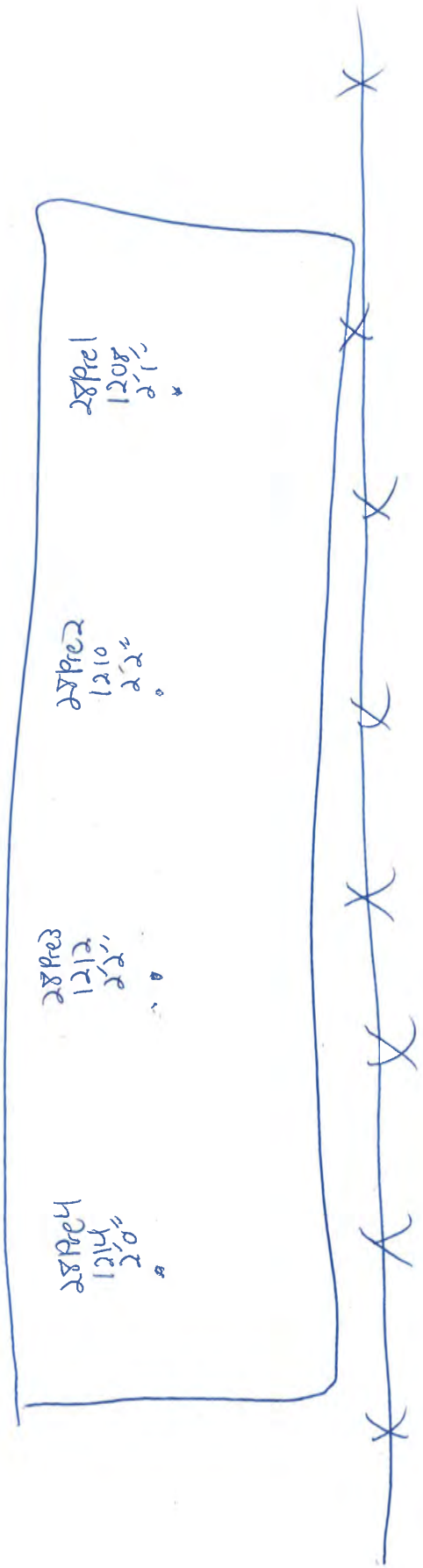
		Treatment Pile # 28	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	9/7 13:45	Yes	3.54	0	-*	5.085	180	1	1	7.5	4.3
Day 2	9/8 8:40	Yes	3.27	0	-*	4.861	160	4	4	0.0	0.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

*Mag gauge peaked, Graymar unable to troubleshoot

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	



9/7 Simplot - Warden Batch Swapout (28)

600 - Arrive @ office, prep cooler + field docs

630 - Leave office

700 - Arrive onsite, prep soil jars

1208 - Start Batch 28 Pret sampling.

1214 - Finish

1230 - Leave site

1400 - Drop samples off @ T/A

1500 - Arrive @ office, process field docs.

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/9/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 82°F	
Treatment Start Time: 16:53	**Weather:** Fair, 6mph breeze	**Barometric Pressure:** 28.72 in Hg	

		Treatment Pile # 29	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1*											
Day 1											
Day 2											
Day 3											
Day 4	9/12 12:30	Yes	3.02	0	147.5	4.661	172	3	3	0.0	0.0
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

[redacted]

*Graymar unable to access meters for readings from locked office.

Bath 29

N

Project:
Subject:
Task:
Job #:

Computed:
Checked:
Page:
No:

Date:
Date:
of:

745 - Arrive @ office, prep cooler + field docs
815 - Leave office
945 - Arrive onsite
1030 - finish pulling old Batch out
1100 - New backhoe has not arrived onsite.
Scheduled to be here 10-11 AM.
Graymar looking into other options
1115 - Update Tyler
1200 - Graymar gets backhoe from Moses Lake
~~office~~ location (in-house)
1334 - Start Batch 29 PreT sampling
1340 - Finish
1345 - Check in w/ Simplot. Will not leave office unless
to use meters for Graymar to take readings.
Leave site
1530 - Drop samples off @ TA.

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/13/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 78°F
Treatment Start Time: 16:15	**Weather:** Sunny, ~7mph gusts	**Barometric Pressure:** 29.67 in Hg

		Treatment Pile # 30	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	9/13 16:34	Yes	3.22	0	158.4	4.237	168	2	1	4.0	1.3
Day 1											
Day 2	9/14 7:40	Yes	3.46	0	149.6	4.237	150	5	4	0.0	0.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

N

Batch 30

Project:
Subject:
Task:
Job #:

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Date:
Date:
of:

9/13 Simplot-Warden Batch Swapout (30)
930 - Leave office
1105 - Arrive onsite, prep soil jars
Pitot tube arrived and discussed
installation w/ Grayson
1246 - Start Batch 30 PreT sampling
1252 - Finish "
1302 - Leave site
1436 - Drop samples off @ TA
1510 - Arrive @ office, process field docs.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/15/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 69°F
Treatment Start Time: 19:30	**Weather:** Night, partly Cloudy	**Barometric Pressure:** 23.68 in Hg

		Treatment Pile # 31	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1*	9/15 19:40	Yes	—	0	164.7	—	158	—	—	—	—
Day 1											
Day 2	9/16 15:30	Yes	3.06	0	215.8	4.661	170	3	3	2.3	2.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

* Incomplete system reading set. Handheld meters locked in office.

Batch 31

N

Project:
Subject:
Task:
Job #:

Computed:
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Page:
No:

Date:
Date:
of:

9/15 Simplot - Warden Batch Swanpoint (31)
915 - Leave office
1045 - Arrive onsite, prep soil jars. Grayson informs of repairs needed on treatment cell. Will update Tyler.
1330 - Discuss repair progress w/ Bob + Jake will not make Lab cutoff time
1440 - Start filling treatment cell
1633 - Start Batch 31 PreT sampling "
1641 - Finish "
1645 - Leave site
1830 - Drop off samples @ TA after hour dropoff
1900 - Arrive @ office, debrobe.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/19/2022	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 76°F
Treatment Start Time: 16:45	**Weather:** Sunny	**Barometric Pressure:** 28.57 in Hg

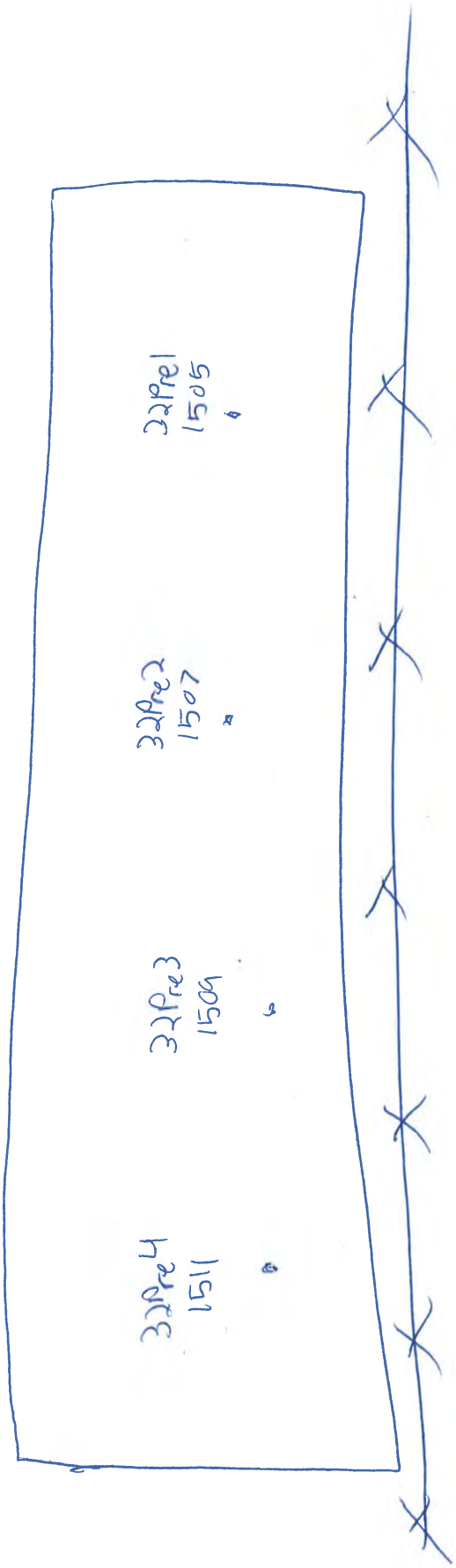
		Treatment Pile #32	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	(in H_2O) [1]	(cfm)	(cfm)	(cfm)	(°F)	(psi)	(psi)	(ppm)	(ppm)
Day 1	9/19 17:10	Yes	3.43	0	[redacted]17.6	4,237	170	3	3	6.0	4.2
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	

Batch 32



9/19 Simplot-Warden Batch Swapout (32)

900 - Leave office

1040 - Arrive onsite, prep sample jars.

1230 - Start filling treatment cell, notify Tyler will not make cutoff time

1400 - Virtual meeting w/ Tyler + Molly

1505 - Start Batch 32 Pre-t sampling,,

1511 - Finish

1515 - Leave site

1700 - Drop samples off @ TA

1745 - Arrive @ office, debrief.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/21/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 76°F
Treatment Start Time: 13:22	**Weather:** Cloudy, ~12 mph wind	**Barometric Pressure:** 28.63 in Hg

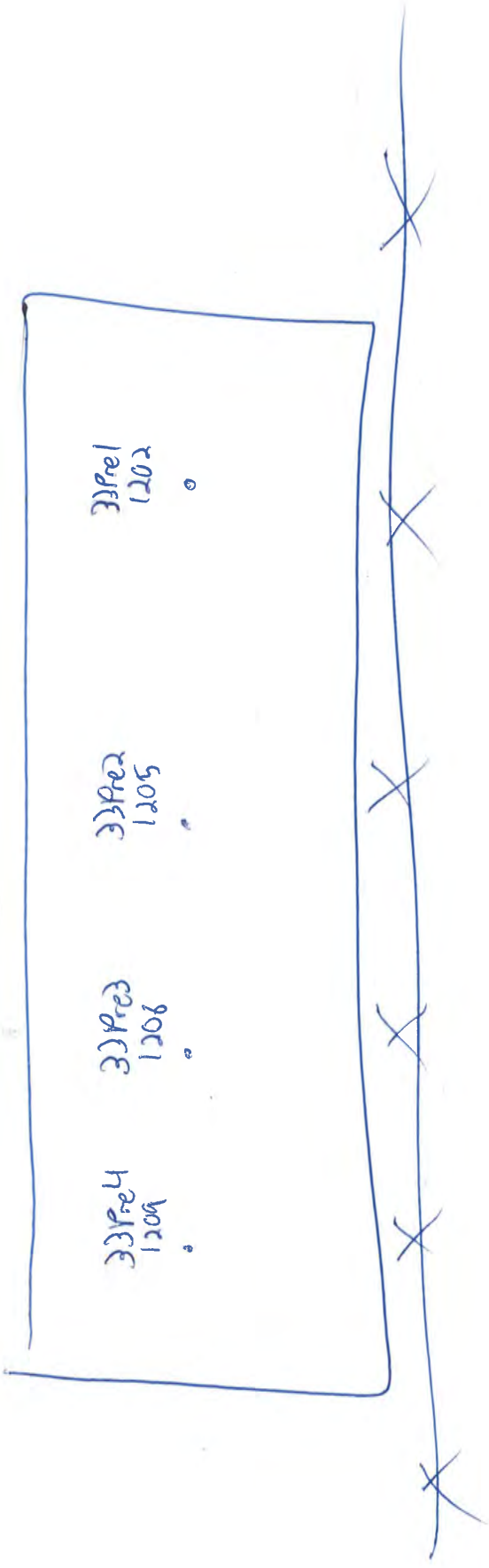
			Treatment Pile # 33	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
			(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	9/21	13:44	Yes	3.49	0	219.3	4.661	61	3	3	4.1	3.6
Day 1												
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	

Bath 33



9/21 #Simplot - Warden Batch Swapout (33)
730 - Leave office
900 - Arrive onsite, prep sample jars.
1100 - Finish filling treatment cell
1115 - Christer (ECY) arrives onsite
- Conduct overall site walk thru and discuss future treatment
1140 - Christer leaves site, update Tyler on walk thru
1202 - Start Batch 33 Prot sampling,,
1209 - Finish"
1245 - Leave site
1430 - Drop samples off @ TA
1510 - Arrive @ office

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/23/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 73°F
Treatment Start Time: 15:15	**Weather:** Sunny, ~12mph gusts	**Barometric Pressure:** 29.99 in Hg

			Treatment Pile # 34	Extraction System Operation Parameters							Soil Vapor (PID Readings)		
Data Designation	Date/Time		Visual Observations Indicating Negative Pressure is Present	Blower Inlet Vacuum	Dilution Air Flowrate	Blower Outlet Flow Rate	Manifold Flow Rate	Blower Outlet Temperature	GAC Drum #1 Pressure	GAC Drum #2 Pressure	Influent (Prior to GAC)	Effluent (After GAC)	
			(Yes / No)	(in H_2O) (1)	(cfm)	(cfm)	(cfm)	(°F)	(psi)	(psi)	(ppm)	(ppm)	
Day 1	9/23	15:30	Yes	4.28	0	231.8	4.237	158	2	1	3.8	3.8	JAKE
Day 1	[redacted]												
Day 2													
Day 3													
Day 4	9/26	8:25	Yes	2.82	0	181.1	4.237	154	5	5	0.0	0.0	JAKE
Day 5													
Day 6													
Day 7													

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

FDR

Project: Computed: Date:

Subject: Checked: Date:

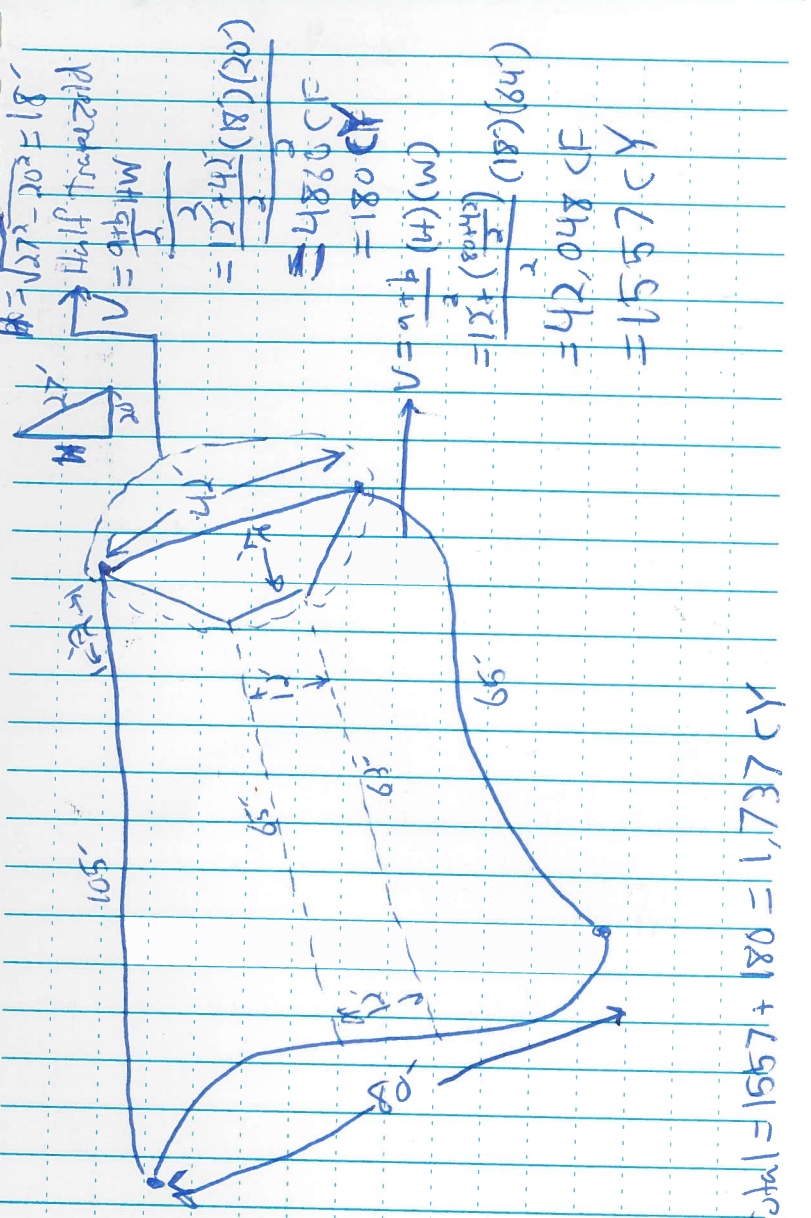
Task: Page: of:

Job #: No:

Bath 34

N

9/23 Simplot - Warden Batch Swapout (34)
600 - Arrive @ office, prep fieldsheets / coolers
700 - Leave office
830 - Arrive onsite, prep sample jars
900 - Take stockpile measurements
930 - Meeting w/ Molly + Tyler
1015 - Take additional measurements, calc. vol.
1218 - Start Batch 34 PreT sampling
1224 - Finish "
1230 - Leave site
1410 - Drop samples off @ TA
1440 - Arrive @ office



Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/27/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*		**Ambient Temperature:** 83°F
Treatment Start Time: 17:00	**Weather:** Sunny, 8mph breeze		**Barometric Pressure:** 28.57 in Hg

		Treatment Pile # 35	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	9/27 17:25	Yes		0	234.4	[illegible]	186	2	2		
Day 1											
Day 2	9/28 10:12	Yes	2.98	0	194.5	4,661	162	4	3	0.6	0.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

N

Batch 35

FDR

Project: Computed: Date:

Subject: Checked: Date:

Task: Page: of:

Job #: No:

9/27 Simplot-Warden Batch Swapout (35)
930 - Leave office
1100 - Arrive onsite, prep sample jars
1320 - Treatment cell filled partially, onsite sample
1329 - Start Batch 35 PreT sampling
1335 - Finish
1340 - Leave site
1515 - Drop samples off @ TA
1600 - Arrive @ office

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 9/29/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 68°F
Treatment Start Time: 16:15	**Weather:** Mostly Cloudy	**Barometric Pressure:** 28.78 inHg

		Treatment Pile # 36	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	9/29 16:34	Yes	—	0	230.7	—	148	4	4	—	—	JAKE
Day 1												
Day 2	9/30 7:56	Yes	3.28	0	188.2	5.085	156	4	4	1.8	1.7	JAKE
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

FDR

Project:
Subject:
Task:
Job #:

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Checked:
Page:
No:

Date:
Date:
of:

Batch 36

N

900 - Leave office

1040 - Arrive onsite, prep sample jars

1305 - Treatment cell filled sufficiently to ~~begin~~ conduct sampling

1310 - Start Batch 36 PreT sampling

1316 - Finish "

1320 - Leave site

1500 - Drop samples off @ TA

1535 - Arrive @ office

1115 - Discuss separate stock pile volume calcs w/ Graymar (Jake)

1750 CY - 1672 CY = 78 CY/Batch

(Jacqd before B35) (Jake After B35)

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/3/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 80°F	
Treatment Start Time: 14:55	**Weather:** Sunny, Fair	**Barometric Pressure:** 28.83 in Hg	

		Treatment Pile # 37	Extraction System Operation Parameters							Soil Vapor (PID Readings)		
Data Designation	Date/Time	Visual Observations Indicating Negative Pressure is Present	Blower Inlet Vacuum	Dilution Air Flowrate	Blower Outlet Flow Rate	Manifold Flow Rate	Blower Outlet Temperature	GAC Drum #1 Pressure	GAC Drum #2 Pressure	Influent (Prior to GAC)	Effluent (After GAC)	
		(Yes / No)	(in H_2O) (1)	(cfm)	(cfm)	(cfm)	(°F)	(psi)	(psi)	(ppm)	(ppm)	
Day 1	10/3 15:16	Yes	3.56	0	220.9	4.237	170	3	2	5.4	3.6	JAKE
Day 1												
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

N

Batch 37

Project:
Subject:
Task:
Job #:

Computed:
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Date:
Date:
of:

10/3 Simplot-Warden Batch Swapout (37)
900 - Leave office
1030 - Arrive onsite, Prep sample jars
1257 - Start Batch 37 PreT sampling
1305 - Finish "
1315 - Leave site
1446 - Drop samples off @ TA
1520 - Arrive @ office
~~1555~~

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/5/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 80°F
Treatment Start Time: 14:30	**Weather:** Sunny, Fair	**Barometric Pressure:** 28.86 in Hg

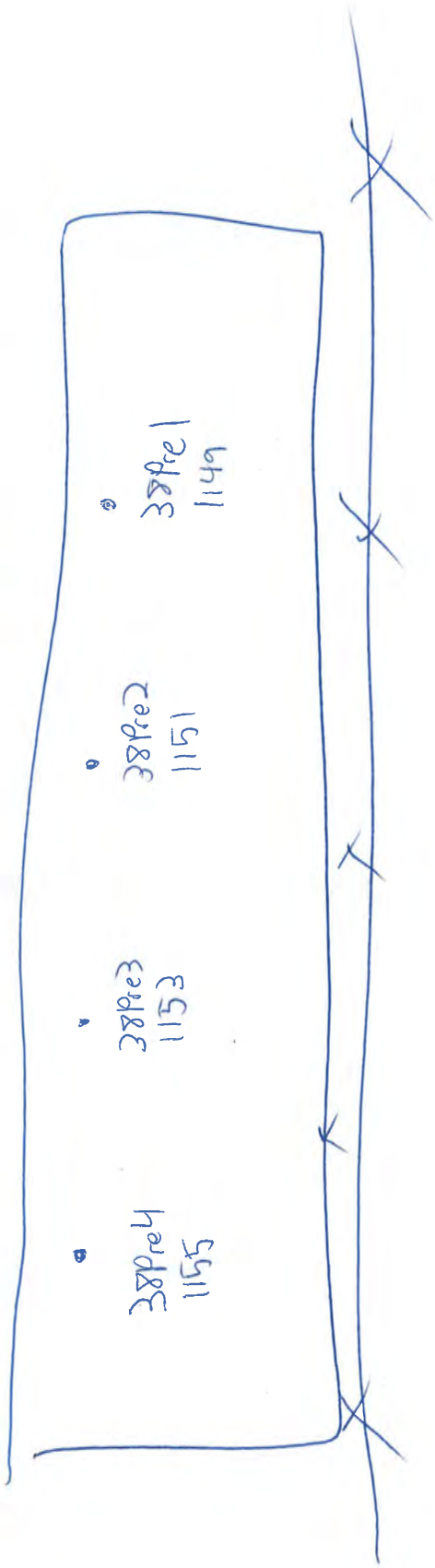
		Treatment Pile # 38	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	10/5 15:00	Yes	5.47	0	274.6	5.085	156	1	0	1.7	1.1
Day 1											
Day 2	10/6 8:50	Yes	6.68	0	273.5	5.085	130	4	2	3.0	2.8
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	

Bath 38



10/5 Simplot - Warden Butch Swapout (38)
745 - Leave office
915 - Arrive onsite
945 - Prep sample jars [redacted] (PreT + IDW)
1117 - Start IDW sampling of 5 Drums
1126 - Finish "
1149 - Start Butch 38 PreT sampling "
1155 - Finish "
1215 - Leave site
1400 - Prep samples off @ TA
1430 - Arrive @ office

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/7	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 83°F
Treatment Start Time: 15:00	**Weather:** Fair, overcast	**Barometric Pressure:** 28.93 in Hg

		Treatment Pile # 39	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	10/7 15:27	Yes	6.47	0	241.9	5.509	149	1	0	4.5	2.1
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

JAK2

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

FDR

Project: Computed: Date:

Subject: Checked: Date:

Task: Page: of:

Job #: No:

Batch 39

N

10/7 Simplot - Vardon Batch Swapout (34)
900 - Leave office w/ Daniel
1030 - Arrive onsite, intro. w/ Jake + Jared (G) and Gary (S)
1045 - Site walkthru w/ Daniel, overview of meters, show how to calibrate PID
1130 - Prep sample jars
1251 - Start Batch 34 PreT sampling w/ Daniel Shadow
257 - Finish
1310 - Leave site
1446 - Drop samples off @ TA
1530 - Arrive @ office

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/9/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 70°F
Treatment Start Time: 15:26	**Weather:** Fair	**Barometric Pressure:** 28.84

		Treatment Pile # 40	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/9 1552	Yes	–	0	287.6	–	146	2	0	–	–	JAKE
Day 1												
Day 2	10/10 8:01	Yes	5.47	0	244.7	4.661	137	4	3	3.3	2.8	JAKE
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/11/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 74°F
Treatment Start Time: 15:05	**Weather:** Fair,	**Barometric Pressure:** 28.84 in/Hg

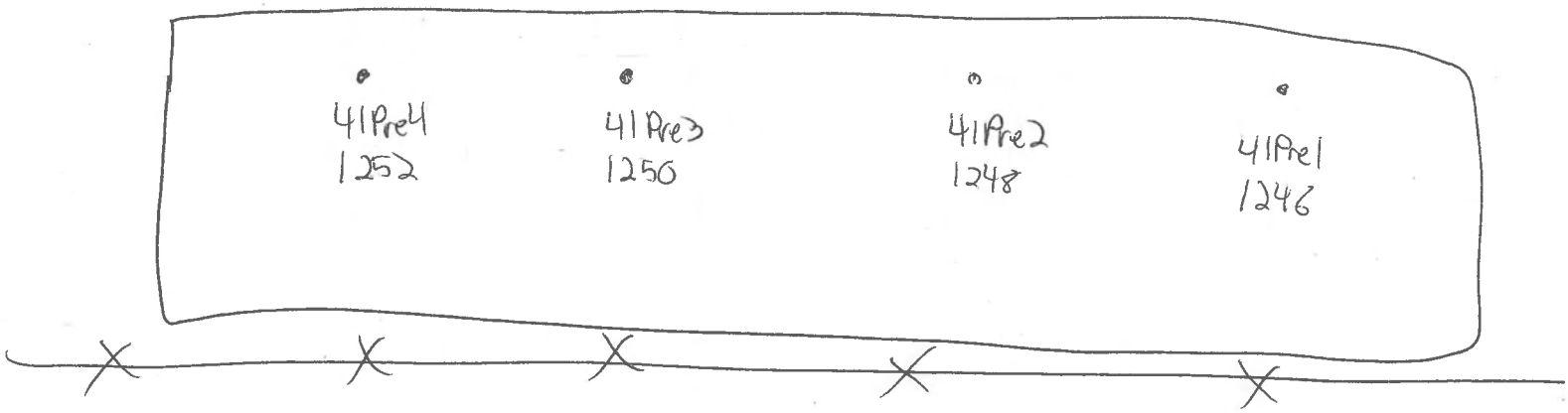
		Treatment Pile # 41	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	10/11 15:25	Yes	5.83	0	279.6	5.085	145	2	0	3.1	2.8
Day 1											
Day 2	10/12 8:27	Yes	6.60	0	266.6	2.118	124	4	3	2.8	2.6
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

N

Batch



10/11 Simplot-Warden Batch Swapout (41)
930 - Leave office
1110 - Arrive onsite, prep sample jars
1120 - Follow up w/ Jeff
1145 - Check samples from Batch 40 sampled over the weekend by Graymar. See following issues:
- All ice in cooler melted
- Water leaked into ziploc bag and destroyed COC
- Water leaked into 2 of 4 soil sample jars
- After discussing w/ Tyler, collect 2 postT samples
1200 - Prep postT sample jars
1215 - Sample postT samples from estimate location of removed Batch 40 (Graymar)
1246 - Start Batch 41 PreT sampling
1252 - Finish "
1310 - Offsite
1450 - Drop samples off @ TA
1520 - Arrive @ office.

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/13/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 75°F
Treatment Start Time: 15:10	**Weather:** Sunny	**Barometric Pressure:** 28.89 inHg

			Treatment Pile # 42	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**		**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
			(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/13	16:03	Yes	7.27	0	295.1	5.085	140	1	6	4.1	0.0	Jake
Day 1													
Day 2	10/14	10:36	Yes	6.34	0	270.1	4.661	136	1	0	0.3	0.1	Jake
Day 3													
Day 4													
Day 5													
Day 6													
Day 7													

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Project:

Subject:

Task:

Job #:

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Date:

Date:

of:

Batch 42

N

10/13 Simplot-Warden Batch Swapout (42)
930 - Leave office
1100 - Arrive onsite, prep sample jars (42+43)
1305 - Start Batch 42 PreT sampling
1325 - Finish

- Daniel Brandt collected all soil samples w/ Jake Allen (Graymar) shadowing and Jered Newcomb supervising

1330 - Check sampler + field docs, leave site
1510 - Drop sampler off @ TA Glab
1545 - Arrive @ office, process field docs.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/15/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 80°F
Treatment Start Time: 14:20	**Weather:** Fair / Sunny	**Barometric Pressure:** 28.80 inHg

		Treatment Pile # 43	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	10/15 14:47	Yes	57.04	0	294.8	5.509	141	1	0	0.0	0.0
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Table 2 - Soil Vapor Extraction Field Data Collection Example

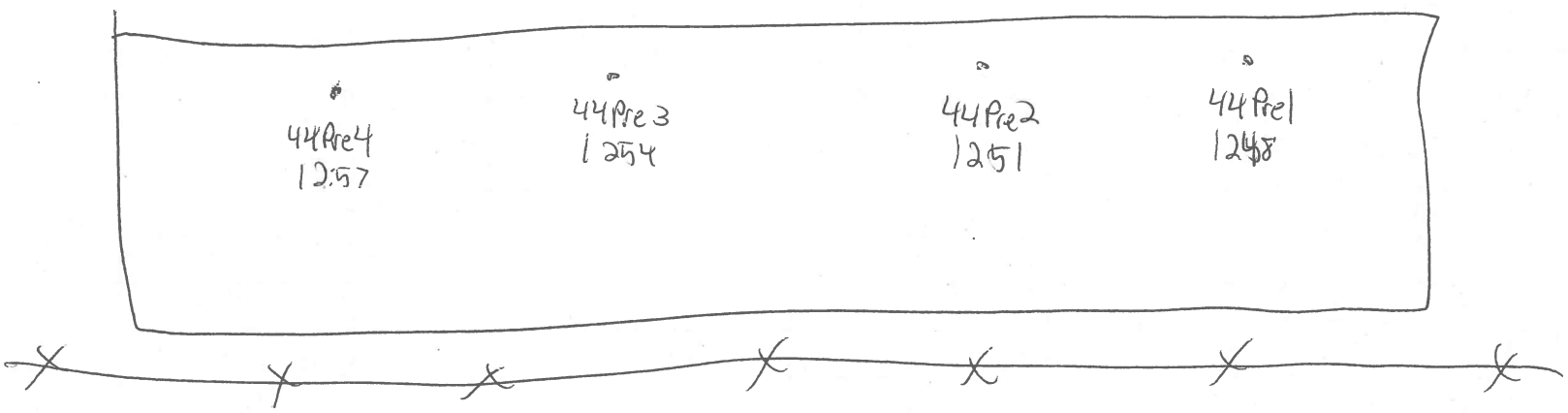
Date: 10/17/22	Personnel: *Jeff Greenwalt/Jered Newcomb*	Ambient Temperature: 75°F
Treatment Start Time: 13:45	Weather: Sunny	Barometric Pressure: 28.83 in Hg

		Treatment Pile #44	Extraction System Operation Parameters							Soil Vapor (PID Readings)	
Data Designation	Date/Time	Visual Observations Indicating Negative Pressure is Present	Blower Inlet Vacuum	Dilution Air Flowrate	Blower Outlet Flow Rate	Manifold Flow Rate	Blower Outlet Temperature	GAC Drum #1 Pressure	GAC Drum #2 Pressure	Influent (Prior to GAC)	Effluent (After GAC)
		(Yes / No)	(in H_2O) [1]	(cfm)	(cfm)	(cfm)	(°F)	(psi)	(psi)	(ppm)	(ppm)
Day 1	10/17 14:00	Yes	6.93	0	286.7	5.085	140	1	0	0.4	0.0
Day 1						-					
Day 2	10/18 8:11	Yes	7.72	0	287.9	-	127	4	3	0.0	0.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Batch 44



Project: Computed: Date:
Subject: Checked: Date:
Task: Page: of:
Job #: No:

10/17 Simplot - Wanden Batch Swapout (44)
0900 - Leave office
1000 - Arrive onsite, PB prep sampling gears
1050 - Receive and take custody of Batch 43 Post samples
1145 - Calibrate PID
1245 - Start Batch 44 Post sampling } PB
1257 - Finish " } sampled
1310 - Coordinate w/ Jeff on containment dike location
1320 - Leave site
1510 - Drop samples off @ TA
1545 - Arrive @ office, begin demobe.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/19/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 67°F	
Treatment Start Time: 14:30	**Weather:** Sunny	**Barometric Pressure:** 29.00 inHg	

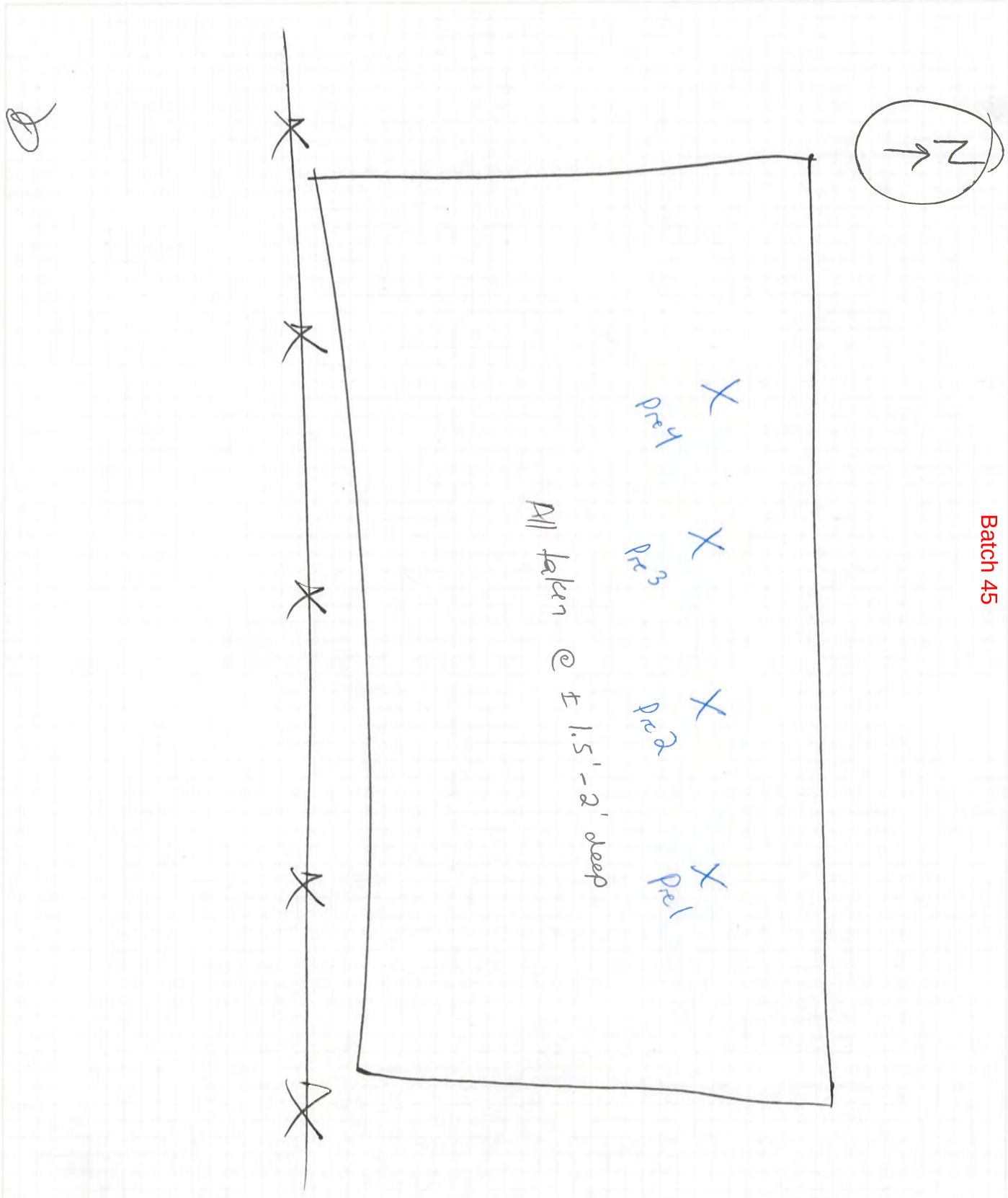
		Treatment Pile # 45	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/19 15:13	Yes	5.24	0	286.0	—	154	1	0	4.0	0.7	JAKE
Day 1	~~10/19~~						~~154~~					
Day 2	10/20 14:32	Yes	5.50	0	277.0	—	149	—	—	0.0	0.0	
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

HDR | ONE COMPANY *Many Solutions℠*

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	



Batch 45

10/19/22 – BATCH 45 PRE1

8:55 – LEFT OFFICE

10:30 – ARRIVED ONSITE & PREPPED SAMPLE JARS

10:50 – SITE OBSERVATION

10:55 – CALIBRATE GAS MONITOR

12:40 – BEGIN SAMPLING

13:05 – LEAVE SITE

15:00 – DROP OFF SAMPLES @ LAB

15:30 – Returned to office

Rite in the Rain.

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/21/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 50°F	
Treatment Start Time: 12:46	**Weather:** cloudy, slight rain	**Barometric Pressure:** 28.48 inHg	

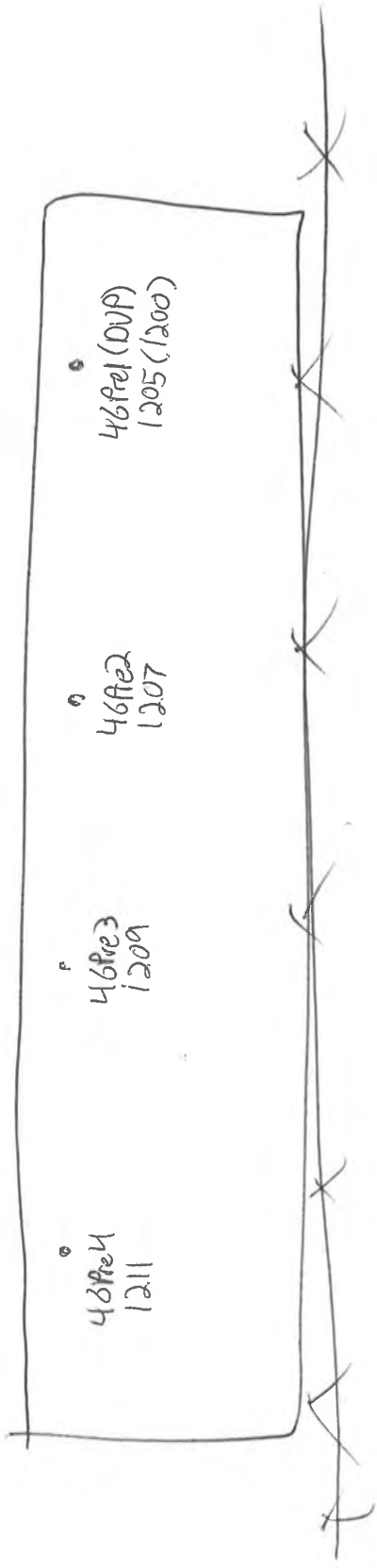
		Treatment Pile # 46	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) [1]**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/21 13:13	Yes	6.50	0	285.9	6.356	131	—	—	3.1	1.7	JAKE
Day 1												
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	

Bath 46



10/21 Simplot-Warden Batch Swapout (46)
800 - Leave office
835 - Pick up bottles @ TA
1030 - Arrive onsite, prep bottles/Jars
1145 - Start IDW drum water sampling
1200 - Start Batch 48 PreT sampling
1215 - Finish
1300 - Finish IDW drum water sampling
1310 - Label drums and pick up coolers
1320 - Leave site
1330 - Re-Ice coolers
1345 - Leave Warden
1535 - Drop samples off @ TA
1415 - Arrive @ office

10/25 Simplot-Warden Batch Swapout (48)

Scale: 1 square = _____

Rite in the Rain.

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/23/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 56°F
Treatment Start Time: 12:50	**Weather:** Fair	**Barometric Pressure:** 28.79 inHg

		Treatment Pile # 47	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) [1]**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/23 13:06	Yes	–	0	284.2	–	134	3	2	–	–	JAKE
Day 1												
Day 2	10/24 9:22	Yes	6.69	0	262.9	–	117	4	3	0.0	0.0	JEFF
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/25/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*		**Ambient Temperature:** 53°F
Treatment Start Time: 16:15	**Weather:** Cloudy, windy		**Barometric Pressure:** 28.70 in Hg

		Treatment Pile # 48	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/25 16:30	Yes	–	0	276.5	–	116	3	2	–	–	JAKE
Day 1												
Day 2	10/26 12:51	Yes	5.54	0	266.8	5,085	140	2	1	0.7	0.6	JAKE
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

N

Bath 48

FDR

Project: Computed: Date:

Subject: Checked: Date:

Task: Page: of:

Job #: No:

1415 - Arrive @ office

10/25 Simplot-Warden Batch Swapout (48)

900 - Leave office

1045 - Arrive onsite, prep jars

1355 - Receive Batch 47 PreT samples

1415 - Start Batch 48 PreT sampling

1421 - Finish

1430 - Leave site

1615 - Drop samples off @ TA

1640 - Arrive @ office

Scale: 1 square = _____

Rite in the Rain

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/28/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 55°F
Treatment Start Time: 11:25	**Weather:** Cloudy	**Barometric Pressure:** 28.81 in Hg

			Treatment Pile # 49	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	10/28 11:44	Yes	6.50	0	280.9	–	139	3	2	0.1	0.0	JAKE
Day 1												
Day 2												
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

HDR | ONE COMPANY *Many Solutions*™

Project: Computed: Date:

Subject: Checked: Date:

Task: Page: of:

Job #: No:

Batch No. 49 Sample Map – 10/28/22

10/28/22 Batch 49 Pre

5:15 - Leave Spokane HDR Office

6:50 - Arrive at Warden Site
- Calibrate gas monitor
- took site photos

7:10 - Prep sample jars

7:25 - checked for water in testing system drum

~~10:25~~

10:05 - Begin Sampling

10:30 Leave site

12:15 Drop off samples @ lab

12:40 Arrived @ Spokane HDR office

Rite in the Rain.

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 10/30/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 58°F	
Treatment Start Time: 13:45	**Weather:** Fair	**Barometric Pressure:** 28.76 in Hg	

		Treatment Pile # 50	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**		
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**	
	10/30	**(Yes / No)**	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**	
Day 1	~~10/30~~ 14:10	Yes	7.32	0	298.2	—	123	2	1	0.5	0.6	JAKE
Day 1												
Day 2	10/31 11:40	Yes	5.71	0	272.3	—	140	2	0	0.0	0.0	JEFF
Day 3												
Day 4												
Day 5												
Day 6												
Day 7												

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 11/1/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*		**Ambient Temperature:** 47°F
Treatment Start Time: 15:25	**Weather:** Rain		**Barometric Pressure:** 28.36 in Hg

		Treatment Pile # 51	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) (1)**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	11/1 19:42	Yes	6.64	0	267.8	—	122	4	2	0.0	0.0
Day 1											
Day 2	11/2 14:28	Yes	5.73	0	273.7	—	137	3	1	0.0	0.0
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

HDR

Project: Computed: Date:

Subject: Checked: Date:

Task: Page: of:

Job #: No:

Batch 51

N

11/1 Simplot-Warden Batch Swapout (51)
900 - Leave office
1100 - Arrive onsite, prep sample jars
1235 - Start Batch 51 PreT sampling
1245 - Finish
1300 - Receive custody of Batch 50 PreT samples
1315 - Leave site
1500 - Drop samples off @ TA
1535 - Arrive @ office.

Scale: 1 square = _____

Table 2 - Soil Vapor Extraction Field Data Collection Example

Date: 11/3/22	**Personnel:** *Jeff Greenwalt/Jered Newcomb*	**Ambient Temperature:** 42°F
Treatment Start Time: 16:13	**Weather:** Cloudy	**Barometric Pressure:** 28.86 in Hg

		Treatment Pile # 52	**Extraction System Operation Parameters**							**Soil Vapor (PID Readings)**	
Data Designation	**Date/Time**	**Visual Observations Indicating Negative Pressure is Present**	**Blower Inlet Vacuum**	**Dilution Air Flowrate**	**Blower Outlet Flow Rate**	**Manifold Flow Rate**	**Blower Outlet Temperature**	**GAC Drum #1 Pressure**	**GAC Drum #2 Pressure**	**Influent (Prior to GAC)**	**Effluent (After GAC)**
		(Yes / No)	**(in H_2O) [1]**	**(cfm)**	**(cfm)**	**(cfm)**	**(°F)**	**(psi)**	**(psi)**	**(ppm)**	**(ppm)**
Day 1	11/3 16:23	Yes	7.77	0	280.2	–	99	4	2	0.0	0.0
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

JARED

(1) - Vacuum measured with a Magnehelic gauge.

inches of water column
cubic feet per minute
Not monitored

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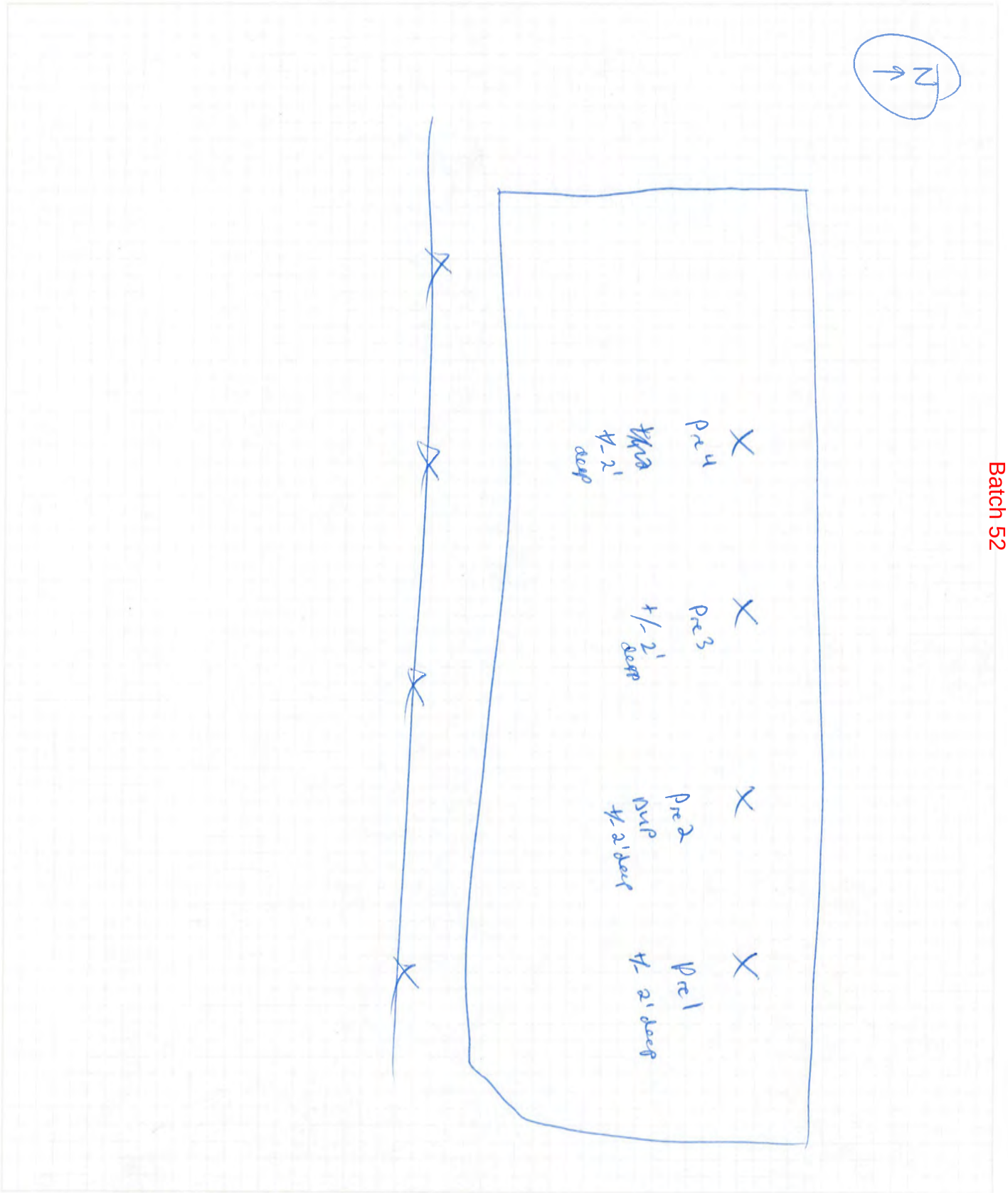
Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	



Batch 52

11/3/22 Batch No. 52 Pre

9:10 - Leave HDR Spokane for site

10:40 - Arrived on site

10:45 - Calibrate gas monitor. Replace batteries in probe equipment.

10:55 - Site photos & conversation with Bob (Graymar). Conference call with me, Bob (Graymar), & Tyler (HDR).

11:50 - Prep Sample Jars

13:45 - Begin Sampling

14:10 - Leave site

15:45 - drop off samples @ lab

16:25 - return to Spokane HDR office

G

Site Grading Plan

SIMPLOT WARDEN

GRADING PLAN

INDEX OF DRAWINGS

VERTICAL DATUM

NAVD 1988 VERTICAL DATUM ON ORTHOMETRICALLY CORRECTED GPS OBSERVATIONS USING WSRN AND GEOID 2012A.

UTILITY NOTES

1. SURFACE UTILITY FACILITIES ARE SHOWN HEREON PER FIELD LOCATED VISIBLE EVIDENCE. THERE MAY BE UTILITIES THAT EXIST ON THIS SITE OTHER THAN THOSE GRAPHICALLY DEPICTED HEREON.

2. UNDERGROUND (BURIED) UTILITIES SHOWN HEREON ARE BASED ON COMBINATIONS OF VISIBLE SURFACE EVIDENCE, UTILITY LOCATOR MARKINGS AND RECORD DATA (SUCH AS AS-BUILT OR UTILITY DESIGN DRAWINGS). ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND, IN SOME CASES, ARE SHOWN AS STRAIGHT LINES BETWEEN FIELD LOCATED SURFACE UTILITY FACILITIES. UNDERGROUND UTILITIES MAY HAVE BENDS, CURVES OR CONNECTIONS WHICH ARE NOT SHOWN.

3. ALTHOUGH LOCATIONS OF UNDERGROUND UTILITIES BASED ON UTILITY LOCATOR MARKINGS AND RECORD DATA (SUCH AS AS-BUILT OR UTILITY DESIGN DRAWINGS) ARE DEEMED RELIABLE, AHBL, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF SAID DATA.

4. CALL 1-800-424-5555 BEFORE ANY CONSTRUCTION.

GENERAL NOTES

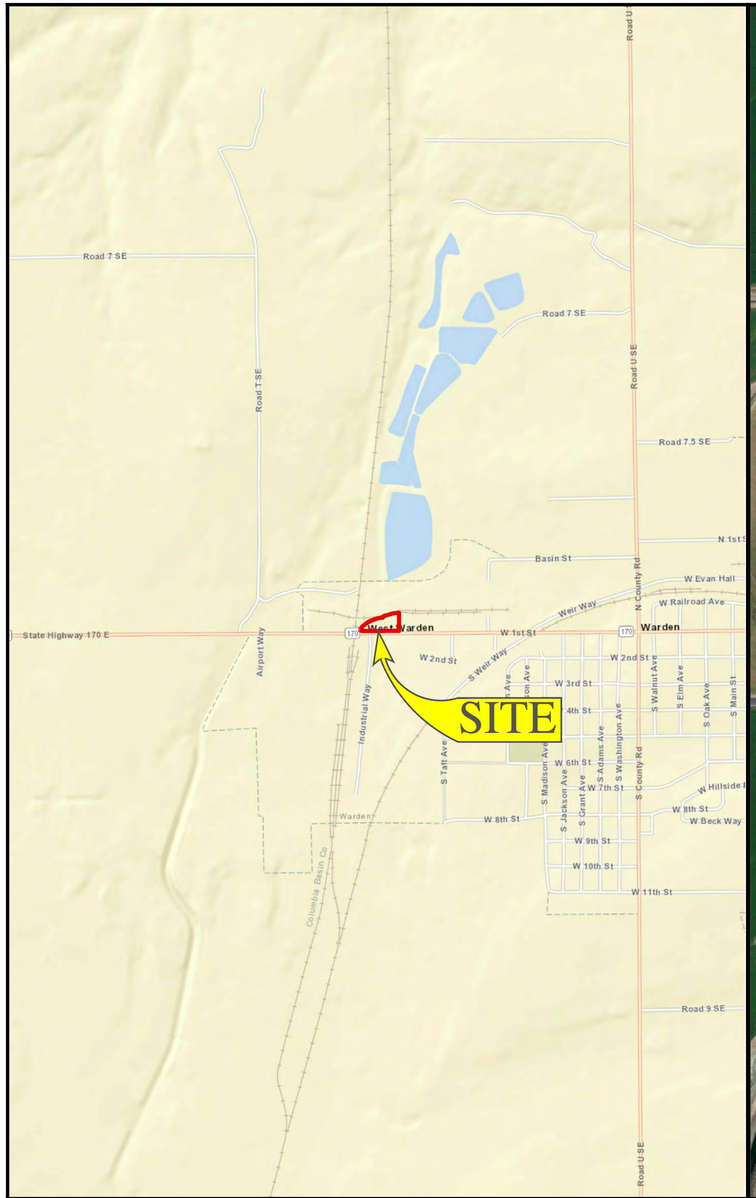
1. THE INTENT OF THIS GRADING PLAN IS FOR PLACEMENT AND COMPACTION OF 600 LOOSE CUBIC YARDS OF STOCKPILED FILL MATERIAL ON-SITE (APPROXIMATELY 420 BANK CUBIC YARDS).

2. LOCATION AND/OR DEPTH OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. ALL UTILITIES MAY NOT APPEAR ON PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR UNDERGROUND LOCATION OF FACILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATING OR "POTHOLING". THE UTILITY "ONE-CALL" NUMBER IS (800) 424-5555 OR 811. WASHINGTON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE WASHINGTON UTILITY NOTIFICATION CENTER.

3. THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS, ELEVATIONS, TYPES AND SIZES OF EXISTING UTILITIES PRIOR TO CONSTRUCTION FAR ENOUGH IN ADVANCE TO ALLOW NECESSARY ADJUSTMENTS IN GRADE AND SHALL NOTIFY ENGINEER OF NEED TO ADJUST GRADES. ANY ELEVATION ADJUSTMENTS SHALL BE INCIDENTAL TO THE WORK.

4. MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN CONDITION, FREE FROM OBSTRUCTIONS AND HAZARDS. THE SPREADING OF MUD OR DEBRIS UPON ANY PUBLIC ROADWAY IS STRICTLY PROHIBITED AND VIOLATION SHALL BE CAUSE FOR STOPPAGE OF WORK.

5. CONSTRUCT THIS PROJECT TO THE LIMITS, GRADES AND ELEVATIONS SHOWN ON THE DRAWINGS. ANY DEVIATION MUST BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. INFORM THE ENGINEER OF ANY DISCREPANCIES DISCOVERED IMMEDIATELY.



VICINITY MAP

0' 500' 1,000' 1,500' 2,000' SCALE:
1" = 1,000' (34"x22")
1" = 2,000' (11"x17")

VICINITY AERIAL PHOTOGRAPH

0' 250' 500' 750' 1,000' SCALE:
1" = 500' (34"x22")
1" = 1,000' (11"x17")

FINAL DESIGN
ISSUED FOR CONSTRUCTION
11/18/2022

REV	D	M	Y	ISSUE/REVISION DESCRIPTION	ENG.	APPR.
1	18	11	2022	FINAL GRADING PLAN	DS	TM
0	10	11	2022	DRAFT GRADING PLAN	DS	TM

SIMPLOT WARDEN

WSP
15862 SW 72nd Ave., Suite 150
Portland, OR 97224

GRADING PLAN

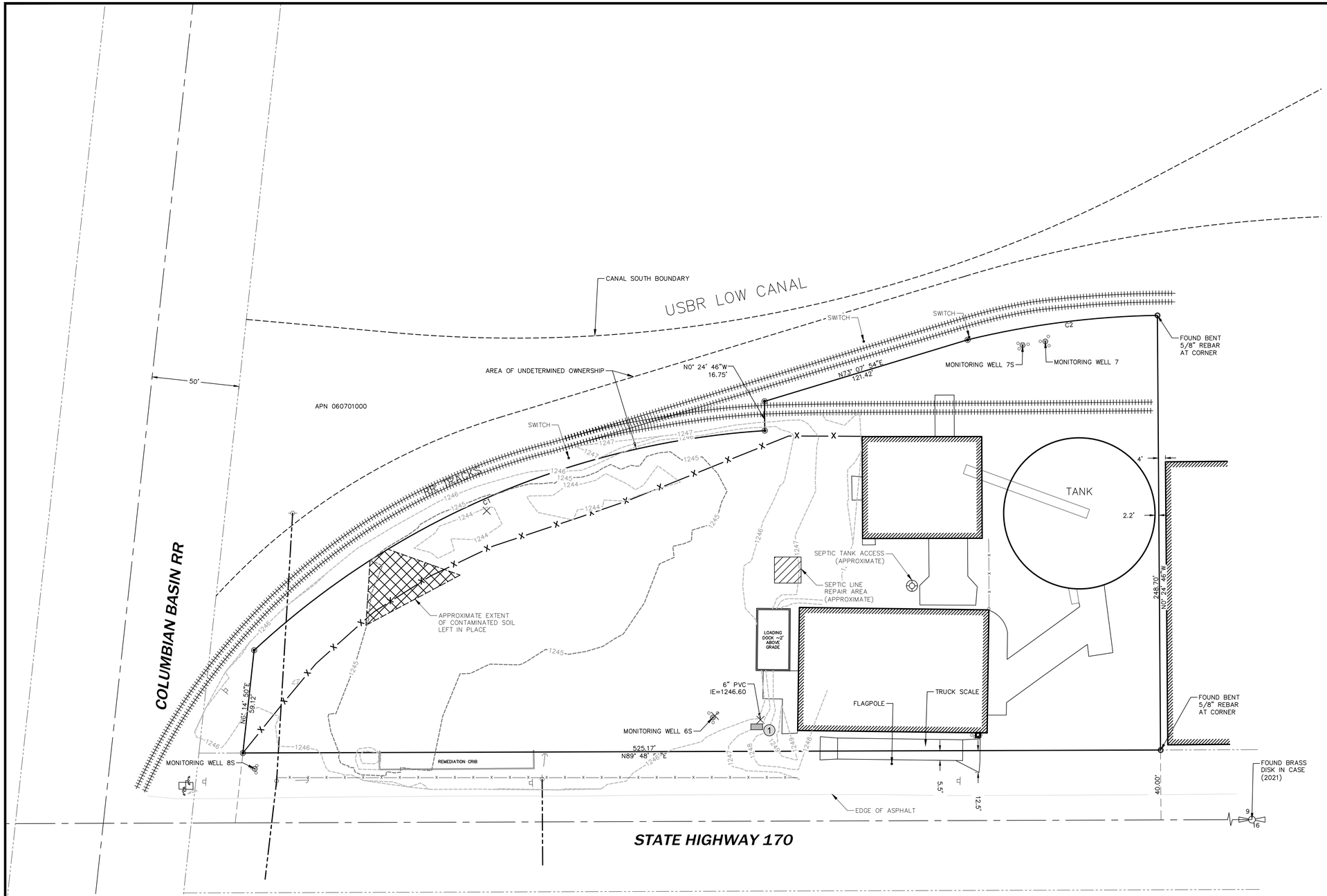
COVER SHEET / DRAWING INDEX

DATE: NOVEMBER 2022
SCALE: AS SHOWN
PROJECT NO.: 261M136740
REVISION: 1
SHEET NO.: 1 of 4
DRAWING NO.: 1

THIS DRAWING IS FULL SIZE WHEN PLOTTED AT 22" X34"

DRAWN BY: PM CHECKED BY: DS

K:\13000\13800\138741.01 CIVIL\ - 13871-CIVIL.dwg -> Draw -> Nov. 18, 2022 - 2:04pm -> pattick.mccarthy



LEGEND

- QUARTER SECTION CORNER
- SET REBAR AND CAP
- FOUND PROPERTY CORNER
- MONITORING WELL
- BOLLARD
- GAS METER
- GUY ANCHOR
- UTILITY POWER POLE
- OVERHEAD UTILITIES
- EXISTING FENCE
- APPROXIMATE LOCATION OF EXISTING FENCE
- PROPERTY LINE
- EXISTING 5' MAJOR CONTOUR
- EXISTING 1' MINOR CONTOUR
- APPROXIMATE EXTENT OF CONTAMINATED SOIL LEFT IN PLACE

GENERAL NOTES

1. EXISTING CONDITIONS SURVEY MODIFIED TO NOT INCLUDE EXISTING STOCKPILES, PER INSTRUCTIONS FROM SIMPLOT, AS STOCKPILE SIZES NOT ACCURATE.

SITE PLAN NOTES

(1) ECO-BLOCK WITH RED SCREW ON TOP WITH VERTICAL ELEVATION CONTROL, PER SIMPLOT

0' 15' 30' 45' 60'

SCALE:
1" = 30' (34"x22")
1" = 60' (11"x17")

FINAL DESIGN
ISSUED FOR CONSTRUCTION
11/18/2022

REV	D	M	Y	ISSUE/REVISION DESCRIPTION	ENG.	APPR.
1	18	11	2022	FINAL GRADING PLAN	DS	TM
0	10	11	2022	DRAFT GRADING PLAN	DS	TM

SIMPLOT WARDEN

WSP
15862 SW 72nd Ave., Suite 150
Portland, OR 97224

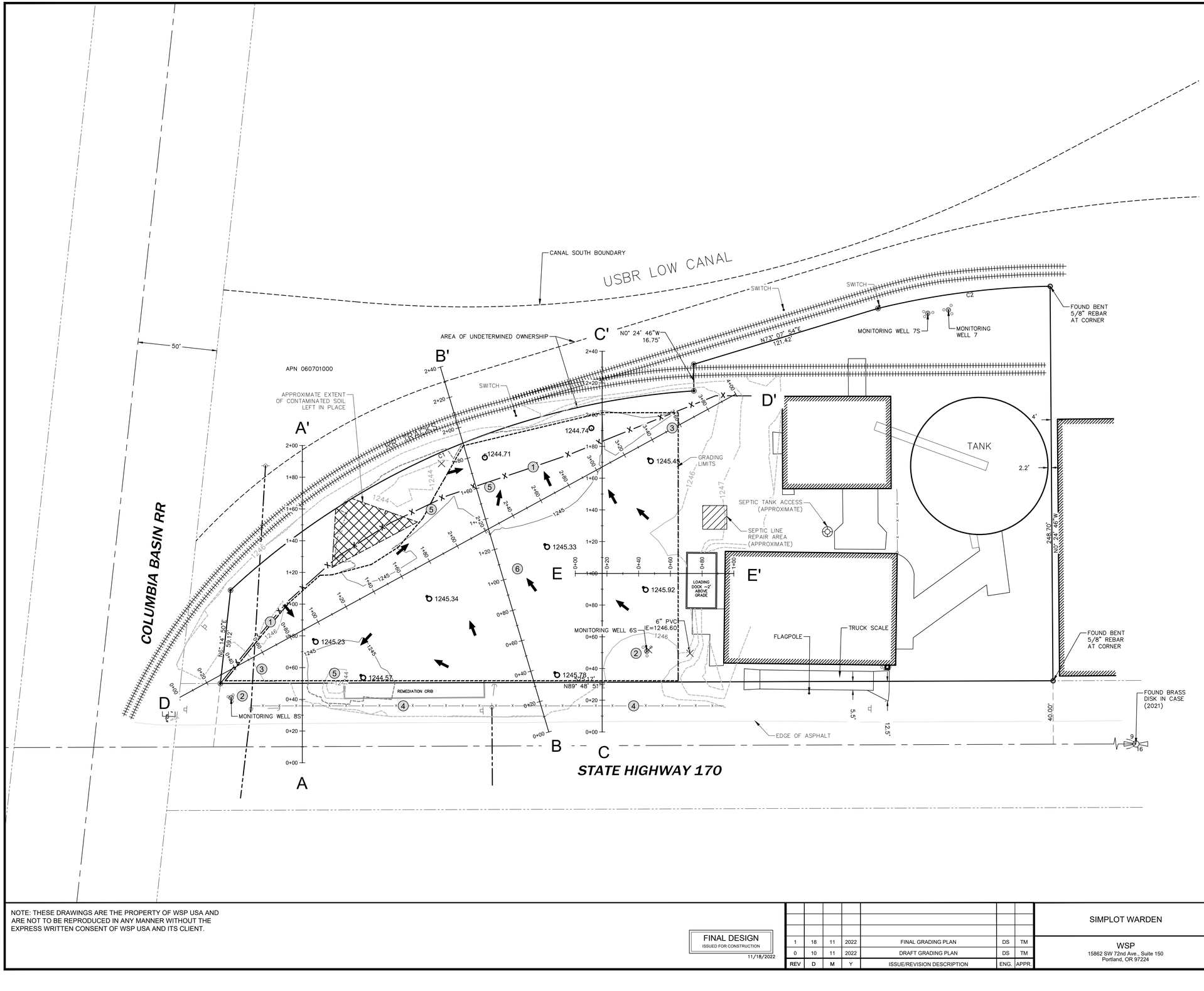
GRADING PLAN

EXISTING CONDITIONS

DATE: NOVEMBER 2022
SCALE: 1" = 30'
PROJECT NO.: 261M136740
REVISION: 1
SHEET NO.: 2 of 4
DRAWING NO.: 2

THIS DRAWING IS FULL SIZE WHEN PLOTTED AT 22" X34"

DRAWN BY: TM CHECKED BY: JW



LEGEND

- QUARTER SECTION CORNER
- SET REBAR AND CAP
- FOUND PROPERTY CORNER
- MONITORING WELL
- BOLLARD
- GAS METER
- GUY ANCHOR
- UTILITY POWER POLE
- OVERHEAD UTILITIES
- FENCE
- APPROXIMATE LOCATION OF EXISTING FENCE
- PROPERTY LINE
- EXISTING 5' MAJOR CONTOUR
- EXISTING 1' MINOR CONTOUR
- PROPOSED 5' MAJOR CONTOUR
- PROPOSED 1' MINOR CONTOUR
- GRADING LIMITS
- APPROXIMATE EXTENT OF CONTAMINATED SOIL LEFT IN PLACE
- FLOW DIRECTION
- 1245.16 SPOT ELEVATION

GENERAL NOTES

1. CONTRACTOR TO PLACE FILL IN MAXIMUM 6" LIFTS AND COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY (MDD) PER ASTM D1557.
2. CONTRACTOR SHALL USE PROCTOR ID MD20675-26 WITH A MDD OF 116.1pcf BY WESTERN PACIFIC ENGINEERING AND SURVEY.

SITE PLAN NOTES

1. PROTECT EXISTING FENCE
2. PROTECT EXISTING MONITORING WELLS
3. EXISTING LOW SPOT
4. APPROXIMATE LOCATION OF EXISTING FENCE. THIS FENCE IS OUTSIDE THE PROPERTY BOUNDARY. DO NOT GRADE TO THE FENCE
5. CONTRACTOR TO INSTALL STRAW WATTLES FOR EROSION AND SEDIMENT CONTROL AFTER GRADING - FIELD FIT.
6. CONTRACTOR AND SIMPLOT MAY ADD CRUSHED ROCK SURFACING FOR TRAVEL AREAS - FIELD FIT TO MAINTAIN DRAINAGE PATTERNS.

N

0' 15' 30' 45' 60'

SCALE:
1" = 30' (34"x22")
1" = 60' (11"x17")

FINAL DESIGN
ISSUED FOR CONSTRUCTION
11/18/2022

REV	D	M	Y	ISSUE/REVISION DESCRIPTION	ENG.	APPR.
1	18	11	2022	FINAL GRADING PLAN	DS	TM
0	10	11	2022	DRAFT GRADING PLAN	DS	TM

SIMPLOT WARDEN

WSP
15862 SW 72nd Ave., Suite 150
Portland, OR 97224

GRADING PLAN

PROPOSED GRADING PLAN

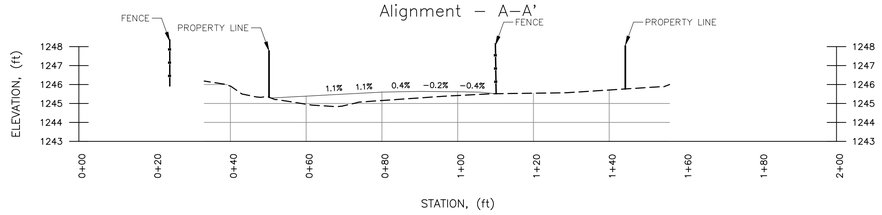
DATE: NOVEMBER 2022
SCALE: 1" = 30'
PROJECT NO: 261M136740
REVISION: 1
SHEET NO: 3 of 4
DRAWING NO: 3

DRAWN BY: PM CHECKED BY: JWV

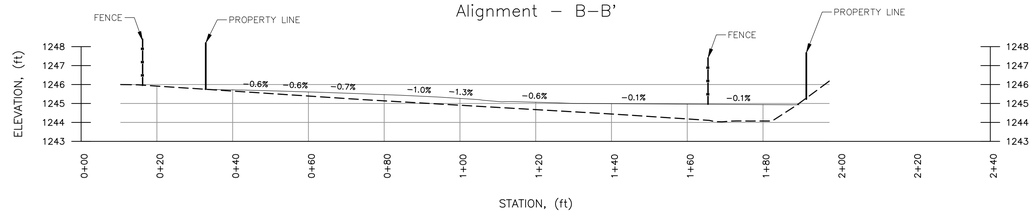
C:\Users\jwarden\Documents\projects\261M136740_ID2101-1 REMEDIATION_Drawings 11 Nov, 14, 2022 2:54pm jwarden

THIS DRAWING IS FULL SIZE WHEN PLOTTED AT 22" X34"

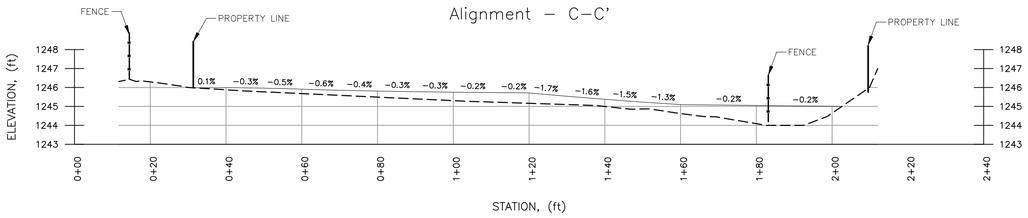
Alignment – A–A'



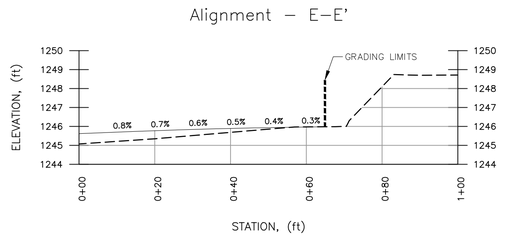
Alignment – B–B'



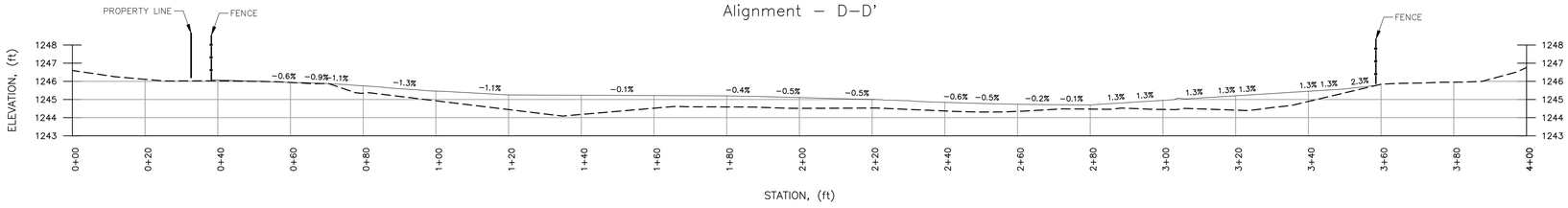
Alignment – C–C'



Alignment – E–E'



Alignment – D–D'



EXISTING SURFACE
PROPOSED SURFACE

ALL CROSS SECTION ARE EXAGGERATED VERTICALLY 5 TIMES

HORIZONTAL SCALE 0' 10' 20' 30' 40'
SCALE:
1" = 20' (34"x22")
1" = 40' (11"x17")

VERTICAL SCALE 0' 2' 4' 6' 8'
SCALE:
1" = 4' (34"x22")
1" = 8' (11"x17")

FINAL DESIGN
ISSUED FOR CONSTRUCTION
11/18/2022

REV	D	M	Y	ISSUE/REVISION DESCRIPTION	ENG.	APPR.
1	18	11	2022	FINAL GRADING PLAN	DS	TM
0	10	11	2022	DRAFT GRADING PLAN	DS	TM

SIMPLOT WARDEN

WSP
15862 SW 72nd Ave., Suite 150
Portland, OR 97224

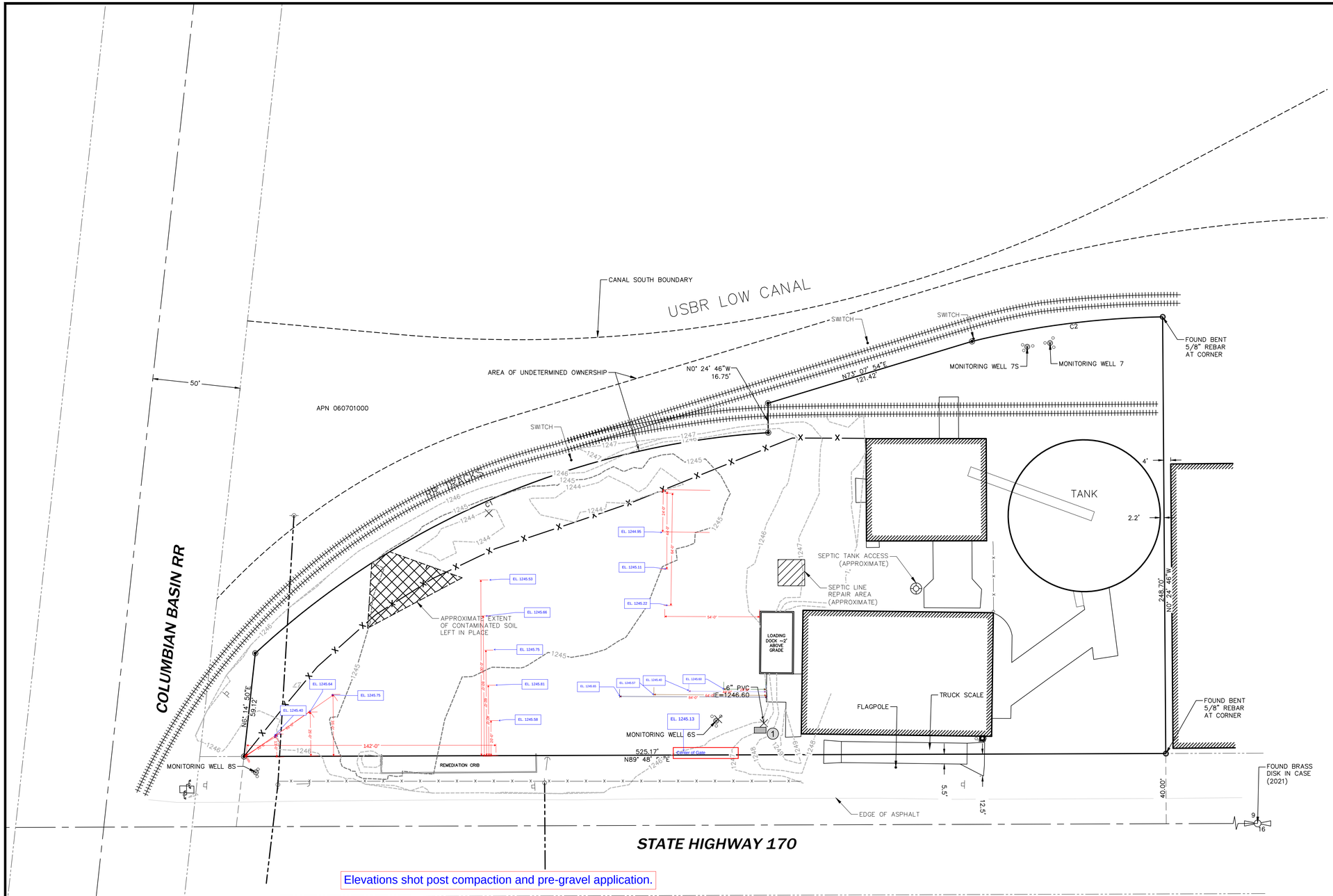
GRADING PLAN

CROSS-SECTIONS

DATE: NOVEMBER 2022
SCALE: AS SHOWN
PROJECT NO.: 261M136740
REVISION: 1
SHEET NO.: 4 of 4
DRAWING NO.: 4

THIS DRAWING IS FULL SIZE WHEN PLOTTED AT 22" X34"

DRAWN BY: TM CHECKED BY: JSH



Elevations shot post compaction and pre-gravel application.

LEGEND

- QUARTER SECTION CORNER
- SET REBAR AND CAP
- FOUND PROPERTY CORNER
- MONITORING WELL
- BOLLARD
- GAS METER
- GUY ANCHOR
- UTILITY POWER POLE
- OVERHEAD UTILITIES
- EXISTING FENCE
- APPROXIMATE LOCATION OF EXISTING FENCE
- PROPERTY LINE
- EXISTING 5' MAJOR CONTOUR
- EXISTING 1' MINOR CONTOUR
- APPROXIMATE EXTENT OF CONTAMINATED SOIL LEFT IN PLACE

GENERAL NOTES

1. EXISTING CONDITIONS SURVEY MODIFIED TO NOT INCLUDE EXISTING STOCKPILES, PER INSTRUCTIONS FROM SIMPLOT, AS STOCKPILE SIZES NOT ACCURATE.

SITE PLAN NOTES

(1) ECO-BLOCK WITH RED SCREW ON TOP WITH VERTICAL ELEVATION CONTROL, PER SIMPLOT

*October 2022 conditions are presented in black text and linework. GrayMar elevation confirmations are presented in blue text and red linework.

0' 15' 30' 45' 60'

SCALE:
1" = 30' (34"x22")
1" = 60' (11"x17")

DRAWN BY: TM CHECKED BY: JW

FINAL DESIGN
ISSUED FOR CONSTRUCTION
11/18/2022

REV	D	M	Y	ISSUE/REVISION DESCRIPTION	ENG.	APPR.
1	18	11	2022	FINAL GRADING PLAN	DS	TM
0	10	11	2022	DRAFT GRADING PLAN	DS	TM

SIMPLOT WARDEN

WSP
15862 SW 72nd Ave., Suite 150
Portland, OR 97224

GRADING PLAN

EXISTING CONDITIONS*

DATE: NOVEMBER 2022
SCALE: 1" = 30'
PROJECT NO.: 261M136740
REVISION: 1
SHEET NO.: 2 of 4
DRAWING NO.: 2

THIS DRAWING IS FULL SIZE WHEN PLOTTED AT 22" X34"

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H

Offsite Waste Stream Disposal

GAC Drum Samples

This table summarizes detections in GAC Drum samples. See the analytical report in Appendix H for a full list of analytes and results.

GAC Drum Sample Summary (Detections Only)

Lab Sample ID	Sample Name	Analytical Method	CAS#	Analyte	Result	Units	Qualifier
590-19244-1	GAC-Drum-1-11142022	6010D	7440-38-2	Arsenic	0.013	mg/L	J
590-19244-1	GAC-Drum-1-11142022	6010D	7440-39-3	Barium	0.27	mg/L	B
590-19244-1	GAC-Drum-1-11142022	Moisture	N/A	Percent Moisture	1.3	%	
590-19244-1	GAC-Drum-1-11142022	Moisture	N/A	Percent Solids	98.7	%	
590-19244-1	GAC-Drum-1-11142022	8260D	75-69-4	Trichlorofluoromethane	250	mg/Kg	
590-19244-1	GAC-Drum-1-11142022	8260D	67-66-3	Chloroform	19	mg/Kg	J
590-19244-1	GAC-Drum-1-11142022	8260D	120-82-1	1,2,4-Trichlorobenzene	20	mg/Kg	J
590-19244-1	GAC-Drum-1-11142022	8260D	87-61-6	1,2,3-Trichlorobenzene	31	mg/Kg	J
590-19244-1	GAC-Drum-1-11142022	8260D	87-68-3	Hexachlorobutadiene	23	mg/Kg	J
590-19244-1	GAC-Drum-1-11142022	8260D	91-20-3	Naphthalene	23	mg/Kg	J
590-19244-2	GAC-Drum-2-11142022	6010D	7440-38-2	Arsenic	0.016	mg/L	J
590-19244-2	GAC-Drum-2-11142022	6010D	7440-39-3	Barium	0.28	mg/L	B
590-19244-2	GAC-Drum-2-11142022	Moisture	N/A	Percent Moisture	1.1	%	
590-19244-2	GAC-Drum-2-11142022	Moisture	N/A	Percent Solids	98.9	%	
590-19244-2	GAC-Drum-2-11142022	8260D	75-69-4	Trichlorofluoromethane	250	mg/Kg	
590-19244-2	GAC-Drum-2-11142022	8260D	67-66-3	Chloroform	19	mg/Kg	J
590-19244-2	GAC-Drum-2-11142022	8260D	120-82-1	1,2,4-Trichlorobenzene	17	mg/Kg	J
590-19244-2	GAC-Drum-2-11142022	8260D	87-61-6	1,2,3-Trichlorobenzene	26	mg/Kg	J
590-19244-2	GAC-Drum-2-11142022	8260D	87-68-3	Hexachlorobutadiene	26	mg/Kg	J
590-19244-2	GAC-Drum-2-11142022	8260D	91-20-3	Naphthalene	17	mg/Kg	J

Note: This table summarizes detections in GAC Drum samples. Non-detect results are not included. Please refer to the laboratory report for full list of analytes and results.

ANALYTICAL REPORT

PREPARED FOR

Attn: Jered Newcomb
HDR Inc
1401 E. Trent Ave
Suite 101
Spokane, Washington 99202

Generated 12/2/2022 12:11:14 PM

JOB DESCRIPTION

Simplot Warden

JOB NUMBER

590-19244-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

See page two for job notes and contact information.

Job Notes

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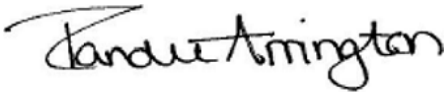
The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project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

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

Authorization



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

Table of Contents

Case Narrative

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Job ID: 590-19244-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 11/14/2022 4:16 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 590-39169 recovered above the upper control limit for Chlorodibromomethane, trans-1,4-Dichloro-2-butene, Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, trans-1,3-Dichloropropene, 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: GAC-Drum-1-11142022 (590-19244-1), GAC-Drum-2-11142022 (590-19244-2) and (CCVIS 590-39169/5).

Method 8260D: The following sample was diluted due to the nature of the sample matrix: GAC-Drum-1-11142022 (590-19244-1). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270C: Surrogate recovery for the following samples were outside control limits: GAC-Drum-1-11142022 (590-19244-1) and GAC-Drum-2-11142022 (590-19244-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-39165 and analytical batch 590-39163 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals
Method 6010D: The post digestion spike % recovery for Silver associated with batch 590-39285 was outside of control limits. The associated sample is: (590-19244-A-1-E PDS).

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.

Organic Prep
Method 3546: Due to the matrix, the initial volumes used for the following samples deviated from the standard procedure: GAC-Drum-1-11142022 (590-19244-1) and GAC-Drum-2-11142022 (590-19244-2). The reporting limits (RLs) have been adjusted proportionately. The initial mass was changed from 20g to 1g.
Method 8270C.

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

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

Sample Summary

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-19244-1	GAC-Drum-1-11142022	Solid	11/14/22 12:10	11/14/22 16:16
590-19244-2	GAC-Drum-2-11142022	Solid	11/14/22 12:20	11/14/22 16:16

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

Glossary

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

Client Sample ID: GAC-Drum-1-11142022
Date Collected: 11/14/22 12:10
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-1
Matrix: Solid
Percent Solids: 98.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		37	10	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Chloromethane	ND		190	15	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Vinyl chloride	ND		22	7.5	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Bromomethane	ND	F2	190	12	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Chloroethane	ND		74	21	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Trichlorofluoromethane	**250**		74	12	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1-Dichloroethene	ND		37	13	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Methylene Chloride	ND		130	74	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
trans-1,2-Dichloroethene	ND		37	8.5	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1-Dichloroethane	ND		37	9.8	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
2,2-Dichloropropane	ND		37	9.0	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
cis-1,2-Dichloroethene	ND		37	7.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Bromochloromethane	ND		37	15	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Chloroform	**19**	**J**	37	8.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1,1-Trichloroethane	ND		37	6.4	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Carbon tetrachloride	ND		37	4.1	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1-Dichloropropene	ND		37	6.5	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Benzene	ND		7.4	3.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2-Dichloroethane	ND		37	2.6	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Trichloroethene	ND		9.3	2.8	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2-Dichloropropane	ND		45	11	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Dibromomethane	ND		37	8.3	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Bromodichloromethane	ND		37	23	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
cis-1,3-Dichloropropene	ND		37	7.6	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Toluene	ND		37	4.9	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
trans-1,3-Dichloropropene	ND		37	9.8	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1,2-Trichloroethane	ND		37	13	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Tetrachloroethene	ND		15	6.5	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,3-Dichloropropane	ND		37	11	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Dibromochloromethane	ND		74	6.0	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2-Dibromoethane (EDB)	ND		37	12	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Chlorobenzene	ND		37	7.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Ethylbenzene	ND		37	6.0	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1,1,2-Tetrachloroethane	ND		37	7.1	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,1,2,2-Tetrachloroethane	ND		37	11	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
m,p-Xylene	ND		150	11	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
o-Xylene	ND		74	8.5	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Styrene	ND		37	8.8	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Bromoform	ND		74	7.1	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Isopropylbenzene	ND		37	11	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Bromobenzene	ND		37	8.3	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
N-Propylbenzene	ND		37	9.8	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2,3-Trichloropropane	ND		74	14	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
2-Chlorotoluene	ND		37	6.1	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,3,5-Trimethylbenzene	ND		37	12	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
4-Chlorotoluene	ND		37	3.2	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
tert-Butylbenzene	ND		37	7.2	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2,4-Trimethylbenzene	ND		37	8.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
sec-Butylbenzene	ND		37	6.9	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100

Client Sample ID: GAC-Drum-1-11142022

Date Collected: 11/14/22 12:10
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-1

Matrix: Solid
Percent Solids: 98.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		37	4.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
p-Isopropyltoluene	ND		37	7.6	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,4-Dichlorobenzene	ND		37	7.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
n-Butylbenzene	ND		37	10	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2-Dichlorobenzene	ND		37	8.7	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2-Dibromo-3-Chloropropane	ND		190	22	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2,4-Trichlorobenzene	**20**	**J**	37	6.9	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
1,2,3-Trichlorobenzene	**31**	**J**	37	12	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Hexachlorobutadiene	**23**	**J**	37	6.1	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Naphthalene	**23**	**J**	74	10	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100
Methyl tert-butyl ether	ND		19	11	mg/Kg	☼	11/21/22 16:12	11/23/22 13:25	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*	*11/21/22 16:12*	*11/23/22 13:25*	*100*
4-Bromofluorobenzene (Surr)	*98*		*76 - 122*	*11/21/22 16:12*	*11/23/22 13:25*	*100*
Dibromofluoromethane (Surr)	*102*		*80 - 120*	*11/21/22 16:12*	*11/23/22 13:25*	*100*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*11/21/22 16:12*	*11/23/22 13:25*	*100*

Method: SW846 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.8	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
1,2-Dichlorobenzene	ND		9.8	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
1,3-Dichlorobenzene	ND		9.8	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
1,4-Dichlorobenzene	ND		9.8	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
1-Methylnaphthalene	ND		9.8	0.71	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,4,5-Trichlorophenol	ND		9.8	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,4,6-Trichlorophenol	ND		9.8	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,4-Dichlorophenol	ND		9.8	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,4-Dimethylphenol	ND		9.8	0.89	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,4-Dinitrophenol	ND		39	31	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,4-Dinitrotoluene	ND		9.8	2.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,6-Dichlorophenol	ND		9.8	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2,6-Dinitrotoluene	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2-Chloronaphthalene	ND		9.8	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2-Chlorophenol	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2-Methylnaphthalene	ND		9.8	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2-Methylphenol	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2-Nitroaniline	ND		9.8	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
2-Nitrophenol	ND		9.8	2.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
3 & 4 Methylphenol	ND		20	4.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
3,3'-Dichlorobenzidine	ND		49	16	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
3-Nitroaniline	ND		9.8	2.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4,6-Dinitro-2-methylphenol	ND		49	19	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4-Bromophenyl phenyl ether	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4-Chloro-3-methylphenol	ND		9.8	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4-Chloroaniline	ND		9.8	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4-Chlorophenyl phenyl ether	ND		9.8	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4-Nitroaniline	ND		9.8	2.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
4-Nitrophenol	ND		9.8	3.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Acenaphthene	ND		9.8	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1

Client Sample ID: GAC-Drum-1-11142022

Date Collected: 11/14/22 12:10
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-1

Matrix: Solid
Percent Solids: 98.7

Method: SW846 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Aniline	ND		9.8	2.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Anthracene	ND		9.8	0.99	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Azobenzene	ND		9.8	2.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzidine	ND		98	28	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzo[a]anthracene	ND		9.8	0.90	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzo[a]pyrene	ND		9.8	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzo[b]fluoranthene	ND		9.8	1.6	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzo[g,h,i]perylene	ND		9.8	1.6	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzo[k]fluoranthene	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzoic acid	ND		49	31	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Benzyl alcohol	ND		9.8	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
bis (2-Chloroisopropyl) ether	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Bis(2-chloroethoxy)methane	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Bis(2-chloroethyl)ether	ND		49	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Butyl benzyl phthalate	ND		9.8	4.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Chrysene	ND		9.8	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Dibenz(a,h)anthracene	ND		9.8	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Dibenzofuran	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Diethyl phthalate	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Dimethyl phthalate	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Di-n-butyl phthalate	ND		9.8	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Di-n-octyl phthalate	ND		9.8	7.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Fluoranthene	ND		9.8	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Fluorene	ND		9.8	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Hexachlorobutadiene	ND		9.8	0.98	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Hexachlorobenzene	ND		9.8	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Hexachlorocyclopentadiene	ND		30	7.4	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Hexachloroethane	ND		9.8	2.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Indeno[1,2,3-cd]pyrene	ND		9.8	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Isophorone	ND		9.8	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Naphthalene	ND		9.8	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Nitrobenzene	ND		39	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
N-Nitrosodimethylamine	ND		9.8	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
N-Nitrosodi-n-propylamine	ND		9.8	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
N-Nitrosodiphenylamine	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Pentachlorophenol	ND		49	20	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Phenanthrene	ND		9.8	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Phenol	ND		9.8	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Pyrene	ND		9.8	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1
Pyridine	ND		9.8	1.6	mg/Kg	☼	11/17/22 06:45	11/18/22 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*9*	*S1-*	*10 - 134*	*11/17/22 06:45*	*11/18/22 20:58*	*1*
2-Fluorobiphenyl (Surr)	*11*	*S1-*	*14 - 142*	*11/17/22 06:45*	*11/18/22 20:58*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 123*	*11/17/22 06:45*	*11/18/22 20:58*	*1*
Nitrobenzene-d5 (Surr)	*21*		*10 - 129*	*11/17/22 06:45*	*11/18/22 20:58*	*1*
Phenol-d6 (Surr)	*46*		*10 - 120*	*11/17/22 06:45*	*11/18/22 20:58*	*1*
p-Terphenyl-d14 (Surr)	*1*	*S1-*	*31 - 139*	*11/17/22 06:45*	*11/18/22 20:58*	*1*

Client Sample ID: GAC-Drum-1-11142022

Lab Sample ID: 590-19244-1

Date Collected: 11/14/22 12:10
Date Received: 11/14/22 16:16

Matrix: Solid
Percent Solids: 98.7

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	F1 F2	0.081	0.035	ug/Kg	☼	11/21/22 14:47	11/21/22 22:17	1
1,2-Dibromo-3-Chloropropane	ND	F1	0.081	0.030	ug/Kg	☼	11/21/22 14:47	11/21/22 22:17	1
1,2,3-Trichloropropane	ND	F1	0.081	0.020	ug/Kg	☼	11/21/22 14:47	11/21/22 22:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.013**	**J**	0.025	0.010	mg/L		11/30/22 14:45	11/30/22 17:21	1
Barium	**0.27**	**B**	0.025	0.0014	mg/L		11/30/22 14:45	11/30/22 17:21	1
Cadmium	ND		0.025	0.0012	mg/L		11/30/22 14:45	11/30/22 17:21	1
Chromium	ND		0.025	0.0017	mg/L		11/30/22 14:45	11/30/22 17:21	1
Lead	ND		0.060	0.0051	mg/L		11/30/22 14:45	11/30/22 17:21	1
Selenium	ND		0.10	0.049	mg/L		11/30/22 14:45	11/30/22 17:21	1
Silver	ND		0.025	0.0025	mg/L		11/30/22 14:45	12/01/22 12:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	0.090	ug/L		11/30/22 14:47	11/30/22 18:32	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**1.3**		0.01	0.01	%			11/18/22 14:52	1
Percent Solids (EPA Moisture)	**98.7**		0.01	0.01	%			11/18/22 14:52	1

Client Sample ID: GAC-Drum-2-11142022

Lab Sample ID: 590-19244-2

Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Matrix: Solid
Percent Solids: 98.9

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		41	12	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Chloromethane	ND		200	17	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Vinyl chloride	ND		25	8.3	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Bromomethane	ND		200	14	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Chloroethane	ND		82	23	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Trichlorofluoromethane	**250**		82	13	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1-Dichloroethene	ND		41	14	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Methylene Chloride	ND		140	82	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
trans-1,2-Dichloroethene	ND		41	9.4	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1-Dichloroethane	ND		41	11	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
2,2-Dichloropropane	ND		41	10	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
cis-1,2-Dichloroethene	ND		41	8.5	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Bromochloromethane	ND		41	16	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Chloroform	**19**	**J**	41	9.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1,1-Trichloroethane	ND		41	7.1	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Carbon tetrachloride	ND		41	4.5	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1-Dichloropropene	ND		41	7.1	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Benzene	ND		8.2	4.1	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2-Dichloroethane	ND		41	2.9	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Trichloroethene	ND		10	3.1	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2-Dichloropropane	ND		49	12	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Dibromomethane	ND		41	9.1	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100

Client Sample ID: GAC-Drum-2-11142022
Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2
Matrix: Solid
Percent Solids: 98.9

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		41	25	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
cis-1,3-Dichloropropene	ND		41	8.4	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Toluene	ND		41	5.4	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
trans-1,3-Dichloropropene	ND		41	11	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1,2-Trichloroethane	ND		41	14	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Tetrachloroethene	ND		16	7.2	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,3-Dichloropropane	ND		41	12	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Dibromochloromethane	ND		82	6.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2-Dibromoethane (EDB)	ND		41	14	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Chlorobenzene	ND		41	8.5	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Ethylbenzene	ND		41	6.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1,1,2-Tetrachloroethane	ND		41	7.9	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,1,2,2-Tetrachloroethane	ND		41	12	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
m,p-Xylene	ND		160	12	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
o-Xylene	ND		82	9.4	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Styrene	ND		41	9.7	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Bromoform	ND		82	7.8	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Isopropylbenzene	ND		41	13	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Bromobenzene	ND		41	9.1	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
N-Propylbenzene	ND		41	11	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2,3-Trichloropropane	ND		82	15	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
2-Chlorotoluene	ND		41	6.7	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,3,5-Trimethylbenzene	ND		41	13	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
4-Chlorotoluene	ND		41	3.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
tert-Butylbenzene	ND		41	8.0	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2,4-Trimethylbenzene	ND		41	9.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
sec-Butylbenzene	ND		41	7.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,3-Dichlorobenzene	ND		41	5.2	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
p-Isopropyltoluene	ND		41	8.4	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,4-Dichlorobenzene	ND		41	8.4	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
n-Butylbenzene	ND		41	11	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2-Dichlorobenzene	ND		41	9.5	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2-Dibromo-3-Chloropropane	ND		200	25	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2,4-Trichlorobenzene	**17**	**J**	41	7.6	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
1,2,3-Trichlorobenzene	**26**	**J**	41	14	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Hexachlorobutadiene	**26**	**J**	41	6.7	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Naphthalene	**17**	**J**	82	11	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100
Methyl tert-butyl ether	ND		20	12	mg/Kg	☼	11/21/22 16:12	11/23/22 14:52	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*	*11/21/22 16:12*	*11/23/22 14:52*	*100*
4-Bromofluorobenzene (Surr)	*101*		*76 - 122*	*11/21/22 16:12*	*11/23/22 14:52*	*100*
Dibromofluoromethane (Surr)	*99*		*80 - 120*	*11/21/22 16:12*	*11/23/22 14:52*	*100*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 129*	*11/21/22 16:12*	*11/23/22 14:52*	*100*

Method: SW846 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.4	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
1,2-Dichlorobenzene	ND		9.4	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
1,3-Dichlorobenzene	ND		9.4	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Client Sample ID: GAC-Drum-2-11142022
Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2
Matrix: Solid
Percent Solids: 98.9

Method: SW846 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		9.4	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
1-Methylnaphthalene	ND		9.4	0.68	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,4,5-Trichlorophenol	ND		9.4	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,4,6-Trichlorophenol	ND		9.4	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,4-Dichlorophenol	ND		9.4	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,4-Dimethylphenol	ND		9.4	0.85	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,4-Dinitrophenol	ND		37	30	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,4-Dinitrotoluene	ND		9.4	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,6-Dichlorophenol	ND		9.4	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2,6-Dinitrotoluene	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2-Chloronaphthalene	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2-Chlorophenol	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2-Methylnaphthalene	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2-Methylphenol	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2-Nitroaniline	ND		9.4	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
2-Nitrophenol	ND		9.4	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
3 & 4 Methylphenol	ND		19	4.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
3,3'-Dichlorobenzidine	ND		47	15	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
3-Nitroaniline	ND		9.4	2.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4,6-Dinitro-2-methylphenol	ND		47	18	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4-Bromophenyl phenyl ether	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4-Chloro-3-methylphenol	ND		9.4	1.6	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4-Chloroaniline	ND		9.4	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4-Chlorophenyl phenyl ether	ND		9.4	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4-Nitroaniline	ND		9.4	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
4-Nitrophenol	ND		9.4	3.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Acenaphthene	ND		9.4	1.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Acenaphthylene	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Aniline	ND		9.4	2.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Anthracene	ND		9.4	0.95	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Azobenzene	ND		9.4	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzidine	ND		94	27	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzo[a]anthracene	ND		9.4	0.85	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzo[a]pyrene	ND		9.4	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzo[b]fluoranthene	ND		9.4	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzo[g,h,i]perylene	ND		9.4	1.6	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzo[k]fluoranthene	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzoic acid	ND		47	30	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Benzyl alcohol	ND		9.4	1.6	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
bis (2-Chloroisopropyl) ether	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Bis(2-chloroethoxy)methane	ND		9.4	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Bis(2-chloroethyl)ether	ND		47	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Butyl benzyl phthalate	ND		9.4	4.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Chrysene	ND		9.4	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Dibenz(a,h)anthracene	ND		9.4	1.9	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Dibenzofuran	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Diethyl phthalate	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Dimethyl phthalate	ND		9.4	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1

Client Sample ID: GAC-Drum-2-11142022

Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2

Matrix: Solid
Percent Solids: 98.9

Method: SW846 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		9.4	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Di-n-octyl phthalate	ND		9.4	6.7	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Fluoranthene	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Fluorene	ND		9.4	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Hexachlorobutadiene	ND		9.4	0.94	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Hexachlorobenzene	ND		9.4	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Hexachlorocyclopentadiene	ND		28	7.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Hexachloroethane	ND		9.4	2.0	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Indeno[1,2,3-cd]pyrene	ND		9.4	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Isophorone	ND		9.4	1.3	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Naphthalene	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Nitrobenzene	ND		37	1.7	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
N-Nitrosodimethylamine	ND		9.4	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
N-Nitrosodi-n-propylamine	ND		9.4	1.2	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
N-Nitrosodiphenylamine	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Pentachlorophenol	ND		47	19	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Phenanthrene	ND		9.4	1.1	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Phenol	ND		9.4	1.8	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Pyrene	ND		9.4	1.4	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1
Pyridine	ND		9.4	1.5	mg/Kg	☼	11/17/22 06:45	11/18/22 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*8*	*S1-*	*10 - 134*	*11/17/22 06:45*	*11/18/22 21:16*	*1*
2-Fluorobiphenyl (Surr)	*12*	*S1-*	*14 - 142*	*11/17/22 06:45*	*11/18/22 21:16*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 123*	*11/17/22 06:45*	*11/18/22 21:16*	*1*
Nitrobenzene-d5 (Surr)	*23*		*10 - 129*	*11/17/22 06:45*	*11/18/22 21:16*	*1*
Phenol-d6 (Surr)	*47*		*10 - 120*	*11/17/22 06:45*	*11/18/22 21:16*	*1*
p-Terphenyl-d14 (Surr)	*0.6*	*S1-*	*31 - 139*	*11/17/22 06:45*	*11/18/22 21:16*	*1*

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		0.080	0.035	ug/Kg	☼	11/21/22 14:47	11/21/22 23:05	1
1,2-Dibromo-3-Chloropropane	ND		0.080	0.030	ug/Kg	☼	11/21/22 14:47	11/21/22 23:05	1
1,2,3-Trichloropropane	ND		0.080	0.020	ug/Kg	☼	11/21/22 14:47	11/21/22 23:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.016**	**J**	0.025	0.010	mg/L		11/30/22 14:45	11/30/22 17:46	1
Barium	**0.28**	**B**	0.025	0.0014	mg/L		11/30/22 14:45	11/30/22 17:46	1
Cadmium	ND		0.025	0.0012	mg/L		11/30/22 14:45	11/30/22 17:46	1
Chromium	ND		0.025	0.0017	mg/L		11/30/22 14:45	11/30/22 17:46	1
Lead	ND		0.060	0.0051	mg/L		11/30/22 14:45	11/30/22 17:46	1
Selenium	ND		0.10	0.049	mg/L		11/30/22 14:45	11/30/22 17:46	1
Silver	ND		0.025	0.0025	mg/L		11/30/22 14:45	12/01/22 17:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	0.090	ug/L		11/30/22 14:47	11/30/22 18:42	1

Client Sample Results

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Client Sample ID: GAC-Drum-2-11142022
Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2
Matrix: Solid
Percent Solids: 98.9

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	1.1		0.01	0.01	%			11/18/22 14:52	1
Percent Solids (EPA Moisture)	98.9		0.01	0.01	%			11/18/22 14:52	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 590-39168/1-A
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.10	0.028	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Chloromethane	ND		0.50	0.042	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Vinyl chloride	ND		0.060	0.020	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Bromomethane	ND		0.50	0.033	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Chloroethane	ND		0.20	0.056	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Trichlorofluoromethane	ND		0.20	0.033	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1-Dichloroethene	ND		0.10	0.034	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Methylene Chloride	ND		0.35	0.20	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
trans-1,2-Dichloroethene	ND		0.10	0.023	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1-Dichloroethane	ND		0.10	0.026	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
2,2-Dichloropropane	ND		0.10	0.024	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
cis-1,2-Dichloroethene	ND		0.10	0.021	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Bromochloromethane	ND		0.10	0.040	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Chloroform	ND		0.10	0.024	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1,1-Trichloroethane	ND		0.10	0.017	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Carbon tetrachloride	ND		0.10	0.011	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1-Dichloropropene	ND		0.10	0.017	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Benzene	ND		0.020	0.010	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2-Dichloroethane	ND		0.10	0.0070	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Trichloroethene	ND		0.025	0.0076	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2-Dichloropropane	ND		0.12	0.030	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Dibromomethane	ND		0.10	0.022	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Bromodichloromethane	ND		0.10	0.062	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
cis-1,3-Dichloropropene	ND		0.10	0.020	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Toluene	ND		0.10	0.013	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
trans-1,3-Dichloropropene	ND		0.10	0.026	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1,2-Trichloroethane	ND		0.10	0.035	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Tetrachloroethene	ND		0.040	0.018	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,3-Dichloropropane	ND		0.10	0.030	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Dibromochloromethane	ND		0.20	0.016	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2-Dibromoethane (EDB)	ND		0.10	0.034	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Chlorobenzene	ND		0.10	0.021	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Ethylbenzene	ND		0.10	0.016	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1,1,2-Tetrachloroethane	ND		0.10	0.019	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,1,2,2-Tetrachloroethane	ND		0.10	0.029	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
m,p-Xylene	ND		0.40	0.029	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
o-Xylene	ND		0.20	0.023	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Styrene	ND		0.10	0.024	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Bromoform	ND		0.20	0.019	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Isopropylbenzene	ND		0.10	0.031	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Bromobenzene	ND		0.10	0.022	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
N-Propylbenzene	ND		0.10	0.026	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2,3-Trichloropropane	ND		0.20	0.037	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
2-Chlorotoluene	ND		0.10	0.016	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,3,5-Trimethylbenzene	ND		0.10	0.032	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
4-Chlorotoluene	ND		0.10	0.0087	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
tert-Butylbenzene	ND		0.10	0.020	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2,4-Trimethylbenzene	ND		0.10	0.023	mg/Kg		11/21/22 16:12	11/23/22 12:43	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 590-39168/1-A
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.10	0.019	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,3-Dichlorobenzene	ND		0.10	0.013	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
p-Isopropyltoluene	ND		0.10	0.020	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,4-Dichlorobenzene	ND		0.10	0.021	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
n-Butylbenzene	ND		0.10	0.028	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2-Dichlorobenzene	ND		0.10	0.023	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.060	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2,4-Trichlorobenzene	ND		0.10	0.019	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
1,2,3-Trichlorobenzene	ND		0.10	0.033	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Hexachlorobutadiene	ND		0.10	0.016	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Naphthalene	ND		0.20	0.028	mg/Kg		11/21/22 16:12	11/23/22 12:43	1
Methyl tert-butyl ether	ND		0.050	0.030	mg/Kg		11/21/22 16:12	11/23/22 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*11/21/22 16:12*	*11/23/22 12:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 122*	*11/21/22 16:12*	*11/23/22 12:43*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*	*11/21/22 16:12*	*11/23/22 12:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*11/21/22 16:12*	*11/23/22 12:43*	*1*

Lab Sample ID: LCS 590-39168/2-A
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	0.500	0.333		mg/Kg		67	34 - 120
Chloromethane	0.500	0.429	J	mg/Kg		86	42 - 120
Vinyl chloride	0.500	0.515		mg/Kg		103	66 - 129
Bromomethane	0.500	0.529		mg/Kg		106	56 - 138
Chloroethane	0.500	0.516		mg/Kg		103	50 - 150
Trichlorofluoromethane	0.500	0.546		mg/Kg		109	64 - 143
1,1-Dichloroethene	0.500	0.581		mg/Kg		116	63 - 150
Methylene Chloride	0.500	0.594		mg/Kg		119	47 - 150
trans-1,2-Dichloroethene	0.500	0.591		mg/Kg		118	80 - 138
1,1-Dichloroethane	0.500	0.578		mg/Kg		116	80 - 136
2,2-Dichloropropane	0.500	0.572		mg/Kg		114	73 - 150
cis-1,2-Dichloroethene	0.500	0.543		mg/Kg		109	80 - 144
Bromochloromethane	0.500	0.548		mg/Kg		110	75 - 148
Chloroform	0.500	0.568		mg/Kg		114	80 - 150
1,1,1-Trichloroethane	0.500	0.585		mg/Kg		117	80 - 150
Carbon tetrachloride	0.500	0.585		mg/Kg		117	72 - 150
1,1-Dichloropropene	0.500	0.571		mg/Kg		114	78 - 145
Benzene	0.500	0.565		mg/Kg		113	76 - 139
1,2-Dichloroethane	0.500	0.538		mg/Kg		108	73 - 150
Trichloroethene	0.500	0.570		mg/Kg		114	79 - 144
1,2-Dichloropropane	0.500	0.516		mg/Kg		103	75 - 135
Dibromomethane	0.500	0.485		mg/Kg		97	80 - 140
Bromodichloromethane	0.500	0.540		mg/Kg		108	80 - 146
cis-1,3-Dichloropropene	0.500	0.528		mg/Kg		106	80 - 136

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 590-39168/2-A
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	0.500	0.559		mg/Kg		112	77 - 131
trans-1,3-Dichloropropene	0.500	0.529		mg/Kg		106	80 - 124
1,1,2-Trichloroethane	0.500	0.529		mg/Kg		106	80 - 132
Tetrachloroethene	0.500	0.556		mg/Kg		111	77 - 149
1,3-Dichloropropane	0.500	0.521		mg/Kg		104	76 - 125
Dibromochloromethane	0.500	0.539		mg/Kg		108	78 - 136
1,2-Dibromoethane (EDB)	0.500	0.519		mg/Kg		104	75 - 129
Chlorobenzene	0.500	0.544		mg/Kg		109	80 - 136
Ethylbenzene	0.500	0.582		mg/Kg		116	77 - 135
1,1,1,2-Tetrachloroethane	0.500	0.561		mg/Kg		112	80 - 128
1,1,2,2-Tetrachloroethane	0.500	0.505		mg/Kg		101	75 - 137
m,p-Xylene	0.500	0.597		mg/Kg		119	78 - 130
o-Xylene	0.500	0.569		mg/Kg		114	77 - 129
Styrene	0.500	0.584		mg/Kg		117	80 - 128
Bromoform	0.500	0.525		mg/Kg		105	72 - 133
Isopropylbenzene	0.500	0.593		mg/Kg		119	78 - 139
Bromobenzene	0.500	0.528		mg/Kg		106	75 - 142
N-Propylbenzene	0.500	0.589		mg/Kg		118	77 - 140
1,2,3-Trichloropropane	0.500	0.492		mg/Kg		98	67 - 144
2-Chlorotoluene	0.500	0.577		mg/Kg		115	77 - 135
1,3,5-Trimethylbenzene	0.500	0.579		mg/Kg		116	76 - 133
4-Chlorotoluene	0.500	0.581		mg/Kg		116	77 - 133
tert-Butylbenzene	0.500	0.579		mg/Kg		116	76 - 130
1,2,4-Trimethylbenzene	0.500	0.573		mg/Kg		115	76 - 139
sec-Butylbenzene	0.500	0.594		mg/Kg		119	76 - 139
1,3-Dichlorobenzene	0.500	0.552		mg/Kg		110	80 - 133
p-Isopropyltoluene	0.500	0.572		mg/Kg		114	80 - 140
1,4-Dichlorobenzene	0.500	0.532		mg/Kg		106	80 - 133
n-Butylbenzene	0.500	0.571		mg/Kg		114	80 - 131
1,2-Dichlorobenzene	0.500	0.523		mg/Kg		105	80 - 135
1,2-Dibromo-3-Chloropropane	0.500	0.498	J	mg/Kg		100	65 - 139
1,2,4-Trichlorobenzene	0.500	0.502		mg/Kg		100	67 - 140
1,2,3-Trichlorobenzene	0.500	0.476		mg/Kg		95	66 - 143
Hexachlorobutadiene	0.500	0.524		mg/Kg		105	59 - 150
Naphthalene	0.500	0.469		mg/Kg		94	67 - 129
Methyl tert-butyl ether	0.500	0.539		mg/Kg		108	80 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*76 - 122*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 129*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	ND		186	184		mg/Kg	☼	99	34 - 120
Chloromethane	ND		186	193		mg/Kg	☼	104	42 - 120
Vinyl chloride	ND		186	203		mg/Kg	☼	109	66 - 129
Bromomethane	ND	F2	186	183	J	mg/Kg	☼	99	56 - 138
Chloroethane	ND		186	183		mg/Kg	☼	98	50 - 150
Trichlorofluoromethane	250		186	436		mg/Kg	☼	102	64 - 143
1,1-Dichloroethene	ND		186	196		mg/Kg	☼	105	63 - 150
Methylene Chloride	ND		186	210		mg/Kg	☼	113	47 - 150
trans-1,2-Dichloroethene	ND		186	207		mg/Kg	☼	111	80 - 138
1,1-Dichloroethane	ND		186	196		mg/Kg	☼	106	80 - 136
2,2-Dichloropropane	ND		186	193		mg/Kg	☼	104	73 - 150
cis-1,2-Dichloroethene	ND		186	188		mg/Kg	☼	101	80 - 144
Bromochloromethane	ND		186	190		mg/Kg	☼	102	75 - 148
Chloroform	19	J	186	210		mg/Kg	☼	103	80 - 150
1,1,1-Trichloroethane	ND		186	203		mg/Kg	☼	109	80 - 150
Carbon tetrachloride	ND		186	192		mg/Kg	☼	103	72 - 150
1,1-Dichloropropene	ND		186	196		mg/Kg	☼	105	78 - 145
Benzene	ND		186	191		mg/Kg	☼	103	76 - 139
1,2-Dichloroethane	ND		186	183		mg/Kg	☼	98	73 - 150
Trichloroethene	ND		186	193		mg/Kg	☼	104	79 - 144
1,2-Dichloropropane	ND		186	187		mg/Kg	☼	100	75 - 135
Dibromomethane	ND		186	164		mg/Kg	☼	88	80 - 140
Bromodichloromethane	ND		186	180		mg/Kg	☼	97	80 - 146
cis-1,3-Dichloropropene	ND		186	173		mg/Kg	☼	93	80 - 136
Toluene	ND		186	189		mg/Kg	☼	102	77 - 131
trans-1,3-Dichloropropene	ND		186	185		mg/Kg	☼	100	80 - 124
1,1,2-Trichloroethane	ND		186	183		mg/Kg	☼	98	80 - 132
Tetrachloroethene	ND		186	193		mg/Kg	☼	104	77 - 149
1,3-Dichloropropane	ND		186	179		mg/Kg	☼	96	76 - 125
Dibromochloromethane	ND		186	187		mg/Kg	☼	101	78 - 136
1,2-Dibromoethane (EDB)	ND		186	180		mg/Kg	☼	97	75 - 129
Chlorobenzene	ND		186	183		mg/Kg	☼	98	80 - 136
Ethylbenzene	ND		186	192		mg/Kg	☼	103	77 - 135
1,1,1,2-Tetrachloroethane	ND		186	191		mg/Kg	☼	103	80 - 128
1,1,2,2-Tetrachloroethane	ND		186	171		mg/Kg	☼	92	75 - 137
m,p-Xylene	ND		186	194		mg/Kg	☼	104	78 - 130
o-Xylene	ND		186	188		mg/Kg	☼	101	77 - 129
Styrene	ND		186	187		mg/Kg	☼	101	80 - 128
Bromoform	ND		186	182		mg/Kg	☼	98	72 - 133
Isopropylbenzene	ND		186	195		mg/Kg	☼	105	78 - 139
Bromobenzene	ND		186	177		mg/Kg	☼	95	75 - 142
N-Propylbenzene	ND		186	190		mg/Kg	☼	102	77 - 140
1,2,3-Trichloropropane	ND		186	174		mg/Kg	☼	94	67 - 144
2-Chlorotoluene	ND		186	186		mg/Kg	☼	100	77 - 135
1,3,5-Trimethylbenzene	ND		186	190		mg/Kg	☼	102	76 - 133
4-Chlorotoluene	ND		186	187		mg/Kg	☼	101	77 - 133
tert-Butylbenzene	ND		186	190		mg/Kg	☼	102	76 - 130
1,2,4-Trimethylbenzene	ND		186	185		mg/Kg	☼	100	76 - 139

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
sec-Butylbenzene	ND		186	189		mg/Kg	☼	102	76 - 139
1,3-Dichlorobenzene	ND		186	183		mg/Kg	☼	99	80 - 133
p-Isopropyltoluene	ND		186	186		mg/Kg	☼	100	80 - 140
1,4-Dichlorobenzene	ND		186	182		mg/Kg	☼	98	80 - 133
n-Butylbenzene	ND		186	180		mg/Kg	☼	97	80 - 131
1,2-Dichlorobenzene	ND		186	172		mg/Kg	☼	93	80 - 135
1,2-Dibromo-3-Chloropropane	ND		186	160	J	mg/Kg	☼	86	65 - 139
1,2,4-Trichlorobenzene	20	J	186	170		mg/Kg	☼	81	67 - 140
1,2,3-Trichlorobenzene	31	J	186	153		mg/Kg	☼	66	66 - 143
Hexachlorobutadiene	23	J	186	191		mg/Kg	☼	90	59 - 150
Naphthalene	23	J	186	156		mg/Kg	☼	71	67 - 129
Methyl tert-butyl ether	ND		186	185		mg/Kg	☼	100	80 - 144

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*76 - 122*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*

Lab Sample ID: 590-19244-1 MSD
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND		186	181		mg/Kg	☼	97	34 - 120	2	13
Chloromethane	ND		186	200		mg/Kg	☼	107	42 - 120	3	12
Vinyl chloride	ND		186	206		mg/Kg	☼	111	66 - 129	2	20
Bromomethane	ND	F2	186	107	J F2	mg/Kg	☼	58	56 - 138	52	14
Chloroethane	ND		186	170		mg/Kg	☼	91	50 - 150	7	17
Trichlorofluoromethane	250		186	420		mg/Kg	☼	94	64 - 143	4	10
1,1-Dichloroethene	ND		186	200		mg/Kg	☼	108	63 - 150	2	40
Methylene Chloride	ND		186	203		mg/Kg	☼	109	47 - 150	3	40
trans-1,2-Dichloroethene	ND		186	201		mg/Kg	☼	108	80 - 138	3	16
1,1-Dichloroethane	ND		186	196		mg/Kg	☼	106	80 - 136	0	16
2,2-Dichloropropane	ND		186	187		mg/Kg	☼	101	73 - 150	3	13
cis-1,2-Dichloroethene	ND		186	193		mg/Kg	☼	104	80 - 144	2	15
Bromochloromethane	ND		186	194		mg/Kg	☼	104	75 - 148	2	32
Chloroform	19	J	186	207		mg/Kg	☼	102	80 - 150	1	15
1,1,1-Trichloroethane	ND		186	201		mg/Kg	☼	108	80 - 150	1	10
Carbon tetrachloride	ND		186	193		mg/Kg	☼	104	72 - 150	1	17
1,1-Dichloropropene	ND		186	198		mg/Kg	☼	107	78 - 145	1	14
Benzene	ND		186	195		mg/Kg	☼	105	76 - 139	2	14
1,2-Dichloroethane	ND		186	192		mg/Kg	☼	103	73 - 150	5	25
Trichloroethene	ND		186	192		mg/Kg	☼	103	79 - 144	1	13
1,2-Dichloropropane	ND		186	194		mg/Kg	☼	105	75 - 135	4	20
Dibromomethane	ND		186	176		mg/Kg	☼	95	80 - 140	7	24
Bromodichloromethane	ND		186	180		mg/Kg	☼	97	80 - 146	0	19
cis-1,3-Dichloropropene	ND		186	172		mg/Kg	☼	93	80 - 136	1	17

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-19244-1 MSD
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	ND		186	188		mg/Kg	☼	101	77 - 131	0	14
trans-1,3-Dichloropropene	ND		186	182		mg/Kg	☼	98	80 - 124	1	14
1,1,2-Trichloroethane	ND		186	191		mg/Kg	☼	103	80 - 132	5	12
Tetrachloroethene	ND		186	200		mg/Kg	☼	108	77 - 149	3	10
1,3-Dichloropropane	ND		186	181		mg/Kg	☼	97	76 - 125	1	24
Dibromochloromethane	ND		186	190		mg/Kg	☼	102	78 - 136	2	18
1,2-Dibromoethane (EDB)	ND		186	183		mg/Kg	☼	98	75 - 129	2	18
Chlorobenzene	ND		186	184		mg/Kg	☼	99	80 - 136	0	10
Ethylbenzene	ND		186	191		mg/Kg	☼	103	77 - 135	1	13
1,1,1,2-Tetrachloroethane	ND		186	206		mg/Kg	☼	111	80 - 128	8	25
1,1,2,2-Tetrachloroethane	ND		186	170		mg/Kg	☼	91	75 - 137	1	15
m,p-Xylene	ND		186	193		mg/Kg	☼	104	78 - 130	0	23
o-Xylene	ND		186	195		mg/Kg	☼	105	77 - 129	4	15
Styrene	ND		186	178		mg/Kg	☼	96	80 - 128	5	25
Bromoform	ND		186	185		mg/Kg	☼	100	72 - 133	1	10
Isopropylbenzene	ND		186	201		mg/Kg	☼	108	78 - 139	3	10
Bromobenzene	ND		186	168		mg/Kg	☼	91	75 - 142	5	25
N-Propylbenzene	ND		186	174		mg/Kg	☼	94	77 - 140	9	25
1,2,3-Trichloropropane	ND		186	165		mg/Kg	☼	89	67 - 144	5	40
2-Chlorotoluene	ND		186	172		mg/Kg	☼	93	77 - 135	8	35
1,3,5-Trimethylbenzene	ND		186	180		mg/Kg	☼	97	76 - 133	5	20
4-Chlorotoluene	ND		186	178		mg/Kg	☼	96	77 - 133	5	17
tert-Butylbenzene	ND		186	176		mg/Kg	☼	95	76 - 130	7	16
1,2,4-Trimethylbenzene	ND		186	179		mg/Kg	☼	96	76 - 139	4	21
sec-Butylbenzene	ND		186	177		mg/Kg	☼	95	76 - 139	6	18
1,3-Dichlorobenzene	ND		186	185		mg/Kg	☼	99	80 - 133	1	18
p-Isopropyltoluene	ND		186	178		mg/Kg	☼	96	80 - 140	4	19
1,4-Dichlorobenzene	ND		186	174		mg/Kg	☼	94	80 - 133	4	16
n-Butylbenzene	ND		186	177		mg/Kg	☼	95	80 - 131	1	20
1,2-Dichlorobenzene	ND		186	176		mg/Kg	☼	95	80 - 135	2	17
1,2-Dibromo-3-Chloropropane	ND		186	170	J	mg/Kg	☼	91	65 - 139	6	27
1,2,4-Trichlorobenzene	20	J	186	167		mg/Kg	☼	79	67 - 140	2	25
1,2,3-Trichlorobenzene	31	J	186	168		mg/Kg	☼	74	66 - 143	9	16
Hexachlorobutadiene	23	J	186	176		mg/Kg	☼	82	59 - 150	8	19
Naphthalene	23	J	186	167		mg/Kg	☼	77	67 - 129	7	15
Methyl tert-butyl ether	ND		186	194		mg/Kg	☼	104	80 - 144	5	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*91*		*76 - 122*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 129*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-19244-1 DU
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Dichlorodifluoromethane	ND		ND		mg/Kg	☼	NC	24
Chloromethane	ND		ND		mg/Kg	☼	NC	22
Vinyl chloride	ND		ND		mg/Kg	☼	NC	20
Bromomethane	ND	F2	ND		mg/Kg	☼	NC	21
Chloroethane	ND		ND		mg/Kg	☼	NC	25
Trichlorofluoromethane	250		264		mg/Kg	☼	7	25
1,1-Dichloroethene	ND		ND		mg/Kg	☼	NC	18
Methylene Chloride	ND		ND		mg/Kg	☼	NC	40
trans-1,2-Dichloroethene	ND		ND		mg/Kg	☼	NC	25
1,1-Dichloroethane	ND		ND		mg/Kg	☼	NC	25
2,2-Dichloropropane	ND		ND		mg/Kg	☼	NC	22
cis-1,2-Dichloroethene	ND		ND		mg/Kg	☼	NC	23
Bromochloromethane	ND		ND		mg/Kg	☼	NC	25
Chloroform	19	J	ND		mg/Kg	☼	NC	25
1,1,1-Trichloroethane	ND		ND		mg/Kg	☼	NC	19
Carbon tetrachloride	ND		ND		mg/Kg	☼	NC	25
1,1-Dichloropropene	ND		ND		mg/Kg	☼	NC	24
Benzene	ND		ND		mg/Kg	☼	NC	25
1,2-Dichloroethane	ND		ND		mg/Kg	☼	NC	25
Trichloroethene	ND		ND		mg/Kg	☼	NC	25
1,2-Dichloropropane	ND		ND		mg/Kg	☼	NC	20
Dibromomethane	ND		ND		mg/Kg	☼	NC	24
Bromodichloromethane	ND		ND		mg/Kg	☼	NC	26
cis-1,3-Dichloropropene	ND		ND		mg/Kg	☼	NC	24
Toluene	ND		ND		mg/Kg	☼	NC	25
trans-1,3-Dichloropropene	ND		ND		mg/Kg	☼	NC	28
1,1,2-Trichloroethane	ND		ND		mg/Kg	☼	NC	31
Tetrachloroethene	ND		ND		mg/Kg	☼	NC	24
1,3-Dichloropropane	ND		ND		mg/Kg	☼	NC	16
Dibromochloromethane	ND		ND		mg/Kg	☼	NC	25
1,2-Dibromoethane (EDB)	ND		ND		mg/Kg	☼	NC	18
Chlorobenzene	ND		ND		mg/Kg	☼	NC	25
Ethylbenzene	ND		ND		mg/Kg	☼	NC	25
1,1,1,2-Tetrachloroethane	ND		ND		mg/Kg	☼	NC	25
1,1,2,2-Tetrachloroethane	ND		ND		mg/Kg	☼	NC	22
m,p-Xylene	ND		ND		mg/Kg	☼	NC	23
o-Xylene	ND		ND		mg/Kg	☼	NC	25
Styrene	ND		ND		mg/Kg	☼	NC	25
Bromoform	ND		ND		mg/Kg	☼	NC	34
Isopropylbenzene	ND		ND		mg/Kg	☼	NC	24
Bromobenzene	ND		ND		mg/Kg	☼	NC	25
N-Propylbenzene	ND		ND		mg/Kg	☼	NC	25
1,2,3-Trichloropropane	ND		ND		mg/Kg	☼	NC	27
2-Chlorotoluene	ND		ND		mg/Kg	☼	NC	20
1,3,5-Trimethylbenzene	ND		ND		mg/Kg	☼	NC	20
4-Chlorotoluene	ND		ND		mg/Kg	☼	NC	25
tert-Butylbenzene	ND		ND		mg/Kg	☼	NC	16
1,2,4-Trimethylbenzene	ND		ND		mg/Kg	☼	NC	21

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-19244-1 DU
Matrix: Solid
Analysis Batch: 39203

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39168

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
sec-Butylbenzene	ND			ND		mg/Kg	☼			NC	34
1,3-Dichlorobenzene	ND			ND		mg/Kg	☼			NC	18
p-Isopropyltoluene	ND			ND		mg/Kg	☼			NC	26
1,4-Dichlorobenzene	ND			ND		mg/Kg	☼			NC	16
n-Butylbenzene	ND			ND		mg/Kg	☼			NC	20
1,2-Dichlorobenzene	ND			ND		mg/Kg	☼			NC	25
1,2-Dibromo-3-Chloropropane	ND			ND		mg/Kg	☼			NC	40
1,2,4-Trichlorobenzene	20	J		ND		mg/Kg	☼			NC	25
1,2,3-Trichlorobenzene	31	J		ND		mg/Kg	☼			NC	25
Hexachlorobutadiene	23	J		ND		mg/Kg	☼			NC	25
Naphthalene	23	J		ND		mg/Kg	☼			NC	36
Methyl tert-butyl ether	ND			ND		mg/Kg	☼			NC	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*76 - 122*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 129*

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

Lab Sample ID: MB 570-282232/1-A
Matrix: Solid
Analysis Batch: 282755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282232

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.50	0.089	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
1,2-Dichlorobenzene	ND		0.50	0.074	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
1,3-Dichlorobenzene	ND		0.50	0.069	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
1,4-Dichlorobenzene	ND		0.50	0.071	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
1-Methylnaphthalene	ND		0.50	0.036	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,4,5-Trichlorophenol	ND		0.50	0.070	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,4,6-Trichlorophenol	ND		0.50	0.078	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,4-Dichlorophenol	ND		0.50	0.10	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,4-Dimethylphenol	ND		0.50	0.045	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,4-Dinitrophenol	ND		2.0	1.6	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,4-Dinitrotoluene	ND		0.50	0.11	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,6-Dichlorophenol	ND		0.50	0.065	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2,6-Dinitrotoluene	ND		0.50	0.059	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2-Chloronaphthalene	ND		0.50	0.057	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2-Chlorophenol	ND		0.50	0.099	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2-Methylnaphthalene	ND		0.50	0.057	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2-Methylphenol	ND		0.50	0.094	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2-Nitroaniline	ND		0.50	0.065	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
2-Nitrophenol	ND		0.50	0.11	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
3 & 4 Methylphenol	ND		1.0	0.22	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
3,3'-Dichlorobenzidine	ND		2.5	0.81	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
3-Nitroaniline	ND		0.50	0.12	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
4,6-Dinitro-2-methylphenol	ND		2.5	0.97	mg/Kg		11/17/22 06:45	11/18/22 14:11	1

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

Lab Sample ID: MB 570-282232/1-A
Matrix: Solid
Analysis Batch: 282755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282232

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	ND		0.50	0.059	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
4-Chloro-3-methylphenol	ND		0.50	0.084	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
4-Chloroaniline	ND		0.50	0.072	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
4-Chlorophenyl phenyl ether	ND		0.50	0.070	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
4-Nitroaniline	ND		0.50	0.11	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
4-Nitrophenol	ND		0.50	0.17	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Acenaphthene	ND		0.50	0.054	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Acenaphthylene	ND		0.50	0.096	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Aniline	ND		0.50	0.12	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Anthracene	ND		0.50	0.051	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Azobenzene	ND		0.50	0.11	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzidine	ND		5.0	1.4	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzo[a]anthracene	ND		0.50	0.046	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzo[a]pyrene	ND		0.50	0.076	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzo[b]fluoranthene	ND		0.50	0.080	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzo[g,h,i]perylene	ND		0.50	0.083	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzo[k]fluoranthene	ND		0.50	0.094	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzoic acid	ND		2.5	1.6	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Benzyl alcohol	ND		0.50	0.085	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
bis (2-Chloroisopropyl) ether	ND		0.50	0.060	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Bis(2-chloroethoxy)methane	ND		0.50	0.062	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Bis(2-chloroethyl)ether	ND		2.5	0.10	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Bis(2-ethylhexyl) phthalate	ND		0.50	0.25	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Butyl benzyl phthalate	ND		0.50	0.22	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Chrysene	ND		0.50	0.068	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Dibenz(a,h)anthracene	ND		0.50	0.10	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Dibenzofuran	ND		0.50	0.094	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Diethyl phthalate	ND		0.50	0.061	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Dimethyl phthalate	ND		0.50	0.063	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Di-n-butyl phthalate	ND		0.50	0.073	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Di-n-octyl phthalate	ND		0.50	0.36	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Fluoranthene	ND		0.50	0.058	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Fluorene	ND		0.50	0.067	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Hexachlorobutadiene	ND		0.50	0.050	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Hexachlorobenzene	ND		0.50	0.092	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Hexachlorocyclopentadiene	ND		1.5	0.38	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Hexachloroethane	ND		0.50	0.11	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.090	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Isophorone	ND		0.50	0.068	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Naphthalene	ND		0.50	0.058	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Nitrobenzene	ND		2.0	0.092	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
N-Nitrosodimethylamine	ND		0.50	0.077	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
N-Nitrosodi-n-propylamine	ND		0.50	0.067	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
N-Nitrosodiphenylamine	ND		0.50	0.095	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Pentachlorophenol	ND		2.5	1.0	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Phenanthrene	ND		0.50	0.061	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Phenol	ND		0.50	0.095	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Pyrene	ND		0.50	0.075	mg/Kg		11/17/22 06:45	11/18/22 14:11	1
Pyridine	ND		0.50	0.082	mg/Kg		11/17/22 06:45	11/18/22 14:11	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		10 - 134	11/17/22 06:45	11/18/22 14:11	1
2-Fluorobiphenyl (Surr)	88		14 - 142	11/17/22 06:45	11/18/22 14:11	1
2-Fluorophenol (Surr)	90		10 - 123	11/17/22 06:45	11/18/22 14:11	1
Nitrobenzene-d5 (Surr)	71		10 - 129	11/17/22 06:45	11/18/22 14:11	1
Phenol-d6 (Surr)	85		10 - 120	11/17/22 06:45	11/18/22 14:11	1
p-Terphenyl-d14 (Surr)	81		31 - 139	11/17/22 06:45	11/18/22 14:11	1

Lab Sample ID: LCS 570-282232/2-A
Matrix: Solid
Analysis Batch: 282755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 282232

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	5.00	4.03		mg/Kg		81	59 - 120
1,4-Dichlorobenzene	5.00	4.34		mg/Kg		87	64 - 120
2,4-Dinitrotoluene	5.00	4.27		mg/Kg		85	64 - 120
2-Chlorophenol	5.00	3.97		mg/Kg		79	65 - 121
4-Chloro-3-methylphenol	5.00	3.23		mg/Kg		65	54 - 120
4-Nitrophenol	5.00	2.94		mg/Kg		59	52 - 121
Acenaphthene	5.00	3.78		mg/Kg		76	71 - 120
Acenaphthylene	5.00	4.53		mg/Kg		91	77 - 125
Butyl benzyl phthalate	5.00	3.29		mg/Kg		66	58 - 120
Dimethyl phthalate	5.00	4.04		mg/Kg		81	58 - 120
Fluorene	5.00	3.79		mg/Kg		76	72 - 120
Naphthalene	5.00	3.50		mg/Kg		70	60 - 120
N-Nitrosodi-n-propylamine	5.00	3.50		mg/Kg		70	61 - 123
Pentachlorophenol	5.00	3.34		mg/Kg		67	27 - 120
Phenol	5.00	3.68		mg/Kg		74	61 - 127
Pyrene	5.00	3.68		mg/Kg		74	70 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	98		10 - 134
2-Fluorobiphenyl (Surr)	89		14 - 142
2-Fluorophenol (Surr)	90		10 - 123
Nitrobenzene-d5 (Surr)	64		10 - 129
Phenol-d6 (Surr)	88		10 - 120
p-Terphenyl-d14 (Surr)	83		31 - 139

Lab Sample ID: LCSD 570-282232/3-A
Matrix: Solid
Analysis Batch: 282755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 282232

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	5.00	4.27		mg/Kg		85	59 - 120	6	20
1,4-Dichlorobenzene	5.00	4.52		mg/Kg		90	64 - 120	4	20
2,4-Dinitrotoluene	5.00	4.08		mg/Kg		82	64 - 120	5	20
2-Chlorophenol	5.00	4.14		mg/Kg		83	65 - 121	4	20
4-Chloro-3-methylphenol	5.00	3.22		mg/Kg		64	54 - 120	0	20
4-Nitrophenol	5.00	2.76		mg/Kg		55	52 - 121	6	20
Acenaphthene	5.00	3.93		mg/Kg		79	71 - 120	4	20
Acenaphthylene	5.00	4.63		mg/Kg		93	77 - 125	2	20
Butyl benzyl phthalate	5.00	3.47		mg/Kg		69	58 - 120	5	20

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

Lab Sample ID: LCSD 570-282232/3-A
Matrix: Solid
Analysis Batch: 282755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 282232

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dimethyl phthalate			5.00	4.03		mg/Kg		81	58 - 120	0	20
Fluorene			5.00	3.77		mg/Kg		75	72 - 120	1	20
Naphthalene			5.00	3.70		mg/Kg		74	60 - 120	5	20
N-Nitrosodi-n-propylamine			5.00	3.57		mg/Kg		71	61 - 123	2	20
Pentachlorophenol			5.00	3.53		mg/Kg		71	27 - 120	5	20
Phenol			5.00	3.81		mg/Kg		76	61 - 127	3	20
Pyrene			5.00	4.02		mg/Kg		80	70 - 124	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*102*		*10 - 134*
2-Fluorobiphenyl (Surr)	*91*		*14 - 142*
2-Fluorophenol (Surr)	*96*		*10 - 123*
Nitrobenzene-d5 (Surr)	*66*		*10 - 129*
Phenol-d6 (Surr)	*90*		*10 - 120*
p-Terphenyl-d14 (Surr)	*88*		*31 - 139*

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

Lab Sample ID: MB 590-39165/1-A
Matrix: Solid
Analysis Batch: 39163

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39165

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.080	0.035	ug/Kg		11/21/22 14:47	11/21/22 21:45	1
1,2-Dibromo-3-Chloropropane	ND		0.080	0.030	ug/Kg		11/21/22 14:47	11/21/22 21:45	1
1,2,3-Trichloropropane	ND		0.080	0.020	ug/Kg		11/21/22 14:47	11/21/22 21:45	1

Lab Sample ID: LCS 590-39165/2-A
Matrix: Solid
Analysis Batch: 39163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39165

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)			1.00	1.05		ug/Kg		105	60 - 140
1,2-Dibromo-3-Chloropropane			1.00	1.05		ug/Kg		105	60 - 140
1,2,3-Trichloropropane			1.00	1.02		ug/Kg		102	60 - 140

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39163

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39165

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND	F1 F2	1.01	0.0431	J F1	ug/Kg	☼	4	60 - 140
1,2-Dibromo-3-Chloropropane	ND	F1	1.01	0.0343	J F1	ug/Kg	☼	3	60 - 140
1,2,3-Trichloropropane	ND	F1	1.01	1.79	F1	ug/Kg	☼	178	60 - 140

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

Lab Sample ID: 590-19244-1 MSD
Matrix: Solid
Analysis Batch: 39163

Client Sample ID: GAC-Drum-1-11142022
Prep Type: Total/NA
Prep Batch: 39165

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND	F1 F2	0.985	0.0537	J F1 F2	ug/Kg	☼	5	60 - 140	22	20
1,2-Dibromo-3-Chloropropane	ND	F1	0.985	ND	F1	ug/Kg	☼	0	60 - 140	NC	20
1,2,3-Trichloropropane	ND	F1	0.985	2.01	F1	ug/Kg	☼	204	60 - 140	11	20

Method: 6010D - Metals (ICP)

Lab Sample ID: LCS 590-39265/1-A
Matrix: Solid
Analysis Batch: 39269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	1.71		mg/L		86	80 - 120
Barium	2.00	1.63		mg/L		82	80 - 120
Cadmium	1.00	0.872		mg/L		87	80 - 120
Chromium	1.00	0.864		mg/L		86	80 - 120
Lead	1.00	0.904		mg/L		90	80 - 120
Selenium	2.00	1.74		mg/L		87	80 - 120

Lab Sample ID: LCS 590-39265/1-A
Matrix: Solid
Analysis Batch: 39285

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0846		mg/L		85	80 - 120

Lab Sample ID: LB 590-39242/1-B
Matrix: Solid
Analysis Batch: 39269

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 39265

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.025	0.010	mg/L		11/30/22 14:45	11/30/22 17:17	1
Barium	0.00390	J	0.025	0.0014	mg/L		11/30/22 14:45	11/30/22 17:17	1
Cadmium	ND		0.025	0.0012	mg/L		11/30/22 14:45	11/30/22 17:17	1
Chromium	ND		0.025	0.0017	mg/L		11/30/22 14:45	11/30/22 17:17	1
Lead	ND		0.060	0.0051	mg/L		11/30/22 14:45	11/30/22 17:17	1
Selenium	ND		0.10	0.049	mg/L		11/30/22 14:45	11/30/22 17:17	1

Lab Sample ID: LB 590-39242/1-B
Matrix: Solid
Analysis Batch: 39285

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 39265

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.025	0.0025	mg/L		11/30/22 14:45	12/01/22 12:23	1

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39269

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.013	J	2.00	1.79		mg/L		89	75 - 125

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

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39269

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.27	B	2.00	1.94		mg/L		83	75 - 125
Cadmium	ND		1.00	0.867		mg/L		87	75 - 125
Chromium	ND		1.00	0.849		mg/L		85	75 - 125
Lead	ND		1.00	0.844		mg/L		84	75 - 125
Selenium	ND		2.00	1.84		mg/L		92	80 - 120

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39285

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0819		mg/L		82	75 - 125

Lab Sample ID: 590-19244-1 MSD
Matrix: Solid
Analysis Batch: 39269

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.013	J	2.00	1.82		mg/L		90	75 - 125	2	20
Barium	0.27	B	2.00	1.95		mg/L		84	75 - 125	0	20
Cadmium	ND		1.00	0.877		mg/L		88	75 - 125	1	20
Chromium	ND		1.00	0.862		mg/L		86	75 - 125	2	20
Lead	ND		1.00	0.855		mg/L		86	75 - 125	1	20
Selenium	ND		2.00	1.88		mg/L		94	80 - 120	2	20

Lab Sample ID: 590-19244-1 MSD
Matrix: Solid
Analysis Batch: 39285

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0824		mg/L		82	75 - 125	1	20

Lab Sample ID: 590-19244-1 DU
Matrix: Solid
Analysis Batch: 39269

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.013	J	0.0153	J	mg/L		13	20
Barium	0.27	B	0.281		mg/L		4	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20

Lab Sample ID: 590-19244-1 DU
Matrix: Solid
Analysis Batch: 39285

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39265

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	ND		ND		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 590-39266/8-A
Matrix: Solid
Analysis Batch: 39274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39266

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hg			2.00	1.94		ug/L		97	80 - 120		

Lab Sample ID: LB 590-39242/1-C
Matrix: Solid
Analysis Batch: 39274

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 39266

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	0.090	ug/L		11/30/22 14:47	11/30/22 18:30	1

Lab Sample ID: 590-19244-1 MS
Matrix: Solid
Analysis Batch: 39274

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Hg	ND		2.00	1.97		ug/L		99	80 - 120		

Lab Sample ID: 590-19244-1 MSD
Matrix: Solid
Analysis Batch: 39274

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hg	ND		2.00	1.69		ug/L		85	80 - 120	15	20

Lab Sample ID: 590-19244-1 DU
Matrix: Solid
Analysis Batch: 39274

Client Sample ID: GAC-Drum-1-11142022
Prep Type: TCLP
Prep Batch: 39266

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Hg	ND			ND		ug/L				NC	20

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Client Sample ID: GAC-Drum-1-11142022
Date Collected: 11/14/22 12:10
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.92 g	2000.15 mL	39242	11/29/22 18:58	AMB	EET SPK
TCLP	Prep	3010A			50 mL	50 mL	39265	11/30/22 14:45	AMB	EET SPK
TCLP	Analysis	6010D		1			39269	11/30/22 17:21	AMB	EET SPK
TCLP	Leach	1311			100.92 g	2000.15 mL	39242	11/29/22 18:58	AMB	EET SPK
TCLP	Prep	3010A			50 mL	50 mL	39265	11/30/22 14:45	AMB	EET SPK
TCLP	Analysis	6010D		1			39285	12/01/22 12:27	AMB	EET SPK
TCLP	Leach	1311			100.92 g	2000.15 mL	39242	11/29/22 18:58	AMB	EET SPK
TCLP	Prep	7470A			50 mL	50 mL	39266	11/30/22 14:47	AMB	EET SPK
TCLP	Analysis	7470A		1			39274	11/30/22 18:32	AMB	EET SPK
Total/NA	Analysis	Moisture		1			39146	11/18/22 14:52	M1V	EET SPK

Client Sample ID: GAC-Drum-1-11142022
Date Collected: 11/14/22 12:10
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-1
Matrix: Solid
Percent Solids: 98.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2.737 g	10 mL	39168	11/21/22 16:12	JSP	EET SPK
Total/NA	Analysis	8260D		100	0.86 mL	43 mL	39203	11/23/22 13:25	JSP	EET SPK
Total/NA	Prep	3546			1.03 g	2 mL	282232	11/17/22 06:45	VB5S	EET CAL 4
Total/NA	Analysis	8270C		1	1 mL	1 mL	282755	11/18/22 20:58	ULLI	EET CAL 4
Total/NA	Prep	8011			10.02 g	2 mL	39165	11/21/22 14:47	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	39163	11/21/22 22:17	NMI	EET SPK

Client Sample ID: GAC-Drum-2-11142022
Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.81 g	2000.23 mL	39242	11/29/22 18:58	AMB	EET SPK
TCLP	Prep	3010A			50 mL	50 mL	39265	11/30/22 14:45	AMB	EET SPK
TCLP	Analysis	6010D		1			39269	11/30/22 17:46	AMB	EET SPK
TCLP	Leach	1311			100.81 g	2000.23 mL	39242	11/29/22 18:58	AMB	EET SPK
TCLP	Prep	3010A			50 mL	50 mL	39265	11/30/22 14:45	AMB	EET SPK
TCLP	Analysis	6010D		1			39285	12/01/22 17:14	AMB	EET SPK
TCLP	Leach	1311			100.81 g	2000.23 mL	39242	11/29/22 18:58	AMB	EET SPK
TCLP	Prep	7470A			50 mL	50 mL	39266	11/30/22 14:47	AMB	EET SPK
TCLP	Analysis	7470A		1			39274	11/30/22 18:42	AMB	EET SPK
Total/NA	Analysis	Moisture		1			39146	11/18/22 14:52	M1V	EET SPK

Client Sample ID: GAC-Drum-2-11142022
Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2
Matrix: Solid
Percent Solids: 98.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2.475 g	10 mL	39168	11/21/22 16:12	JSP	EET SPK
Total/NA	Analysis	8260D		100	0.86 mL	43 mL	39203	11/23/22 14:52	JSP	EET SPK

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Client Sample ID: GAC-Drum-2-11142022

Date Collected: 11/14/22 12:20
Date Received: 11/14/22 16:16

Lab Sample ID: 590-19244-2

Matrix: Solid
Percent Solids: 98.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			1.08 g	2 mL	282232	11/17/22 06:45	VB5S	EET CAL 4
Total/NA	Analysis	8270C		1	1 mL	1 mL	282755	11/18/22 21:16	ULLI	EET CAL 4
Total/NA	Prep	8011			10.10 g	2 mL	39165	11/21/22 14:47	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	39163	11/21/22 23:05	NMI	EET SPK

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 590-19244-1
Project/Site: Simplot Warden

Laboratory: Eurofins Spokane

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8011	8011	Solid	1,2,3-Trichloropropane
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	07-31-23
California	SCAQMD LAP	17LA0919	12-01-22
California	State	3082	07-31-23
Nevada	State	CA00111	08-01-23
Oregon	NELAP	4175	02-02-23
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-12-22 *

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

Method Summary

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19244-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET SPK
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	EET CAL 4
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET SPK
6010D	Metals (ICP)	SW846	EET SPK
7470A	Mercury (CVAA)	SW846	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
1311	TCLP Extraction	SW846	EET SPK
3010A	Preparation, Total Metals	SW846	EET SPK
3546	Microwave Extraction	SW846	EET CAL 4
5035	Closed System Purge and Trap	SW846	EET SPK
7470A	Preparation, Mercury	SW846	EET SPK
8011	Microextraction	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Jered Newcomb / Daniel Brandr	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No:
Client Contact: Jered Newcomb	Phone: 509-899-4371	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: HDR Inc	PWSID:			Job #:
Address: 835 N Post St. Ste. 101	Due Date Requested:			
City: Spokane	TAT Requested (days): Standard			
State, Zip: WA, 99202	Compliance Project: Δ Yes Δ No			
Phone: 509-899-4371	PO #: Purchase Order Requested			
Email: jered.newcomb@hdrinc.com	WO #:			
Project Name: Simplot Warden	Project #: 10331653			
Site: Warden WA	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	EPA Method 8011 (fumigants including EDB)	EPA Method 8260B VOCs	EPA Method 8270 Semi-VOCs	EPA Method 6010 TCLP RCRA 8	Percent Moisture/Total Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
GAC-Drum-1 1114 2022	11/14/2022	1210	G	S	N		X	X	X	X	X		
GAC-Drum-2- 1114 2022	11/14/2022	1220	G	S	N		X	X	X	X	X		

590-19244 Chain of Custody

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

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

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

Special Instructions/QC Requirements.

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/14/2022 15:20	HDR		11/14/22 15:20	HDR
2		11/14/22 15:55	HDR		11/14/22 15.55	EETORO
3		Date/Time:	Company		Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks: 5.0 8.1 IR005

12/2/2022

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

Chain of Custody Record

eurofins

Loc: 590
19244

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-7335 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Washington		Job #: 590-19244-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 11/29/2022			
City: Tustin	TAT Requested (days):			
State Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: Simplot Warden	Project #: 59002373			
Site:	SSOW#:			

Analysis Requested

Preservation Code:
A HCL
B NaOH
C Zn Acetate
D Nitric Acid
E NaHSO4
F MeOH
G Amchlor
H - Ascorbic Acid
I Ice
J DI Water
K EDTA
L EDA
Other:

590-19244 Chain of Custody

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270C/3546 Routine SVOA	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GAC-Drum-1-11142022 (590-19244-1)	11/14/22	12 10 Pacific		Solid			X	1	
GAC-Drum-2-11142022 (590-19244-2)	11/14/22	12.20 Pacific		Solid			X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/15/22 1400	EC TSP		11/16/22 1000	EC
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No :	Cooler Temperature(s) °C and Other Remarks
		2.6/2.4 SC12

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-19244-1

Login Number: 19244
List Number: 1
Creator: Fettig, Riley

List Source: Eurofins Spokane

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

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-19244-1

Login Number: 19244
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/16/22 11:53 AM

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	2071552
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	2.4
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	Received project as a subcontract.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

IDW Water Samples

This table summarizes the results from IDW Water samples collected during SVE Operations.

IDW Water Sample Summary

IDW Water Sample Results (Analyzed for EDB Only)							
Sample Name	**Collection Date**	**Results Received**	**EDB Result (µg/Kg)**	**Qualifier**	**MDL (µg/Kg)**	**Batch/Sample Notes**	**Eurofins Job Number**
IDW-Drum-1-10052022	10/5/2022	10/13/2022	ND	F1	0.039	Soil samples. 2 Revisions on lab report r.e. sample name and COC revision.	590-18870-1
IDW-Drum-2-10052023			ND	None	0.04		
IDW-Drum-3-10052024			ND	None	0.039		
IDW-Drum-4-10052025			ND	None	0.036		
IDW-Drum-5-10052025			ND	None	0.036		
IDW-Water-Drum-1-10212022	10/21/2022	10/27/2022	ND	None	0.0025	Groundwater purge drums from previous investigation that have been stored on site.	590-19044-1
IDW-Water-Drum-2-10212022			ND	None	0.0025		
IDW-Water-Drum-3-10212022			0.0039	J	0.0025		
IDW-Water-Drum-4-10212022			ND	None	0.0025		
IDW-Water-Drum-5-10212022			ND	None	0.0025		
IDW-Water-Drum-6-10212022			ND	None	0.0025		

IDW Water Sample Results (Analyzed for VOCs)							
Lab Sample ID	**Client Sample ID**	**Analysis Method**	**CAS**	**Analyte**	**Result**	**Unit**	**Flag**
590-19192-2	IDW-Drum-1-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	26	ug/L	
590-19192-2	IDW-Drum-1-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	25	ug/L	
590-19192-2	IDW-Drum-1-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	
590-19192-2	IDW-Drum-1-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	
590-19192-2	IDW-Drum-1-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	180	ug/L	
590-19192-2	IDW-Drum-1-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	71	ug/L	
590-19192-2	IDW-Drum-1-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	89	ug/L	
590-19192-2	IDW-Drum-1-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	71	ug/L	
590-19192-2	IDW-Drum-1-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	71	ug/L	
590-19192-2	IDW-Drum-1-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	75	ug/L	
590-19192-2	IDW-Drum-1-11072022	SM 4500 H+ B		pH	7.6	SU	HF
590-19192-3	IDW-Drum-2-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	26	ug/L	
590-19192-3	IDW-Drum-2-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	24	ug/L	
590-19192-3	IDW-Drum-2-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	25	ug/L	
590-19192-3	IDW-Drum-2-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	
590-19192-3	IDW-Drum-2-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	180	ug/L	
590-19192-3	IDW-Drum-2-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	74	ug/L	
590-19192-3	IDW-Drum-2-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	95	ug/L	
590-19192-3	IDW-Drum-2-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	78	ug/L	
590-19192-3	IDW-Drum-2-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	68	ug/L	
590-19192-3	IDW-Drum-2-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	85	ug/L	
590-19192-3	IDW-Drum-2-11072022	SM 4500 H+ B		pH	8	SU	HF
590-19192-4	IDW-Drum-3-11072022	8011	106-93-4	1,2-Dibromoethane (EDB)	0.0037	ug/L	J
590-19192-4	IDW-Drum-3-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	26	ug/L	
590-19192-4	IDW-Drum-3-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	25	ug/L	
590-19192-4	IDW-Drum-3-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	

IDW Water Sample Summary

IDW Water Sample Results (Analyzed for VOCs)							
Lab Sample ID	**Client Sample ID**	**Analysis Method**	**CAS**	**Analyte**	**Result**	**Unit**	**Flag**
590-19192-4	IDW-Drum-3-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	
590-19192-4	IDW-Drum-3-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	190	ug/L	
590-19192-4	IDW-Drum-3-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	66	ug/L	
590-19192-4	IDW-Drum-3-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	94	ug/L	
590-19192-4	IDW-Drum-3-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	69	ug/L	
590-19192-4	IDW-Drum-3-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	73	ug/L	
590-19192-4	IDW-Drum-3-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	81	ug/L	
590-19192-4	IDW-Drum-3-11072022	SM 4500 H+ B		pH	8.3	SU	HF
590-19192-5	IDW-Drum-4-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	27	ug/L	
590-19192-5	IDW-Drum-4-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	24	ug/L	
590-19192-5	IDW-Drum-4-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	
590-19192-5	IDW-Drum-4-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	
590-19192-5	IDW-Drum-4-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	160	ug/L	
590-19192-5	IDW-Drum-4-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	77	ug/L	
590-19192-5	IDW-Drum-4-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	87	ug/L	
590-19192-5	IDW-Drum-4-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	83	ug/L	
590-19192-5	IDW-Drum-4-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	60	ug/L	
590-19192-5	IDW-Drum-4-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	84	ug/L	
590-19192-5	IDW-Drum-4-11072022	SM 4500 H+ B		pH	6.9	SU	HF
590-19192-6	IDW-Drum-5-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	27	ug/L	
590-19192-6	IDW-Drum-5-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	25	ug/L	
590-19192-6	IDW-Drum-5-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	
590-19192-6	IDW-Drum-5-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	27	ug/L	
590-19192-6	IDW-Drum-5-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	160	ug/L	
590-19192-6	IDW-Drum-5-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	79	ug/L	
590-19192-6	IDW-Drum-5-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	85	ug/L	
590-19192-6	IDW-Drum-5-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	75	ug/L	
590-19192-6	IDW-Drum-5-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	57	ug/L	
590-19192-6	IDW-Drum-5-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	83	ug/L	
590-19192-6	IDW-Drum-5-11072022	SM 4500 H+ B		pH	7.6	SU	HF
590-19192-7	IDW-Drum-6-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	27	ug/L	
590-19192-7	IDW-Drum-6-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	25	ug/L	
590-19192-7	IDW-Drum-6-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	
590-19192-7	IDW-Drum-6-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	
590-19192-7	IDW-Drum-6-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	160	ug/L	
590-19192-7	IDW-Drum-6-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	79	ug/L	
590-19192-7	IDW-Drum-6-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	91	ug/L	
590-19192-7	IDW-Drum-6-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	79	ug/L	
590-19192-7	IDW-Drum-6-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	59	ug/L	
590-19192-7	IDW-Drum-6-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	86	ug/L	

IDW Water Sample Summary

IDW Water Sample Results (Analyzed for VOCs)							
Lab Sample ID	**Client Sample ID**	**Analysis Method**	**CAS**	**Analyte**	**Result**	**Unit**	**Flag**
590-19192-7	IDW-Drum-6-11072022	SM 4500 H+ B		pH	8.2	SU	HF
590-19192-1	TOTE-Water-11072022	8011	96-18-4	1,2,3-Trichloropropane	0.19	ug/L	
590-19192-1	TOTE-Water-11072022	8260D	74-87-3	Chloromethane	0.82	ug/L	J
590-19192-1	TOTE-Water-11072022	8260D	91-20-3	Naphthalene	0.63	ug/L	J B
590-19192-1	TOTE-Water-11072022	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	26	ug/L	
590-19192-1	TOTE-Water-11072022	8260D	460-00-4	4-Bromofluorobenzene (Surr)	25	ug/L	
590-19192-1	TOTE-Water-11072022	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	
590-19192-1	TOTE-Water-11072022	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	
590-19192-1	TOTE-Water-11072022	8270E	118-79-6	2,4,6-Tribromophenol (Surr)	120	ug/L	
590-19192-1	TOTE-Water-11072022	8270E	321-60-8	2-Fluorobiphenyl (Surr)	65	ug/L	
590-19192-1	TOTE-Water-11072022	8270E	367-12-4	2-Fluorophenol (Surr)	68	ug/L	
590-19192-1	TOTE-Water-11072022	8270E	4165-60-0	Nitrobenzene-d5 (Surr)	62	ug/L	
590-19192-1	TOTE-Water-11072022	8270E	4165-62-2	Phenol-d5 (Surr)	56	ug/L	
590-19192-1	TOTE-Water-11072022	8270E	1718-51-0	p-Terphenyl-d14 (Surr)	41	ug/L	
590-19192-1	TOTE-Water-11072022	SM 4500 H+ B		pH	7.3	SU	HF
590-19192-8	Trip Blank	8260D	17060-07-0	1,2-Dichloroethane-d4 (Surr)	27	ug/L	
590-19192-8	Trip Blank	8260D	460-00-4	4-Bromofluorobenzene (Surr)	24	ug/L	
590-19192-8	Trip Blank	8260D	1868-53-7	Dibromofluoromethane (Surr)	26	ug/L	
590-19192-8	Trip Blank	8260D	2037-26-5	Toluene-d8 (Surr)	26	ug/L	

Note: This table summarizes detections in IDW samples. Non-detect results are not included. Please refer to the laboratory report for full list of analytes and results.

Qualifiers: HF - Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request; J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value; B - Compound was found in the blank and sample.

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 590-18870-1
Client Project/Site: Simplot Warden

For:
HDR Inc
1401 E. Trent Ave
Suite 101
Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by:
10/10/2022 4:37:53 PM

Randee Arrington, Lab Director
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Table of Contents

Case Narrative

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-18870-1

Job ID: 590-18870-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 10/5/2022 2:00 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 2.8º C.

GC Semi VOA
Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-38471 and analytical batch 590-38472 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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.

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

Sample Summary

Client: HDR Inc
Job ID: 590-18870-1
Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18870-1	IDW-Drum-1-10052022	Solid	10/05/22 11:17	10/05/22 14:00
590-18870-2	IDW-Drum-2-10052022	Solid	10/05/22 11:19	10/05/22 14:00
590-18870-3	IDW-Drum-3-10052022	Solid	10/05/22 11:21	10/05/22 14:00
590-18870-4	IDW-Drum-4-10052022	Solid	10/05/22 11:23	10/05/22 14:00
590-18870-5	IDW-Drum-4-10052022	Solid	10/05/22 11:26	10/05/22 14:00
590-18870-6	Trip Blank	Solid	10/05/22 11:00	10/05/22 14:00

Definitions/Glossary

Client: HDR Inc
Job ID: 590-18870-1
Project/Site: Simplot Warden

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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: IDW-Drum-1-10052022 — **Lab Sample ID: 590-18870-1**
Date Collected: 10/05/22 11:17 — **Matrix: Solid**
Date Received: 10/05/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	10.2		0.01	0.01	%			10/10/22 09:14	1
Percent Solids (EPA Moisture)	89.8		0.01	0.01	%			10/10/22 09:14	1

Client Sample ID: IDW-Drum-1-10052022 — **Lab Sample ID: 590-18870-1**
Date Collected: 10/05/22 11:17 — **Matrix: Solid**
Date Received: 10/05/22 14:00 — **Percent Solids: 89.8**

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	F1	0.055	0.039	ug/Kg	☼	10/10/22 08:02	10/10/22 10:15	1

Client Sample ID: IDW-Drum-2-10052022 — **Lab Sample ID: 590-18870-2**
Date Collected: 10/05/22 11:19 — **Matrix: Solid**
Date Received: 10/05/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	15.2		0.01	0.01	%			10/10/22 09:14	1
Percent Solids (EPA Moisture)	84.8		0.01	0.01	%			10/10/22 09:14	1

Client Sample ID: IDW-Drum-2-10052022 — **Lab Sample ID: 590-18870-2**
Date Collected: 10/05/22 11:19 — **Matrix: Solid**
Date Received: 10/05/22 14:00 — **Percent Solids: 84.8**

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.057	0.040	ug/Kg	☼	10/10/22 08:02	10/10/22 11:02	1

Client Sample ID: IDW-Drum-3-10052022 — **Lab Sample ID: 590-18870-3**
Date Collected: 10/05/22 11:21 — **Matrix: Solid**
Date Received: 10/05/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	12.4		0.01	0.01	%			10/10/22 09:14	1
Percent Solids (EPA Moisture)	87.6		0.01	0.01	%			10/10/22 09:14	1

Client Sample ID: IDW-Drum-3-10052022 — **Lab Sample ID: 590-18870-3**
Date Collected: 10/05/22 11:21 — **Matrix: Solid**
Date Received: 10/05/22 14:00 — **Percent Solids: 87.6**

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.055	0.039	ug/Kg	☼	10/10/22 08:02	10/10/22 11:18	1

Client Sample ID: IDW-Drum-4-10052022 — **Lab Sample ID: 590-18870-4**
Date Collected: 10/05/22 11:23 — **Matrix: Solid**
Date Received: 10/05/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	5.6		0.01	0.01	%			10/10/22 09:14	1

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-4
Date Collected: 10/05/22 11:23
Matrix: Solid
Date Received: 10/05/22 14:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids (EPA Moisture)	**94.4**		0.01	0.01	%			10/10/22 09:14	1

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-4
Date Collected: 10/05/22 11:23
Matrix: Solid
Date Received: 10/05/22 14:00
Percent Solids: 94.4

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.052	0.036	ug/Kg	☼	10/10/22 08:02	10/10/22 11:34	1

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-5
Date Collected: 10/05/22 11:26
Matrix: Solid
Date Received: 10/05/22 14:00

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**5.8**		0.01	0.01	%			10/10/22 09:14	1
Percent Solids (EPA Moisture)	**94.2**		0.01	0.01	%			10/10/22 09:14	1

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-5
Date Collected: 10/05/22 11:26
Matrix: Solid
Date Received: 10/05/22 14:00
Percent Solids: 94.2

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.051	0.036	ug/Kg	☼	10/10/22 08:02	10/10/22 11:50	1

Client Sample ID: Trip Blank
Lab Sample ID: 590-18870-6
Date Collected: 10/05/22 11:00
Matrix: Solid
Date Received: 10/05/22 14:00

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.049	0.034	ug/Kg		10/10/22 08:02	10/10/22 12:06	1

QC Sample Results

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-18870-1

Method: 8011 - EDB

Lab Sample ID: MB 590-38471/2-A
Matrix: Solid
Analysis Batch: 38472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		10/10/22 08:02	10/10/22 09:43	1

Lab Sample ID: LCS 590-38471/3-A
Matrix: Solid
Analysis Batch: 38472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	0.896		ug/Kg		90	60 - 140

Lab Sample ID: 590-18870-1 MS
Matrix: Solid
Analysis Batch: 38472

Client Sample ID: IDW-Drum-1-10052022
Prep Type: Total/NA
Prep Batch: 38471

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND	F1	1.11	0.625	F1	ug/Kg	☼	56	60 - 140

Lab Sample ID: 590-18870-1 MSD
Matrix: Solid
Analysis Batch: 38472

Client Sample ID: IDW-Drum-1-10052022
Prep Type: Total/NA
Prep Batch: 38471

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND	F1	1.08	0.706		ug/Kg	☼	66	60 - 140	12	20

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-18870-1

Client Sample ID: IDW-Drum-1-10052022 — **Lab Sample ID: 590-18870-1**
Date Collected: 10/05/22 11:17 — **Matrix: Solid**
Date Received: 10/05/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38475	10/10/22 09:14	NMI	EET SPK

Client Sample ID: IDW-Drum-1-10052022 — **Lab Sample ID: 590-18870-1**
Date Collected: 10/05/22 11:17 — **Matrix: Solid**
Date Received: 10/05/22 14:00 — **Percent Solids: 89.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.12 g	2 mL	38471	10/10/22 08:02	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38472	10/10/22 10:15	NMI	EET SPK

Client Sample ID: IDW-Drum-2-10052022 — **Lab Sample ID: 590-18870-2**
Date Collected: 10/05/22 11:19 — **Matrix: Solid**
Date Received: 10/05/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38475	10/10/22 09:14	NMI	EET SPK

Client Sample ID: IDW-Drum-2-10052022 — **Lab Sample ID: 590-18870-2**
Date Collected: 10/05/22 11:19 — **Matrix: Solid**
Date Received: 10/05/22 14:00 — **Percent Solids: 84.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.37 g	2 mL	38471	10/10/22 08:02	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38472	10/10/22 11:02	NMI	EET SPK

Client Sample ID: IDW-Drum-3-10052022 — **Lab Sample ID: 590-18870-3**
Date Collected: 10/05/22 11:21 — **Matrix: Solid**
Date Received: 10/05/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38475	10/10/22 09:14	NMI	EET SPK

Client Sample ID: IDW-Drum-3-10052022 — **Lab Sample ID: 590-18870-3**
Date Collected: 10/05/22 11:21 — **Matrix: Solid**
Date Received: 10/05/22 14:00 — **Percent Solids: 87.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.33 g	2 mL	38471	10/10/22 08:02	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38472	10/10/22 11:18	NMI	EET SPK

Client Sample ID: IDW-Drum-4-10052022 — **Lab Sample ID: 590-18870-4**
Date Collected: 10/05/22 11:23 — **Matrix: Solid**
Date Received: 10/05/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38475	10/10/22 09:14	NMI	EET SPK

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-18870-1

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-4
Date Collected: 10/05/22 11:23
Matrix: Solid
Date Received: 10/05/22 14:00
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.23 g	2 mL	38471	10/10/22 08:02	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38472	10/10/22 11:34	NMI	EET SPK

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-5
Date Collected: 10/05/22 11:26
Matrix: Solid
Date Received: 10/05/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38475	10/10/22 09:14	NMI	EET SPK

Client Sample ID: IDW-Drum-4-10052022
Lab Sample ID: 590-18870-5
Date Collected: 10/05/22 11:26
Matrix: Solid
Date Received: 10/05/22 14:00
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.40 g	2 mL	38471	10/10/22 08:02	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38472	10/10/22 11:50	NMI	EET SPK

Client Sample ID: Trip Blank
Lab Sample ID: 590-18870-6
Date Collected: 10/05/22 11:00
Matrix: Solid
Date Received: 10/05/22 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.22 g	2 mL	38471	10/10/22 08:02	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38472	10/10/22 12:06	NMI	EET SPK

Laboratory References:

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 590-18870-1
Project/Site: Simplot Warden

Laboratory: Eurofins Spokane

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: HDR Inc
Job ID: 590-18870-1
Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Jered Newcomb, JAN	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-7430-2162.1
Client Contact: Jered Newcomb	Phone: 509-899-4371	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: WA	Page: Page 1 of 1
Company: HDR Inc	PWSID:			Job #:
Address: 835 N Post St. Ste. 101	Due Date Requested			
City: Spokane	TAT Requested (days): ~~24 hour~~ Standard			
State, Zip: WA, 99202	Compliance Project: ∆ Yes ∆ No			
Phone: 509-899-4371	PO #: Purchase Order Requested			
Email: jered.newcomb@hdrinc.com	WO #:			
Project Name: Simplot Warden	Project #: 59002373			
Site: Warden WA	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011 EDB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
IDW-Drum-1-10052022	10/5/22	1117	G	S	N	N	X	1	
IDW-Drum-2-10052022		1119					X	1	
IDW-Drum-3-10052022		1121					X	1	
IDW-Drum-4-10052022		1123					X	1	
IDW-Drum-5-10052022	↓	1126	↓	↓	↓	↓	X	1	
Trip Blank	—	—	—	S	N	N	X	1	

590-18870 Chain of Custody

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

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

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

Special Instructions/QC Requirements.

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Jered Newcomb	10/5/22 1406			10/6/22 1400	STASpokane
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.7°C 2.8°C IR006

10/10/2022

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18870-1

Login Number: 18870

List Source: Eurofins Spokane

List Number: 1

Creator: Arrington, Randee E

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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 590-19044-1
Client Project/Site: Simplot Warden

For:
HDR Inc
1401 E. Trent Ave
Suite 101
Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by:
10/27/2022 3:12:50 PM

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

Table of Contents

Case Narrative

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Job ID: 590-19044-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 10/21/2022 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.2º C.

GC Semi VOA
Method 8011: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 590-38773 and analytical batch 590-38772 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

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

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

Sample Summary

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-19044-1	IDW-Water-Drum-1-10212022	Water	10/21/22 11:50	10/21/22 15:30
590-19044-2	IDW-Water-Drum-2-10212022	Water	10/21/22 11:55	10/21/22 15:30
590-19044-3	IDW-Water-Drum-3-10212022	Water	10/21/22 12:20	10/21/22 15:30
590-19044-4	IDW-Water-Drum-4-10212022	Water	10/21/22 12:35	10/21/22 15:30
590-19044-5	IDW-Water-Drum-5-10212022	Water	10/21/22 12:45	10/21/22 15:30
590-19044-6	IDW-Water-Drum-6-10212022	Water	10/21/22 13:00	10/21/22 15:30
590-19044-7	Trip Blanks	Water	10/21/22 00:00	10/21/22 15:30

Definitions/Glossary

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Qualifiers

GC Semi VOA

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

Glossary

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

Client Sample Results

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Client Sample ID: IDW-Water-Drum-1-10212022
Lab Sample ID: 590-19044-1
Date Collected: 10/21/22 11:50
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 18:25	1

Client Sample ID: IDW-Water-Drum-2-10212022
Lab Sample ID: 590-19044-2
Date Collected: 10/21/22 11:55
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 18:58	1

Client Sample ID: IDW-Water-Drum-3-10212022
Lab Sample ID: 590-19044-3
Date Collected: 10/21/22 12:20
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	0.0039	J	0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 19:14	1

Client Sample ID: IDW-Water-Drum-4-10212022
Lab Sample ID: 590-19044-4
Date Collected: 10/21/22 12:35
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 19:30	1

Client Sample ID: IDW-Water-Drum-5-10212022
Lab Sample ID: 590-19044-5
Date Collected: 10/21/22 12:45
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 19:46	1

Client Sample ID: IDW-Water-Drum-6-10212022
Lab Sample ID: 590-19044-6
Date Collected: 10/21/22 13:00
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 20:03	1

Client Sample ID: Trip Blanks
Lab Sample ID: 590-19044-7
Date Collected: 10/21/22 00:00
Matrix: Water
Date Received: 10/21/22 15:30

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 20:51	1

Method: 8011 - EDB

Lab Sample ID: MB 590-38773/1-A
Matrix: Water
Analysis Batch: 38772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		10/26/22 10:09	10/26/22 15:59	1

Lab Sample ID: LCS 590-38773/2-A
Matrix: Water
Analysis Batch: 38772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38773

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromoethane (EDB)			0.125	0.0988		ug/L		79	60 - 140		

Lab Sample ID: LCSD 590-38773/3-A
Matrix: Water
Analysis Batch: 38772

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38773

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)			0.125	0.0899		ug/L		72	60 - 140	9	20

Lab Sample ID: 590-19044-6 MS
Matrix: Water
Analysis Batch: 38772

Client Sample ID: IDW-Water-Drum-6-10212022
Prep Type: Total/NA
Prep Batch: 38773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromoethane (EDB)	ND		0.125	0.0990		ug/L		79	60 - 140		

Lab Sample ID: 590-19044-6 MSD
Matrix: Water
Analysis Batch: 38772

Client Sample ID: IDW-Water-Drum-6-10212022
Prep Type: Total/NA
Prep Batch: 38773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		0.125	0.0817		ug/L		65	60 - 140	19	20

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Client Sample ID: IDW-Water-Drum-1-10212022
Lab Sample ID: 590-19044-1
Date Collected: 10/21/22 11:50
Matrix: Water
Date Received: 10/21/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 18:25	NMI	EET SPK

Client Sample ID: IDW-Water-Drum-2-10212022
Lab Sample ID: 590-19044-2
Date Collected: 10/21/22 11:55
Matrix: Water
Date Received: 10/21/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 18:58	NMI	EET SPK

Client Sample ID: IDW-Water-Drum-3-10212022
Lab Sample ID: 590-19044-3
Date Collected: 10/21/22 12:20
Matrix: Water
Date Received: 10/21/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 19:14	NMI	EET SPK

Client Sample ID: IDW-Water-Drum-4-10212022
Lab Sample ID: 590-19044-4
Date Collected: 10/21/22 12:35
Matrix: Water
Date Received: 10/21/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 19:30	NMI	EET SPK

Client Sample ID: IDW-Water-Drum-5-10212022
Lab Sample ID: 590-19044-5
Date Collected: 10/21/22 12:45
Matrix: Water
Date Received: 10/21/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 19:46	NMI	EET SPK

Client Sample ID: IDW-Water-Drum-6-10212022
Lab Sample ID: 590-19044-6
Date Collected: 10/21/22 13:00
Matrix: Water
Date Received: 10/21/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 20:03	NMI	EET SPK

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Client Sample ID: Trip Blanks

Date Collected: 10/21/22 00:00
Date Received: 10/21/22 15:30

Lab Sample ID: 590-19044-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	38773	10/26/22 10:09	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38772	10/26/22 20:51	NMI	EET SPK

Laboratory References:

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 590-19044-1
Project/Site: Simplot Warden

Laboratory: Eurofins Spokane

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

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

Method Summary

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19044-1

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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

Chain of Custody Record

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Client Information	Sampler: Jered Newcomb	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No:
Client Contact: Jered Newcomb	Phone: 509-899-4371	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: HDR Inc	PWSID:			Job #:
Address: 835 N Post St. Ste. 101	Due Date Requested:			
City: Spokane	TAT Requested (days): Standard			
State, Zip: WA, 99202	Compliance Project: Δ Yes Δ No			
Phone: 509-899-4371	PO #: Purchase Order Requested			
Email: jered.newcomb@hdrinc.com	WO #:			
Project Name: Simplot Warden	Project #: 10331653			
Site: Warden WA	SSOW#:			

Analysis Requested

Preservation Codes.

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	* EPA Method 8011	** EPA Method 8260B VOCs	** EPA Method 8270 Semi-VOCs	** pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
IDW-Water-Drum-1-102122	10/21/2022	1150	G	W	N	N	X				7	*Report EDB only Full list may need to be reported in future.
IDW-Water-Drum-2-102122	10/21/2022	1155	G	W	N	N	X				7	
IDW-Water-Drum-3-102122	10/21/2022	1220	G	W	N	N	X				7	**Place sample analytes on hold
IDW-Water-Drum-4-102122	10/21/2022	1235	G	W	N	N	X				7	Please advise HDR on hold time expiration dates
IDW-Water-Drum-5-102122	10/21/2022	1245	G	W	N	N	X				7	
IDW-Water-Drum-6-102122	10/21/2022	1300	G	W	N	Y	X				17	Perform MS/MSD
Trip Blanks				W	N	N	X				3	

590-19044 Chain of Custody

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

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

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/21/22 1535	HDR		10/21/22 15:36	FedEx
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks: 5.2°C Cond IR Gun

10/27/2022

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-19044-1

Login Number: 19044
List Number: 1
Creator: Fettig, Riley

List Source: Eurofins Spokane

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jered Newcomb
HDR Inc
1401 E. Trent Ave
Suite 101
Spokane, Washington 99202

Generated 11/30/2022 10:27:56 AM

JOB DESCRIPTION

Simplot Warden

JOB NUMBER

590-19192-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

See page two for job notes and contact information.

myEOL

Job Notes

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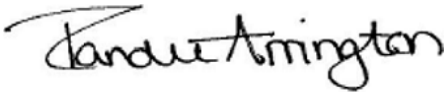
The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project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

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

Authorization



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11/30/2022 10:27:56 AM

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

Table of Contents

Case Narrative

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Job ID: 590-19192-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 11/7/2022 4:25 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 5.2º C.

GC/MS VOA
Method 8260D: The method blank for analytical batch 590-39122 contained Toluene and Naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) associated with batch 410-317400 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 410-317358 recovered above the upper control limit for 4,6-Dinitro-2-methylphenol, 2,4-Dinitrophenol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) for preparation batch 410-317127 and analytical batch 410-317400 recovered outside control limits for several analytes. The results are reported and qualified. No remaining volume for re-analysis.

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

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.

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

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

Sample Summary

Client: HDR Inc
Job ID: 590-19192-1
Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-19192-1	TOTE-Water-11072022	Water	11/07/22 14:10	11/07/22 16:25
590-19192-2	IDW-Drum-1-11072022	Water	11/07/22 13:10	11/07/22 16:25
590-19192-3	IDW-Drum-2-11072022	Water	11/07/22 13:20	11/07/22 16:25
590-19192-4	IDW-Drum-3-11072022	Water	11/07/22 13:35	11/07/22 16:25
590-19192-5	IDW-Drum-4-11072022	Water	11/07/22 13:45	11/07/22 16:25
590-19192-6	IDW-Drum-5-11072022	Water	11/07/22 13:50	11/07/22 16:25
590-19192-7	IDW-Drum-6-11072022	Water	11/07/22 13:55	11/07/22 16:25
590-19192-8	Trip Blank	Water	11/07/22 00:00	11/07/22 16:25

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.

GC Semi VOA

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Client Sample ID: TOTE-Water-11072022
Date Collected: 11/07/22 14:10
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 14:08	1
Chloromethane	**0.82**	**J**	3.0	0.50	ug/L			11/17/22 14:08	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 14:08	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 14:08	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 14:08	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 14:08	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:08	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:08	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 14:08	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 14:08	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 14:08	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 14:08	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 14:08	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 14:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 14:08	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 14:08	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 14:08	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:08	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 14:08	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 14:08	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 14:08	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 14:08	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 14:08	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 14:08	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 14:08	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 14:08	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 14:08	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 14:08	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 14:08	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 14:08	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 14:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 14:08	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 14:08	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 14:08	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 14:08	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 14:08	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 14:08	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 14:08	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 14:08	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 14:08	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 14:08	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 14:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 14:08	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 14:08	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 14:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 14:08	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 14:08	1

Client Sample ID: TOTE-Water-11072022
Date Collected: 11/07/22 14:10
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 14:08	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 14:08	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 14:08	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 14:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 14:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 14:08	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 14:08	1
Naphthalene	**0.63**	**J B**	2.0	0.63	ug/L			11/17/22 14:08	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*11/17/22 14:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*11/17/22 14:08*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*11/17/22 14:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*11/17/22 14:08*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Acenaphthylene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Aniline	ND		4.7	0.93	ug/L		11/14/22 07:55	11/15/22 00:04	1
Anthracene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzidine	ND		56	19	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzo[a]anthracene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzo[b]fluoranthene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzo[k]fluoranthene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzo[g,h,i]perylene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzo[a]pyrene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzoic acid	ND		23	11	ug/L		11/14/22 07:55	11/15/22 00:04	1
Benzyl alcohol	ND		9.3	3.7	ug/L		11/14/22 07:55	11/15/22 00:04	1
Bis(2-chloroethoxy)methane	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Bis(2-chloroethyl)ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
bis (2-Chloroisopropyl) ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
4-Bromophenyl phenyl ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Butyl benzyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
4-Chloroaniline	ND		9.3	3.7	ug/L		11/14/22 07:55	11/15/22 00:04	1
4-Chloro-3-methylphenol	ND		4.7	0.93	ug/L		11/14/22 07:55	11/15/22 00:04	1
2-Chloronaphthalene	ND		0.93	0.37	ug/L		11/14/22 07:55	11/15/22 00:04	1
2-Chlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
4-Chlorophenyl phenyl ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Chrysene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Dibenz(a,h)anthracene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Dibenzofuran	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Di-n-butyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
1,2-Dichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
1,3-Dichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
1,4-Dichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1

Client Sample ID: TOTE-Water-11072022
Date Collected: 11/07/22 14:10
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-1
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	ND		9.3	3.7	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,4-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,6-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Diethyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,4-Dimethylphenol	ND		9.3	2.8	ug/L		11/14/22 07:55	11/15/22 00:04	1
Dimethyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
4,6-Dinitro-2-methylphenol	ND		20	7.5	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,4-Dinitrophenol	ND		28	13	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,4-Dinitrotoluene	ND		4.7	0.93	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,6-Dinitrotoluene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Di-n-octyl phthalate	ND		10	4.7	ug/L		11/14/22 07:55	11/15/22 00:04	1
Fluoranthene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Fluorene	ND		0.47	0.11	ug/L		11/14/22 07:55	11/15/22 00:04	1
Hexachlorobenzene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:04	1
Hexachloro-1,3-butadiene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Hexachlorocyclopentadiene	ND		10	4.7	ug/L		11/14/22 07:55	11/15/22 00:04	1
Hexachloroethane	ND		4.7	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Indeno[1,2,3-cd]pyrene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:04	1
Isophorone	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
2-Methylnaphthalene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
1-Methylnaphthalene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
2-Methylphenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Naphthalene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
2-Nitroaniline	ND		4.7	0.93	ug/L		11/14/22 07:55	11/15/22 00:04	1
3-Nitroaniline	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
4-Nitroaniline	ND		2.8	0.84	ug/L		11/14/22 07:55	11/15/22 00:04	1
Nitrobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
2-Nitrophenol	ND		4.7	0.93	ug/L		11/14/22 07:55	11/15/22 00:04	1
4-Nitrophenol	ND		28	9.3	ug/L		11/14/22 07:55	11/15/22 00:04	1
N-Nitrosodimethylamine	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
N-Nitrosodiphenylamine	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
N-Nitrosodi-n-propylamine	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Pentachlorophenol	ND		4.7	0.93	ug/L		11/14/22 07:55	11/15/22 00:04	1
Phenanthrene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:04	1
Phenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
Pyrene	ND		0.47	0.093	ug/L		11/14/22 07:55	11/15/22 00:04	1
Pyridine	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:04	1
1,2,4-Trichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,4,5-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1
2,4,6-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 150*	*11/14/22 07:55*	*11/15/22 00:04*	*1*
2-Fluorobiphenyl (Surr)	*69*		*44 - 120*	*11/14/22 07:55*	*11/15/22 00:04*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 120*	*11/14/22 07:55*	*11/15/22 00:04*	*1*
Nitrobenzene-d5 (Surr)	*66*		*25 - 125*	*11/14/22 07:55*	*11/15/22 00:04*	*1*
p-Terphenyl-d14 (Surr)	*44*		*37 - 120*	*11/14/22 07:55*	*11/15/22 00:04*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*11/14/22 07:55*	*11/15/22 00:04*	*1*

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Client Sample ID: TOTE-Water-11072022

Lab Sample ID: 590-19192-1

Date Collected: 11/07/22 14:10
Matrix: Water
Date Received: 11/07/22 16:25

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 15:51	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 15:51	1
1,2,3-Trichloropropane	**0.19**		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.3**	**HF**	0.1	0.1	SU			11/18/22 12:10	1

Client Sample ID: IDW-Drum-1-11072022

Lab Sample ID: 590-19192-2

Date Collected: 11/07/22 13:10
Matrix: Water
Date Received: 11/07/22 16:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 14:30	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 14:30	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 14:30	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 14:30	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 14:30	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 14:30	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:30	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 14:30	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:30	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 14:30	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 14:30	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 14:30	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 14:30	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 14:30	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 14:30	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 14:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 14:30	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 14:30	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 14:30	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:30	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 14:30	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 14:30	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 14:30	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 14:30	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 14:30	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 14:30	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 14:30	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 14:30	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 14:30	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 14:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 14:30	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 14:30	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 14:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 14:30	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 14:30	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 14:30	1

Client Sample ID: IDW-Drum-1-11072022
Date Collected: 11/07/22 13:10
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 14:30	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 14:30	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 14:30	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 14:30	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 14:30	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 14:30	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 14:30	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 14:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 14:30	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 14:30	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 14:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 14:30	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 14:30	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 14:30	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 14:30	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 14:30	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 14:30	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 14:30	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 14:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 14:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 14:30	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 14:30	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 14:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*11/17/22 14:30*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/17/22 14:30*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*11/17/22 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*11/17/22 14:30*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Acenaphthylene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Aniline	ND		4.7	0.94	ug/L		11/14/22 07:55	11/15/22 00:25	1
Anthracene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzidine	ND		57	19	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzo[a]anthracene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzo[b]fluoranthene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzo[k]fluoranthene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzo[g,h,i]perylene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzo[a]pyrene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzoic acid	ND		24	11	ug/L		11/14/22 07:55	11/15/22 00:25	1
Benzyl alcohol	ND		9.4	3.8	ug/L		11/14/22 07:55	11/15/22 00:25	1
Bis(2-chloroethoxy)methane	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Bis(2-chloroethyl)ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
bis (2-Chloroisopropyl) ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
4-Bromophenyl phenyl ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Client Sample ID: IDW-Drum-1-11072022
Date Collected: 11/07/22 13:10
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-2
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
4-Chloroaniline	ND		9.4	3.8	ug/L		11/14/22 07:55	11/15/22 00:25	1
4-Chloro-3-methylphenol	ND		4.7	0.94	ug/L		11/14/22 07:55	11/15/22 00:25	1
2-Chloronaphthalene	ND		0.94	0.38	ug/L		11/14/22 07:55	11/15/22 00:25	1
2-Chlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
4-Chlorophenyl phenyl ether	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Chrysene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Dibenz(a,h)anthracene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Dibenzofuran	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Di-n-butyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
1,2-Dichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
1,3-Dichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
1,4-Dichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
3,3'-Dichlorobenzidine	ND		9.4	3.8	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,4-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,6-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Diethyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,4-Dimethylphenol	ND		9.4	2.8	ug/L		11/14/22 07:55	11/15/22 00:25	1
Dimethyl phthalate	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
4,6-Dinitro-2-methylphenol	ND		20	7.5	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,4-Dinitrophenol	ND		28	13	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,4-Dinitrotoluene	ND		4.7	0.94	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,6-Dinitrotoluene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Di-n-octyl phthalate	ND		10	4.7	ug/L		11/14/22 07:55	11/15/22 00:25	1
Fluoranthene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
Fluorene	ND		0.47	0.11	ug/L		11/14/22 07:55	11/15/22 00:25	1
Hexachlorobenzene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:25	1
Hexachloro-1,3-butadiene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Hexachlorocyclopentadiene	ND		10	4.7	ug/L		11/14/22 07:55	11/15/22 00:25	1
Hexachloroethane	ND		4.7	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Indeno[1,2,3-cd]pyrene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:25	1
Isophorone	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
2-Methylnaphthalene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
1-Methylnaphthalene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
2-Methylphenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Naphthalene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1
2-Nitroaniline	ND		4.7	0.94	ug/L		11/14/22 07:55	11/15/22 00:25	1
3-Nitroaniline	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
4-Nitroaniline	ND		2.8	0.85	ug/L		11/14/22 07:55	11/15/22 00:25	1
Nitrobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
2-Nitrophenol	ND		4.7	0.94	ug/L		11/14/22 07:55	11/15/22 00:25	1
4-Nitrophenol	ND		28	9.4	ug/L		11/14/22 07:55	11/15/22 00:25	1
N-Nitrosodimethylamine	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
N-Nitrosodiphenylamine	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
N-Nitrosodi-n-propylamine	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Pentachlorophenol	ND		4.7	0.94	ug/L		11/14/22 07:55	11/15/22 00:25	1
Phenanthrene	ND		0.47	0.10	ug/L		11/14/22 07:55	11/15/22 00:25	1
Phenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
Pyrene	ND		0.47	0.094	ug/L		11/14/22 07:55	11/15/22 00:25	1

Client Sample ID: IDW-Drum-1-11072022

Lab Sample ID: 590-19192-2

Date Collected: 11/07/22 13:10

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		4.7	1.9	ug/L		11/14/22 07:55	11/15/22 00:25	1
1,2,4-Trichlorobenzene	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,4,5-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1
2,4,6-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:55	11/15/22 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*10 - 150*	*11/14/22 07:55*	*11/15/22 00:25*	*1*
2-Fluorobiphenyl (Surr)	*75*		*44 - 120*	*11/14/22 07:55*	*11/15/22 00:25*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*11/14/22 07:55*	*11/15/22 00:25*	*1*
Nitrobenzene-d5 (Surr)	*75*		*25 - 125*	*11/14/22 07:55*	*11/15/22 00:25*	*1*
p-Terphenyl-d14 (Surr)	*79*		*37 - 120*	*11/14/22 07:55*	*11/15/22 00:25*	*1*
Phenol-d5 (Surr)	*38*		*10 - 120*	*11/14/22 07:55*	*11/15/22 00:25*	*1*

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 16:07	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 16:07	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.6**	**HF**	0.1	0.1	SU			11/18/22 12:10	1

Client Sample ID: IDW-Drum-2-11072022

Lab Sample ID: 590-19192-3

Date Collected: 11/07/22 13:20

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 14:52	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 14:52	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 14:52	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 14:52	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 14:52	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 14:52	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:52	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 14:52	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:52	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 14:52	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 14:52	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 14:52	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 14:52	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 14:52	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 14:52	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 14:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 14:52	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 14:52	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 14:52	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 14:52	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 14:52	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 14:52	1

Client Sample ID: IDW-Drum-2-11072022
Date Collected: 11/07/22 13:20
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 14:52	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 14:52	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 14:52	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 14:52	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 14:52	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 14:52	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 14:52	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 14:52	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 14:52	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 14:52	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 14:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 14:52	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 14:52	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 14:52	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 14:52	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 14:52	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 14:52	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 14:52	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 14:52	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 14:52	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 14:52	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 14:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 14:52	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 14:52	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 14:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 14:52	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 14:52	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 14:52	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 14:52	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 14:52	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 14:52	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 14:52	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 14:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 14:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 14:52	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 14:52	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 14:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*11/17/22 14:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*11/17/22 14:52*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*11/17/22 14:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*11/17/22 14:52*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Acenaphthylene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Aniline	ND		5.1	1.0	ug/L		11/14/22 07:55	11/15/22 00:46	1

Client Sample ID: IDW-Drum-2-11072022
Date Collected: 11/07/22 13:20
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzidine	ND		61	20	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzo[a]pyrene	ND		0.51	0.11	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzoic acid	ND		25	12	ug/L		11/14/22 07:55	11/15/22 00:46	1
Benzyl alcohol	ND		10	4.1	ug/L		11/14/22 07:55	11/15/22 00:46	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Bis(2-ethylhexyl) phthalate	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
bis (2-Chloroisopropyl) ether	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
4-Bromophenyl phenyl ether	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Butyl benzyl phthalate	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
4-Chloroaniline	ND		10	4.1	ug/L		11/14/22 07:55	11/15/22 00:46	1
4-Chloro-3-methylphenol	ND		5.1	1.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		11/14/22 07:55	11/15/22 00:46	1
2-Chlorophenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
4-Chlorophenyl phenyl ether	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Chrysene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Dibenzofuran	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
1,2-Dichlorobenzene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
1,3-Dichlorobenzene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
1,4-Dichlorobenzene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
3,3'-Dichlorobenzidine	ND		10	4.1	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,6-Dichlorophenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Diethyl phthalate	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
Dimethyl phthalate	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,4-Dinitrophenol	ND		30	14	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,6-Dinitrotoluene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		11/14/22 07:55	11/15/22 00:46	1
Fluoranthene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Fluorene	ND		0.51	0.12	ug/L		11/14/22 07:55	11/15/22 00:46	1
Hexachlorobenzene	ND		0.51	0.11	ug/L		11/14/22 07:55	11/15/22 00:46	1
Hexachloro-1,3-butadiene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Hexachlorocyclopentadiene	ND		11	5.1	ug/L		11/14/22 07:55	11/15/22 00:46	1
Hexachloroethane	ND		5.1	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.11	ug/L		11/14/22 07:55	11/15/22 00:46	1
Isophorone	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
1-Methylnaphthalene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
2-Methylphenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1

Client Sample ID: IDW-Drum-2-11072022

Lab Sample ID: 590-19192-3

Date Collected: 11/07/22 13:20

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
2-Nitroaniline	ND		5.1	1.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
3-Nitroaniline	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
4-Nitroaniline	ND		3.0	0.91	ug/L		11/14/22 07:55	11/15/22 00:46	1
Nitrobenzene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
2-Nitrophenol	ND		5.1	1.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
4-Nitrophenol	ND		30	10	ug/L		11/14/22 07:55	11/15/22 00:46	1
N-Nitrosodimethylamine	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
N-Nitrosodiphenylamine	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
N-Nitrosodi-n-propylamine	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Pentachlorophenol	ND		5.1	1.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
Phenanthrene	ND		0.51	0.11	ug/L		11/14/22 07:55	11/15/22 00:46	1
Phenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
Pyrene	ND		0.51	0.10	ug/L		11/14/22 07:55	11/15/22 00:46	1
Pyridine	ND		5.1	2.0	ug/L		11/14/22 07:55	11/15/22 00:46	1
1,2,4-Trichlorobenzene	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,4,5-Trichlorophenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1
2,4,6-Trichlorophenol	ND		2.0	0.51	ug/L		11/14/22 07:55	11/15/22 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*10 - 150*	*11/14/22 07:55*	*11/15/22 00:46*	*1*
2-Fluorobiphenyl (Surr)	*73*		*44 - 120*	*11/14/22 07:55*	*11/15/22 00:46*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*11/14/22 07:55*	*11/15/22 00:46*	*1*
Nitrobenzene-d5 (Surr)	*77*		*25 - 125*	*11/14/22 07:55*	*11/15/22 00:46*	*1*
p-Terphenyl-d14 (Surr)	*83*		*37 - 120*	*11/14/22 07:55*	*11/15/22 00:46*	*1*
Phenol-d5 (Surr)	*34*		*10 - 120*	*11/14/22 07:55*	*11/15/22 00:46*	*1*

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 16:23	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 16:23	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 16:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**8.0**	**HF**	0.1	0.1	SU			11/18/22 12:10	1

Client Sample ID: IDW-Drum-3-11072022

Lab Sample ID: 590-19192-4

Date Collected: 11/07/22 13:35

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 15:13	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 15:13	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 15:13	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 15:13	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 15:13	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 15:13	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:13	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 15:13	1

Client Sample ID: IDW-Drum-3-11072022
Date Collected: 11/07/22 13:35
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:13	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 15:13	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 15:13	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 15:13	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 15:13	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 15:13	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 15:13	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 15:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 15:13	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 15:13	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 15:13	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:13	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 15:13	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 15:13	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 15:13	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 15:13	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 15:13	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 15:13	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 15:13	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 15:13	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 15:13	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 15:13	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 15:13	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 15:13	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 15:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 15:13	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 15:13	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 15:13	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 15:13	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 15:13	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 15:13	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 15:13	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 15:13	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 15:13	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 15:13	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 15:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 15:13	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 15:13	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 15:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 15:13	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 15:13	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 15:13	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 15:13	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 15:13	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 15:13	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 15:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 15:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 15:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 15:13	1

Client Sample ID: IDW-Drum-3-11072022
Date Collected: 11/07/22 13:35
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 15:13	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 15:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*11/17/22 15:13*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/17/22 15:13*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*11/17/22 15:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*11/17/22 15:13*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Acenaphthylene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Aniline	ND		4.8	0.96	ug/L		11/14/22 07:55	11/15/22 01:07	1
Anthracene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzidine	ND		58	19	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzo[a]anthracene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzo[b]fluoranthene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzo[k]fluoranthene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzo[g,h,i]perylene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzo[a]pyrene	ND		0.48	0.11	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzoic acid	ND		24	12	ug/L		11/14/22 07:55	11/15/22 01:07	1
Benzyl alcohol	ND		9.6	3.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
Bis(2-chloroethoxy)methane	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Bis(2-chloroethyl)ether	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
bis (2-Chloroisopropyl) ether	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
4-Bromophenyl phenyl ether	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Butyl benzyl phthalate	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
4-Chloroaniline	ND		9.6	3.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
4-Chloro-3-methylphenol	ND		4.8	0.96	ug/L		11/14/22 07:55	11/15/22 01:07	1
2-Chloronaphthalene	ND		0.96	0.39	ug/L		11/14/22 07:55	11/15/22 01:07	1
2-Chlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
4-Chlorophenyl phenyl ether	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Chrysene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Dibenz(a,h)anthracene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Dibenzofuran	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Di-n-butyl phthalate	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
1,2-Dichlorobenzene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
1,3-Dichlorobenzene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
1,4-Dichlorobenzene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
3,3'-Dichlorobenzidine	ND		9.6	3.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,4-Dichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,6-Dichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Diethyl phthalate	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,4-Dimethylphenol	ND		9.6	2.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
Dimethyl phthalate	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
4,6-Dinitro-2-methylphenol	ND		20	7.7	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,4-Dinitrophenol	ND		29	13	ug/L		11/14/22 07:55	11/15/22 01:07	1

Client Sample ID: IDW-Drum-3-11072022
Date Collected: 11/07/22 13:35
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		4.8	0.96	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,6-Dinitrotoluene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Di-n-octyl phthalate	ND		11	4.8	ug/L		11/14/22 07:55	11/15/22 01:07	1
Fluoranthene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Fluorene	ND		0.48	0.12	ug/L		11/14/22 07:55	11/15/22 01:07	1
Hexachlorobenzene	ND		0.48	0.11	ug/L		11/14/22 07:55	11/15/22 01:07	1
Hexachloro-1,3-butadiene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Hexachlorocyclopentadiene	ND		11	4.8	ug/L		11/14/22 07:55	11/15/22 01:07	1
Hexachloroethane	ND		4.8	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Indeno[1,2,3-cd]pyrene	ND		0.48	0.11	ug/L		11/14/22 07:55	11/15/22 01:07	1
Isophorone	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
2-Methylnaphthalene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
1-Methylnaphthalene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
2-Methylphenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Naphthalene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
2-Nitroaniline	ND		4.8	0.96	ug/L		11/14/22 07:55	11/15/22 01:07	1
3-Nitroaniline	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
4-Nitroaniline	ND		2.9	0.87	ug/L		11/14/22 07:55	11/15/22 01:07	1
Nitrobenzene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
2-Nitrophenol	ND		4.8	0.96	ug/L		11/14/22 07:55	11/15/22 01:07	1
4-Nitrophenol	ND		29	9.6	ug/L		11/14/22 07:55	11/15/22 01:07	1
N-Nitrosodimethylamine	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
N-Nitrosodiphenylamine	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
N-Nitrosodi-n-propylamine	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Pentachlorophenol	ND		4.8	0.96	ug/L		11/14/22 07:55	11/15/22 01:07	1
Phenanthrene	ND		0.48	0.11	ug/L		11/14/22 07:55	11/15/22 01:07	1
Phenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
Pyrene	ND		0.48	0.096	ug/L		11/14/22 07:55	11/15/22 01:07	1
Pyridine	ND		4.8	1.9	ug/L		11/14/22 07:55	11/15/22 01:07	1
1,2,4-Trichlorobenzene	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,4,5-Trichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1
2,4,6-Trichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:55	11/15/22 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 150*	*11/14/22 07:55*	*11/15/22 01:07*	*1*
2-Fluorobiphenyl (Surr)	*68*		*44 - 120*	*11/14/22 07:55*	*11/15/22 01:07*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 120*	*11/14/22 07:55*	*11/15/22 01:07*	*1*
Nitrobenzene-d5 (Surr)	*71*		*25 - 125*	*11/14/22 07:55*	*11/15/22 01:07*	*1*
p-Terphenyl-d14 (Surr)	*84*		*37 - 120*	*11/14/22 07:55*	*11/15/22 01:07*	*1*
Phenol-d5 (Surr)	*38*		*10 - 120*	*11/14/22 07:55*	*11/15/22 01:07*	*1*

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	**0.0037**	**J**	0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 16:40	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 16:40	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**8.3**	**HF**	0.1	0.1	SU			11/18/22 12:10	1

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Client Sample ID: IDW-Drum-4-11072022
Date Collected: 11/07/22 13:45
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 15:35	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 15:35	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 15:35	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 15:35	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 15:35	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 15:35	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:35	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 15:35	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:35	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 15:35	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 15:35	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 15:35	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 15:35	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 15:35	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 15:35	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 15:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 15:35	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 15:35	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 15:35	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:35	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 15:35	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 15:35	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 15:35	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 15:35	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 15:35	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 15:35	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 15:35	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 15:35	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 15:35	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 15:35	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 15:35	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 15:35	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 15:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 15:35	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 15:35	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 15:35	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 15:35	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 15:35	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 15:35	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 15:35	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 15:35	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 15:35	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 15:35	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 15:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 15:35	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 15:35	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 15:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 15:35	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 15:35	1

Client Sample ID: IDW-Drum-4-11072022
Date Collected: 11/07/22 13:45
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 15:35	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 15:35	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 15:35	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 15:35	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 15:35	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 15:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 15:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 15:35	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 15:35	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 15:35	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*11/17/22 15:35*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/17/22 15:35*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*11/17/22 15:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*11/17/22 15:35*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Acenaphthylene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Aniline	ND	*- *1	4.8	0.95	ug/L		11/14/22 07:54	11/15/22 00:06	1
Anthracene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzidine	ND	*- *1	57	19	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzo[a]anthracene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzo[b]fluoranthene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzo[k]fluoranthene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzo[g,h,i]perylene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzo[a]pyrene	ND	*1	0.48	0.10	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzoic acid	ND	*1	24	11	ug/L		11/14/22 07:54	11/15/22 00:06	1
Benzyl alcohol	ND	*1	9.5	3.8	ug/L		11/14/22 07:54	11/15/22 00:06	1
Bis(2-chloroethoxy)methane	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Bis(2-chloroethyl)ether	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Bis(2-ethylhexyl) phthalate	ND	*1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
bis (2-Chloroisopropyl) ether	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
4-Bromophenyl phenyl ether	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Butyl benzyl phthalate	ND	*1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
4-Chloroaniline	ND	*- *1	9.5	3.8	ug/L		11/14/22 07:54	11/15/22 00:06	1
4-Chloro-3-methylphenol	ND		4.8	0.95	ug/L		11/14/22 07:54	11/15/22 00:06	1
2-Chloronaphthalene	ND	*1	0.95	0.38	ug/L		11/14/22 07:54	11/15/22 00:06	1
2-Chlorophenol	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
4-Chlorophenyl phenyl ether	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Chrysene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Dibenz(a,h)anthracene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Dibenzofuran	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Di-n-butyl phthalate	ND	*1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
1,2-Dichlorobenzene	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
1,3-Dichlorobenzene	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
1,4-Dichlorobenzene	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1

Client Sample ID: IDW-Drum-4-11072022
Date Collected: 11/07/22 13:45
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	ND	*- *1	9.5	3.8	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,4-Dichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,6-Dichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Diethyl phthalate	ND	*1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,4-Dimethylphenol	ND		9.5	2.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
Dimethyl phthalate	ND	*1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
4,6-Dinitro-2-methylphenol	ND		20	7.6	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,4-Dinitrophenol	ND		29	13	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,4-Dinitrotoluene	ND	*1	4.8	0.95	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,6-Dinitrotoluene	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Di-n-octyl phthalate	ND	*1	10	4.8	ug/L		11/14/22 07:54	11/15/22 00:06	1
Fluoranthene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Fluorene	ND	*1	0.48	0.11	ug/L		11/14/22 07:54	11/15/22 00:06	1
Hexachlorobenzene	ND	*1	0.48	0.10	ug/L		11/14/22 07:54	11/15/22 00:06	1
Hexachloro-1,3-butadiene	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Hexachlorocyclopentadiene	ND	*1	10	4.8	ug/L		11/14/22 07:54	11/15/22 00:06	1
Hexachloroethane	ND	*- *1	4.8	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Indeno[1,2,3-cd]pyrene	ND	*1	0.48	0.10	ug/L		11/14/22 07:54	11/15/22 00:06	1
Isophorone	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
2-Methylnaphthalene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
1-Methylnaphthalene	ND	*- *1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
2-Methylphenol	ND		1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Naphthalene	ND	*- *1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
2-Nitroaniline	ND	*1	4.8	0.95	ug/L		11/14/22 07:54	11/15/22 00:06	1
3-Nitroaniline	ND	*- *1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
4-Nitroaniline	ND		2.9	0.86	ug/L		11/14/22 07:54	11/15/22 00:06	1
Nitrobenzene	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
2-Nitrophenol	ND	*1	4.8	0.95	ug/L		11/14/22 07:54	11/15/22 00:06	1
4-Nitrophenol	ND		29	9.5	ug/L		11/14/22 07:54	11/15/22 00:06	1
N-Nitrosodimethylamine	ND	*- *1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
N-Nitrosodiphenylamine	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
N-Nitrosodi-n-propylamine	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Pentachlorophenol	ND		4.8	0.95	ug/L		11/14/22 07:54	11/15/22 00:06	1
Phenanthrene	ND	*1	0.48	0.10	ug/L		11/14/22 07:54	11/15/22 00:06	1
Phenol	ND	*1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
Pyrene	ND	*1	0.48	0.095	ug/L		11/14/22 07:54	11/15/22 00:06	1
Pyridine	ND	*- *1	4.8	1.9	ug/L		11/14/22 07:54	11/15/22 00:06	1
1,2,4-Trichlorobenzene	ND	*- *1	1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,4,5-Trichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1
2,4,6-Trichlorophenol	ND		1.9	0.48	ug/L		11/14/22 07:54	11/15/22 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 150*	*11/14/22 07:54*	*11/15/22 00:06*	*1*
2-Fluorobiphenyl (Surr)	*81*		*44 - 120*	*11/14/22 07:54*	*11/15/22 00:06*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*11/14/22 07:54*	*11/15/22 00:06*	*1*
Nitrobenzene-d5 (Surr)	*87*		*25 - 125*	*11/14/22 07:54*	*11/15/22 00:06*	*1*
p-Terphenyl-d14 (Surr)	*88*		*37 - 120*	*11/14/22 07:54*	*11/15/22 00:06*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*11/14/22 07:54*	*11/15/22 00:06*	*1*

Client Sample ID: IDW-Drum-4-11072022

Lab Sample ID: 590-19192-5

Date Collected: 11/07/22 13:45

Matrix: Water

Date Received: 11/07/22 16:25

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 16:56	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 16:56	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.9	HF	0.1	0.1	SU			11/18/22 12:10	1

Client Sample ID: IDW-Drum-5-11072022

Lab Sample ID: 590-19192-6

Date Collected: 11/07/22 13:50

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 15:57	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 15:57	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 15:57	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 15:57	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 15:57	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 15:57	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:57	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 15:57	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:57	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 15:57	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 15:57	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 15:57	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 15:57	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 15:57	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 15:57	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 15:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 15:57	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 15:57	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 15:57	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 15:57	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 15:57	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 15:57	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 15:57	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 15:57	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 15:57	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 15:57	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 15:57	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 15:57	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 15:57	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 15:57	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 15:57	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 15:57	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 15:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 15:57	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 15:57	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 15:57	1

Client Sample ID: IDW-Drum-5-11072022
Date Collected: 11/07/22 13:50
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 15:57	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 15:57	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 15:57	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 15:57	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 15:57	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 15:57	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 15:57	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 15:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 15:57	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 15:57	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 15:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 15:57	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 15:57	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 15:57	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 15:57	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 15:57	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 15:57	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 15:57	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 15:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 15:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 15:57	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 15:57	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 15:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*		*11/17/22 15:57*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/17/22 15:57*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*11/17/22 15:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*11/17/22 15:57*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Acenaphthylene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Aniline	ND	*- *1	4.7	0.94	ug/L		11/14/22 07:54	11/15/22 00:46	1
Anthracene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzidine	ND	*- *1	57	19	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzo[a]anthracene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzo[b]fluoranthene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzo[k]fluoranthene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzo[g,h,i]perylene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzo[a]pyrene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzoic acid	ND	*1	24	11	ug/L		11/14/22 07:54	11/15/22 00:46	1
Benzyl alcohol	ND	*1	9.4	3.8	ug/L		11/14/22 07:54	11/15/22 00:46	1
Bis(2-chloroethoxy)methane	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Bis(2-chloroethyl)ether	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Bis(2-ethylhexyl) phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
bis (2-Chloroisopropyl) ether	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
4-Bromophenyl phenyl ether	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Client Sample ID: IDW-Drum-5-11072022
Date Collected: 11/07/22 13:50
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
4-Chloroaniline	ND	*- *1	9.4	3.8	ug/L		11/14/22 07:54	11/15/22 00:46	1
4-Chloro-3-methylphenol	ND		4.7	0.94	ug/L		11/14/22 07:54	11/15/22 00:46	1
2-Chloronaphthalene	ND	*1	0.94	0.38	ug/L		11/14/22 07:54	11/15/22 00:46	1
2-Chlorophenol	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
4-Chlorophenyl phenyl ether	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Chrysene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Dibenz(a,h)anthracene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Dibenzofuran	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Di-n-butyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
1,2-Dichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
1,3-Dichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
1,4-Dichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
3,3'-Dichlorobenzidine	ND	*- *1	9.4	3.8	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,4-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,6-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Diethyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,4-Dimethylphenol	ND		9.4	2.8	ug/L		11/14/22 07:54	11/15/22 00:46	1
Dimethyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
4,6-Dinitro-2-methylphenol	ND		20	7.5	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,4-Dinitrophenol	ND		28	13	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,4-Dinitrotoluene	ND	*1	4.7	0.94	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,6-Dinitrotoluene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Di-n-octyl phthalate	ND	*1	10	4.7	ug/L		11/14/22 07:54	11/15/22 00:46	1
Fluoranthene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
Fluorene	ND	*1	0.47	0.11	ug/L		11/14/22 07:54	11/15/22 00:46	1
Hexachlorobenzene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 00:46	1
Hexachloro-1,3-butadiene	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Hexachlorocyclopentadiene	ND	*1	10	4.7	ug/L		11/14/22 07:54	11/15/22 00:46	1
Hexachloroethane	ND	*- *1	4.7	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Indeno[1,2,3-cd]pyrene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 00:46	1
Isophorone	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
2-Methylnaphthalene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
1-Methylnaphthalene	ND	*- *1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
2-Methylphenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Naphthalene	ND	*- *1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1
2-Nitroaniline	ND	*1	4.7	0.94	ug/L		11/14/22 07:54	11/15/22 00:46	1
3-Nitroaniline	ND	*- *1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
4-Nitroaniline	ND		2.8	0.85	ug/L		11/14/22 07:54	11/15/22 00:46	1
Nitrobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
2-Nitrophenol	ND	*1	4.7	0.94	ug/L		11/14/22 07:54	11/15/22 00:46	1
4-Nitrophenol	ND		28	9.4	ug/L		11/14/22 07:54	11/15/22 00:46	1
N-Nitrosodimethylamine	ND	*- *1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
N-Nitrosodiphenylamine	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
N-Nitrosodi-n-propylamine	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Pentachlorophenol	ND		4.7	0.94	ug/L		11/14/22 07:54	11/15/22 00:46	1
Phenanthrene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 00:46	1
Phenol	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
Pyrene	ND	*1	0.47	0.094	ug/L		11/14/22 07:54	11/15/22 00:46	1

Client Sample ID: IDW-Drum-5-11072022

Lab Sample ID: 590-19192-6

Date Collected: 11/07/22 13:50

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND	*- *1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 00:46	1
1,2,4-Trichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,4,5-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1
2,4,6-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*10 - 150*	*11/14/22 07:54*	*11/15/22 00:46*	*1*
2-Fluorobiphenyl (Surr)	*84*		*44 - 120*	*11/14/22 07:54*	*11/15/22 00:46*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*11/14/22 07:54*	*11/15/22 00:46*	*1*
Nitrobenzene-d5 (Surr)	*80*		*25 - 125*	*11/14/22 07:54*	*11/15/22 00:46*	*1*
p-Terphenyl-d14 (Surr)	*88*		*37 - 120*	*11/14/22 07:54*	*11/15/22 00:46*	*1*
Phenol-d5 (Surr)	*30*		*10 - 120*	*11/14/22 07:54*	*11/15/22 00:46*	*1*

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 17:12	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 17:12	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.6**	**HF**	0.1	0.1	SU			11/18/22 12:10	1

Client Sample ID: IDW-Drum-6-11072022

Lab Sample ID: 590-19192-7

Date Collected: 11/07/22 13:55

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 16:40	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 16:40	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 16:40	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 16:40	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 16:40	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 16:40	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 16:40	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 16:40	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 16:40	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 16:40	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 16:40	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 16:40	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 16:40	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 16:40	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 16:40	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 16:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 16:40	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 16:40	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 16:40	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 16:40	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 16:40	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 16:40	1

Client Sample ID: IDW-Drum-6-11072022
Date Collected: 11/07/22 13:55
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 16:40	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 16:40	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 16:40	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 16:40	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 16:40	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 16:40	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 16:40	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 16:40	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 16:40	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 16:40	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 16:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 16:40	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 16:40	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 16:40	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 16:40	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 16:40	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 16:40	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 16:40	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 16:40	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 16:40	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 16:40	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 16:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 16:40	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 16:40	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 16:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 16:40	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 16:40	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 16:40	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 16:40	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 16:40	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 16:40	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 16:40	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 16:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 16:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 16:40	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 16:40	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 16:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*11/17/22 16:40*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/17/22 16:40*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*11/17/22 16:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*11/17/22 16:40*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Acenaphthylene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Aniline	ND	*- *1	4.7	0.95	ug/L		11/14/22 07:54	11/15/22 01:06	1

Client Sample ID: IDW-Drum-6-11072022
Date Collected: 11/07/22 13:55
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-7
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzidine	ND	*- *1	57	19	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzo[a]anthracene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzo[b]fluoranthene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzo[k]fluoranthene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzo[g,h,i]perylene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzo[a]pyrene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzoic acid	ND	*1	24	11	ug/L		11/14/22 07:54	11/15/22 01:06	1
Benzyl alcohol	ND	*1	9.5	3.8	ug/L		11/14/22 07:54	11/15/22 01:06	1
Bis(2-chloroethoxy)methane	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Bis(2-chloroethyl)ether	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Bis(2-ethylhexyl) phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
bis (2-Chloroisopropyl) ether	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
4-Bromophenyl phenyl ether	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Butyl benzyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
4-Chloroaniline	ND	*- *1	9.5	3.8	ug/L		11/14/22 07:54	11/15/22 01:06	1
4-Chloro-3-methylphenol	ND		4.7	0.95	ug/L		11/14/22 07:54	11/15/22 01:06	1
2-Chloronaphthalene	ND	*1	0.95	0.38	ug/L		11/14/22 07:54	11/15/22 01:06	1
2-Chlorophenol	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
4-Chlorophenyl phenyl ether	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Chrysene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Dibenz(a,h)anthracene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Dibenzofuran	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Di-n-butyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
1,2-Dichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
1,3-Dichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
1,4-Dichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
3,3'-Dichlorobenzidine	ND	*- *1	9.5	3.8	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,4-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,6-Dichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Diethyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,4-Dimethylphenol	ND		9.5	2.8	ug/L		11/14/22 07:54	11/15/22 01:06	1
Dimethyl phthalate	ND	*1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
4,6-Dinitro-2-methylphenol	ND		20	7.6	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,4-Dinitrophenol	ND		28	13	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,4-Dinitrotoluene	ND	*1	4.7	0.95	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,6-Dinitrotoluene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Di-n-octyl phthalate	ND	*1	10	4.7	ug/L		11/14/22 07:54	11/15/22 01:06	1
Fluoranthene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Fluorene	ND	*1	0.47	0.11	ug/L		11/14/22 07:54	11/15/22 01:06	1
Hexachlorobenzene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 01:06	1
Hexachloro-1,3-butadiene	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Hexachlorocyclopentadiene	ND	*1	10	4.7	ug/L		11/14/22 07:54	11/15/22 01:06	1
Hexachloroethane	ND	*- *1	4.7	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Indeno[1,2,3-cd]pyrene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 01:06	1
Isophorone	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
2-Methylnaphthalene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
1-Methylnaphthalene	ND	*- *1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
2-Methylphenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1

Client Sample ID: IDW-Drum-6-11072022

Lab Sample ID: 590-19192-7

Date Collected: 11/07/22 13:55

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	*- *1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
2-Nitroaniline	ND	*1	4.7	0.95	ug/L		11/14/22 07:54	11/15/22 01:06	1
3-Nitroaniline	ND	*- *1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
4-Nitroaniline	ND		2.8	0.85	ug/L		11/14/22 07:54	11/15/22 01:06	1
Nitrobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
2-Nitrophenol	ND	*1	4.7	0.95	ug/L		11/14/22 07:54	11/15/22 01:06	1
4-Nitrophenol	ND		28	9.5	ug/L		11/14/22 07:54	11/15/22 01:06	1
N-Nitrosodimethylamine	ND	*- *1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
N-Nitrosodiphenylamine	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
N-Nitrosodi-n-propylamine	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Pentachlorophenol	ND		4.7	0.95	ug/L		11/14/22 07:54	11/15/22 01:06	1
Phenanthrene	ND	*1	0.47	0.10	ug/L		11/14/22 07:54	11/15/22 01:06	1
Phenol	ND	*1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
Pyrene	ND	*1	0.47	0.095	ug/L		11/14/22 07:54	11/15/22 01:06	1
Pyridine	ND	*- *1	4.7	1.9	ug/L		11/14/22 07:54	11/15/22 01:06	1
1,2,4-Trichlorobenzene	ND	*- *1	1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,4,5-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1
2,4,6-Trichlorophenol	ND		1.9	0.47	ug/L		11/14/22 07:54	11/15/22 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 150*	*11/14/22 07:54*	*11/15/22 01:06*	*1*
2-Fluorobiphenyl (Surr)	*83*		*44 - 120*	*11/14/22 07:54*	*11/15/22 01:06*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*11/14/22 07:54*	*11/15/22 01:06*	*1*
Nitrobenzene-d5 (Surr)	*84*		*25 - 125*	*11/14/22 07:54*	*11/15/22 01:06*	*1*
p-Terphenyl-d14 (Surr)	*91*		*37 - 120*	*11/14/22 07:54*	*11/15/22 01:06*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*11/14/22 07:54*	*11/15/22 01:06*	*1*

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 17:28	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 17:28	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**8.2**	**HF**	0.1	0.1	SU			11/18/22 12:10	1

Client Sample ID: Trip Blank

Lab Sample ID: 590-19192-8

Date Collected: 11/07/22 00:00

Matrix: Water

Date Received: 11/07/22 16:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 17:02	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 17:02	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 17:02	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 17:02	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 17:02	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 17:02	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 17:02	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 17:02	1

Client Sample ID: Trip Blank
Date Collected: 11/07/22 00:00
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 17:02	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 17:02	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 17:02	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 17:02	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 17:02	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 17:02	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 17:02	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 17:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 17:02	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 17:02	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 17:02	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 17:02	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 17:02	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 17:02	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 17:02	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 17:02	1
Toluene	ND		1.0	0.31	ug/L			11/17/22 17:02	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 17:02	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 17:02	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 17:02	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 17:02	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 17:02	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 17:02	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 17:02	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 17:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 17:02	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 17:02	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 17:02	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 17:02	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 17:02	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 17:02	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 17:02	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 17:02	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 17:02	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 17:02	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 17:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 17:02	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 17:02	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 17:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 17:02	1
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 17:02	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 17:02	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 17:02	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 17:02	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 17:02	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 17:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 17:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 17:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 17:02	1

Client Sample ID: Trip Blank
Date Collected: 11/07/22 00:00
Date Received: 11/07/22 16:25

Lab Sample ID: 590-19192-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 17:02	1
Naphthalene	ND		2.0	0.63	ug/L			11/17/22 17:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/17/22 17:02*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*11/17/22 17:02*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*11/17/22 17:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*11/17/22 17:02*	*1*

Method: EPA 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 18:01	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 18:01	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 18:01	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 590-39122/6
Matrix: Water
Analysis Batch: 39122

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	0.64	ug/L			11/17/22 12:40	1
Chloromethane	ND		3.0	0.50	ug/L			11/17/22 12:40	1
Vinyl chloride	ND		0.40	0.13	ug/L			11/17/22 12:40	1
Bromomethane	ND		5.0	0.76	ug/L			11/17/22 12:40	1
Chloroethane	ND		2.0	0.40	ug/L			11/17/22 12:40	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/17/22 12:40	1
1,1-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 12:40	1
Methylene Chloride	ND		5.0	2.2	ug/L			11/17/22 12:40	1
trans-1,2-Dichloroethene	ND		1.0	0.20	ug/L			11/17/22 12:40	1
1,1-Dichloroethane	ND		1.0	0.29	ug/L			11/17/22 12:40	1
2,2-Dichloropropane	ND		2.0	0.66	ug/L			11/17/22 12:40	1
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L			11/17/22 12:40	1
Bromochloromethane	ND		2.0	0.44	ug/L			11/17/22 12:40	1
Chloroform	ND		1.0	0.24	ug/L			11/17/22 12:40	1
1,1,1-Trichloroethane	ND		1.0	0.17	ug/L			11/17/22 12:40	1
Carbon tetrachloride	ND		1.0	0.40	ug/L			11/17/22 12:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			11/17/22 12:40	1
Benzene	ND		0.40	0.093	ug/L			11/17/22 12:40	1
1,2-Dichloroethane	ND		1.0	0.31	ug/L			11/17/22 12:40	1
Trichloroethene	ND		1.0	0.20	ug/L			11/17/22 12:40	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/17/22 12:40	1
Dibromomethane	ND		2.0	0.50	ug/L			11/17/22 12:40	1
Bromodichloromethane	ND		1.0	0.29	ug/L			11/17/22 12:40	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			11/17/22 12:40	1
Toluene	0.338	J	1.0	0.31	ug/L			11/17/22 12:40	1
trans-1,3-Dichloropropene	ND		1.0	0.45	ug/L			11/17/22 12:40	1
1,1,2-Trichloroethane	ND		2.0	0.43	ug/L			11/17/22 12:40	1
Tetrachloroethene	ND		1.0	0.22	ug/L			11/17/22 12:40	1
1,3-Dichloropropane	ND		2.0	0.21	ug/L			11/17/22 12:40	1
Dibromochloromethane	ND		2.0	0.33	ug/L			11/17/22 12:40	1
1,2-Dibromoethane (EDB)	ND		1.0	0.20	ug/L			11/17/22 12:40	1
Chlorobenzene	ND		1.0	0.32	ug/L			11/17/22 12:40	1
Ethylbenzene	ND		1.0	0.20	ug/L			11/17/22 12:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.48	ug/L			11/17/22 12:40	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.32	ug/L			11/17/22 12:40	1
m,p-Xylene	ND		2.0	0.28	ug/L			11/17/22 12:40	1
o-Xylene	ND		1.0	0.16	ug/L			11/17/22 12:40	1
Styrene	ND		1.0	0.24	ug/L			11/17/22 12:40	1
Bromoform	ND		5.0	0.66	ug/L			11/17/22 12:40	1
Isopropylbenzene	ND		1.0	0.24	ug/L			11/17/22 12:40	1
Bromobenzene	ND		1.0	0.28	ug/L			11/17/22 12:40	1
N-Propylbenzene	ND		1.0	0.25	ug/L			11/17/22 12:40	1
1,2,3-Trichloropropane	ND		2.0	0.50	ug/L			11/17/22 12:40	1
2-Chlorotoluene	ND		1.0	0.36	ug/L			11/17/22 12:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.32	ug/L			11/17/22 12:40	1
4-Chlorotoluene	ND		1.0	0.26	ug/L			11/17/22 12:40	1
tert-Butylbenzene	ND		1.0	0.12	ug/L			11/17/22 12:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.31	ug/L			11/17/22 12:40	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 590-39122/6
Matrix: Water
Analysis Batch: 39122

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.22	ug/L			11/17/22 12:40	1
1,3-Dichlorobenzene	ND		1.0	0.14	ug/L			11/17/22 12:40	1
p-Isopropyltoluene	ND		1.0	0.27	ug/L			11/17/22 12:40	1
1,4-Dichlorobenzene	ND		1.0	0.28	ug/L			11/17/22 12:40	1
n-Butylbenzene	ND		1.0	0.20	ug/L			11/17/22 12:40	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/L			11/17/22 12:40	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/L			11/17/22 12:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.16	ug/L			11/17/22 12:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.33	ug/L			11/17/22 12:40	1
Hexachlorobutadiene	ND		2.0	0.21	ug/L			11/17/22 12:40	1
Naphthalene	0.630	J	2.0	0.63	ug/L			11/17/22 12:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/17/22 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*		*11/17/22 12:40*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/17/22 12:40*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*11/17/22 12:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*11/17/22 12:40*	*1*

Lab Sample ID: LCS 590-39122/1004
Matrix: Water
Analysis Batch: 39122

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	10.0	9.81		ug/L		98	31 - 150
Chloromethane	10.0	9.01		ug/L		90	40 - 150
Vinyl chloride	10.0	9.87		ug/L		99	47 - 150
Bromomethane	10.0	10.1		ug/L		101	54 - 143
Chloroethane	10.0	10.3		ug/L		103	56 - 145
Trichlorofluoromethane	10.0	10.8		ug/L		108	60 - 150
1,1-Dichloroethene	10.0	10.6		ug/L		106	75 - 140
Methylene Chloride	10.0	9.93		ug/L		99	57 - 150
trans-1,2-Dichloroethene	10.0	10.5		ug/L		105	75 - 132
1,1-Dichloroethane	10.0	9.91		ug/L		99	79 - 121
2,2-Dichloropropane	10.0	10.0		ug/L		100	69 - 143
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	80 - 121
Bromochloromethane	10.0	10.9		ug/L		109	70 - 140
Chloroform	10.0	10.4		ug/L		104	80 - 126
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	80 - 130
Carbon tetrachloride	10.0	10.1		ug/L		101	75 - 126
1,1-Dichloropropene	10.0	10.8		ug/L		108	76 - 125
Benzene	10.0	10.4		ug/L		104	80 - 126
1,2-Dichloroethane	10.0	10.2		ug/L		102	76 - 127
Trichloroethene	10.0	10.0		ug/L		100	75 - 129
1,2-Dichloropropane	10.0	10.1		ug/L		101	80 - 121
Dibromomethane	10.0	9.89		ug/L		99	70 - 126
Bromodichloromethane	10.0	9.93		ug/L		99	73 - 135
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	72 - 129

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 590-39122/1004
Matrix: Water
Analysis Batch: 39122

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	10.0	10.5		ug/L		105	80 - 129
trans-1,3-Dichloropropene	10.0	10.7		ug/L		107	74 - 120
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	80 - 126
Tetrachloroethene	10.0	10.8		ug/L		108	77 - 124
1,3-Dichloropropane	10.0	10.7		ug/L		107	73 - 126
Dibromochloromethane	10.0	10.3		ug/L		103	72 - 122
1,2-Dibromoethane (EDB)	10.0	10.7		ug/L		107	74 - 120
Chlorobenzene	10.0	10.4		ug/L		104	79 - 125
Ethylbenzene	10.0	10.7		ug/L		107	80 - 128
1,1,1,2-Tetrachloroethane	10.0	10.4		ug/L		104	75 - 125
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	75 - 121
m,p-Xylene	10.0	10.8		ug/L		108	80 - 127
o-Xylene	10.0	10.6		ug/L		106	80 - 126
Styrene	10.0	10.4		ug/L		104	75 - 136
Bromoform	10.0	10.6		ug/L		106	46 - 134
Isopropylbenzene	10.0	10.7		ug/L		107	77 - 123
Bromobenzene	10.0	9.84		ug/L		98	77 - 128
N-Propylbenzene	10.0	10.5		ug/L		105	67 - 138
1,2,3-Trichloropropane	10.0	11.7		ug/L		117	72 - 128
2-Chlorotoluene	10.0	10.1		ug/L		101	76 - 131
1,3,5-Trimethylbenzene	10.0	10.9		ug/L		109	69 - 134
4-Chlorotoluene	10.0	10.5		ug/L		105	70 - 132
tert-Butylbenzene	10.0	10.5		ug/L		105	68 - 122
1,2,4-Trimethylbenzene	10.0	10.7		ug/L		107	78 - 123
sec-Butylbenzene	10.0	10.8		ug/L		108	67 - 131
1,3-Dichlorobenzene	10.0	10.5		ug/L		105	74 - 128
p-Isopropyltoluene	10.0	10.3		ug/L		103	72 - 127
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	74 - 121
n-Butylbenzene	10.0	9.74		ug/L		97	71 - 127
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	73 - 127
1,2-Dibromo-3-Chloropropane	10.0	11.2		ug/L		112	47 - 136
1,2,4-Trichlorobenzene	10.0	10.2		ug/L		102	75 - 136
1,2,3-Trichlorobenzene	10.0	10.1		ug/L		101	74 - 135
Hexachlorobutadiene	10.0	10.0		ug/L		100	65 - 150
Naphthalene	10.0	10.6		ug/L		106	60 - 130
Methyl tert-butyl ether	10.0	10.7		ug/L		107	77 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 590-39122/4
Matrix: Water
Analysis Batch: 39122

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
Dichlorodifluoromethane			10.0	9.81		ug/L		98	31 - 150	0	25
Chloromethane			10.0	9.01		ug/L		90	40 - 150	0	28
Vinyl chloride			10.0	9.87		ug/L		99	47 - 150	0	18
Bromomethane			10.0	10.1		ug/L		101	54 - 143	0	25
Chloroethane			10.0	10.3		ug/L		103	56 - 145	0	25
Trichlorofluoromethane			10.0	10.8		ug/L		108	60 - 150	0	19
1,1-Dichloroethene			10.0	10.6		ug/L		106	75 - 140	0	24
Methylene Chloride			10.0	9.93		ug/L		99	57 - 150	0	24
trans-1,2-Dichloroethene			10.0	10.5		ug/L		105	75 - 132	0	17
1,1-Dichloroethane			10.0	9.91		ug/L		99	79 - 121	0	16
2,2-Dichloropropane			10.0	10.0		ug/L		100	69 - 143	0	25
cis-1,2-Dichloroethene			10.0	10.0		ug/L		100	80 - 121	0	18
Bromochloromethane			10.0	10.9		ug/L		109	70 - 140	0	18
Chloroform			10.0	10.4		ug/L		104	80 - 126	0	18
1,1,1-Trichloroethane			10.0	10.4		ug/L		104	80 - 130	0	18
Carbon tetrachloride			10.0	10.1		ug/L		101	75 - 126	0	17
1,1-Dichloropropene			10.0	10.8		ug/L		108	76 - 125	0	15
Benzene			10.0	10.4		ug/L		104	80 - 126	0	18
1,2-Dichloroethane			10.0	10.2		ug/L		102	76 - 127	0	16
Trichloroethene			10.0	10.0		ug/L		100	75 - 129	0	17
1,2-Dichloropropane			10.0	10.1		ug/L		101	80 - 121	0	18
Dibromomethane			10.0	9.89		ug/L		99	70 - 126	0	21
Bromodichloromethane			10.0	9.93		ug/L		99	73 - 135	0	19
cis-1,3-Dichloropropene			10.0	10.1		ug/L		101	72 - 129	0	20
Toluene			10.0	10.5		ug/L		105	80 - 129	0	18
trans-1,3-Dichloropropene			10.0	10.7		ug/L		107	74 - 120	0	17
1,1,2-Trichloroethane			10.0	10.7		ug/L		107	80 - 126	0	16
Tetrachloroethene			10.0	10.8		ug/L		108	77 - 124	0	22
1,3-Dichloropropane			10.0	10.7		ug/L		107	73 - 126	0	23
Dibromochloromethane			10.0	10.3		ug/L		103	72 - 122	0	19
1,2-Dibromoethane (EDB)			10.0	10.7		ug/L		107	74 - 120	0	17
Chlorobenzene			10.0	10.4		ug/L		104	79 - 125	0	17
Ethylbenzene			10.0	10.7		ug/L		107	80 - 128	0	18
1,1,1,2-Tetrachloroethane			10.0	10.4		ug/L		104	75 - 125	0	15
1,1,2,2-Tetrachloroethane			10.0	10.7		ug/L		107	75 - 121	0	21
m,p-Xylene			10.0	10.8		ug/L		108	80 - 127	0	18
o-Xylene			10.0	10.6		ug/L		106	80 - 126	0	17
Styrene			10.0	10.4		ug/L		104	75 - 136	0	17
Bromoform			10.0	10.6		ug/L		106	46 - 134	0	20
Isopropylbenzene			10.0	10.7		ug/L		107	77 - 123	0	17
Bromobenzene			10.0	9.84		ug/L		98	77 - 128	0	18
N-Propylbenzene			10.0	10.5		ug/L		105	67 - 138	0	18
1,2,3-Trichloropropane			10.0	11.7		ug/L		117	72 - 128	0	25
2-Chlorotoluene			10.0	10.1		ug/L		101	76 - 131	0	25
1,3,5-Trimethylbenzene			10.0	10.9		ug/L		109	69 - 134	0	17
4-Chlorotoluene			10.0	10.5		ug/L		105	70 - 132	0	18
tert-Butylbenzene			10.0	10.5		ug/L		105	68 - 122	0	19
1,2,4-Trimethylbenzene			10.0	10.7		ug/L		107	78 - 123	0	17

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 590-39122/4
Matrix: Water
Analysis Batch: 39122

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
sec-Butylbenzene			10.0	10.8		ug/L		108	67 - 131	0	19
1,3-Dichlorobenzene			10.0	10.5		ug/L		105	74 - 128	0	17
p-Isopropyltoluene			10.0	10.3		ug/L		103	72 - 127	0	18
1,4-Dichlorobenzene			10.0	10.0		ug/L		100	74 - 121	0	18
n-Butylbenzene			10.0	9.74		ug/L		97	71 - 127	0	19
1,2-Dichlorobenzene			10.0	10.1		ug/L		101	73 - 127	0	16
1,2-Dibromo-3-Chloropropane			10.0	11.2		ug/L		112	47 - 136	0	34
1,2,4-Trichlorobenzene			10.0	10.2		ug/L		102	75 - 136	0	26
1,2,3-Trichlorobenzene			10.0	10.1		ug/L		101	74 - 135	0	27
Hexachlorobutadiene			10.0	10.0		ug/L		100	65 - 150	0	22
Naphthalene			10.0	10.6		ug/L		106	60 - 130	0	32
Methyl tert-butyl ether			10.0	10.7		ug/L		107	77 - 128	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*

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

Lab Sample ID: MB 410-317127/1-A
Matrix: Water
Analysis Batch: 317400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317127

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Acenaphthylene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Aniline	ND		5.0	1.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
Anthracene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzidine	ND		60	20	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzo[a]pyrene	ND		0.50	0.11	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzoic acid	ND		25	12	ug/L		11/14/22 07:54	11/14/22 22:06	1
Benzyl alcohol	ND		10	4.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
bis (2-Chloroisopropyl) ether	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
4-Bromophenyl phenyl ether	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Butyl benzyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
4-Chloroaniline	ND		10	4.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
4-Chloro-3-methylphenol	ND		5.0	1.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		11/14/22 07:54	11/14/22 22:06	1
2-Chlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
4-Chlorophenyl phenyl ether	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1

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

Lab Sample ID: MB 410-317127/1-A
Matrix: Water
Analysis Batch: 317400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317127

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Dibenzofuran	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
1,2-Dichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
1,3-Dichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
1,4-Dichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
3,3'-Dichlorobenzidine	ND		10	4.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,6-Dichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Diethyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,4-Dinitrophenol	ND		30	14	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
Fluoranthene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Fluorene	ND		0.50	0.12	ug/L		11/14/22 07:54	11/14/22 22:06	1
Hexachlorobenzene	ND		0.50	0.11	ug/L		11/14/22 07:54	11/14/22 22:06	1
Hexachloro-1,3-butadiene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
Hexachloroethane	ND		5.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.11	ug/L		11/14/22 07:54	11/14/22 22:06	1
Isophorone	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
1-Methylnaphthalene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
2-Methylphenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Naphthalene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
2-Nitroaniline	ND		5.0	1.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
3-Nitroaniline	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
4-Nitroaniline	ND		3.0	0.90	ug/L		11/14/22 07:54	11/14/22 22:06	1
Nitrobenzene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
2-Nitrophenol	ND		5.0	1.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
4-Nitrophenol	ND		30	10	ug/L		11/14/22 07:54	11/14/22 22:06	1
N-Nitrosodimethylamine	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
N-Nitrosodiphenylamine	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
N-Nitrosodi-n-propylamine	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Pentachlorophenol	ND		5.0	1.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
Phenanthrene	ND		0.50	0.11	ug/L		11/14/22 07:54	11/14/22 22:06	1
Phenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
Pyrene	ND		0.50	0.10	ug/L		11/14/22 07:54	11/14/22 22:06	1
Pyridine	ND		5.0	2.0	ug/L		11/14/22 07:54	11/14/22 22:06	1
1,2,4-Trichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:54	11/14/22 22:06	1

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

Lab Sample ID: MB 410-317127/1-A
Matrix: Water
Analysis Batch: 317400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317127

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		10 - 150	11/14/22 07:54	11/14/22 22:06	1
2-Fluorobiphenyl (Surr)	83		44 - 120	11/14/22 07:54	11/14/22 22:06	1
2-Fluorophenol (Surr)	52		10 - 120	11/14/22 07:54	11/14/22 22:06	1
Nitrobenzene-d5 (Surr)	83		25 - 125	11/14/22 07:54	11/14/22 22:06	1
p-Terphenyl-d14 (Surr)	96		37 - 120	11/14/22 07:54	11/14/22 22:06	1
Phenol-d5 (Surr)	36		10 - 120	11/14/22 07:54	11/14/22 22:06	1

Lab Sample ID: LCS 410-317127/2-A
Matrix: Water
Analysis Batch: 317400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317127

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	50.0	32.3		ug/L		65	59 - 120
Acenaphthylene	50.0	33.4		ug/L		67	67 - 120
Butyl benzyl phthalate	50.0	22.5		ug/L		45	25 - 132
4-Chloro-3-methylphenol	50.0	45.2		ug/L		90	63 - 128
2-Chlorophenol	50.0	30.2		ug/L		60	57 - 120
1,4-Dichlorobenzene	50.0	11.6	*-	ug/L		23	40 - 120
Dimethyl phthalate	50.0	18.7		ug/L		37	10 - 135
2,4-Dinitrotoluene	50.0	39.4		ug/L		79	71 - 124
Fluorene	50.0	35.2		ug/L		70	66 - 120
Naphthalene	50.0	23.6	*-	ug/L		47	55 - 120
4-Nitrophenol	100	68.5		ug/L		69	24 - 120
N-Nitrosodi-n-propylamine	50.0	27.2	*-	ug/L		54	63 - 120
Pentachlorophenol	100	86.4		ug/L		86	56 - 135
Phenol	50.0	20.5		ug/L		41	22 - 120
Pyrene	50.0	37.6		ug/L		75	73 - 120
1,2,4-Trichlorobenzene	50.0	20.4	*-	ug/L		41	44 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	85		10 - 150
2-Fluorobiphenyl (Surr)	49		44 - 120
2-Fluorophenol (Surr)	33		10 - 120
Nitrobenzene-d5 (Surr)	43		25 - 125
p-Terphenyl-d14 (Surr)	61		37 - 120
Phenol-d5 (Surr)	32		10 - 120

Lab Sample ID: LCSD 410-317127/3-A
Matrix: Water
Analysis Batch: 317400

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317127

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	50.0	47.4	*1	ug/L		95	59 - 120	38	30
Acenaphthylene	50.0	48.5	*1	ug/L		97	67 - 120	37	30
Butyl benzyl phthalate	50.0	40.8	*1	ug/L		82	25 - 132	58	30
4-Chloro-3-methylphenol	50.0	51.3		ug/L		103	63 - 128	13	30
2-Chlorophenol	50.0	47.1	*1	ug/L		94	57 - 120	44	30
1,4-Dichlorobenzene	50.0	35.9	*1	ug/L		72	40 - 120	102	30

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

Lab Sample ID: LCSD 410-317127/3-A
Matrix: Water
Analysis Batch: 317400

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317127

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dimethyl phthalate			50.0	37.0	*1	ug/L		74	10 - 135	66	30
2,4-Dinitrotoluene			50.0	54.8	*1	ug/L		110	71 - 124	33	30
Fluorene			50.0	49.7	*1	ug/L		99	66 - 120	34	30
Naphthalene			50.0	43.0	*1	ug/L		86	55 - 120	58	30
4-Nitrophenol			100	77.8		ug/L		78	24 - 120	13	30
N-Nitrosodi-n-propylamine			50.0	47.8	*1	ug/L		96	63 - 120	55	30
Pentachlorophenol			100	107		ug/L		107	56 - 135	21	30
Phenol			50.0	28.9	*1	ug/L		58	22 - 120	34	30
Pyrene			50.0	52.7	*1	ug/L		105	73 - 120	33	30
1,2,4-Trichlorobenzene			50.0	38.5	*1	ug/L		77	44 - 120	61	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*94*		*10 - 150*
2-Fluorobiphenyl (Surr)	*73*		*44 - 120*
2-Fluorophenol (Surr)	*59*		*10 - 120*
Nitrobenzene-d5 (Surr)	*80*		*25 - 125*
p-Terphenyl-d14 (Surr)	*99*		*37 - 120*
Phenol-d5 (Surr)	*44*		*10 - 120*

Lab Sample ID: MB 410-317131/1-A
Matrix: Water
Analysis Batch: 317358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317131

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Acenaphthylene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Aniline	ND		5.0	1.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
Anthracene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzidine	ND		60	20	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzo[a]pyrene	ND		0.50	0.11	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzoic acid	ND		25	12	ug/L		11/14/22 07:55	11/14/22 16:00	1
Benzyl alcohol	ND		10	4.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
bis (2-Chloroisopropyl) ether	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
4-Bromophenyl phenyl ether	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Butyl benzyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
4-Chloroaniline	ND		10	4.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
4-Chloro-3-methylphenol	ND		5.0	1.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		11/14/22 07:55	11/14/22 16:00	1
2-Chlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
4-Chlorophenyl phenyl ether	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Chrysene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1

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

Lab Sample ID: MB 410-317131/1-A
Matrix: Water
Analysis Batch: 317358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317131

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Dibenzofuran	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
1,2-Dichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
1,3-Dichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
1,4-Dichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
3,3'-Dichlorobenzidine	ND		10	4.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,6-Dichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Diethyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,4-Dinitrophenol	ND		30	14	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
Fluoranthene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Fluorene	ND		0.50	0.12	ug/L		11/14/22 07:55	11/14/22 16:00	1
Hexachlorobenzene	ND		0.50	0.11	ug/L		11/14/22 07:55	11/14/22 16:00	1
Hexachloro-1,3-butadiene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
Hexachloroethane	ND		5.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.11	ug/L		11/14/22 07:55	11/14/22 16:00	1
Isophorone	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
1-Methylnaphthalene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
2-Methylphenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Naphthalene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
2-Nitroaniline	ND		5.0	1.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
3-Nitroaniline	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
4-Nitroaniline	ND		3.0	0.90	ug/L		11/14/22 07:55	11/14/22 16:00	1
Nitrobenzene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
2-Nitrophenol	ND		5.0	1.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
4-Nitrophenol	ND		30	10	ug/L		11/14/22 07:55	11/14/22 16:00	1
N-Nitrosodimethylamine	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
N-Nitrosodiphenylamine	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
N-Nitrosodi-n-propylamine	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Pentachlorophenol	ND		5.0	1.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
Phenanthrene	ND		0.50	0.11	ug/L		11/14/22 07:55	11/14/22 16:00	1
Phenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
Pyrene	ND		0.50	0.10	ug/L		11/14/22 07:55	11/14/22 16:00	1
Pyridine	ND		5.0	2.0	ug/L		11/14/22 07:55	11/14/22 16:00	1
1,2,4-Trichlorobenzene	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		11/14/22 07:55	11/14/22 16:00	1

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

Lab Sample ID: MB 410-317131/1-A
Matrix: Water
Analysis Batch: 317358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317131

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	*102*		*10 - 150*	*11/14/22 07:55*	*11/14/22 16:00*	*1*
2-Fluorobiphenyl (Surr)	*84*		*44 - 120*	*11/14/22 07:55*	*11/14/22 16:00*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 120*	*11/14/22 07:55*	*11/14/22 16:00*	*1*
Nitrobenzene-d5 (Surr)	*83*		*25 - 125*	*11/14/22 07:55*	*11/14/22 16:00*	*1*
p-Terphenyl-d14 (Surr)	*97*		*37 - 120*	*11/14/22 07:55*	*11/14/22 16:00*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*11/14/22 07:55*	*11/14/22 16:00*	*1*

Lab Sample ID: LCS 410-317131/2-A
Matrix: Water
Analysis Batch: 317358

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317131

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	50.0	48.0		ug/L		96	59 - 120
Acenaphthylene	50.0	48.1		ug/L		96	67 - 120
Butyl benzyl phthalate	50.0	41.9		ug/L		84	25 - 132
4-Chloro-3-methylphenol	50.0	50.3		ug/L		101	63 - 128
2-Chlorophenol	50.0	46.5		ug/L		93	57 - 120
1,4-Dichlorobenzene	50.0	39.4		ug/L		79	40 - 120
Dimethyl phthalate	50.0	33.3		ug/L		67	10 - 135
2,4-Dinitrotoluene	50.0	55.6		ug/L		111	71 - 124
Fluorene	50.0	51.2		ug/L		102	66 - 120
Naphthalene	50.0	44.0		ug/L		88	55 - 120
4-Nitrophenol	100	79.0		ug/L		79	24 - 120
N-Nitrosodi-n-propylamine	50.0	48.2		ug/L		96	63 - 120
Pentachlorophenol	100	111		ug/L		111	56 - 135
Phenol	50.0	28.0		ug/L		56	22 - 120
Pyrene	50.0	50.9		ug/L		102	73 - 120
1,2,4-Trichlorobenzene	50.0	41.8		ug/L		84	44 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*98*		*10 - 150*
2-Fluorobiphenyl (Surr)	*80*		*44 - 120*
2-Fluorophenol (Surr)	*59*		*10 - 120*
Nitrobenzene-d5 (Surr)	*79*		*25 - 125*
p-Terphenyl-d14 (Surr)	*95*		*37 - 120*
Phenol-d5 (Surr)	*44*		*10 - 120*

Method: 8011 - EDB

Lab Sample ID: MB 590-38981/1-A
Matrix: Water
Analysis Batch: 38970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010	0.0025	ug/L		11/08/22 13:31	11/08/22 15:02	1
1,2-Dibromo-3-Chloropropane	ND		0.010	0.0032	ug/L		11/08/22 13:31	11/08/22 15:02	1
1,2,3-Trichloropropane	ND		0.010	0.0050	ug/L		11/08/22 13:31	11/08/22 15:02	1

Method: 8011 - EDB (Continued)

Lab Sample ID: LCS 590-38981/2-A
Matrix: Water
Analysis Batch: 38970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	0.125	0.110		ug/L		88	60 - 140
1,2-Dibromo-3-Chloropropane	0.125	0.119		ug/L		95	60 - 140
1,2,3-Trichloropropane	0.125	0.121		ug/L		97	60 - 140

Lab Sample ID: LCSD 590-38981/3-A
Matrix: Water
Analysis Batch: 38970

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38981

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	0.125	0.108		ug/L		86	60 - 140	2	20
1,2-Dibromo-3-Chloropropane	0.125	0.125		ug/L		100	60 - 140	5	20
1,2,3-Trichloropropane	0.125	0.129		ug/L		104	60 - 140	7	20

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 590-39136/1
Matrix: Water
Analysis Batch: 39136

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		101	98.6 - 101.4

Lab Chronicle

Client: HDR Inc
Project/Site: Simplot Warden

Job ID: 590-19192-1

Client Sample ID: TOTE-Water-11072022

Lab Sample ID: 590-19192-1

Date Collected: 11/07/22 14:10

Matrix: Water

Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 14:08	JSP	EET SPK
Total/NA	Prep	3510C			267.9 mL	1 mL	317131	11/14/22 07:55	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317358	11/15/22 00:04	AH7C	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 15:51	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client Sample ID: IDW-Drum-1-11072022

Lab Sample ID: 590-19192-2

Date Collected: 11/07/22 13:10

Matrix: Water

Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 14:30	JSP	EET SPK
Total/NA	Prep	3510C			265.2 mL	1 mL	317131	11/14/22 07:55	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317358	11/15/22 00:25	AH7C	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 16:07	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client Sample ID: IDW-Drum-2-11072022

Lab Sample ID: 590-19192-3

Date Collected: 11/07/22 13:20

Matrix: Water

Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 14:52	JSP	EET SPK
Total/NA	Prep	3510C			246.7 mL	1 mL	317131	11/14/22 07:55	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317358	11/15/22 00:46	AH7C	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 16:23	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client Sample ID: IDW-Drum-3-11072022

Lab Sample ID: 590-19192-4

Date Collected: 11/07/22 13:35

Matrix: Water

Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 15:13	JSP	EET SPK
Total/NA	Prep	3510C			259.3 mL	1 mL	317131	11/14/22 07:55	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317358	11/15/22 01:07	AH7C	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 16:40	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client: HDR Inc
Job ID: 590-19192-1
Project/Site: Simplot Warden

Client Sample ID: IDW-Drum-4-11072022
Lab Sample ID: 590-19192-5
Date Collected: 11/07/22 13:45
Matrix: Water
Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 15:35	JSP	EET SPK
Total/NA	Prep	3510C			262.5 mL	1 mL	317127	11/14/22 07:54	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317400	11/15/22 00:06	W6XI	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 16:56	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client Sample ID: IDW-Drum-5-11072022
Lab Sample ID: 590-19192-6
Date Collected: 11/07/22 13:50
Matrix: Water
Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 15:57	JSP	EET SPK
Total/NA	Prep	3510C			265 mL	1 mL	317127	11/14/22 07:54	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317400	11/15/22 00:46	W6XI	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 17:12	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client Sample ID: IDW-Drum-6-11072022
Lab Sample ID: 590-19192-7
Date Collected: 11/07/22 13:55
Matrix: Water
Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 16:40	JSP	EET SPK
Total/NA	Prep	3510C			263.4 mL	1 mL	317127	11/14/22 07:54	YDF5	ELLE
Total/NA	Analysis	8270E		1	1 mL	1 mL	317400	11/15/22 01:06	W6XI	ELLE
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 17:28	NMI	EET SPK
Total/NA	Analysis	SM 4500 H+ B		1			39136	11/18/22 12:10	AMB	EET SPK

Client Sample ID: Trip Blank
Lab Sample ID: 590-19192-8
Date Collected: 11/07/22 00:00
Matrix: Water
Date Received: 11/07/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	39122	11/17/22 17:02	JSP	EET SPK
Total/NA	Prep	8011			80 mL	2 mL	38981	11/08/22 13:31	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38970	11/08/22 18:01	NMI	EET SPK

Laboratory References:

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 590-19192-1
Project/Site: Simplot Warden

Laboratory: Eurofins Spokane

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8011	8011	Water	1,2,3-Trichloropropane

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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	0001.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	07-01-23
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-00660	08-09-23
California	State	2792	11-30-22
Colorado	State	PA00009	06-30-23
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-23
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	11-27-22
Illinois	NELAP	200027	01-31-23
Iowa	State	361	11-21-22
Kansas	NELAP	E-10151	10-31-22 *
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana (All)	NELAP	02055	06-30-23
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-23
Massachusetts	State	M-PA009	06-30-23
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Mississippi	State	022	01-31-23
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-23
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-23
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	11-22-22
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 590-19192-1
Project/Site: Simplot Warden

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23
Texas	NELAP	T104704194-22-43	08-31-23
USDA	US Federal Programs	P330-19-00197	08-09-23
Vermont	State	VT - 36037	11-16-22
Virginia	NELAP	460182	06-14-23
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	07-31-23
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	1.01	11-30-22

Method Summary

Client: HDR Inc
Job ID: 590-19192-1
Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET SPK
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8011	EDB	EPA	EET SPK
SM 4500 H+ B	pH	SM	EET SPK
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	EET SPK
8011	Microextraction	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

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

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Jered Newcomb	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No:
Client Contact: Jered Newcomb	Phone: 509-899-4371	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: HDR Inc	PWSID:			Job #:
Address: 835 N Post St. Ste. 101	Due Date Requested:			
City: Spokane	TAT Requested (days): Standard			
State, Zip: WA, 99202	Compliance Project: Δ Yes Δ No			
Phone: 509-899-4371	PO #: Purchase Order Requested			
Email: jered.newcomb@hdrinc.com	WO #:			
Project Name: Simplot Warden	Project #: 10331653			
Site: Warden WA	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	EPA Method 8011 *	EPA Method 8260B VOCs **	EPA Method 8270 Semi-VOCs ***	pH ^^^	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
~~KOT-Water-11072022~~	~~11/ /2022~~		G	W	N		X					* ~~Report EDB only. Full list may need~~ to be reported in future.
TOTE-Water 11072022	11/7/2022	1416	G	W	N	N	X	X	X	X	6	
IDW Drum-1-11072022		1310			N	N	X	X	X	X	6	** ~~Place sample analytes on hold.~~ Please advise HDR on hold time expiration dates
IDW-Drum-2-11072022		1320			N	N	X	X	X	X	6	
IDW-Drum-3-11072022		1325			N	N	X	X	X	X	6	*Full list
IDW-Drum-4-11072022		1345			N	N	X	X	X	X	6	
IDW-Drum-5-11072022		1350			N	N	X	X	X	X	6	
IDW-Drum-6-11072022		1355										
Trip Blanks	-	-	-	W	N	N	X	X			6	

590-19192 Chain of Custody

Possible Hazard Identification

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

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

Special Instructions/QC Requirements.

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/7/22 1625	HDR		11/7/22 1625	EET080
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks: 5.1

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-7319.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Washington		Job #: 590-19192-1
Address: 2425 New Holland Pike,	Due Date Requested: 11/21/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Simplot Warden	Project #: 59002373			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270E/3510C_LVI (MOD) Routine SVOA	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TOTE-Water-11072022 (590-19192-1)	11/7/22	14:10 Pacific		Water			X	1	
IDW-Drum-1-11072022 (590-19192-2)	11/7/22	13:10 Pacific		Water			X	1	
IDW-Drum-2-11072022 (590-19192-3)	11/7/22	13:20 Pacific		Water			X	1	
IDW-Drum-3-11072022 (590-19192-4)	11/7/22	13:35 Pacific		Water			X	1	
IDW-Drum-4-11072022 (590-19192-5)	11/7/22	13:45 Pacific		Water			X	1	
IDW-Drum-5-11072022 (590-19192-6)	11/7/22	13:50 Pacific		Water			X	1	
IDW-Drum-6-11072022 (590-19192-7)	11/7/22	13:55 Pacific		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/8/22 1500	ET080			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/9/22 1030	Company ET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1

MB

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-19192-1

Login Number: 19192

List Source: Eurofins Spokane

List Number: 1

Creator: Fettig, Riley

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: HDR Inc

Job Number: 590-19192-1

Login Number: 19192
List Number: 2
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 11/09/22 02:47 PM

Question	Answer	Comment
The cooler's custody seal is 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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Broken Concrete Waste Profile

WASTE CONNECTIONS
Connect with the Future

APPROVED

Waste Stream Details

ID	2e51b180-a1de-4566-bd4e-ef9513578464
Name	Concrete with low level (ppb) EDB
Generator	Simplot RDO – Simplot Grower's Solutions 1800 W First St, Warden, WA 98857 (208) 389-7451 County: Grant
Service Provider 1	Graymar Environmental Services, Inc – Graymar Environmental 601 South Pioneer WAy, Suite F218, Moses Lake , WA 98837 (971) 270-7776 County: Grant
Service Provider 2	GrayMar Environmental Services Inc. – JR Simplot Simplot Growers Solutions (SGS), 1800 West First Street, Warden, WA 98857 (208) 389-7541 County: Grant County
Transporter	Graymar Environmental Services, Inc – Graymar Environmental 601 South Pioneer WAy, Suite F218, Moses Lake , WA 98837 (971) 270-7776 County: Grant
Billing	Graymar Environmental Services, Inc – Graymar Environmental 601 South Pioneer WAy, Suite F218, Moses Lake , WA 98837 (971) 270-7776 County: Grant
Facility	Waste Connections – Wasco County LF 2550 Steele Road, The Dalles, OR 97058 (541) 296-4082 County: Wasco
Updated	05/03/21

Material Origin

Address	Simplot RDO – Simplot Grower's Solutions 1800 W First St, Warden, WA 98857 (208) 389-7451 County: Grant
EPA ID	
State ID	

Waste Description

EPA Hazardous?	☐ Yes ☑ No
DOT Hazardous Material?	☐ Yes ☑ No
State Hazardous Waste?	☐ Yes ☑ No

Non-hazardous due to treatment, delisting, or exclusion?	☐ Yes ☑ No
From an industry regulated under Benzene NESHAP?	☐ Yes ☑ No
Regulated, Licensed or NORM Radioactive Waste?	☐ Yes ☑ No
Contains PCBs?	☐ Yes ☑ No
Regulated and/or Untreated Medical/Infectious Waste?	☐ Yes ☑ No
Contains Asbestos?	☐ Yes ☑ No
Subject to RCRA Subpart CC controls?	☐ Yes ☑ No

Shipping Description

Shipping Description (including Proper Shipping Name)	Material Not Regulated By DOT (C&D Debris Containing EDB in ppb Concentrations)

Material Details

Is this an Industrial Waste Stream?	No
Common Name	C&D DEBRIS (Concrete Chunks with Rebar)
Generation Process	CLEANUP ACTION REQUESTED BY STATE ECOLOGY UNDER CONSENT ORDER
Preferred Disposal Methods	
Contamination Source	

Material Composition

Constituents	Concrete Chunks: 100% – 95% Rebar: 5% – 1% Soil: 5% – 1%
Color	Gray/White
Physical State at 70°F	⊘ Solid ○ Liquid ○ Sludge ○ Dust ○ Other
Description	*To be completed when* Physical State at 70°F *is* Other
Free Liquid Range	*To be completed when* Physical State at 70°F *is* Liquid, Sludge or Other _____ – _____
pH	_____ – _____
Strong Odor	
Describe Odor	*To be completed when* Strong Odor *is* Yes
Reactivity	
Reactivity Explanation	*To be completed when* Reactivity *is* Yes

Flash Point	◯ < 140°F ◯ 140°F - 199°F ◯ ≥ 200°F ⊘ N/A

EPA Hazardous Information

To be completed when EPA Hazardous? *is* Yes

Characteristic Waste	_____ : _____ _____ : _____ _____ : _____
Listed Codes	_____
Is this material subject to the Alternative DEBRIS standards (40 CFR 268.45)?	_____
Is this material subject to the Alternative SOIL standards (40 CFR 268.49)?	_____
Underlying Hazardous Constituent	*To be completed when* Is this material subject to the Alternative SOIL standards (40 CFR 268.49)? *is* Yes _____ _____ _____
Is this material exempt from Subpart CC controls (40 CFR 264.1083)?	_____
Reason	*To be completed when* Is this material exempt from Subpart CC controls (40 CFR 264.1083)? *is* Yes ◯ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c) or (c)(4)) ◯ Waste contains VOCs that average <500 ppmw (40 CFR 264.1082(c)(1)). [Will require annual update]

EPA Non-Hazardous Information

To be completed when EPA Hazardous? *is* No

Process Knowledge	☐ Yes ☑ No
SDS	☐ Yes ☑ No
Certified Analytical Report	☑ Yes ☐ No
Exempt Waste	☐ Yes ☑ No
Process Details	*To be completed when* Process Knowledge *is* Yes _____
Is the data derived from testing a representative sample according with 40 CFR 261 and/or other applicable laws?	*To be completed when* Certified Analytical Report *is* Yes Yes
Type of Analytical Sample	*To be completed when* Is the data derived from testing a representative sample according with 40 CFR 261 and/or other applicable laws? *is* Yes ⊘ Composite ◯ Grab
Sample ID #	*To be completed when* Is the data derived from testing a representative sample according with 40 CFR 261 and/or other applicable laws? *is* Yes J14804-1 UDS Level 2 Report Final Report

Applicable Exempt Waste Item	*To be completed when* Exempt Waste *is* Yes ◯ UST Corrective Action - 40 CFR 261.4 (b)(10) ◯ PCB Bulk Product Waste - 40 CFR 761.62 ◯ Oil & Gas E&P Waste - 40 CFR 261.4 (b)(5) ◯ RCRA-Empty Containers - 40 CFR 261.7 ◯ Other
Provided Reference	*To be completed when* Applicable Exempt Waste Item *is* Other

Non-Hazardous Waste

To be completed when Non-hazardous due to treatment, delisting, or exclusion? *is* Yes

What type of non-hazardous waste is this?	◯ Delisted Hazardous Waste ◯ Treated Hazardous Waste Debris ◯ Excluded Waste under 40 CFR 261.4 ◯ Treated Characteristic Hazardous Waste
Specify Exclusions	*To be completed when* What type of non-hazardous waste is this? *is* Excluded Waste under 40 CFR 261.4

State Waste Information

State Waste Codes	

Benzene Information

To be completed when From an industry regulated under Benzene NESHAP? *is* Yes

Are you a TSDF?	

To be completed when Are you a TSDF? is Yes

Please complete the Benzene NESHAP questionnaire

Does this material contain benzene?	*To be completed when* Are you a TSDF? *is* No
Flow Weighted Average Concentration in PPMW	*To be completed when* Does this material contain benzene? *is* Yes
What is your current facility's total annual benzene quantity in megagrams?	*To be completed when* Are you a TSDF? *is* No ◯ Less than (<) 1 Mg ◯ 1 - 9.99 Mg ◯ More than (>) 10Mg
Is this waste soil from a remediation?	*To be completed when* Are you a TSDF? *is* No
Benzene Concentration in PPMW	*To be completed when* Is this waste soil from a remediation? *is* Yes
Does the waste contain more than (>) 10% water/moisture?	*To be completed when* Are you a TSDF? *is* No
Has material been treated to remove 99% of the benzene or to achieve less than 10ppmw?	*To be completed when* Are you a TSDF? *is* No
Is material exempt from controls in accordance with 40 CFR 61.342?	*To be completed when* Are you a TSDF? *is* No
Specify Exemption	*To be completed when* Is material exempt from controls in accordance with 40 CFR 61.342? *is* Yes

Is this waste stream subject to treatment and control requirements of 40 CFR Part 61, Subpart FF?	*To be completed when* Are you a TSDF? *is* No

Facility Remediation & Clean Up

Facility remediation subject to 40 CFR 63 GGGGG?	No
Does the material contain less than (<) 500 ppmw VOHAPS at the point of determination?	*To be completed when* Facility remediation subject to 40 CFR 63 GGGGG? *is* Yes
CERCLA or State-Mandated clean-up?	Yes

To be completed when CERCLA or State-Mandated clean-up? is Yes

Please submit the Record of Decision or other documentation to assist others in the evaluation for proper disposal.

Radioactive Waste

To be completed when Regulated, Licensed or NORM Radioactive Waste? *is* Yes

Identify Isotopes and pCi/g	

PCBs

To be completed when Contains PCBs? *is* Yes

Regulated by 40 CFR 761?	
Remediation under 40 CFR 761.61 (a)?	
PCB imported into the US?	

Asbestos

To be completed when Contains Asbestos? *is* Yes

Asbestos Type	◯ Friable ◯ Non-Friable ◯ Non-Friable Regulated

Shipping Information

Event Frequency	On-Going
Anticipated Number of Loads	10
Estimated Annual Quantity	100
Unit of Measure	⊘ Tons ◯ Yards ◯ Drums ◯ Gallons ◯ Pounds ◯ Other
Other	*To be completed when* Unit of Measure *is* Other

Shipping Frequency	◯ Once ◯ Daily ◯ Weekly ◯ Monthly ⊘ Other
Other	*To be completed when* Shipping Frequency *is* Other As Needed
Quantity Per Shipment	25 Tons
Container Type	CM
Container Size	20 yards

Certification

I hereby certify that (1) all information submitted on this form and on supplemental materials is complete and accurate to the best of my knowledge and ability to determine; (2) the information provided herein, including any supplemental information, such as laboratory analytical, MSDS, etc., accurately describes the waste stream to be delivered to the facility and that all known or suspected hazards have been disclosed. I understand that, once the waste stream is approved by Destination Facility based on this information, any deviation in the source, composition, constituents or characteristics of the waste stream from the information described herein, may render the waste stream unacceptable for disposal, at the sole discretion of Destination Facility. I further understand that any deviation from the information contained herein will require immediate notification to the Destination Facility and cessation of disposal.

Name	
Signature	Kelly Ottmar
Company Name	
Title	

Current Approval

Status	approved
Approval Number	2042-21-058
Approved By	Lauren Kahle
Approved On	05/03/21 12:00 am PDT
Expires On	04/22/22 12:00 am PDT
Approved Volume	100 tons
Approved Disposal Methods	
Conditions	Approved for landfill.

Waste Stream Documentation

Concrete Disposal Weight Ticket

WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

217
GrayMar Environmental Services
accountspayable@graymarenn.co

,

Ticket: 374321
Date In: 5/3/2021
Time In: 10:40:57
Date Out: 5/3/2021
Time Out: 11:43:28
Ref: GRAY T-500

Description

Scale Gross Weight:	80540	Vehicle:	21-058
Scale 7 Tare Weight:	47760	Roll- Off:	
Net Weight:	32780	Tons:	16.39

OTHER SPECIAL WASTE
OTHER SPECIAL WASTE

PO:
TRAILER:
DRIVER: GRAYMAR T-500

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE. **OFFICE PH# (541)296-4082**
Signature:_____

Concrete Disposal Weight Ticket

WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

217
GrayMar Environmental Services
accountspayable@graymarenn.co

,

Ticket: 374490
Date In: 5/4/2021
Time In: 09:01:38
Date Out: 5/4/2021
Time Out: 09:56:48
Ref: GARY T500

Description

Scale 3 Gross Weight:	80660	Vehicle:	21-058
Scale 7 Tare Weight:	47860	Roll- Off:	
Net Weight:	32800	Tons:	16.40

OTHER SPECIAL WASTE
OTHER SPECIAL WASTE

PO:
TRAILER:
DRIVER: GRAYMAR T500

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE. **OFFICE PH# (541)296-4082**
Signature:_____

Concrete Disposal Weight Ticket

WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

217
GrayMar Environmental Services
accountspayable@graymarenn.co

,

Ticket: 374677
Date In: 5/5/2021
Time In: 07:42:13
Date Out: 5/5/2021
Time Out: 08:40:02
Ref: GRAY T500

Description

Scale 3 Gross Weight:	81360	Vehicle:	21-058
Scale 7 Tare Weight:	47840	Roll- Off:	
Net Weight:	33520	Tons:	16.76

OTHER SPECIAL WASTE
OTHER SPECIAL WASTE

PO: SIMPLOT
TRAILER:
DRIVER: GRAYMAR T500

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE. **OFFICE PH# (541)296-4082**
Signature:_____

Other Solid Waste Disposal

Grant County Solid Waste
124 Enterprise St SE
Ephrata, WA 98823
(509)-754-6082

ate: 03/17/21
ime: 11:42

Invoice:**250421**
Operator: TMB
Truck #: 72202A

Haul Accout #: GRAY50
GrayMar Environmental Servi
601 S. Pioneer Way STE F218
Moses Lake, WA 98837

Bill Account #: GRAY50
GrayMar Environmental Servic
601 S. Pioneer Way STE F218
Moses Lake, WA 98837

Gross:	88440	lbs	44.22 TN
Tare:	47400	lbs	23.70 TN
Net:	41040	lbs	20.52 TN

Material: Non-Compacted

Print: _____ Sign: Vito

Route:

Note:

GAC Drum Waste Manifest

BXSOO

Please print or type.

494338

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	WAD000801092	1	866-472-9627	018038233 FLE

GENERATOR

5. Generator's Name and Mailing Address
Simplot Grower's Solutions - Simplot RDO
1800 W First St
Warden WA 98857
Generator's Phone: 509 346-2843

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: GRAYMAR ENVIRONMENTAL SERVICES
U.S. EPA ID Number: WAH000055713

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Chemical Waste Management of the NW, Inc.
17629 Cedar Springs Lane
Arlington OR 97812
Facility's Phone: 541 454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. UN3077, WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, 9, PG III, D033	002	DM	00055	G	D033
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
AS ~~1ORS53489~~
1. OR353489 (2)55 DM

880 P.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Corinna Cole for Simplot Growers Solutions
Signature:
Month: 2 Day: 14 Year: 23

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Otto Tuetken
Signature:
Month: 2 Day: 14 Year: 23

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Dawn Dunlap
Signature:
Month: 2 Day: 17 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Grant County Solid Waste
124 Enterprise St SE
Ephrata, WA 98823
(509)-754-6082

Date: 11/17/22
Time: 11:52

Invoice: **328249**
Operator: KBC
Truck #: TOMMER

Haul Accout #: TOMM20
Tommer Constr.
P O Box 1150
Ephrata, WA 98823

Bill Account #: TOMM20
Tommer Constr.
P O Box 1150
Ephrata, WA 98823

Payment Method: Charge on Account

Subtotal: [redacted]
Tax:
Total:

Gross:	84600	lbs	42.30 TN
Tare:	35280	lbs	17.64 TN
Net:	49320	lbs	24.66 TN

Material: Non-Compacted

Print: _____ Sign: Emanuel

Route:
Note:

Disposed SVE Appurtenances/Broken Concrete Weight Ticket

Grant County Solid Waste
124 Enterprise St SE
Ephrata, WA 98823
(509)-754-6082

Date: 11/17/22
Time: 09:31

Invoice: **328215**
Operator: KBC
Truck #: TOMMER

Haul Accout #: TOMM20
Tommer Constr.
P O Box 1150
Ephrata, WA 98823

Bill Account #: TOMM20
Tommer Constr.
P O Box 1150
Ephrata, WA 98823

Payment Method: Charge on Account

[redacted]

Gross:	77460	lbs	38.73 TN
Tare:	35360	lbs	17.68 TN
Net:	42100	lbs	21.05 TN

Material: Non-Compacted

Print: _____ Sign: Emanuel

Route:
Note:

Disposed SVE Appurtenances/Broken Concrete Weight Ticket

Grant County Solid Waste
124 Enterprise St SE
Ephrata, WA 98823
(509)-754-6082

Date: 11/17/22
Time: 02:15

Invoice: **328290**
Operator: KBC
Truck #: TOMMER

Haul Accout #: TOMM20
Tommer Constr.
P O Box 1150
Ephrata, WA 98823

Bill Account #: TOMM20
Tommer Constr.
P O Box 1150
Ephrata, WA 98823

Payment Method: Charge on Account

[redacted]

Gross:	63120	lbs	31.56 TN
Tare:	35120	lbs	17.56 TN
Net:	28000	lbs	14.00 TN

Material: Non-Compacted

Print: _____ Sign: Emanuel

Route:
Note:

Disposed SVE Appurtenances/Broken Concrete Weight Ticket

IDW and Knockout Tank Waste Manifest

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
WAD000801092	1	866-472-9627	0309232FB-JRP

GENERATOR

5. Generator's Name and Mailing Address
Simplot Grower's Solutions - Simplot RDO
1800 W First St
Warden WA 98857
Generator's Phone: 509 346-2843

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
GRAYMAR ENVIRONMENTAL SERVICES
U.S. EPA ID Number: WAH000055713

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Finley Buttes Regional Landfill
73221 Bombing Range Road
Boardman OR 97818
Facility's Phone: 541 481-2233
U.S. EPA ID Number: ORD987199643

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NOT REGULATED BY DOT (GROUND WATER)	003	DM	01200	P	
2.	NOT REGULATED BY DOT (GROUND WATER)	002	DM	00800	P	
3.	NOT REGULATED BY DOT (GROUND WATER)	001	DF	00300	P	
4.	NOT REGULATED BY DOT (GROUND WATER)	002	DF	00300	P	

13. Special Handling Instructions and Additional Information
1) FB-23-17 (3) DM55 Investigation Derived Water
2) FB-23-16 (2) DM55 Knockout Water
3) FB-23-17 (1) DF55 Investigation Derived Waster
4) FB-23-17 (2) DF 30 Investigation Derived Waster

14. **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.

Generator's/Offeror's Printed/Typed Name: For Simplot Grower Solutions Angela Stenhouse
Signature: Angela Stenhouse
Month: 3 Day: 8 Year: 23

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Fausto Lopez
Signature:
Month: Day: Year:

Transporter 2 Printed/Typed Name:
Signature:
Month: 3 Day: 9 Year: 23

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: Day: Year:

Finley Buttes Regional Landfill
FINLEY BUTTES REGIONAL LANDFIL
P.O. Box 350
BOARDMAN, OR 97818

010423
GRAYMAR ENVIRONMENTAL SERVICES
accountspayable@graymarenn.co

Site 01
Ticket 00535033
Date In 03/09/23
Time In 11:09:41
Date Out 03/09/23
Time Out 11:54:45

SANDRA
Origin WASH STATE

Ref. T-550
Grid

	DESCRIPTION		
Scale 2 Gross Wt.	39520LB	Vehicle FB-23-17	
Scale 2 Tare Wt.	37640LB	Roll-Off	
Net Wt.	1880LB	TON	0.94

Industrial - Liquid -- Minimum Charge

SW#
PO # DM 55 DF 55 DF 30
CONTAINER# E 233 T-550

Operating hours 7AM to 3:30PM Monday thru Friday.
Have a nice day!

Signature _____

IDW and Knockout Tank Waste Invoice

Finley Buttes Regional Landfill
FINLEY BUTTES REGIONAL LANDFIL
P.O. Box 350
BOARDMAN, OR 97818

010423
GRAYMAR ENVIRONMENTAL SERVICES
accountspayable@graymarenn.co

Site 01
Ticket 00535026
Date In 03/09/23
Time In 10:25:47
Date Out 03/09/23
Time Out 11:08:21

RACHELLE
Origin WASH STATE

Ref. T-550
Grid

DESCRIPTION			
Scale 1 Gross Wt.	40300LB	Vehicle FB-23-16	
Scale 2 Tare Wt.	39520LB	Roll-Off	
Net Wt.	780LB	TON	0.39

Industrial - Liquid -- Minimum Charge

SW#
PO # DM 55
CONTAINER# E-233 T-550

Operating hours 7AM to 3:30PM Monday thru Friday.
Have a nice day!

Signature _____

IDW and Knockout Tank Waste Invoice

Dangerous Waste Report - Annual Report - 2022

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022

Web site: www.ecology.wa.gov/DWReport

For Ecology Use Only		Date Received:	
Form	Reviewed	Entered	Verified
Site ID			

1. Reason for Submittal	[X] Dangerous Waste Annual Report – 2022
	[ ] Withdraw
	Received Date: 02/28/2023
2. EPA/State Id Number:	WAD000801092

3. Site Name

Simplot Soilbuilders Warden

4. Site Location

Street 1:	1800 W 1ST
City:	WARDEN
State:	WA
Zip:	98857
Country:	US
County:	GRANT
District:	ERO

5. Site Mailing Address

Street 1:	Box 1135
Street 2:	
City/State/Zip:	Warden, WA 98857
Country:	US

6. Site Land Type

Land Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [X] Private [ ] Tribal [ ] Other

7. North American Industry Classification System (NAICS)

NAICS: 424910

8. Site Contact Person

Name:	Jeff D greenwalt
Title:	Unit Supervisor
Street Address:	Box 1135
City/State/Zip:	Warden, WA 98857
Email:	jeff.greenwalt@simplot.com
Phone/Ext:	(509)349-2463

To ask about available formats for the visually impaired call 360-407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Dangerous Waste Site Identification Form (continued)

Site ID

9a. Legal Owner					
Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [X] Private [ ] Tribal [ ] Other					
Name:	JR Simplot Co				
Street 1:	PO Box 27				
Street 2:					
City/State/Zip:	BOISE, ID 83707				
Country:	US				
Email:		Phone:	(208)336-2110	Ext:	
Owner Since:	08/21/1996				

9b. Land Owner					
Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [X] Private [ ] Tribal [ ] Other					
Name:	JR Simplot Co				
Street 1:	PO Box 27				
Street 2:					
City/State/Zip:	BOISE, ID 83707				
Country:	US				
Email:		Phone:	(208)336-2110	Ext:	
Owner Since:	12/31/2017				

9c. Site Operator					
Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [X] Private [ ] Tribal [ ] Other					
Name:	Greenwalt, Jeff D				
Street 1:	Box 1135				
Street 2:					
City/State/Zip:	Warden, WA 98857				
Country:	US				
Email:		Phone:	(509)349-2463	Ext:	
Operator Since:	01/01/2015				

Dangerous Waste Site Identification Form (continued)	**Site ID**

10a. Hazardous Waste Activities

1. Federal Generator of Hazardous Waste (Choose one)
[ ] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
[ ] b. SQG: Small Quantity Generator (Between 220 – 2,200 lbs/mo)
[X] c. VSQG: Very Small Quantity Generator (Less than 220 lbs/mo)
[ ] d. NQG: No Regulated Waste Generated

2. State Generator of Hazardous Waste (Choose one)
[ ] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
[ ] b. MQG: Medium Quantity Generator (Between 220 – 2,200 lbs/mo)
[X] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
[ ] d. XQG: No Regulated Waste Generated

3. Short Term Generator (This question is automatically reported as no to the U.S. Environmental Protection Agency)

[ ] **4. U.S. Importer of Hazardous Waste**

[ ] **5. Mixed Waste Generator (Hazardous and Radioactive)**

6. Transporter of Hazardous Waste (HW)
[ ] a. HW Transporter
[ ] b. HW Transfer Facility

[ ] **7. Designated Facility of Hazardous Waste (TSD)**
(Requires an Ecology Part A or Part B permit for dangerous waste management. See WAC 173-303).

8. Recycler of Hazardous Waste Received from Off-Site
[ ] a. Stores prior to recycling
[ ] a. Does not store prior to recycling

9. Exempt Boiler and/or Industrial Furnace
[ ] a. Small Quantity On-site Burner Exemption
[ ] b. Smelting, Melting, Refining Furnace Exemption

[ ] **10. Underground Injection Control**
(Requires a registered underground injection well. See WAC 173-218)

[ ] **11. Receives Hazardous Waste from Off-site**

12. Recognized Trader
[ ] a. Importer
[ ] b. Exporter

13. Importer/Exporter of Spent Lead Acid Batteries (SLABs)
[ ] a. Importer [ ] b. Exporter

Dangerous Waste Site Identification Form (continued)	**Site ID**

10b. Universal Waste Activities

1. Large Quantity Handler of Universal Waste (Mark all boxes that apply)
[ ] a. Batteries [ ] b. Lamps [ ] c. Mercury containing equipment

(Note: Large Quantity Handlers accumulate 11,000 pounds or more total of universal waste (batteries, thermostats, and lamps calculated collectively) and/or accumulates more than 2,200 pounds of universal waste lamps at any time.)

[ ] **2. Destination Facility for Universal Waste**
(Note: Please check this box if you either store waste from off-site sources prior to recycling or if you recycle waste from off-site sources without first storing the waste.)

10c. Used Oil Activities

1. Off-Specification Used Oil Burner		**3. Used Oil Transporter - Indicate types of activities**	
	[ ] a. Utility Boiler		[ ] a. Transporter
	[ ] b. Industrial Boiler		[ ] b. Transfer Facility
	[ ] c. Industrial furnace		
2. Used Oil Processor/Re-refiner		**4. Used Oil Fuel Marketer**	
	[ ] a. Processor		[ ] a. Directs shipment of used oil to used oil burner
	[ ] b. Re-refiner		[ ] b. First claims the used oil meets the specifications

10d. Eligible Academic Entities with Laboratories – Notification to participate in or withdraw from the State Academic Laboratory Rule - (Subpart K) for managing laboratory dangerous waste under WAC173-303-235.

1. Yes, I am managing dangerous wastes under this rule.

	[ ] a. College or University
	[ ] b. Teaching hospital that is owned by (or has a formal written affiliation agreement with) a college or university.
	[ ] c. Non-profit institute that is owned by (or has a formal written agreement with) a college or university

2. [ ] **Yes, I wish to withdraw from this rule.** (If you were managing dangerous wastes under the State Academic Laboratory Rule and you no longer wish to participate, select this option.)

Dangerous Waste Site Identification Form (continued)	**Site ID**

10e. State Required Information. Washington State requires the following information. Please answer all questions that apply to your site.

1. Washington State Tax Registration Number (UBI number):	604490620

2. How Frequently do you generate dangerous waste?

[ ] a. Monthly [ ] b. Batch [ ] c. Spill Event [X] d. Clean-up: Remediation of past contamination

[ ]	**3. Generator of special waste (per WAC 173-303-073)**
[ ]	**4. Recycler of On-Site Waste (i.e. on-site use, reuse, or reclamation of a waste after it was generated)**
[ ]	**5. Permit-by-Rule (PBR)**
[ ]	**6. Treatment by Generator (TBG)**
[ ]	**7. Transport your own waste**

8. Dangerous Waste Fuel Activities

	[ ]	a. Generator of dangerous waste fuel
	[ ]	b. Generator marketing to burner
	[ ]	c. Other marketers (i.e. blender, distributer etc)
		d. Burner (indicate type of combustion unit)
		[ ] 1. Utility Boiler
		[ ] 2. Industrial Boiler
		[ ] 3. Industrial Furnace

Description of Hazardous Wastes Additional codes may be added to comments if needed.

11. Waste Codes for Federally Regulated Hazardous Wastes: What codes best describe your waste (e.g., D001 – Ignitable, D002 – Corrosive, D003 – Reactive, etc.)? Find these codes on your Uniform Hazardous Waste Manifest or call your designated facility.

D033

12. Waste Codes for State Regulated (non-Federal) Hazardous Wastes: What codes best describe your waste (e.g., WT02 – Toxic, WP02 – Persistent, WSC2 – Solid Corrosive, etc.)? Find these codes on your Uniform Hazardous Waste Manifest or call your designated facility.

WP02

Dangerous Waste Site Identification Form (continued)	**Site ID**

13. Episodic Generator

[ ] Complete the Episodic Event Waste Generation Addendum Form

14. LQG Consolidation of SQG Hazardous Waste

[ ] Complete the LQG Consolidation of SQG Generator Waste Addendum Form

15. Notification of LQG Site Closure of a Central Accumulation Area (CAA) OR Entire Facility

[ ] LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility

A. [ ] Central Accumulation Area (CAA) [ ] Entire Facility

B. Expected closure date: N/A

C. Requesting new closure date: N/A

D. Date closed:

[ ] In compliance [ ] Not in compliance
[ ] Will close as a landfill, WAC 173-303-665
[ ] Will close under drip pad standards, WAC 173-303-675

16. Notification of Hazardous Secondary Material (HSM) Activity

[ ] Complete the Hazardous Secondary Material (HSM) Addendum Form

17. Manifest Broker

[ ] Are you a Manifest Broker?

18. Pharmaceutical Activities

If you manage dangerous waste under the Pharmaceutical Requirements, indicate the facility type in question a. If these requirements no longer apply, check the box in question b to withdraw.

a. I am managing dangerous wastes under the requirements as a:

[ ] Health care facility
[ ] Reverse distributor

[ ] b. I wish to withdraw from the requirements

Note: If you are a Reverse Distributor, you may only withdraw from these requirements if you are also withdrawing your EPA/State Id.

19. Comments - Attach additional sheets if you need more room.

20. Certification - This form cannot be processed without a wet ink signature.	
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	
Signature:	Date:
Name (print or type):	Title:

WASTE CONNECTIONS
Connect with the Future

Knockout Tank Waste Profile

Waste Profile: Knockout Chamber Water

Status: CREATED

Approval Number:

Generator Company

Company: Simplot Grower Solutions
Address:
City:
Postal Code:
Phone:
State/Province:
County:

Generator Site

Site: Simplot Grower Solution
Address: 1800 W First St
City: Warden
Postal code: 98857
Phone: (208) 220-6597
State/Province: WA
County: Grant
EPA ID: WAD000801092

Waste Origin

Address: 1800 W First St
City: Warden
State/Province: WA
Postal code: 98857
County: Grant

Landfill

Landfill: Finley Buttes Regional Landfill
Address: 73221 Bombing Range Road
City: Boardman
State/Province: OR
Postal code: 97818
Phone:

Billing Company

Company: GrayMar Environmental Services Inc.
Address: 601 S Pioneer Way
Address 2: Ste F #218
City: Moses Lake
Postal Code: 98837
Phone:
State/Province: WA
County: Grant County

Billing Site

Company: Graymar Environmental Services Inc.
Address: 601 S Pioneer Way, Ste. F 218
City: Moses lake
Postal code: 98837
Phone: 9712707776
State/Province: WA
County:

Broker/Consultant Company 1

Company: GrayMar Environmental Services Inc.
Address: 601 S Pioneer Way
Address 2: Ste F #218
City: Moses Lake
Postal Code: 98837
Phone:
State/Province: WA
County: Grant County

Broker/Consultant Site 1

Company: Graymar Environmental Services Inc.
Address: 601 S Pioneer Way, Ste. F 218
City: Moses lake
Postal Code: 98837
Phone: 9712707776
State/Province: WA
County:

Transporter Company 1

Company: GrayMar Environmental Services Inc.
Address: 601 S Pioneer Way
Address 2: Ste F #218
City: Moses Lake
Postal Code: 98837
Phone:
State/Province: WA
County: Grant County

Transporter Site 1

Company: Graymar Environmental Services Inc.
Address: 601 S Pioneer Way, Ste. F 218
City: Moses lake
Postal code: 98837
Phone: 9712707776
State/Province: WA
County:
Permit #:
Permit Exp.:

Non-Hazardous determination

EPA hazardous waste: No
Process knowledge: No
Process knowledge details:
Safety data sheet:false
Certified analytical: Yes
Is this a representative sample in accordance with 40 CFR 261? Yes
What type of sample is this?:Grab
Sample ID:TOTE-Water-1-01042023; TOTE-Water-2-01042023
Exempt waste:False
Exempt waste item:
Reference to exemption:
State hazardous material: No
State waste codes:
Waste delisted: No
Contains PCB: No
Is this waste subject to 40 CFR 761? No
Is this a remediation project under 40 CFR 761.61(a)? No
Has this waste been imported into the USA? No
Contains asbestos: No
Asbestos type:
Produced from benzene transfer or benzene waste operations: No

Waste contain NORM or TENORM radioactive material: No
Isotopes:
Waste contain regulated, untreated or infectious medical waste: No
Waste subject to RCRA Organic Air Emissions Standards: No
Waste from a CERCLA site: No
Record of decision:
Waste produced from a site remediation project: ~~No~~ YES
Does the waste contain less than 500 PPMW VOHAPS? Yes
DOT hazardous: No

Waste Description

Waste description:Water generated from a soil vapor extraction unit knockout chamber
Industrial waste: Yes
How was waste generated?:Water generated from a soil vapor extraction unit knockout chamber
Why is this material being disposed?It can not stay on site.
Waste been contaminated: No
Contamination description:
Waste constituents:
Color:Clear
Physical state:Liquid
Free liquid range:100.0 - 100.0
pH:6.00 - 9.00
Odor:No Odor
Odor description:
Material reactive: No
Flash point:Greater than 200F (94C)

Shipping details

Event frequency: One Time
Anticipated number of loads: 1
Estimated annual quantity: 5000
Unit of measure: Pounds
Shipping frequency: One time
Quantity per shipment: 5000 pounds
Container type: Tote
Container type description:
Container size: 275 gal

Signature

I hereby certify that all information contained herein is true and correct, and the material described is properly identified, classified, packaged, labeled, and prepared as indicated. I certify that this waste is either (i) not hazardous or dangerous as defined by the U.S. EPA, or the state or province of origin; or (ii) (and applicable to TX only) hazardous, special or industrial waste (including friable asbestos) that meets the classification of Class II waste. I certify that this waste does not contain any regulated radioactive materials and does not contain PCB's regulated by TSCA or any other regulatory authority. I certify that all known and suspected hazards have been disclosed. I certify that all samples used for this analysis are representative of the materials described herein. I understand that all wastes may undergo inspection upon arrival at the designated facility and may be refused if the delivered material does not conform to the description herein. Notification will be provided immediately if there is a change in the composition of, or process generating this waste stream, prior to offering the waste for shipment or management.

Certification signature: 
Title: Sr. Env Programs Manager
Company: J.R. Simplot Company
Certified at: 1099 W Front St, Boise, ID 83702

WASTE CONNECTIONS
Connect with the Future

IDW Waste Profile

Waste Profile: Investigation Derived Water

Status: CREATED

Approval Number:

Generator Company

Company: Simplot Grower Solutions
Address:
City:
Postal Code:
Phone:
State/Province:
County:

Generator Site

Site: Simplot Grower Solution
Address: 1800 W First St
City: Warden
Postal code: 98857
Phone: (208) 220-6597
State/Province: WA
County: Grant
EPA ID: WAD000801092

Waste Origin

Address: 1800 W First St
City: Warden
State/Province: WA
Postal code: 98857
County: Grant

Landfill

Landfill: Finley Buttes Regional Landfill
Address: 73221 Bombing Range Road
City: Boardman
State/Province: OR
Postal code: 97818
Phone:

Billing Company

Company: GrayMar Environmental Services Inc.
Address: 601 S Pioneer Way
Address 2: Ste F #218
City: Moses Lake
Postal Code: 98837
Phone:
State/Province: WA
County: Grant County

Billing Site

Company: Graymar Environmental Services Inc.
Address: 601 S Pioneer Way, Ste. F 218
City: Moses lake
Postal code: 98837
Phone: 9712707776
State/Province: WA
County:

Broker/Consultant Company 1

Company: GrayMar Environmental Services Inc.
Address: 601 S Pioneer Way
Address 2: Ste F #218
City: Moses Lake
Postal Code: 98837
Phone:
State/Province: WA
County: Grant County

Broker/Consultant Site 1

Company: Graymar Environmental Services Inc.
Address: 601 S Pioneer Way, Ste. F 218
City: Moses lake
Postal Code: 98837
Phone: 9712707776
State/Province: WA
County:

Transporter Company 1

Company: GrayMar Environmental Services Inc.
Address: 601 S Pioneer Way
Address 2: Ste F #218
City: Moses Lake
Postal Code: 98837
Phone:
State/Province: WA
County: Grant County

Transporter Site 1

Company: Graymar Environmental Services Inc.
Address: 601 S Pioneer Way, Ste. F 218
City: Moses lake
Postal code: 98837
Phone: 9712707776
State/Province: WA
County:
Permit #:
Permit Exp.:

Non-Hazardous determination

EPA hazardous waste: No
Process knowledge: No
Process knowledge details:
Safety data sheet:false
Certified analytical: Yes
Is this a representative sample in accordance with 40 CFR 261? Yes
What type of sample is this?:Grab
Sample ID:IDW-Drum-1-01042023; DW-Drum-2-01042023; DW-Drum-3-01042023; DW-Drum-4-01042023; IDW-Drum-5-01042023; IDW-Drum-6-01042023
Exempt waste:False
Exempt waste item:
Reference to exemption:
State hazardous material: No
State waste codes:
Waste delisted: No
Contains PCB: No
Is this waste subject to 40 CFR 761? No
Is this a remediation project under 40 CFR 761.61(a)? No
Has this waste been imported into the USA? No
Contains asbestos: No
Asbestos type:

Produced from benzene transfer or benzene waste operations: No
Waste contain NORM or TENORM radioactive material: No
Isotopes:
Waste contain regulated, untreated or infectious medical waste: No
Waste subject to RCRA Organic Air Emissions Standards: No
Waste from a CERCLA site: No
Record of decision:
Waste produced from a site remediation project: ~~No~~ YES
Does the waste contain less than 500 PPMW VOHAPS? Yes
DOT hazardous: No

Waste Description

Waste description:Ground water
Industrial waste: Yes
How was waste generated?:Water generated from a onsite groundwater monitoring activities.
Why is this material being disposed?It can not stay on site.
Waste been contaminated: No
Contamination description:
Waste constituents:Water:100.00-100.00%
Color:Clear
Physical state:Liquid
Free liquid range:100.0 - 100.0
pH:6.00 - 9.00
Odor:No Odor
Odor description:
Material reactive: No
Flash point:Greater than 200F (94C)

Shipping details

Event frequency: One Time
Anticipated number of loads: 1
Estimated annual quantity: 2000
Unit of measure: Pounds
Shipping frequency: One time
Quantity per shipment: 2000 pounds
Container type: 55 gallon drum
Container type description:
Container size: 6 x 55 gallon drum

Signature

I hereby certify that all information contained herein is true and correct, and the material described is properly identified, classified, packaged, labeled, and prepared as indicated. I certify that this waste is either (i) not hazardous or dangerous as defined by the U.S. EPA, or the state or province of origin; or (ii) (and applicable to TX only) hazardous, special or industrial waste (including friable asbestos) that meets the classification of Class II waste. I certify that this waste does not contain any regulated radioactive materials and does not contain PCB's regulated by TSCA or any other regulatory authority. I certify that all known and suspected hazards have been disclosed. I certify that all samples used for this analysis are representative of the materials described herein. I understand that all wastes may undergo inspection upon arrival at the designated facility and may be refused if the delivered material does not conform to the description herein. Notification will be provided immediately if there is a change in the composition of, or process generating this waste stream, prior to offering the waste for shipment or management.

Certification signature: 
Title: Sr. Env Programs Manager
Company: J.R. Simplot Company
Certified at: 1099 W Front St, Boise, ID 83702