Site Environmental Investigation Report

Phillip 66 Facility No. 6880
Geiger Corrections Facility
Spokane, Washington
Facility/Site No.: 663
VCP PID.: EA0263

Phillips 66 Company
October 04, 2023

→ **The Power of Commitment**

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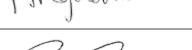
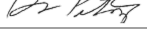
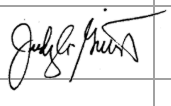
		Luca Piscitello	Heather Gadwa				
			Brian Peters		Judy Gilbert		10/4/23

Site Investigation Summary and 2022 Groundwater Monitoring Report

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Facility/Site No.: 663
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Phillips 66 Company

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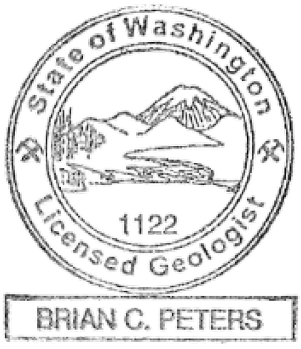

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1. Introduction

1.1 Site Information

Site Name:	Phillips 66 Company (P66) Facility No. 6880
Site Address:	South Spotted Road and West Will D Alton Drive Spokane, Washington
Voluntary Cleanup Program Number:	EA0263
Facility Site ID:	663
Project Consultant:	GHD Services, Inc.
Project Consultant Contact Information:	Brian Peters, LG 9725 3rd Ave Northeast, Ste 204 Seattle, Washington 98115 Office – 425 563-6506

1.2 Purpose

GHD Services Inc. (GHD) has prepared this *Site Investigation Summary and 2022 Groundwater Monitoring Report* (report) on behalf of Phillips 66 Company (P66) for the P66 Facility No. 6880 located northwest of the intersection of South Spotted Road and West Will D Alton Drive, Spokane, Spokane County, Washington (Property; Figure 1)

This report summarizes the environmental investigation data for the Property that were collected to complete the remedial investigation (RI) in accordance with Washington Administrative Code (WAC) 173-340-350. This report includes a summary of historical investigations and documents prepared by GHD and previous consultants. A list of historical environmental documents associated with the petroleum hydrocarbon release at the Property is included in Appendix A.

1.3 Site Description

The Property consists of a Yellowstone Pipeline (YPL) Company pipeline easement within a minimum-security prison, Geiger Corrections Center (Figure 2). The 3-inch YPL pipeline was constructed in 1968 and enters the Property near the intersection of South Spotted Road and West Will D Alton Road and runs north inside the facility's eastern perimeter fence.

The Washington State Department of Ecology's (Ecology) Model Toxics Control Act (MTCA) site (Site) is defined as all areas affected from the contaminant release that require further remedial action and includes the Property and potentially adjacent parcels/right of ways (ROWs). A summary of previous site investigations and remedial activities performed at the Site are provided in Appendix A.

2. 2022 Environmental Investigation Activities

In accordance with GHD's 2021 *Supplemental Investigation Work Plan*, one groundwater monitoring well (MW-13) and two soil vapor probes (VP-1 and VP-2) were completed at the Property on March 14 through 16, 2022. The well was installed to evaluate soil and shallow groundwater conditions north of MW-2. Vapor probes VP-1 and VP-2 were installed to evaluate the soil vapor intrusion pathway near Building C and Building D. The location of the monitoring well and vapor probes are presented in Figure 2.

2.1 Environmental Investigation Approach

A private utility locator was contracted to survey the planned drilling locations to attempt to identify any potential subsurface utility conflicts within the vicinity prior to drilling. The borings were advanced to the target depths using an air knife/vacuum truck and track mounted sonic drill rig owned and operated by Holt Drilling Inc. (Holt), a Washington State licensed driller. The monitoring well was constructed in accordance with Chapter 173-160 WAC, Minimum Standards for Construction and Maintenance of Wells.

Soil encountered in each boring during drilling activities was logged in accordance with American Society for Testing and Materials' (ASTM) Unified Soil Classification System (USCS) standard D2488 by experienced environmental personnel and overseen by a Washington State Licensed Geologist. A photoionization detector (PID) calibrated to 100 parts per million (ppm) isobutylene was used to field screen the soil for the presence of volatile organic compounds (VOCs). A small portion of each soil sample collected for laboratory analysis was placed into a sealable plastic bag, sealed, and allowed to equilibrate for several minutes. The bag was then opened slightly, the tip of the PID was inserted into the bag, and the headspace reading was observed and recorded in the field notebook. PID readings for samples collected from the borings ranged between 0.0 and 0.2 ppm. Boring logs with lithologic descriptions and PID readings are provided in Appendix B. Soil sampling and analytical results are summarized in Section 2.2.

All non-disposable sampling equipment was decontaminated with a non-phosphate soap wash followed by a potable water rinse prior to the beginning of field activities and after each sampling effort. Soil cuttings and decontamination water were contained in US Department of Transportation (DOT) approved 55-gallon drums as investigation derived waste (IDW), properly labeled, and temporarily staged on the Property pending proper offsite disposal.

After the completion of the field activities the monitoring wells and vapor probes were surveyed by a licensed professional to establish groundwater flow direction and gradient for the Site. The survey is included in Appendix C.

2.2 Soil Sample Collection and Results

Soil samples were collected for laboratory analysis at 6 feet below ground surface (bgs) at MW-13 and at 5 feet bgs and 4 feet bgs at VP-1 and VP-2, respectively. Collected soil samples were placed into laboratory provided containers and immediately placed into a cooler containing ice. The samples were delivered to ALS Environmental (ALS) in Everett, Washington, in strict accordance with the industry standard chain of custody protocol.

A total of 3 soil samples were collected between 4 and 6 feet bgs, as summarized in Table 1, and analyzed for the following:

– Total petroleum hydrocarbons (TPH) as gasoline (TPHg) by NWTPH-Gx
– TPH as diesel (TPHd) and TPH as oil (TPHo) by NWTPH-Dx
– Benzene, toluene, ethylbenzene and xylenes (BTEX), methyl tert-butyl ether (MTBE), 1,2-dichloroethane (EDC), 1,2-dibromoethane (EDB), and naphthalene by Environmental Protection Agency (EPA) Method 8260

No analytes were detected above their respective MTCA Method A cleanup levels and/or laboratory reporting limit.

Soil analytical results are presented on Table 1. A Soil Investigation Map is provided as Figure 3. The laboratory analytical reports are presented in Appendix D.

2.3 Groundwater Monitoring Well Installation

One permanent groundwater monitoring well, MW-13 was installed to a depth of 15 feet bgs. The well was constructed with 2-inch Schedule 40 polyvinyl chloride (PVC), 0.010-inch slot screen (from 3 feet bgs to 15 feet bgs), and flush threaded with PVC blank well casing from the top of the screen to the ground surface. The annulus was backfilled with a 12/20 sand pack to a minimum of 1 foot above the screen and sealed with hydrated bentonite chips above the filter pack to approximately 3 feet bgs. The well was finished at the surface with flush mount, traffic rated well boxes set in a concrete surface seal extending to 1 foot bgs. Subsequently, the permanent monitoring well was developed with an inertial down-hole pump.

A depiction of the well construction details is presented on the boring log in Appendix B. Subsequent groundwater monitoring activities and analytical results are summarized in Section 3 and presented in Tables 2a and 2b.

2.4 2022 Soil Gas Probe Installation, Sampling, and Results

Two permanent soil gas probes, VP-1 and VP-2 were installed during the March 2022 investigation to a depth of approximately 5 feet bgs and 4 feet bgs respectively. VP-1 is located near the southern entrance of Building C. VP-2 is located to the north of Building D. The probes were constructed with a 0.5-foot length, 3/8-inch diameter steel well screen with 0.010-inch machined slots installed from approximately 3 to 3.5 feet bgs. A length of 1/4-inch Teflon™ tubing was attached to the top of the well screen and extended to the ground surface. Sand was installed around the well screen to approximately 4 feet bgs and 2 feet bgs respectively and hydrated bentonite chips were installed from the top of the sand pack to approximately 1 foot bgs. An 8-inch diameter flush-mount steel well cover was installed above the soil gas probe and secured in place with cement. Excess Teflon tubing was coiled in the flush well box and capped with a plug for future sampling. Vapor probes well construction information can be found in Appendix B.

Soil gas sampling was completed in March 2022 and August 2022 at soil probes VP-1 and VP-2. The Teflon™ tubing in the flush well box was connected to a sampling device. After the sampling device was tested for leaks, three air volumes were purged from the tubing, which was then connected to a lab-certified 1-liter Summa canister equipped with a calibrated 30-minute flow controller and an in-line particulate filter and vacuum gauge, and later a tedlar bag for fixed gas analysis. A helium tracer gas with a concentration of 99 percent helium, or 990,000 parts per million by volume (ppmV) of helium, was introduced into the shroud during sampling to test for potential leaks in the sampling tubing connections. Helium was measured within the sample tubing using a Dialectric Helium Leak Detector MGD-2002. During the March and August 2022 sampling events, an ambient air sample (AMB) was also collected from the paved parking on-Property building using a lab-certified 1-liter Summa canister equipped with a calibrated 30-minute flow controller and an in-line particulate filter and vacuum gauge.

Once the samples had been collected, the Summa canister valves were closed. The Teflon™ tubing was capped, the helium shroud and sampling device were dismantled, and the flush well cover was secured in place. The Summa canisters were labelled with the project number, date, time, sampling location, and sample number. The sample collected in March 2022 was shipped to ALS in Simi Valley, California and the samples collected in August 2022 were delivered to Friedman and Bruya, Inc. (F&BI) in Seattle, Washington, in accordance with chain-of-custody protocol.

Soil gas samples were analyzed for one or more of the following constituents:

- Hydrocarbon fractions by Method Massachusetts Air Phase Hydrocarbons (APH)
- BTEX, EDB, EDC, MTBE, and naphthalene by EPA Method Toxics Organic (TO)-15, and
- Fixed gases (oxygen, carbon dioxide, and methane) by American Standard of Testing & Materials (ASTM) Standard E2993-16.

A total of three soil gas samples (VP-1, VP-2, and AMB) were submitted for laboratory analyses.

March 2022 Soil Gas Sampling Results-Wet Season

During the March 2022 sampling event, no constituent concentrations were above their respective MTCA Method B Sub-Slab soil gas screening levels.

August 2022 Soil Gas Sampling Results- Dry Season

During the August 2022 sampling event, a concentration of naphthalene (3.1 µg/m^3) was reported in sample VP-1 above the MTCA Method B sub-slab soil gas screening level for unrestricted land use (2.5 µg/m^3), however, the duplicate collected for this sample did not contain a concentration above the laboratory reporting limit. The remaining concentrations of analytes in VP-1 and VP-2 were not detected above their respective MTCA Method B sub-slab soil gas screening levels.

Soil gas analytical results are summarized in Table 3. Soil gas analytical reports are presented in Appendix D.

2.5 Investigation Derived Waste (IDW)

DH Environmental transported two soil drums and one water drum from the Property on April 21st, 2022. Drums were transported offsite for disposal as non-hazardous waste at Waste Management's Chemical Waste Management of the Northwest facility in Arlington, Oregon in accordance with applicable regulation and P66 procedures.

IDW from the second quarter monitoring event, including purged groundwater and decontamination water, was transported by DH Environmental Inc. to Chemical Waste Management, Inc. in Arlington, Oregon. IDW from the fourth quarter monitoring event was transported by Blaine Tech Services, Inc. (Blaine Tech) under a bill of lading to their facility located in Kent, Washington for temporary holding pending transport by others for subsequent disposal. Waste manifest documentation for fourth quarter event will be provided under separate cover when available.

A copy of the waste manifests is included in Appendix E.

3. 2022 Groundwater Activities

Following well installation, semi-annual groundwater monitoring activities were initiated and completed in April and December of 2022 by GHD. Copies of the field data sheets documenting the hydraulic monitoring data are included in Appendix F. Copies of the laboratory analytical reports are included in Appendix D. A summary of groundwater monitoring activities is presented in Table A below.

Table A - Groundwater Monitoring Event Summary

Well ID	Quarter 2 – April		Quarter 4 - December	
	Measure DTW	Collect GW Sample	Measure DTW	Collect GW Sample
Shallow Wells				
MP-1	Decommissioned			
MP-1R	-	-	-	-
MW-2	-	S	M	S
MW-3	-	-	M	S
MW-4	M	-	-	-
MW-5	M	-	M	-
MW-10	-	-	-	-
MW-11	M	S	-	-
MW-13	-	S	M	S
Deep Wells				
MW-1	-	-	M	-
MW-5D	M	S	M	S
MW-6	M	-	M	-
MW-7	M	S	M	S
MW-8	M	-	-	-
95-MW-11A	-	-	-	-
95-MW-11B	-	-	-	-
MW-12	M	S	M	S

Notes:
- = not measured / not collected
DTW = depth to groundwater
GW = groundwater
M = measured DTW
S = sample collected

Prior to groundwater sample collection, selected monitoring wells were purged with a peristaltic pump and clean tubing using low flow purging methods. During the purging process, groundwater quality parameters, including temperature, electrical conductance, pH, turbidity, dissolved oxygen (DO), and oxygen reduction potential (ORP), were measured at regular intervals using a water quality meter. Purging at a given well was considered complete when three consecutive readings for electrical conductance, pH, temperature, turbidity, DO, and ORP were observed within 10 percent of one another. The water quality meter was calibrated in accordance with the manufacturer's specification prior to use. The groundwater parameters measured during purging, flow rates, and instrument calibrations were documented in the field by the sampling contractor.

Once purging at a given well was completed, a groundwater sample was collected for laboratory analysis. During the collection of the groundwater samples, the pump discharge was maintained at the same flow rate as used for low flow purging. Each sample container was labelled with the project number, date, time, well number, and sample number. Groundwater samples were collected in appropriate glassware provided by the laboratory and immediately placed into a cooler containing ice or ice substitute. Samples were delivered to Eurofins in strict accordance with the industry standard chain of custody protocol and analyzed for TPHg, TPHd, TPHo, and BTEX.

Groundwater analytical results are summarized on Tables 2A – Shallow Wells and 2B – Deep Wells.

3.1 Second Quarter 2022 Event - April 2022

SHALLOW WELLS

Groundwater Flow Direction: North to northeast

Hydraulic Gradient: 0.04 ft/ft

Depth to Water: 4.62 to 12.57 feet below top of casing (btoc)

Groundwater Elevation: 2341.62 to 2350.72 feet above mean sea level (AMSL)

LNAPL Present: No

Laboratory analytical testing reported the following:

- The TPHg (940 micrograms per liter (µg/L)) and TPHd concentrations (570 µg/L) in the groundwater sample from MW-2 were greater than their respective MTCA Method A cleanup levels.
- Remaining concentrations were below laboratory reporting limits and/or their respective MTCA Method A cleanup levels in samples collected from the remaining two wells.

A Groundwater Contour and Chemical Concentration Map Shallow Zone – April 20, 2022 is provided as Figure 4.

DEEP WELLS

Results of the monitoring event indicate the following:

Groundwater Flow Direction: Northeast to east

Hydraulic Gradient: 0.006 ft/ft

Depth to Water: 32.17 to 33.16 feet btoc

Groundwater Elevation: 2322.63 to 2323.53 feet AMSL

LNAPL Present: No

Laboratory analytical testing reported the following:

- Concentrations were below laboratory reporting limits and/or MTCA Method A cleanup levels.

A Groundwater Contour and Chemical Concentration Map Deep Zone– April 20, 2022 is provided as Figure 5.

3.2 Fourth Quarter 2022 Event – December 2022

SHALLOW WELLS

Groundwater Flow Direction: Northeast

Hydraulic Gradient: 0.006 ft/ft

Depth to Water: 4.28 to 5.00 feet btoc

Groundwater Elevation: 2348.25 to 2351.06 feet AMSL

LNAPL Present: No

Laboratory analytical testing reported the following:

- Concentrations of TPHg (830 ug/L) and TPHd (690 ug/l) in the groundwater sample from MW-2 were greater than their respective MTCA Method A cleanup levels.
- Remaining concentrations were below laboratory reporting limits and/or MTCA Method A cleanup levels.

A Groundwater Contour and Chemical Concentration Map Shallow Zone – December 7, 2022 is provided as Figure 6.

DEEP WELLS

Groundwater Flow Direction:	North to northwest
Hydraulic Gradient:	0.006 ft/ft
Depth to Water:	36.68 to 37.50 feet btoc
Groundwater Elevation:	2317.81 to 2318.81 feet AMSL
LNAPL Present:	No

Laboratory analytical testing reported the following:

- A concentration of TPHd (630 ug/L) was reported above the MTCA Method A cleanup level in monitoring well MW-7.
- Remaining concentrations were below laboratory reporting limits and/or their respective MTCA method A cleanup levels.

A Groundwater Contour and Chemical Concentrations Map Deep Zone – December 7, 2022 is provided as Figure 7.

4. Conclusions and Recommendations

In March 2022, GHD installed two soil gas probes (VP-1 and VP-2) and one shallow monitoring well (MW-13) at the Gieger Corrections facility. Petroleum hydrocarbon concentrations above laboratory reporting limits were not identified in soil samples collected from each of the soil borings.

Subsequent soil gas sampling was completed in March and August 2022. Concentrations of petroleum hydrocarbons and related constituents were reported below laboratory reporting limits and/or their respective MTCA Method B screening levels in each of the soil gas probes, during both events. The one exception was the low level naphthalene concentration in VP-1 in the August 2022 sample, however, the duplicate sample and the sample collected in March 2022 did not contain naphthalene concentrations above the laboratory reporting limit. Based on the lack of concentrations the soil vapor pathway is considered incomplete and does not require additional evaluation at this time.

Groundwater monitoring activities were completed on a semi-annual basis in April and December 2022. Concentrations of TPHg and/or TPHd were reported above their MTCA Method A cleanup levels in shallow well MW-2 and deep well MW-7. Groundwater concentrations continue to attenuate in monitoring well MW-2 and MW-7.

GHD recommends revising the RI report submitted in December 2019 and continuing compliance groundwater monitoring at the Site. If the compliance monitoring continues to demonstrate stable and/or shrinking groundwater plumes, then the appropriate next step will be to complete a feasibility study to determine the appropriate cleanup action for the Site.

Tables

Table 1
Summary of Soil Analytical Data
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

Location ID	Sample ID	Sample Date	Sample Depth	TPH-G (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	EDC (mg/kg)	EDB (mg/kg)	Naphthalene (mg/kg)	PCE (mg/kg)	TCE (mg/kg)	Vinyl Chloride (mg/kg)	1-2 Cis DCE (mg/kg)
	MTCA Method A Cleanup Levels:			30/100*	2,000		0.03	7	6	9	0.1	--	0.005	5	0.05	0.03	240(method b)	160
TP-2	TP-2-3.5	03/19/01	3.5	6.98	<10	<25	<0.050	<0.100	<0.050	0.108	<0.200	---	---	<0.01	---	---	---	---
TP-3	TP-3-2.0	03/19/01	2	1,460	690	<25	<0.250	<0.500	0.488	1.37	<1.00	---	---	0.163	---	---	---	---
TP-3	TP-3-2.0 (dup)	03/19/01	2	699	804	<25	<0.100	<0.200	0.268	0.733	<0.400	---	---	0.130	---	---	---	---
TP-4	TP-4-6.0	03/19/01	6	4,250	11,600	<275	<0.500	<1.00	1.5	7.06	<2.00	---	---	9.30	---	---	---	---
TP-5	TP-5-3.5	03/19/01	3.5	<5.00	<10	<25	<0.050	<0.100	<0.050	<0.100	<0.200	---	---	<0.01	---	---	---	---
TP-6	TP-6-5.5	03/19/01	5.5	44.8	69.9	<25	<0.050	<0.100	<0.050	<0.100	<0.200	---	---	<0.01	---	---	---	---
TP-7	TP-7-4.0	03/19/01	4	10.3	<10	<25	<0.050	<0.100	<0.050	<0.100	<0.200	---	---	<0.01	---	---	---	---
TP-8	TP-8-4.0	03/19/01	4	<5.00	<10	<25	<0.050	<0.100	<0.050	<0.100	<0.200	---	---	<0.01	---	---	---	---
TP-9	TP-9-4.0	03/19/01	4	<5.00	<10	<25	<0.050	<0.100	<0.050	<0.100	<0.200	---	---	<0.01	---	---	---	---
YPL#2	YPL#2-5.0[a]	03/21/01	5	1,070	5,390	<250	<0.050	<0.100	0.123	0.716	<0.200	---	---	9.34	---	---	---	---
YPL#3	YPL#3-5.0[a]	03/21/01	5	414	971	<25	<0.050	<0.100	0.130	0.411	<0.200	---	---	11.8	---	---	---	---
												---	---		---	---	---	---
GCC-3	GCC-3	10/15/01	2-5	---	756	<25	<0.100	<0.800	<0.800	<0.800	---	---	---	11.2	---	---	---	---
GCC-7	GCC-7	10/15/01	4	---	343	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	4.12	---	---	---	---
GCC8	GCC8-3.5	10/16/01	3.5	---	<10	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC9	GCC9-6	10/16/01	6	---	25.4	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC10	GCC10-4	10/16/01	4	---	<10	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC12	GCC12-6	10/16/01	6	---	190	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	4.48	---	---	---	---
GCC14	GCC14-5	10/16/01	5	---	808	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC15	GCC15-5.5	10/17/01	5.5	---	**6,180**	<250	0.0128	<0.100	0.37	4.1	---	---	---	**70.3**	---	---	---	---
GCC16	GCC16-6	10/17/01	6	---	14.6	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC17	GCC17-5.5	10/17/01	5.5	---	<10	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC18	GCC18-5.5	10/17/01	5.5	---	**2,690**	<250	---	---	---	---	---	---	---	---	---	---	---	---
GCC19	GCC19-6	10/17/01	6	---	1,510	<250	<0.0250	<0.200	<0.200	0.702	---	---	---	**17.3**	---	---	---	---
GCC20	GCC20-6	10/17/01	6	---	**3,470**	<250	---	---	---	---	---	---	---	---	---	---	---	---
GCC21	GCC21-6	10/17/01	6	---	**5,780**	<250	---	---	---	---	---	---	---	---	---	---	---	---
GCC22	GCC22-6	10/17/01	6	---	<10	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC23	GCC23-7	10/17/01	7	---	57.5	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
GCC24	GCC24-6.5	10/18/01	6.5	---	11	29.8	---	---	---	---	---	---	---	---	---	---	---	---
GCC25	GCC25-6	10/18/01	6	---	**3,940**	<250	---	---	---	---	---	---	---	---	---	---	---	---
GCC26	GCC26-6	10/18/01	6	---	11.3	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC27	GCC27-6	10/18/01	6	---	<10	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC28	GCC28-6	10/18/01	6	---	690	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC29	GCC29-6	10/18/01	6	---	**8,280**	<250	0.0205	<0.100	0.371	3.11	---	---	---	**25.0**	---	---	---	---
GCC30	GCC30-6	10/18/01	6	---	<10	<25	---	---	---	---	---	---	---	---	---	---	---	---
GCC31	GCC31-6	10/18/01	6	---	<10	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
GCC32	GCC32-6	10/18/01	6	---	**2,810**	<250	<0.0125	<0.100	0.102	0.400	---	---	---	**40.3**	---	---	---	---
												---	---		---	---		
MW-1	MW-1-45	03/18/02	45	---	67.1	98.5	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
MW-2	MW-2-10-10.5	03/19/02	10-10.5	---	87.9	27	<0.0250	<0.200	<0.200	<0.200	---	---	---	27.8	---	---	---	---
MW-3	MW-3-4-6	03/19/02	4-6	---	<10	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
MW-4	MW-4-7-9	03/19/02	7-9	---	505	40.2	<0.0250	<0.200	<0.200	<0.200	---	---	---	13.6	---	---	---	---
MW-4	MW-4-12-14	03/19/02	12-14	---	15.2	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
MW-5	MW-5-4-6	03/19/02	4-6	---	328	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	16.8	---	---	---	---
MW-5	MW-5-9.5-11.5	03/19/02	9.5-11.5	---	45.4	40.3	<0.0250	<0.200	<0.200	<0.200	---	---	---	0.544	---	---	---	---
MW-6	MW-6-22-24	3/19/2002	22-24	---	68	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	1.6	---	---	---	---
MW-6	MW-6-42	3/20/2002	42	---	27.9	29.2	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
MW-7	MW-7-4-4.5	3/20/2002	4-4.5	---	301	<25	<0.0250	<0.200	<0.200	0.402	---	---	---	20.3	---	---	---	---
MW-7	MW-7-37	3/20/2002	37	---	87.1	47.4	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
MW-8	MW-8-4-6	3/20/2002	4-6	---	<10	<25	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
MW-8	MW-8-36	3/20/2002	36	---	26.7	35.1	<0.0250	<0.200	<0.200	<0.200	---	---	---	<0.500	---	---	---	---
												---	---		---	---		
MP-1R	MP-1R-4.5-4.6-1013	10/8/2013	4.5-4.6	<6.7	47.3	<101	<0.0274	<0.0685	<0.0685	<0.205	---	---	---	---	---	---	---	---
MW-5D	MW-5D-4.9-5.9-1013	10/7/2013	4.9-5.9	**412**	**2,580**	<84.9	<0.0237	<0.0592	<0.0592	<0.178	---	---	---	---	---	---	---	---
MW-5D	MW-5D-35-35.2-1013	10/7/2013	35-35.2	**117**	54.9	<87.8	<0.0282	<0.0706	<0.0706	<0.212	---	---	---	---	---	---	---	---
MW-9	MW-90-4.4-4.5-1013	10/15/2013	4.4-4.5	<4.9	<21.2	<84.2	<0.0229	<0.0573	<0.0573	<0.172	---	---	---	---	---	---	---	---
MW-9	MW-9-4.4-4.5-1013	10/15/2013	4.4-4.5	<8.1	<21.1	<84.4	<0.0221	<0.0553	<0.0553	<0.166	---	---	---	---	---	---	---	---
															---	---		
MW-10	S.11145847-101119-EM-MW-10-6.0	10/11/2019	6	<8.1	<16.8	<11.2	<0.0050	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
MW-10	S.11145847-101119-EM-MW-10-15.0	10/11/2019	15	<7.3	<20.5	<13.7	<0.0050	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
MW-11	S.11145847-101119-EM-MW-11-6.0	10/11/2019	6	<7.7	<18.8	<12.5	<0.0050	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
MW-11	S.11145847-101119-EM-MW-11-15.0	10/11/2019	15	<5.7	<16.3	<10.8	<0.0050	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
MW-12	S.11145847-100919-EM-MW-12-5.0[b]	10/9/2019	5	**320**[1M,E,SS]	755	<11.1	<0.026	<0.015	<0.022	<0.043	---	---	---	0.044	---	---	---	---
MW-12	S.11145847-101019-EM-MW-12-31.0	10/10/2019	31	<5.4[2M]	<16.3	45.2	<0.005	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
MW-12	S.11145847-101019-EM-MW-12-44.0	10/10/2019	44	<6.7	<16.6	<11.1	<0.005	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
B-1	S.11145847-101119-EM-B-1-6.0[b]	10/11/2019	6	**765**[G+]	**2,050**	<11.4	<0.029	<0.017	<0.024	<0.030	---	---	---	2.08	---	---	---	---
B-1	S.11145847-101119-EM-B-1-10.0	10/11/2019	10	<7.6	<17.4	<11.6	<0.0050	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
B-2	S.11145847-101119-EM-B-2-6.0[b]	10/11/2019	6	**511**[G+]	1,630	11.4	<0.025	<0.015	<0.021	<0.026	---	---	---	0.314	---	---	---	---
B-2	S.11145847-101119-EM-B-2-10.0	10/11/2019	10	<5.5	<15.6	<10.4	<0.005	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
B-3	S.11145847-101019-EM-B-3-6.0[b]	10/10/2019	6	**432**[D6]	951	148	<0.030	<0.018	<0.025	<0.032	---	---	---	2.37	---	---	---	---
B-4	S.11145847-101119-EM-B-4-6.3[G+]	10/11/2019	6.3	**116**	101	<10.9	<0.0050	<0.010	<0.010	<0.010	---	---	---	---	---	---	---	---
B-4	S.11145847-101119-EM-B-4-10.0	10/11/2019	10	**151**	276	<10.3	<0.023	<0.014	<0.020	<0.038	---	---	---	---	---	---	---	---
B-4	S.11145847-101219-DT-B-4-35.0	10/12/2019	35	51.2	<17.6	<11.7	<0.023	<0.056	<0.056	<0.017	---	---	---	<0.23	---	---	---	---
B-4	S.11145847-101219-DT-B-4-40.0	10/12/2019	40	<5.2	<15.6	<10.4	<0.021	<0.054	<0.054	<0.16	---	---	---	<0.21	---	---	---	---
VP-1	SO-12576484-031422-NA-VP-5'	3/14/2022	5	<3	<25	<50	<0.0050	<.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
VP-2	SO-12576484-031522-NA-VP-4'	3/15/2022	4	<3	<25	<50	<0.0050	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-13	SO-12576484-031522-NA-MW13-6'	3/15/2022	6	<3	<38	<56	<0.0050	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Table 1
Summary of Soil Analytical Data
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

Notes:
Model Toxics Control Act (MTCA) Method A cleanup level not established per Department of Ecology Cleanup Levels and Risk Calculation data tables (August 2015). Cleanup level protective of groundwater for soil within the vadose zone is
Bold values equal or exceed MTCA Method A Cleanup Level.
All results in milligrams per kilogram (mg/kg) unless otherwise indicated.
ND = Not detected above the laboratory reporting limit
-- = Not analyzed
< = Less than the stated laboratory reporting limit
ft bgs = feet below ground surface
Shading indicates the soil sample has been overexcavated.
TPH as Gasoline-range organics (TPHg) analyzed by Northwest Method NWTPH-Gx.
TPH as Diesel-range organics (TPHd) analyzed by Northwest Method NWTPH-Dx.
TPH as Heavy Oil-range organics (TPHo) analyzed by Northwest Method NWTPH-Dx.
Benzene, toluene, ethylbenzene, total xylenes (BTEX) analyzed by Unitied States Environmental Protection Agency (USEPA) Method 8260B or 8021B
Methyl tert-butyl ether (MTBE) analyzed by EPA Method 8260B.
Tetrachloroethene (PCE) analyzed by EPA Method 8260B
Trichloroethene (TCE) analyzed by EPA Method 8260B
1,2 Dichloroethane (EDC) analyzed by EPA Method 8260B
1,2 Dibromoethane (EDB) analyzed by EPA Method 8260B
Naphthalene analyzed by USEPA Methods 8021B, 8270D, and/or 8260.
[a] Soil sample was additionally analyzed for polycyclic aromatic hydrocarbons by EPA Method 8270D. Toxicity Equivalaency Factor (TEF) was calculated for reported concentrations over laboratory reporting limits and compared to the MTCA Method A cleanup level of 0.1 mg/kg
[b] Soil sample was additionally analyzed for hexane by USEPA method 8260, volatile petroleum hydrocarbons and extractable petroleum hydrocarbons via methods NW-VPH and NW-EPH, respectively. See laboratory report in Appendix D
[1M] Result confimred by second analysis performed outside of holding time
[E] Analyte concentration exceeded the calibration range. The reported result is estimated.
[SS] This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.
[2M] Sample preserved in lab; results are from sample aliquot taken from a glass jar with headspace.
[D6] The precision between the sample and sample duplicate exceeded laboratory control limits.
[G+] Late peacks present outside the GRO window.

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

						HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
	MTCA Method A Screening Levels (Shallow GW)					800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MP-1	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--
MP-1	11/30/01	N	--	--	--	--	**50,300**	<750	<0.50	<2.0	<1.0	<1.5	**990**
MP-1	03/25/02	N	--	--	--	--	**9,650**	<750	<0.50	<2.0	1.9	23	**599**
MP-1	06/04/02	N	--	--	--	--	**39,700**	<500	<0.50	<2.0	1.9	<1.5	**353**
MP-1	08/20/02	N	--	--	--	--	**19,100**	<500	<0.50	<2.0	1.1	13	**223**
MP-1	10/29/02	N	--	--	--	--	**20,900**	<500	<0.50	<2.0	1.2	13	**413**
MP-1	02/19/03	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	4.2	62
MP-1	06/05/03	N	--	--	--	--	**9,950**	<500	<0.50	<2.0	<1.0	<1.5	**268**
MP-1	09/09/03	N	--	--	--	--	**8,430**	<500	<0.50	<2.0	<1.0	17	**459**
MP-1	12/10/03	N	--	--	--	--	**13,600**	<500	<0.50	<2.0	<1.0	5.9	**184**
MP-1	06/03/04	N	--	--	--	--	**16,800**	<500	<0.50	<2.0	<1.0	9.5	**246**
MP-1	12/01/04	N	--	--	--	--	**14,800**	<500	<0.50	<2.0	1.7	16	**246**
MP-1	06/03/05	N	--	--	--	--	**17,400**	<500	<0.50	<2.0	3.1	29	**178**
MP-1	11/21/05	N	--	--	--	--	**9,900**	500	<0.50	<2.0	<1.0	17	32
MP-1	06/15/06	N	--	--	--	--	**11,200**	<500	<0.50	<2.0	<1.0	18	<20
MP-1	12/19/06	N	--	--	--	--	**2,700**	<500	<0.50	<2.0	<1.0	7.2	114
MP-1	05/30/07	N	--	--	--	--	**6,100**	<500	<0.50	<2.0	<1.0	19	120
MP-1	10/30/07	Removed from sampling schedule due to well ob				--	--	--	--	--	--	--	--
MP-1	02/02/11	N	2,354.90	3.96	2350.94	--	--	--	--	--	--	--	--
MP-1	04/26/11	N	2,354.90	4.20	2350.70	--	--	--	--	--	--	--	--
MP-1	07/12/11	N	2,354.90	Dry	--	--	--	--	--	--	--	--	--
MP-1	10/28/11	N	2,354.90	Obstruction in Well at 4.59 Feet			--	--	--	--	--	--	--
MP-1	10/09/13	N	2,354.90	Well Decommissionec		--	--	--	--	--	--	--	--
MP-1R	10/12/13	N	2,354.78	4.86	2349.92	**3,210**	**1,200**	<400	<1.0	<1.0	<1.0	13.9	16.3
MP-1R	03/11/14	N	2,354.78	2.15	2352.63	**1,260**	500	500	<1.0	<1.0	<1.0	<3.0	<4.0
MP-1R	03/11/14	FD	--	--	--	**1,300**	**520**	**640**	<1.0	<1.0	<1.0	<3.0	<4.0
MP-1R	06/03/14	N	2,354.78	4.95	2349.83	**3,890**	**1,400**	<420	<1.0	<1.0	<1.0	13.5	10.6
MP-1R	04/06/17	N	2,354.78	3.58	2351.20	430	290	110 J	<0.5	<0.5	<0.5	<0.5	<1.0
MP-1R	04/06/17	FD	--	--	--	450	250	80 J	<0.5	<0.5	<0.5	<0.5	<1.0
MP-1R	09/14/17	N	2,354.78	4.79	2,349.99	**2,200**	**1,400**	140 J	<1	<1	<1	<1	5
MP-1R	03/21/18	N	2354.78	3.88	2350.90	540	280	<260	--	--	--	--	--
MP-1R	06/21/18	N	2354.78	4.79	2349.99	**1,900**	**1,500**	<270	--	--	--	--	--
MP-1R	06/21/18	FD	--	--	--	**1,900**	**1,400**	<260	--	--	--	--	--
MP-1R	09/21/18	N	2354.78	4.91	2349.87	**1,600**	**1,400**	<270	--	--	--	--	--
MP-1R	12/06/18	N	2354.78	4.27	2350.51	**2,800**	**1,400**	<260	--	--	--	--	--

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

						HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MP-1R	03/06/19	N	2354.78	4.31	2350.47	700	360	<260	--	--	--	--	--
MP-1R	03/06/19	FD	2354.78	4.31	2350.47	710	380	<260	--	--	--	--	--
MP-1R	05/21/19	N	2354.78	4.20	2350.58	**1,200**	**1,200**	<250	--	--	--	--	--
MP-1R	05/21/19	FD	2354.78	4.20	2350.58	**1,300**	**1,300**	<270	--	--	--	--	--
MP-1R	08/21/19	N	2354.78	4.61	2350.17	**2,700**	**1,200**	<270	--	--	--	--	--
MP-1R	10/30/19	N	2354.78	4.42	2350.36	**2,900**	**1,600**	<260	--	--	--	--	--
MP-1R	03/05/20	N	2354.78	4.21	2350.57	550	350	<250	<1	<1	<1	<6	--
MP-1R	06/03/20	N	2354.78	4.12	2350.66	**2,000**	**2,200**	170 J	<1.0	<1.0	<1.0	<6.0	--
MP-1R	09/03/20	N	2354.78	4.76	2350.02	**2,200**	**630**	<1,300	<1.0	<1.0	<1.0	<6.0	--
MP-1R	03/31/21	N	2357.78	4.45	2353.33	**2,100**	**2,400**	<260	<1.0	<1.0	<1.0	<6.0	--
MP-1R	11/16/21	N	2354.78	4.20	2350.58	**1,500**	**1,600**	<250	<1.0	<1.0	<1.0	<1.0	--
MP-1R	04/20/22	NS	2354.78	--	--	--	--	--	--	--	--	--	--
MP-1R	12/07/22	NS	2354.78	--	--	--	--	--	--	--	--	--	--
MW-2	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/25/02	N	--	--	--	--	**19,800**	<750	<0.50	<2.0	<1.0	11	**216**
MW-2	06/04/02	N	--	--	--	--	**22,100**	<500	<0.50	<2.0	<1.0	8.2	**1,320**
MW-2	08/20/02	N	--	--	--	--	**4,970**	<500	<0.50	<2.0	<1.0	6.7	156
MW-2	10/29/02	N	--	--	--	--	**13,700**	<500	<0.50	<2.0	<1.0	6.1	**199**
MW-2	10/29/02	FD	--	--	--	--	**15,400**	<500	<0.50	<2.0	<1.0	9.3	**328**
MW-2	02/19/03	N	--	--	--	--	**10,400**	<500	<0.50	<2.0	<1.0	<1.5	140
MW-2	06/05/03	N	--	--	--	--	**4,570**	<500	<0.50	<2.0	<1.0	2.0	134
MW-2	06/05/03	FD	--	--	--	--	**4,320**	<500	<0.50	<2.0	<1.0	2.4	**182**
MW-2	09/09/03	N	--	--	--	--	**2,560**	<500	<0.50	<2.0	<1.0	<1.5	**203**
MW-2	09/09/03	FD	--	--	--	--	**2,440**	<500	<0.50	<2.0	<1.0	<1.5	**204**
MW-2	12/10/03	N	--	--	--	--	**42,100**	<500	<0.50	<2.0	<1.0	<1.5	**282**
MW-2	06/03/04	N	--	--	--	--	**6,000**	<500	<0.50	2.6	<1.0	6.0	**162**
MW-2	06/03/04	FD	--	--	--	--	**6,500**	<500	<0.50	2.1	<1.0	5.4	**170**
MW-2	12/01/04	N	--	--	--	--	**2,410**	<500	<0.50	<2.0	<1.0	5.2	38
MW-2	06/03/05	N	--	--	--	--	**2,810**	<500	<0.50	<2.0	<1.0	<1.5	129
MW-2	06/03/05	FD	--	--	--	--	**2,910**	<500	<0.50	<2.0	<1.0	5.2	129
MW-2	11/21/05	N	--	--	--	--	**3,440**	<500	<0.50	<2.0	<1.0	<1.5	24
MW-2	11/21/05	FD	--	--	--	--	**3,680**	500	<0.50	<2.0	<1.0	<1.5	23
MW-2	06/15/06	N	--	--	--	--	**2,750**	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-2	06/16/06	FD	--	--	--	--	**11,200**	<500	<0.50	<2.0	<1.0	18	<20
MW-2	12/19/06	N	--	--	--	--	**2,340**	<500	<0.50	<2.0	<1.0	2.6	95

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

						HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800	500	500	5	1000	700	1000	160
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-2	05/30/07	N	--	--	--	--	**2,790**	<500	<0.50	<2.0	<1.0	1.7	98
MW-2	10/30/07	N	--	--	--	2,600	**1,800**	140	<0.50	<0.70	<0.80	<0.80	<1.0
MW-2	06/24/08	N	--	--	--	1,600	**830**	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-2	12/03/08	N	--	--	--	1,800	**700**	<69	<0.50	<0.70	<0.80	<0.80	<1.0
MW-2	06/03/09	N	--	--	--	1,730	**620**	<58	<0.12	<0.21	<0.20	<0.15	--
MW-2	11/10/09	N	--	--	--	2,230	**821**	<379	<1.0	<1.0	<1.0	<3.0	3.2
MW-2	02/02/10	N	--	--	--	1,450	**940**	<388	<1.0	<1.0	<1.0	<3.0	3.9
MW-2	05/18/10	N	--	--	--	1,330	**1,870**	<392	<1.0	<1.0	<1.0	<3.0	<1.0
MW-2	08/09/10	N	--	--	--	1,200	**831**	<396	<1.0	<1.0	<1.0	<3.0	--
MW-2	11/01/10	N	--	--	--	1,680	**2,080**	<388	<1.0	<1.0	<1.0	<3.0	--
MW-2	02/02/11	N	--	--	--	1,700	**1,170**	<385	<1.0	<1.0	<1.0	<3.0	--
MW-2	04/26/11	N	--	--	--	3,280	**562**	<392	<1.0	<1.0	<1.0	<3.0	--
MW-2	07/12/11	N	--	--	--	1,020	**700**	<408	<1.0	<1.0	<1.0	<3.0	--
MW-2	10/27/11	N	--	--	--	2,000	**920**	<410	<1.0	<1.0	<1.0	<3.0	--
MW-2	07/02/12	N	2,354.55	4.83	2349.72	1,960	**580**	<380	<1.0	<1.0	<1.0	<3.0	<1.0
MW-2	10/10/12	N	2,354.55	5.06	2349.49	1,500	**680**	<840	<1.0	<1.0	<1.0	<3.0	7.4
MW-2	03/13/13	N	2,354.55	4.61	2349.94	1,060	**620**	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-2	05/15/13	N	2,354.55	5.09	2349.46	1,220	**990**	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-2	08/06/13	N	2,354.55	4.68	2350.51	924	**560**	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-2	10/11/13	N	2,355.19	5.19	2350.00	833	**910**	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-2	03/11/14	N	2,355.19	3.21	2351.98	1,900	**910**	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-2	06/03/14	N	2,355.19	5.10	2350.09	1,870	**610**	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-2	04/06/17	N	2,355.19	4.18	2351.01	1,500	**1,200**	<73	<0.5	<0.5	<0.5	<0.5	2.0
MW-2	09/14/17	N	2,355.19	4.89	2,350.30	1,200	**720**	<260	<1	<1	<1	<1	<4
MW-2	03/21/18	N	2355.19	4.45	2350.74	940	380	<250	--	--	--	--	--
MW-2	06/21/18	N	2355.19	4.78	2350.41	1,000	**540**	<280	--	--	--	--	--
MW-2	09/21/18	N	2355.19	5.02	2350.17	810	**740**	<270	--	--	--	--	--
MW-2	12/06/18	N	2355.19	4.57	2350.62	**1,400**	**510**	<250	--	--	--	--	--
MW-2	12/06/18	FD	2355.19	4.57	2350.62	**1,400**	400	<260	--	--	--	--	--
MW-2	03/06/19	N	2355.19	4.70	2350.49	**1,300**	410	<270	--	--	--	--	--
MW-2	05/21/19	N	2355.19	4.36	2350.83	**1,200**	**620**	<260	--	--	--	--	--
MW-2	08/21/19	N	2355.19	4.55	2350.64	**1,500**	**540**	<260	--	--	--	--	--
MW-2	10/30/19	N	2355.19	4.49	2350.70	**1,800**	**700**	<310	--	--	--	--	--
MW-2	10/30/19	FD	2355.19	4.49	2350.70	**1,700**	**690**	<280	--	--	--	--	--
MW-2	03/05/20	N	2355.19	4.65	2350.54	**1,200**	410	<260	<1	<1	<1	<6	--
MW-2	03/05/20	FD	2355.19	4.65	2350.54	**1,100**	460	<260	<1	<1	<1	<6	--

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

Sample ID	Date	Sample Type	TOC	DTW	GWE	HYDROCARBONS			PRIMARY VOCs				
						TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MW-2	06/03/20	N	2355.19	4.33	2350.86	780	710	<260	<1.0	<1.0	<1.0	<6.0	--
MW-2	09/03/20	N	2355.19	4.70	2350.49	**1,100**	**630**	<270	<1.0	<1.0	<1.0	<6.0	--
MW-2	03/31/21	N	2355.19	4.92	2350.27	**990**	**720**	<260	<1.0	<1.0	<1.0	<6.0	--
MW-2	11/16/21	N	2355.19	4.50	2350.69	**1,300**	**730**	<250	<1.0	<1.0	<1.0	<1.0	--
MW-2	04/20/22	N	2355.19	--	--	**940**	**570**	<250	<1.0	<1.0	<1.0	<1.0	--
MW-2	12/07/22	N	2355.19	5.00	2350.19	**830**	**690**	<290	<1.0	<1.0	<1.0	<1.0	--
MW-3	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/25/02	N	--	--	--	--	<250	<750	<0.50	<2.0	<1.0	<1.5	<20
MW-3	06/04/02	N	--	--	--	--	267	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	08/02/02	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	10/29/02	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	02/19/03	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	06/05/03	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	09/09/03	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	12/10/03	N	--	--	--	--	<250	<500	<1.5	<2.0	<1.0	<1.5	<20
MW-3	06/03/04	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	12/01/04	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/03/05	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/15/06	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/30/07	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-3	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/24/08	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	12/03/08	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/03/09	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	11/10/09	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	02/02/10	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/18/10	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	08/09/10	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	11/01/10	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	02/02/11	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	04/26/11	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	07/12/11	NS	--	--	--	--	--	--	--	--	--	--	--
MW-3	10/27/11	NS	--	--	--	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

						HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MW-3	07/02/12	N	2,355.18	4.92	2350.26	NS	--	--	--	--	--	--	--
MW-3	10/11/12	N	2,355.18	5.17	2350.01	<50	<160	<820	<1.0	<1.0	<1.0	<3.0	<1.0
MW-3	03/13/13	NS	2,355.18	4.68	2350.50	--	--	--	--	--	--	--	--
MW-3	05/15/13	N	2,355.18	5.16	2350.02	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	<4.0
MW-3	08/06/13	NS	2,355.18	4.64	2350.80	--	--	--	--	--	--	--	--
MW-3	10/11/13	N	2,355.44	5.28	2350.16	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-3	03/11/14	NS	2,355.44	3.52	2351.92	--	--	--	--	--	--	--	--
MW-3	06/03/14	N	2,355.44	4.98	2350.46	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-3	04/06/17	N	2,355.44	4.28	2351.16	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<1.0
MW-3	09/14/17	N	2,355.44	4.89	2,350.55	<250	<100	<260	<1	<1	<1	<1	<4
MW-3	12/06/18	NS	2355.44	--	--	--	--	--	--	--	--	--	--
MW-3	03/06/19	NS	2355.44	--	--	--	--	--	--	--	--	--	--
MW-3	05/21/19	NS	2355.44	--	--	--	--	--	--	--	--	--	--
MW-3	08/21/19	NS	2355.44	--	--	--	--	--	--	--	--	--	--
MW-3	10/30/19	NS	2355.44	--	--	--	--	--	--	--	--	--	--
MW-3	11/16/21	NS	2355.44	4.56	2350.88	--	--	--	--	--	--	--	--
MW-3	04/20/22	NS	2355.44	--	--	--	--	--	--	--	--	--	--
MW-3	12/07/22	NS	2355.44	4.38	2351.06	--	--	--	--	--	--	--	--
MW-4	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/25/02	N	--	--	--	--	**10,600**	<750	1.1	3.2	<1.0	1.9	**526**
MW-4	03/26/02	N	--	--	--	--	**5,770**	<750	<0.50	<2.0	<1.0	<1.5	**344**
MW-4	06/04/02	N	--	--	--	--	**11,400**	<500	<0.50	<2.0	<1.0	<1.5	**432**
MW-4	06/05/02	N	--	--	--	--	**12,500**	<500	<0.50	<2.0	1.1	1.6	**278**
MW-4	08/20/02	N	--	--	--	--	**1,500**	<500	<0.50	<2.0	<1.0	<1.5	43
MW-4	10/29/02	N	--	--	--	--	**2,220**	<500	<0.50	<2.0	<1.0	<1.5	72
MW-4	02/19/03	N	--	--	--	--	**1,570**	<500	<0.50	<2.0	<1.0	<1.5	22
MW-4	06/05/03	N	--	--	--	--	**720**	<500	<0.50	<2.0	<1.0	<1.5	40
MW-4	09/09/03	N	--	--	--	--	**890**	<500	<0.50	<2.0	<1.0	<1.5	61
MW-4	12/10/03	N	--	--	--	--	**2,750**	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-4	06/03/04	N	--	--	--	--	**710**	<500	<0.50	<2.0	<1.0	<1.5	41
MW-4	12/01/04	N	--	--	--	--	**620**	<500	0.69	<2.0	<1.0	<1.5	22
MW-4	06/03/05	N	--	--	--	--	370	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-4	11/21/05	N	--	--	--	--	**920**	<500	<0.50	<2.0	<1.0	<1.5	27
MW-4	06/15/06	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-4	12/19/06	N	--	--	--	--	360	<500	<0.50	<2.0	<1.0	<1.5	31

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

						HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MW-4	12/19/06	FD	--	--	--	--	380	<500	<0.50	<2.0	<1.0	<1.5	27
MW-4	05/30/07	N	--	--	--	--	449	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-4	05/30/07	FD	--	--	--	--	445	<500	<0.50	<2.0	<1.0	<1.5	27
MW-4	10/30/07	N	--	--	--	700	--	--	<0.50	<0.70	<0.80	<0.80	1.0
MW-4	10/30/07	FD	--	--	--	660	**650**	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-4	06/24/08	N	--	--	--	190	200	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-4	12/03/08	N	--	--	--	330	200	<66	<0.50	<0.70	<0.80	<0.80	<1.0
MW-4	06/03/09	N	--	--	--	193	120	<59	<0.12	<0.21	<0.20	<0.15	--
MW-4	11/10/09	N	--	--	--	380	363	<381	<1.0	<1.0	<1.0	<3.0	2.9
MW-4	02/02/10	N	--	--	--	162	286	<388	<1.0	<1.0	<1.0	<3.0	2.7
MW-4	05/18/10	N	--	--	--	227	**650**	<392	<1.0	<1.0	<1.0	<3.0	<1.0
MW-4	08/09/10	N	--	--	--	156	123	<385	<1.0	<1.0	<1.0	<3.0	--
MW-4	11/01/10	N	--	--	--	374	277	<388	<1.0	<1.0	<1.0	<3.0	--
MW-4	02/02/11	N	--	--	--	137	201	<392	<1.0	<1.0	<1.0	<3.0	--
MW-4	04/26/11	N	--	--	--	**1,010**	185	<392	<1.0	<1.0	<1.0	<3.0	--
MW-4	07/12/11	N	--	--	--	510	210 J	<392	<1.0	<1.0	<1.0	<3.0	--
MW-4	10/27/11	N	--	--	--	173	340	<380	<1.0	<1.0	<1.0	<3.0	--
MW-4	07/02/12	N	2,356.37	5.85	2350.52	241	180	<380	<1.0	<1.0	<1.0	<3.0	<1.0
MW-4	10/09/12	N	2,356.37	6.15	2350.22	113	<160	<810	<1.0	<1.0	<1.0	<3.0	5.1
MW-4	03/13/13	N	2,356.37	5.62	2350.75	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<4.0
MW-4	05/15/13	N	2,356.37	6.05	2350.32	136	<390	<390	<1.0	<1.0	<1.0	<3.0	<4.0
MW-4	08/06/13	N	2,356.37	5.68	2350.76	120	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-4	10/09/13	N	2,356.44	6.17	2350.27	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<4.0
MW-4	03/11/14	N	2,356.44	4.70	2351.74	192	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-4	06/03/14	N	2,356.44	5.93	2350.51	277	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-4	04/03/17	N	2,356.44	5.09	2351.35	J200	190	<75	<0.5	<0.5	<0.5	<0.5	<1.0
MW-4	09/14/17	N	2,356.44	6.27	2,350.17	270	260	<260	<1	<1	<1	<1	<4
MW-4	03/21/18	NS	2356.44	5.47	2350.97	--	--	--	--	--	--	--	--
MW-4	06/21/18	NS	2356.44	5.80	2350.64	--	--	--	--	--	--	--	--
MW-4	09/21/18	NS	2356.44	6.07	2350.37	--	--	--	--	--	--	--	--
MW-4	12/06/18	NS	2356.44	5.61	2350.83	--	--	--	--	--	--	--	--
MW-4	03/06/19	NS	2356.44	5.76	2350.68	--	--	--	--	--	--	--	--
MW-4	05/21/19	NS	2356.44	5.47	2350.97	--	--	--	--	--	--	--	--
MW-4	08/21/19	NS	2356.44	5.69	2350.75	--	--	--	--	--	--	--	--
MW-4	10/30/19	NS	2356.44	5.75	2350.69	--	--	--	--	--	--	--	--
MW-4	03/05/20	NS	2356.44	5.69	2350.75	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

						HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MW-4	06/03/20	NS	2356.44	5.44	2351.00	--	--	--	--	--	--	--	--
MW-4	09/03/20	NS	2356.44	5.75	2350.69	--	--	--	--	--	--	--	--
MW-4	11/16/21	NS	2356.44	5.50	2350.94	--	--	--	--	--	--	--	--
MW-4	04/20/22	NS	2356.44	5.72	2350.72	--	--	--	--	--	--	--	--
MW-4	12/07/22	NS	2356.44	--	--	--	--	--	--	--	--	--	--
MW-5	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--
MW-5	03/25/02	N	--	--	--	--	**1,360**	<750	**19.1**	121	16	123	27
MW-5	06/04/02	N	--	--	--	--	**2,720**	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	08/20/02	N	--	--	--	--	**774**	<500	<0.50	<2.0	<1.0	1.6	<20
MW-5	10/29/02	N	--	--	--	--	**2,580**	<500	<0.50	<2.0	<1.0	<1.5	56
MW-5	02/19/03	N	--	--	--	--	**1,510**	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	06/05/03	N	--	--	--	--	**596**	<500	<0.50	<2.0	<1.0	<1.5	28
MW-5	09/09/03	N	--	--	--	--	--	--	<0.50	<2.0	<1.0	<1.5	40
MW-5	12/10/03	N	--	--	--	--	**5,040**	**800**	<0.50	<2.0	<1.0	<1.5	<20
MW-5	06/03/04	N	--	--	--	--	360	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	12/01/04	N	--	--	--	--	**4,600**	<500	1.8	<2.0	<1.0	<1.5	28
MW-5	06/03/05	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	11/21/05	N	--	--	--	--	**2,150**	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	06/15/06	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	12/19/06	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	05/30/07	N	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-5	10/30/07	N	--	--	--	250	**2,500**	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-5	06/24/08	N	--	--	--	<50	170	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-5	12/03/08	N	--	--	--	240	73	<68	<0.50	<0.70	<0.80	<0.80	<1.0
MW-5	06/03/09	N	--	--	--	<13	<36	<59	<0.12	<0.21	<0.20	<0.15	----
MW-5	11/10/09	N	--	--	--	<50	315	<381	<1.0	<1.0	<1.0	<3.0	<1.0
MW-5	02/02/10	N	--	--	--	<50	81	<388	<1.0	<1.0	<1.0	<3.0	<1.0
MW-5	05/18/10	N	--	--	--	<50	126	<396	<1.0	<1.0	<1.0	<3.0	<1.0
MW-5	08/09/10	NS	--	--	--	--	--	--	--	--	--	--	--
MW-5	11/01/10	N	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-5	02/02/11	N	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-5	04/26/11	N	--	--	--	<50	<77	<385	<1.0	<1.0	<1.0	<3.0	--
MW-5	07/12/11	N	--	--	--	<50	<78	<392	<1.0 UJ	<1.0 UJ	<1.0 UJ	<3.0 UJ	--
MW-5	10/27/11	N	--	--	--	<50	**990**	<400	<1.0	<1.0	<1.0	<3.0	--
MW-5	07/02/12	N	2,354.81	4.73	2350.08	<50	<78	<390	<1.0	<1.0	<1.0	<3.0	<1.0

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

Sample ID	Date	Sample Type	TOC	DTW	GWE	HYDROCARBONS			PRIMARY VOCs				
						TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MW-5	10/09/12	N	2,354.81	5.06	2349.75	<50	<170	<830	<1.0	<1.0	<1.0	<3.0	<1.0
MW-5	03/13/13	N	2,354.81	4.51	2350.30	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5	05/15/13	N	2,354.81	5.01	2349.80	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5	08/06/13	N	2,354.81	4.67	2350.44	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5	10/09/13	N	2355.11	5.05	2350.06	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5	03/11/14	N	2355.11	3.40	2351.71	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5	06/03/14	N	2355.11	5.05	2350.06	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5	04/03/17	N	2355.11	3.95	2351.16	<50	<30	<69	<0.5	<0.5	<0.5	<0.5	<1.0
MW-5	09/14/17	N	2355.11	4.89	2350.22	<250	<100	<260	<1	<1	<1	<1	<4
MW-5	03/21/18	NS	2355.11	4.39	2350.72	--	--	--	--	--	--	--	--
MW-5	06/21/18	NS	2355.11	4.84	2350.27	--	--	--	--	--	--	--	--
MW-5	09/21/18	NS	2355.11	4.97	2350.14	--	--	--	--	--	--	--	--
MW-5	12/06/18	NS	2355.11	4.55	2350.56	--	--	--	--	--	--	--	--
MW-5	03/06/19	NS	2355.11	--	--	--	--	--	--	--	--	--	--
MW-5	05/21/19	NS	2355.11	4.47	2350.64	--	--	--	--	--	--	--	--
MW-5	08/21/19	NS	2355.11	4.66	2350.45	--	--	--	--	--	--	--	--
MW-5	10/30/19	NS	2355.11	4.69	2350.42	--	--	--	--	--	--	--	--
MW-5	03/05/20	NS	2355.11	4.62	2350.49	--	--	--	--	--	--	--	--
MW-5	06/03/20	NS	2355.11	4.44	2350.67	--	--	--	--	--	--	--	--
MW-5	09/03/20	NS	2355.11	4.72	2350.39	--	--	--	--	--	--	--	--
MW-5	11/16/21	NS	2355.11	4.45	2350.66	--	--	--	--	--	--	--	--
MW-5	04/20/22	NS	2355.11	4.62	2350.49	--	--	--	--	--	--	--	--
MW-5	12/07/22	NS	2355.11	4.28	2350.83	--	--	--	--	--	--	--	--
MW-10	10/30/19	NS	2354.38	Dry	--	--	--	--	--	--	--	--	--
MW-10	03/05/20	NS	2354.38	Dry									
MW-10	06/03/20	NS	2354.38	Dry	--	--	--	--	--	--	--	--	--
MW-10	09/03/20	NS	2354.38	Dry	--	--	--	--	--	--	--	--	--
MW-10	03/31/21	NS	2354.38	Dry	--	--	--	--	--	--	--	--	--
MW-10	11/16/21	NS	2354.38	Dry	--	--	--	--	--	--	--	--	--
MW-10	04/20/22	NS	2354.38	--	--	--	--	--	--	--	--	--	--
MW-10	12/07/22	NS	2354.38	--	--	--	--	--	--	--	--	--	--
MW-11	10/30/19	NS	--	Dry	--	--	--	--	--	--	--	--	--
MW-11	03/05/20	N	2354.19	11.73	2342.46	<250	<100	<260	<1	<1	<1	<6	--
MW-11	06/03/20	N	2354.19	12.00	2342.19	26 J	71 J	<260	<1.0	<1.0	<1.0	<6.0	--

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

Sample ID	Date	Sample Type	TOC	DTW	GWE	HYDROCARBONS			PRIMARY VOCs				
						TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L
MW-11	09/03/20	NS	2354.19	Dry	--	--	--	--	--	--	--	--	--
MW-11	03/31/21	NS	2354.19	Dry	--	--	--	--	--	--	--	--	--
MW-11	11/16/21	NS	2354.19	Dry	--	--	--	--	--	--	--	--	--
MW-11	04/20/22	N	2354.19	12.57	2341.62	<250	<100	<250	<1.0	<1.0	<1.0	<1.0	--
MW-11	12/07/22	NS	2354.19	--	--	--	--	--	--	--	--	--	--
MW-13	04/20/22	N	2352.6	NM		<250	<100	<250	<1.0	<1.0	<1.0	<1.0	--
MW-13	12/07/22	N	2352.6	4.35	2348.25	<250	<120	<290	<1.0	<1.0	<1.0	<1.0	--

Summary of Groundwater Monitoring Data - Shallow Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

Sample ID	Date	Sample Type	TOC	DTW	GWE	HYDROCARBONS			PRIMARY VOCs				
						TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Screening Levels (Shallow GW)				800 ug/L	500 ug/L	500 ug/L	5 ug/L	1000 ug/L	700 ug/L	1000 ug/L	160 ug/L

Notes:
DTW = Depth to Water in feet
GWE = Groundwater Elevation in feet above mean sea level; before August 13, 2009, relative to arbitrary benchmarks
TOC = Top of Casing in feet above mean sea level; before August 13, 2009, relative to arbitrary benchmarks
All results are in micrograms per liter (µg/L) unless otherwise indicated
TPHg = Total petroleum hydrocarbons as gasoline analyzed by NWTPH--Gx unless otherwise noted. The higher value is based on the assumption that no benzene is present in the groundwater sample. If any detectable amount of benzene is present in the groundwater sample, then the lower TPHg cleanup level is applicable.
TPHd = Total petroleum hydrocarbons as diesel, analyzed by NWTPH--Dx with silica gel cleanup unless otherwise noted.
TPHo = Total petroleum hydrocarbons as oil, analyzed by NWTPH--Dx with silica gel cleanup unless otherwise noted.
VOCs = Volatile organic compounds
BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B unless otherwise noted.
Total Xylenes = o--xylene + m,p--xylene
<x = Not detected at laboratory reporting limit x
FD = Field duplicate
N = Normal
NS = Not sampled
NM = Not measured
------ = Not analyzed
Concentrations in bold type indicate the analyte was detected above the Site-specific cleanup level.
J = Concentration is between the method detection limit (MDL) and the limit of quantitation (LOQ) and is therefore estimated.
>S = The cleanup level exceeds the saturation level; therefore, the absense of separate phase hydrocarbons (SPH) indicates compliance with the TPH cleanup level.

Table 2b

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Cleanup Levels (Deep GW)					800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-1	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/25/02	N	--	--	--	--	--	274	<750	<0.50	<2.0	<1.0	<1.5	<20
MW-1	06/04/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	08/20/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	10/29/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	02/19/03	N	--	--	--	--	--	**9,310**	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	02/19/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	06/05/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	09/09/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	12/10/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	06/03/04	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	12/01/04	N	--	--	--	--	--	<250	<500	3.6	<2.0	1.5	2.0	<20
MW-1	06/03/05	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/15/06	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/30/07	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-1	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/24/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	12/03/08	N	--	--	--	--	<50	<29	<68	<0.50	<0.7	<0.80	<0.80	<1.0
MW-1	06/03/09	N	--	--	--	--	<13	<35	<58	<0.12	<0.21	<0.20	<0.15	--
MW-1	11/10/09	N	--	--	--	--	<50	80	<383	<1.0M0	<1.0	<1.0	<3.0	<1.0
MW-1	02/02/10	N	--	--	--	--	<50	<77	<385	<1.0	<1.0	<1.0	<3.0	<1.0
MW-1	05/18/10	N	--	--	--	--	<50	<76	<379	<1.0	<1.0	<1.0	<3.0	<1.0
MW-1	08/09/10	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
MW-1	11/01/10	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-1	02/02/11	N	--	--	--	--	<50	<77	<385	<1.0	<1.0	<1.0	<3.0	--
MW-1	04/26/11	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-1	07/12/11	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
MW-1	10/27/11	N	--	--	--	--	<50	<78	<390	<1.0	< 1.0	<1.0	<3.0	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-1	10/27/11	FD	--	--	--	--	<50	<78	<390	<1.0	<1.0	<1.0	<3.0	--
MW-1	07/02/12	N	2,354.55	31.90	--	2322.65	<50	<86	<430	<1.0	<1.0	<1.0	<3.0	<1.0
MW-1	07/02/12	FD	--	--	--	--	<50	<82	<410	<1.0	<1.0	<1.0	<3.0	<1.0
MW-1	10/10/12	N	2,354.55	36.02	--	2318.53	<50	<160	<810	<1.0	<1.0	<1.0	<3.0	<1.0
MW-1	10/10/12	FD	--	--	--	--	<50	<160	<800	<1.0	<1.0	<1.0	<3.0	<1.0
MW-1	03/13/13	FD	--	--	--	--	<100	<460	<460	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	05/15/13	N	2,354.55	32.62	--	2321.93	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	05/15/13	FD	--	--	--	--	<100	<390	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	08/06/13	N	2,354.55	34.22	--	2320.38	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	08/06/13	FD	--	--	--	--	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	10/11/13	N	2,354.60	35.79	--	2318.81	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	10/11/13	FD	--	--	--	--	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	03/11/14	N	2,354.60	35.45	--	2319.15	<100	<400	500	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	06/03/14	N	2,354.60	33.90	--	2320.70	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	06/03/14	FD	--	--	--	--	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-1	04/06/17	N	2,354.60	27.10	--	2327.50	<50	<29	<68	<0.5	<0.5	<0.5	<0.5	<1.0
MW-1	09/14/17	N	2,354.60	33.15	--	2,321.45	<250	<110	<270	<1	<1	<1	<1	<4
MW-1	03/21/18	NS	2354.60	29.56	--	2325.04	--	--	--	--	--	--	--	--
MW-1	06/21/18	NS	2354.60	30.57	--	2324.03	--	--	--	--	--	--	--	--
MW-1	09/21/18	NS	2354.60	33.80	--	2320.80	--	--	--	--	--	--	--	--
MW-1	12/06/18	NS	2354.60	35.37	--	2319.23	--	--	--	--	--	--	--	--
MW-1	03/06/19	NS	2354.60	32.63	--	2321.97	--	--	--	--	--	--	--	--
MW-1	05/21/19	NS	2354.60	30.75	--	2323.85	--	--	--	--	--	--	--	--
MW-1	08/21/19	NS	2354.60	33.25	--	2321.35	--	--	--	--	--	--	--	--
MW-1	10/30/19	NS	2354.60	34.69	--	2319.91	--	--	--	--	--	--	--	--
MW-1	03/05/20	NS	2354.60	31.13	--	2323.47	--	--	--	--	--	--	--	--
MW-1	06/03/20	NS	2354.60	31.99	--	2322.61	--	--	--	--	--	--	--	--
MW-1	09/03/20	NS	2354.60	33.80	--	2320.80	--	--	--	--	--	--	--	--
MW-1	11/16/21	N	2354.60	36.52	--	2318.08	--	--	--	--	--	--	--	--
MW-1	04/20/22	N	2354.60	--	--	--	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-1	12/07/22	NS	2354.60	36.79	--	2317.81	--	--	--	--	--	--	--	--
MW-5D	10/11/13	N	2,355.03	35.57	--	2319.46	614	**1,100**	<450	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5D	03/11/14	N	2,355.03	35.48	--	2319.55	<100	<400	**700**	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5D	06/03/14	N	2,355.03	33.73	--	2321.30	128	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-5D	09/14/17	N	2,355.03	32.48	--	2,322.55	<250	**560**	<250	<1	<1	<1	<1	<4
MW-5D	03/21/18	N	2355.03	29.02	--	2326.01	69 J	370	<260	--	--	--	--	--
MW-5D	03/21/18	FD	2355.03	29.02	--	2326.01	57 J	**1,600 ***	**2,400 ***	--	--	--	--	--
MW-5D	06/21/18	N	2355.03	30.01	--	2325.02	<250	**670**	<260	--	--	--	--	--
MW-5D	09/21/18	N	2355.03	33.51	--	2321.52	81 J	160	<280	--	--	--	--	--
MW-5D	09/21/18	FD	2355.03	33.51	--	2321.52	<250	220	<270	--	--	--	--	--
MW-5D	12/06/18	N	2355.03	35.21	--	2319.82	<250	72 J	<260	--	--	--	--	--
MW-5D	03/06/19	N	2355.03	32.46	--	2322.57	<250	110	<260	--	--	--	--	--
MW-5D	05/21/19	N	2355.03	30.46	--	2324.57	--	--	--	--	--	--	--	--
MW-5D	08/21/19	N	2355.03	32.94	--	2322.09	<250	220	<260	--	--	--	--	--
MW-5D	08/21/19	FD	2355.03	32.94	--	2322.09	<250	250	<260	--	--	--	--	--
MW-5D	10/30/19	N	2355.03	34.50	--	2320.53	<250	130	<270	--	--	--	--	--
MW-5D	03/05/20	N	2355.03	30.94	--	2324.09	<250	78 J	<260	<1	<1	<1	<6	--
MW-5D	06/03/20	N	2355.03	31.80	--	2323.23	<250	390	120 J	<1.0	<1.0	<1.0	<6.0	--
MW-5D	09/03/20	N	2355.03	33.52	--	2321.51	45 J	250	<260	<1.0	<1.0	<1.0	<6.0	--
MW-5D Dup	09/03/20	FD	2355.03	33.52	--	2321.51	33 J	240	<270	<1.0	<1.0	<1.0	<6.0	--
MW-5D	03/31/21	N	2355.03	32.21	--	2322.82	<250	290	<260	<1.0	<1.0	<1.0	<6.0	--
MW-5D Dup	03/31/21	FD	2355.03	32.21	--	2322.82	<250	230	<250	<1.0	<1.0	<1.0	<6.0	--
MW-5D	11/16/21	N	2355.03	36.54	--	2318.49	<250	<110	<270	<1.0	<1.0	<1.0	<1.0	--
MW-5D	04/20/22	N	2355.03	32.17	--	2322.86	<250	130	<250	<1.0	<1.0	<1.0	<1.0	--
MW-5D	12/07/22	N	2355.03	36.70	--	2318.33	<250	<110	<270	<1.0	<1.0	<1.0	<1.0	--
MW-6	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/25/02	N	--	--	--	--	--	<250	<750	<0.50	<2.0	<1.0	<1.5	<20
MW-6	06/04/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
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Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-6	08/20/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	10/29/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	02/19/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	06/05/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	09/09/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	12/10/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	06/03/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	12/01/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/03/05	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/15/06	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	05/30/07	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-6	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/24/08	N	--	--	--	--	<50	<75	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-6	12/03/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/03/09	N	--	--	--	--	<13	<35	<58	<0.12	<0.21	<0.20	<0.15	--
MW-6	11/10/09	N	--	--	--	--	<50	135	<396	<1.0	<1.0	<1.0	<3.0	<1.0
MW-6	02/02/10	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	<1.0
MW-6	05/18/10	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	<1.0
MW-6	08/09/10	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
MW-6	11/01/10	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-6	02/02/11	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
MW-6	04/26/11	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-6	07/12/11	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
MW-6	10/27/11	N	--	--	--	--	<50	<78	<390	<1.0	<1.0	<1.0	<3.0	--
MW-6	07/02/12	N	2,355.87	32.83	--	2323.04	<50	<82	<410	<1.0	<1.0	<1.0	<3.0	<1.0
MW-6	10/09/12	N	2,355.87	35.71	--	2320.16	<50	<160	<800	<1.0	<1.0	<1.0	<3.0	<1.0
MW-6	03/13/13	N	2,355.87	32.45	--	2323.42	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-6	05/15/13	N	2,355.87	33.07	--	2322.80	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<4.0 UJ

Summary of Groundwater Monitoring Data - Deep Wells
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							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-6	08/06/13	N	2,355.87	34.91	--	2321.02	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<4.0
MW-6	10/11/13	N	2,355.93	38.50	--	2317.43	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<4.0
MW-6	03/11/14	N	2,355.93	36.59	--	2319.34	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-6	06/03/14	N	2,355.93	34.65	--	2321.28	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-6	04/03/17	N	2,355.93	27.98	--	2327.95	<50	<30	<70	<0.5	<0..5	<0.5	<0.5	<1.0
MW-6	09/14/17	N	2,355.93	33.26	--	2,322.67	<250	<110	<260	<1	<1	<1	<1	<4
MW-6	03/21/18	NS	2355.93	30.08	--	2325.85	--	--	--	--	--	--	--	--
MW-6	06/21/18	NS	2355.93	30.93	--	2325.00	--	--	--	--	--	--	--	--
MW-6	09/21/18	NS	2355.93	34.40	--	2321.53	--	--	--	--	--	--	--	--
MW-6	12/06/18	NS	2355.93	36.13	--	2319.80	--	--	--	--	--	--	--	--
MW-6	03/06/19	NS	2355.93	33.36	--	2322.57	--	--	--	--	--	--	--	--
MW-6	05/21/19	NS	2355.93	31.18	--	2324.75	--	--	--	--	--	--	--	--
MW-6	08/21/19	NS	2355.93	33.84	--	2322.09	--	--	--	--	--	--	--	--
MW-6	10/30/19	NS	2355.93	35.45	--	2320.48	--	--	--	--	--	--	--	--
MW-6	03/05/20	NS	2355.93	31.70	--	2324.23	--	--	--	--	--	--	--	--
MW-6	06/03/20	NS	2355.93	32.64	--	2323.29	--	--	--	--	--	--	--	--
MW-6	09/03/20	NS	2355.93	34.43	--	2321.50	--	--	--	--	--	--	--	--
MW-6	11/16/21	N	2355.93	37.31	--	2318.62	--	--	--	--	--	--	--	--
MW-6	04/20/22	N	2355.93	33.06	--	2322.87	--	--	--	--	--	--	--	--
MW-6	12/07/22	NS	2355.93	37.14	--	2318.79	--	--	--	--	--	--	--	--
MW-7	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	03/25/02	N	--	--	--	--	--	**6,280**	<750	<0.50	<2.0	<1.0	25	154
MW-7	06/04/02	N	--	--	--	--	--	**13,100**	<500	<0.50	<2.0	<1.0	**14**	**221**
MW-7	08/21/02	N	--	--	--	--	--	**6,850**	<500	<0.50	<2.0	<1.0	<1.5	65
MW-7	08/21/02	N	--	--	--	--	--	**6,100**	<500	0.82	4.0	1.9	13	92
MW-7	10/29/02	N	--	--	--	--	--	**5,460**	<500	0.70	<2.0	<1.0	**9**	**172**
MW-7	02/19/03	N	--	--	--	--	--	**7,390**	<500	<0.50	<2.0	<1.0	6	<20
MW-7	06/05/03	N	--	--	--	--	--	**770**	<500	0.99	<2.0	<1.0	<1.5	<20
MW-7	09/09/03	NS	--	--	--	--	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
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Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-7	09/11/03	N	--	--	--	--	--	**1,250**	<500	<0.50	<2.0	4.7	30	81
MW-7	12/10/03	N	--	--	--	--	--	**7,120**	<500	<0.50	<2.0	1.2	15	114
MW-7	06/03/04	N	--	--	--	--	--	**1,000**	<500	<0.50	<2.0	<1.0	<1.5	48
MW-7	12/01/04	N	--	--	--	--	--	**1540**	<500	<0.50	<2.0	<1.0	<1.5	21
MW-7	06/03/05	N	--	--	--	--	--	**830**	<500	<0.50	<2.0	<1.0	<1.5	24
MW-7	11/21/05	N	--	--	--	--	--	**2,970**	<500	<0.50	<2.0	<1.0	<1.5	48
MW-7	06/15/06	N	--	--	--	--	--	**1,410**	<500	<0.50	<2.0	<1.0	<1.5	23
MW-7	12/19/06	N	--	--	--	--	--	**1,300**	<500	<0.50	6.42	2.74	9.43	24
MW-7	05/30/07	N	--	--	--	--	--	**961**	<500	0.71	<2.0	<1.0	<1.5	<20
MW-7	10/30/07	N	--	--	--	--	**2,700**	**14,000**	<4,700	<0.50	<0.70	<0.80	<0.80	<1.0
MW-7	06/24/08	N	--	--	--	--	**1,600**	**1,200**	<95	<0.50	<0.70	<0.80	<0.80	<1.0
MW-7	12/04/08	N	--	--	--	--	**1,400**	<29	<68	<0.50	<0.70	<0.80	<0.80	<1.0
MW-7	06/04/09	N	--	--	--	--	155	**560**	<58	<0.12	<0.21	<0.20	<0.15	--
MW-7	11/10/09	N	--	--	--	--	577	**7,600**	<388	<1.0	<1.0	<1.0	<3.0	2.7
MW-7	02/02/10	N	--	--	--	--	214	**2,000**	<377	<1.0	<1.0	<1.0	<3.0	2.4
MW-7	05/18/10	N	--	--	--	--	717	**16,900**	<400	<1.0	<1.0	<1.0	<3.0	<1.0
MW-7	08/09/10	N	--	--	--	--	**928**	**22,100**	<388	<1.0	<1.0	<1.0	<3.0	--
MW-7	11/01/10	N	--	--	--	--	**3,130**	**28,300**	<388	<1.0	<1.0	<1.0	<3.0	--
MW-7	02/02/11	N	--	--	--	--	704	**10,700**	<392	<1.0	<1.0	<1.0	<3.0	--
MW-7	04/26/11	N	--	--	--	--	**5,710**	**3,690**	<400	<1.0	<1.0	<1.0	<3.0	--
MW-7	07/12/11	N	--	--	--	--	278	**2,540**	<392	<1.0	<1.0	<1.0	<3.0	--
MW-7	10/26/11	N	--	--	--	--	**2,420**	**37,200**	<380	<1.0	<1.0	<1.0	<3.0	--
MW-7	07/02/12	N	2,356.25	31.84	--	2324.41	<50	78	<380	<1.0	<1.0	<1.0	<3.0	<1.0
MW-7	10/10/12	N	2,356.25	35.24	--	2321.01	207	350	<820	<1.0	<1.0	<1.0	<3.0	5.4
MW-7	03/13/13	N	2,356.25	31.94	--	2324.31	104	<440	<440	<1.0	<1.0	<1.0	<3.0	<4.0
MW-7	05/14/13	N	2,356.25	32.74	--	2323.51	< 100	<390	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-7	08/06/13	N	2,356.25	34.54	--	2321.77	250	<420	<420	<1.0	<1.0	<1.0	<3.0	<4.0
MW-7	10/12/13	N	2,356.31	36.11	--	2320.20	410	**600**	< 450	<1.0	<1.0	<1.0	<3.0	<4.0
MW-7	03/11/14	N	2,356.31	35.62	--	2320.69	448	430	**550**	<1.0	<1.0	<1.0	<3.0	<4.0
MW-7	06/04/14	N	2,356.31	34.37	--	2321.94	201	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0

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Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-7	04/05/17	NS	2,356.31	26.25	--	2330.06	ORC sock stuck in well - unable to sample				--	--	--	--
MW-7	09/14/17	NS	2,356.31	33.17	--	2,323.14	ORC sock stuck in well - unable to sample				--	--	--	--
MW-7	03/21/18	NS	2356.31	29.59	--	2326.72	ORC sock stuck in well - unable to sample				--	--	--	--
MW-7	06/21/18	NS	2356.31	30.76	--	2325.55	ORC sock stuck in well - unable to sample				--	--	--	--
MW-7	09/21/18	NS	2356.31	34.13	--	2322.18	ORC sock stuck in well - unable to sample				--	--	--	--
MW-7	12/06/18	NS	2356.31	36.09	--	2320.22	--	--	--	--	--	--	--	--
MW-7	03/06/19	NS	2356.31	33.05	--	2323.26	--	--	--	--	--	--	--	--
MW-7	05/21/19	NS	2356.31	31.00	--	2325.31	--	--	--	--	--	--	--	--
MW-7	08/21/19	N	2356.31	33.67	--	2322.64	180 J	240	<310	--	--	--	--	--
MW-7	10/30/19	N	2356.31	35.36	--	2320.95	190 J	**1,000**	<260	--	--	--	--	--
MW-7	03/05/20	N	2356.31	31.54	--	2324.77	51 J	190	<270	<1	<1	<1	<6	--
MW-7	06/03/20	N	2356.31	32.67	--	2323.64	95 J	400	<300	<1.0	<1.0	<1.0	<6.0	--
MW-7	06/03/20	FD	2356.31	32.67	--	2323.64	60 J	270	<250	<1.0	<1.0	<1.0	<6.0	--
MW-7	09/03/20	N	2356.31	34.33	--	2321.98	89 J	**570**	<270	<1.0	<1.0	<1.0	<6.0	--
MW-7	03/31/21	N	2356.31	32.98	--	2323.33	<250	110	<250	<1.0	<1.0	<1.0	<6.0	--
MW-7	11/16/21	N	2356.31	37.12	--	2319.19	<250	**530**	<260	<1.0	<1.0	<1.0	<1.0	--
MW-7Dup	11/16/21	FD	2356.31	37.12	--	2319.19	<250	290	<250	<1.0	<1.0	<1.0	<1.0	--
MW-7	04/20/22	N	2356.31	32.78	--	2323.53	<250	140	<260	<1.0	<1.0	<1.0	<1.0	--
MW-7	12/07/22	N	2356.31	37.50	--	2318.81	<250	**630**	<300	<1.0	<1.0	<1.0	<1.0	--
MW-8	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	03/25/02	N	--	--	--	--	--	<250	<750	<0.50	<2.0	<1.0	<1.5	<20
MW-8	06/04/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	08/21/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	10/29/02	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	02/19/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	06/05/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	09/09/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	09/11/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	12/10/03	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20

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							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-8	06/03/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	12/01/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	06/03/05	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	06/15/06	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	05/30/07	N	--	--	--	--	--	<250	<500	<0.50	<2.0	<1.0	<1.5	<20
MW-8	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	06/24/08	N	--	--	--	--	<50	<75	<94	<0.50	<0.70	<0.80	<0.80	<1.0
MW-8	12/04/08	N	--	--	--	--	<50	**35,000**	<3,500	<0.50	<0.70	<0.80	<0.80	<1.0
MW-8	06/04/09	N	--	--	--	--	<13.4	<36	<59	<0.12	<0.21	<0.20	<0.15	--
MW-8	11/10/09	N	--	--	--	--	<50	<79	<396	<1.0	<1.0	<1.0	<3.0	<1.0
MW-8	02/02/10	N	--	--	--	--	<50	<76	<381	<1.0	<1.0	<1.0	<3.0	<1.0
MW-8	05/18/10	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	<1.0
MW-8	08/09/10	N	--	--	--	--	<50	<79	<396	<1.0	<1.0	<1.0	<3.0	--
MW-8	11/01/10	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-8	02/02/11	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
MW-8	04/26/11	N	--	--	--	--	<50	<80	<400	<1.0	<1.0	<1.0	<3.0	--
MW-8	07/12/11	N	--	--	--	--	<50	<77	<385	<1.0	<1.0	<1.0	<3.0	--
MW-8	10/26/11	N	--	--	--	--	<50	<76	<380	<1.0	<1.0	<1.0	<3.0	--
MW-8	07/02/12	N	2,356.57	32.36	--	2324.21	<50	<86	<430	<1.0	<1.0	<1.0	<3.0	<1.0
MW-8	10/10/12	N	2,356.57	35.56	--	2321.01	<50	<170	<830	<1.0	<1.0	<1.0	<3.0	<1.0
MW-8	03/13/13	N	2,356.57	32.66	--	2323.91	<100	<440	<440	<1.0	<1.0	<1.0	<3.0	<4.0
MW-8	05/14/13	N	2,356.57	33.12	--	2323.45	<100	<390	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-8	08/06/13	N	2,356.57	34.83	--	2321.77	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<4.0
MW-8	10/12/13	N	2,356.60	36.36	--	2320.24	<100	<430	<430	<1.0	<1.0	<1.0	<3.0	<4.0
MW-8	03/11/14	N	2,356.60	36.98	--	2319.62	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-8	06/04/14	N	2,356.60	34.75	--	2321.85	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
MW-8	04/05/17	N	2,356.60	29.20	--	2327.40	<50	<30	<69	<0.5	<0.5	<0.5	<0.5	<1.0
MW-8	09/14/17	N	2,356.60	33.04	--	2,323.56	<250	<100	<250	<1	<1	<1	<1	<4

Table 2b

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-8	03/21/18	NS	2356.60	30.79	--	2325.81	--	--	--	--	--	--	--	--
MW-8	06/21/18	NS	2356.60	31.11	--	2325.49	--	--	--	--	--	--	--	--
MW-8	09/21/18	NS	2356.60	34.24	--	2322.36	--	--	--	--	--	--	--	--
MW-8	12/06/18	NS	2356.60	36.15	--	2320.45	--	--	--	--	--	--	--	--
MW-8	03/06/19	NS	2356.60	33.58	--	2323.02	--	--	--	--	--	--	--	--
MW-8	05/21/19	NS	2356.60	31.44	--	2325.16	--	--	--	--	--	--	--	--
MW-8	08/21/19	NS	2356.60	33.42	--	2323.18	--	--	--	--	--	--	--	--
MW-8	10/30/19	NS	2356.60	35.39	--	2321.21	--	--	--	--	--	--	--	--
MW-8	03/05/20	NS	2356.60	31.98	--	2324.62	--	--	--	--	--	--	--	--
MW-8	06/03/20	NS	2356.60	33.18	--	2323.42	--	--	--	--	--	--	--	--
MW-8	09/03/20	NS	2356.60	35.20	--	2321.40	--	--	--	--	--	--	--	--
MW-8	11/16/21	N	2356.60	37.19	--	2319.41	--	--	--	--	--	--	--	--
MW-8	04/20/22	N	2356.60	33.16	--	2323.44	--	--	--	--	--	--	--	--
MW-8	12/07/22	NS	2356.60	--	--	--	--	--	--	--	--	--	--	--
95-MW-11A	removed from sampling schedule due to well obstruction													
95-MW-11A	02/02/11	NS	2,357.25	Obstruction in Well at 3.25 Feet				--	--	--	--	--	--	--
95-MW-11A	04/26/11	NS	2,357.25	Obstruction in Well at 3.25 Feet				--	--	--	--	--	--	--
95-MW-11A	09/14/17	NS	2,357.25	34.47	--	2,322.78	--	--	--	--	--	--	--	--
95-MW-11A	03/21/18	NS	2357.25	30.76	--	2326.49	--	--	--	--	--	--	--	--
95-MW-11A	06/21/18	NS	2357.25	31.98	--	2325.27	--	--	--	--	--	--	--	--
95-MW-11A	09/21/18	NS	2357.25	35.48	--	2321.77	--	--	--	--	--	--	--	--
95-MW-11A	12/06/18	NS	2357.25	37.18	--	2320.07	--	--	--	--	--	--	--	--
95-MW-11A	03/06/19	NS	2357.25	34.11	--	2323.14	--	--	--	--	--	--	--	--
95-MW-11A	05/21/19	NS	2357.25	32.07	--	2325.18	--	--	--	--	--	--	--	--
95-MW-11A	08/21/19	NS	2357.25	34.87	--	2322.38	--	--	--	--	--	--	--	--
95-MW-11A	10/30/19	NS	2357.25	36.47	--	2320.78	--	--	--	--	--	--	--	--
95-MW-11B	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	03/25/02	NS	--	--	--	--	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Cleanup Levels (Deep GW)					800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
95-MW-11B	06/04/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	10/29/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	02/19/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	06/05/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	09/09/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	12/10/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	06/03/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	12/01/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	06/03/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	06/15/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	05/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	06/24/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	12/03/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-11B	06/03/09	N	--	--	--	--	<13	<35	<58	<0.12	<0.21	<0.20	<0.15	--
95-MW-11B	11/10/09	N	--	--	--	--	<50	144	<381	<1.0	<1.0	<1.0	<3.0	<1.0
95-MW-11B	02/02/10	N	--	--	--	--	<50	<76	<381	<1.0	<1.0	<1.0	<3.0	<1.0
95-MW-11B	05/18/10	N	--	--	--	--	<50	<77	<385	<1.0	<1.0	<1.0	<3.0	<1.0
95-MW-11B	08/09/10	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
95-MW-11B	11/01/10	N	--	--	--	--	<50	<78	<388	<1.0	<1.0	<1.0	<3.0	--
95-MW-11B	02/02/11	N	--	--	--	--	<50	<79	<396	<1.0	<1.0	<1.0	<3.0	--
95-MW-11B	04/26/11	N	--	--	--	--	<50	<80	<400	<1.0	<1.0	<1.0	<3.0	--
95-MW-11B	07/12/11	N	--	--	--	--	<50	<78	<392	<1.0	<1.0	<1.0	<3.0	--
95-MW-11B	10/26/11	N	--	--	--	--	<50	<75	<380	<1.0	<1.0	<1.0	<3.0	--
95-MW-11B	07/02/12	N	2,357.78	33.82	--	2323.96	<50	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0
95-MW-11B	10/10/12	N	2,357.78	37.18	--	2320.60	<50	<160	<810	<1.0	<1.0	<1.0	<3.0	<1.0
95-MW-11B	03/13/13	N	2,357.78	33.67	--	2324.11	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<4.0
95-MW-11B	05/14/13	N	2,357.78	34.52	--	2323.26	<100	<450	<450	<1.0	<1.0	<1.0	<3.0	<4.0

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
		MTCA Method A Cleanup Levels (Deep GW)					800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
95-MW-11B	08/06/13	N	2,357.78	36.34	--	2321.51	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<4.0
95-MW-11B	10/12/13	N	2,357.85	37.96	--	2319.89	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<4.0
95-MW-11B	03/12/14	N	2,357.85	38.10	--	2319.75	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
95-MW-11B	06/04/14	N	2,357.85	35.97	--	2321.88	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
95-MW-11B	04/05/17	N	2,357.85	28.38	--	2329.47	<50	<30	<70	<0.5	<0.5	<0.5	<0.5	<1.0
95-MW-11B	09/14/17	N	2,357.85	34.78	--	2,323.07	<250	<110	<260	<1	<1	<1	<1	<4
95-MW-11B	03/21/18	NS	2357.85	31.19	--	2326.66	--	--	--	--	--	--	--	--
95-MW-11B	06/21/18	NS	2357.85	32.27	--	2325.58	--	--	--	--	--	--	--	--
95-MW-11B	09/21/18	NS	2357.85	34.76	--	2323.09	--	--	--	--	--	--	--	--
95-MW-11B	12/06/18	NS	2356.71	36.51	--	2320.20	--	--	--	--	--	--	--	--
95-MW-11B	03/06/19	NS	2356.71	33.42	--	2323.29	--	--	--	--	--	--	--	--
95-MW-11B	05/21/19	NS	2356.71	31.40	--	2325.31	--	--	--	--	--	--	--	--
95-MW-11B	08/21/19	NS	2356.71	34.13	--	2322.58	--	--	--	--	--	--	--	--
95-MW-11B	10/30/19	NS	2356.71	35.92	--	2320.79	--	--	--	--	--	--	--	--
MW-12	10/30/19	NS	--	34.46	--	--	--	--	--	--	--	--	--	--
MW-12	03/05/20	N	2354.82	10.30	--	2344.52	<250	<100	<260	<1	<1	<1	<6	--
MW-12	06/03/20	N	2354.82	31.94	--	2322.88	<250	<110	<270	<1.0	<1.0	<1.0	<6.0	--
MW-12	09/03/20	N	2354.82	33.57	--	2321.25	24 J	<110	<290	<1.0	<1.0	<1.0	<6.0	--
MW-12	03/31/21	N	2354.82	32.18	--	2322.64	<250	<100	<260	<1.0	<1.0	<1.0	<6.0	--
MW-12	11/16/21	N	2354.82	36.43	--	2318.39	<250	<100	<250	<1.0	<1.0	<1.0	<1.0	--
MW-12	04/20/22	N	2354.82	32.19	--	2322.63	<250	<100	<260	<1.0	<1.0	<1.0	<1.0	--
MW-12 Dup	04/20/22	FD	2354.82	32.19	--	2322.63	<250	<100	<260	<1.0	<1.0	<1.0	<1.0	--
MW-12	12/07/22	N	2354.82	36.68	--	2318.14	<250	<110	<280	<1.0	<1.0	<1.0	<1.0	--
95-MW-12A	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	03/25/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	06/04/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	10/29/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	02/19/03	NS	--	--	--	--	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
95-MW-12A	06/05/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	09/09/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	12/10/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	06/03/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	12/01/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	06/03/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	06/15/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	05/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	06/24/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	12/03/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12A	06/03/09	N	--	--	--	--	<13	<35	<58	<0.12	<0.21	<0.20	<0.15	--
95-MW-12A	07/02/12	NS	2,355.12	31.23	--	2323.89	--	--	--	--	--	--	--	--
95-MW-12A	10/09/12	NS	2,355.12	34.66	--	2320.46	--	--	--	--	--	--	--	--
95-MW-12A	03/12/13	NS	2,355.12	30.97	--	2324.15	--	--	--	--	--	--	--	--
95-MW-12A	05/14/13	NS	2,355.12	32.00	--	2323.12	--	--	--	--	--	--	--	--
95-MW-12A	08/05/13	NS	2,355.12	33.74	--	2321.48	--	--	--	--	--	--	--	--
95-MW-12A	10/18/13	NS	2,355.22	35.36	--	2319.86	--	--	--	--	--	--	--	--
95-MW-12A	03/11/14	NS	2,355.22	35.02	--	2320.20	--	--	--	--	--	--	--	--
95-MW-12A	06/02/14	NS	2,355.22	33.38	--	2321.84	--	--	--	--	--	--	--	--
95-MW-12A	04/03/17	NS	2,355.22	25.76	--	2329.46	--	--	--	--	--	--	--	--
95-MW-12A	09/14/17	NS	2,355.22	32.27	--	2,322.95	--	--	--	--	--	--	--	--
95-MW-12A	03/21/18	NS	2355.22	23.53	--	2331.69	--	--	--	--	--	--	--	--
95-MW-12A	06/21/18	NS	2355.22	29.80	--	2325.42	--	--	--	--	--	--	--	--
95-MW-12A	09/21/18	NS	2355.22	33.28	--	2321.94	--	--	--	--	--	--	--	--
95-MW-12A	12/06/18	NS	2355.22	34.91	--	2320.31	--	--	--	--	--	--	--	--
95-MW-12A	03/06/19	NS	2355.22	31.85	--	2323.37	--	--	--	--	--	--	--	--
95-MW-12A	05/21/19	NS	2355.22	29.86	--	2325.36	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
95-MW-12A	08/21/19	NS	2355.22	32.66	--	2322.56	--	--	--	--	--	--	--	--
95-MW-12A	10/30/19	NS	2355.22	34.36	--	2320.86	--	--	--	--	--	--	--	--
95-MW-12B	08/20/01	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	03/25/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/04/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	10/29/02	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	02/19/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/05/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	09/09/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	12/10/03	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/03/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	12/01/04	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/03/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	11/21/05	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/15/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	12/19/06	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	05/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	10/30/07	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/24/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	12/03/08	NS	--	--	--	--	--	--	--	--	--	--	--	--
95-MW-12B	06/03/09	N	--	--	--	--	<13	<35	<58	<0.12	<0.21	<0.20	<0.15	--
95-MW-12B	07/02/12	NS	2,355.02	30.85	--	2324.17	--	--	--	--	--	--	--	--
95-MW-12B	10/09/12	NS	2,355.02	34.24	--	2320.78	--	--	--	--	--	--	--	--
95-MW-12B	03/12/13	NS	2,355.02	30.72	--	2324.30	--	--	--	--	--	--	--	--
95-MW-12B	05/14/13	NS	2,355.02	31.56	--	2323.46	--	--	--	--	--	--	--	--
95-MW-12B	08/05/13	NS	2,355.02	33.36	--	2321.73	--	--	--	--	--	--	--	--
95-MW-12B	10/18/13	NS	2,355.09	35.00	--	2320.09	--	--	--	--	--	--	--	--
95-MW-12B	03/11/14	NS	2,355.09	34.99	--	2320.10	--	--	--	--	--	--	--	--
95-MW-12B	06/02/14	NS	2,355.09	33.03	--	2322.06	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
			MTCA Method A Cleanup Levels (Deep GW)				800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
95-MW-12B	04/03/17	NS	2,355.09	26.35	--	2328.74	--	--	--	--	--	--	--	--
95-MW-12B	09/14/17	NS	2,355.09	31.76	--	2,323.33	--	--	--	--	--	--	--	--
95-MW-12B	03/21/18	NS	2355.09	28.18	--	2327.91	--	--	--	--	--	--	--	--
95-MW-12B	06/21/18	NS	2355.09	29.22	--	2325.87	--	--	--	--	--	--	--	--
95-MW-12B	09/21/18	NS	2355.09	32.81	--	2322.28	--	--	--	--	--	--	--	--
95-MW-12B	12/06/18	NS	2355.09	34.55	--	2320.54	--	--	--	--	--	--	--	--
95-MW-12B	03/06/19	NS	2355.09	32.62	--	2322.47	--	--	--	--	--	--	--	--
95-MW-12B	05/21/19	NS	2355.09	29.45	--	2325.64	--	--	--	--	--	--	--	--
95-MW-12B	08/21/19	NS	2355.09	32.15	--	2322.94	--	--	--	--	--	--	--	--
95-MW-12B	10/30/19	NS	2355.09	33.87	--	2321.22	--	--	--	--	--	--	--	--

Summary of Groundwater Monitoring Data - Deep Wells
Yellowstone Pipeline
Geiger Correctional Facility
Spokane, Washington

							HYDROCARBONS			PRIMARY VOCs				
Sample ID	Date	Sample Type	TOC	DTW	SPH	GWE	TPHg	TPHd	TPHo	B	T	E	X	Naph
MTCA Method A Cleanup Levels (Deep GW)							800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Notes:

DTW = Depth to Water in feet

GWE = Groundwater Elevation in feet above mean sea level; before August 13, 2009, relative to arbitrary benchmarks

TOC = Top of Casing in feet above mean sea level; before August 13, 2009, relative to arbitrary benchmarks

All results are in micrograms per liter (µg/L) unless otherwise indicated

TPHg = Total petroleum hydrocarbons as gasoline analyzed by NWTPH--Gx unless otherwise noted. The higher value is based on the assumption that no benzene is present in the groundwater sample. If any detectable amount of benzene is present in the groundwater sample, then the lower TPHg cleanup level is applicable.

TPHd = Total petroleum hydrocarbons as diesel, analyzed by NWTPH--Dx with silica gel cleanup unless otherwise noted.

TPHo = Total petroleum hydrocarbons as oil, analyzed by NWTPH--Dx with silica gel cleanup unless otherwise noted.

VOCs = Volatile organic compounds

BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B unless otherwise noted.

Total Xylenes = o--xylene + m,p--xylene

<x = Not detected at laboratory reporting limit x

FD = Field duplicate

N = Normal

NS = Not sampled

NM = Not measured

-- = Not analyzed

Concentrations in bold type indicate the analyte was detected above the Model Toxics Control Act (MTCA) Method A cleanup level

* = Field duplicate concentration is not consistent with the "parent" sample; therefore, this data is considered anomalous.

Table 3

Summary of Soil Vapor Analytical Data
Yellowstoone Pipeline
Geiger Correctional Facility
Spokane, Washington

Sample ID	Sample Date	Dilution Factor	TPH[2] (ug/m^3)	C_5-C_8 Aliphatic Hydrocarbons (ug/m^3)	C_9-C_{12} Aliphatic Hydrocarbons (ug/m^3)	C_9-C_{10} Aromatic Hydrocarbons (ug/m^3)	Benzene (ug/m^3)	Toluene (ug/m^3)	Ethylbenzene (ug/m^3)	Total Xylenes (ug/m^3)	MTBE (ug/m^3)	Naphthalene (ug/m^3)	EDB (ug/m^3)	EDC (ug/m^3)	Oxygen (%)	Methane (%)	Nitrogen (%)	Carbon Dioxide (%)	Carbon Monoxide (%)	Hydrogen (%)
MTCA Method B Soil Gas Screeing Level[1]			**1,500**	**--**	**--**	**--**	**11.0**	**76,000**	**15,000**	**1,500**	**320**	**2.50**	**0.14**	**3.2**	**--**	**--**	**--**	**--**	**--**	**--**
A-12576484-031622-NA-VP1	3/16/2022		88.7	52	30	6.7	0.39	0.89	0.33	2.08	<0.037	<0.79	<0.037	0.046	22.1	<0.15	77.8	<0.15	<0.15	<0.15
A-12576484-031622-NA-VP2	3/16/2022		83.8	60	17	6.8	0.54	2.8	0.89	4.5	<0.034	0.64	<0.034	0.15	21.7	<0.14	78.2	<0.14	<0.14	<0.14
A-12576484-031622-NA-AMB	3/16/2022		ND	<29	<15	<3.7	0.23	0.12	0.032	0.146	<0.037	0.12	<0.037	0.051	22.3	<0.15	77.6	<0.15	<0.15	<0.15
A-12576484-083022-NA-VP1	8/30/2022		250	<500	250	<170	<2.1	<130	<2.9	<2.9	<48	**3.1**	<0.51	<0.27	23.9	ND	73.2	2.84	ND	ND
A-12576484-083022-NA-DUP1	8/30/2022		780	540	240	<170	<2.2	<130	<3	<3	<50	<1.8	<0.53	<0.28	24.0	ND	73.2	2.78	ND	ND
A-12576484-083022-NA-VP2	8/30/2022		200	<490	200	<160	<2.1	<120	<2.8	<2.8	<47	<1.7	<0.5	<0.26	23.8	ND	73.0	3.16	ND	ND
A-12576484-083022-NA-AMB	8/30/2022		ND	<500	<170	<170	<2.1	<130	<2.9	<2.9	<48	<1.8	<0.51	<0.27	--	--	--	--	--	--

Notes:

Soil vapor samples analyzed by modified USEPA method TO-15

[1]Sub-slab or shallow soil gas screening level Cleanup Levels and Risk Calculation (CLARC) - March 2020 & Implementation Memo 18

2The TPH screening level is compared to the cumulative total of aliphatic carbon ranges C5-C8 and C9-C12, and the aromatic carbon range C9-C10.

< = Less than the stated laboratory reporting limit

ND = Not detected at the reporting limits

D = The reported result is from a dilution

DUP = Sample duplicate

Methyl tert-butyl ether (MTBE)

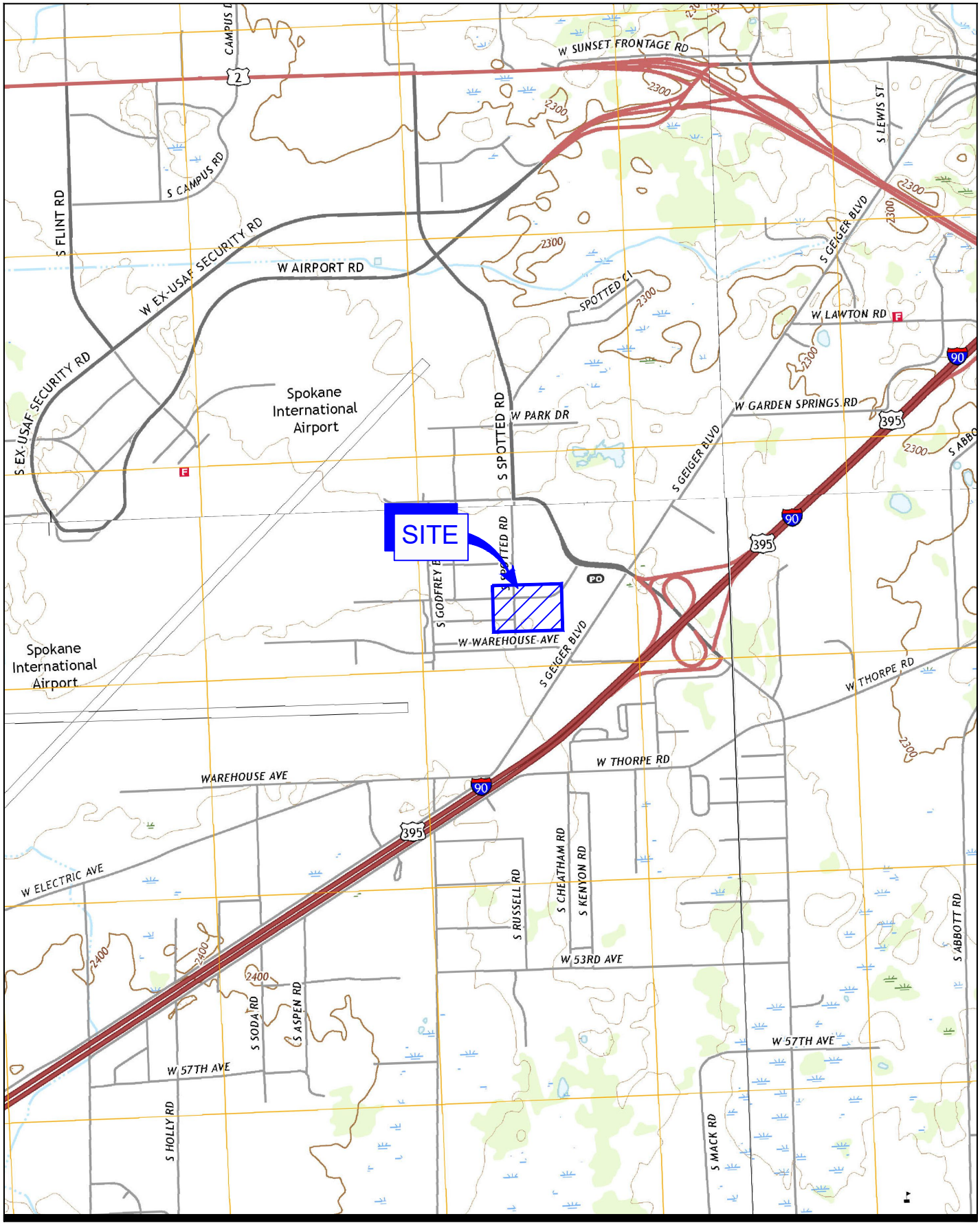
1,2- Dibromoethane (EDB)

1,2- Dichloroethane (EDC)

% = percent

ug/m^3 = micrograms per cubic meter.

Figures



0 1000 2000ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

N

GHD

PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

Project No. **12576484**
Date **July 2023**

SITE LOCATION MAP

FIGURE 1

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D101_SO-001.dwg
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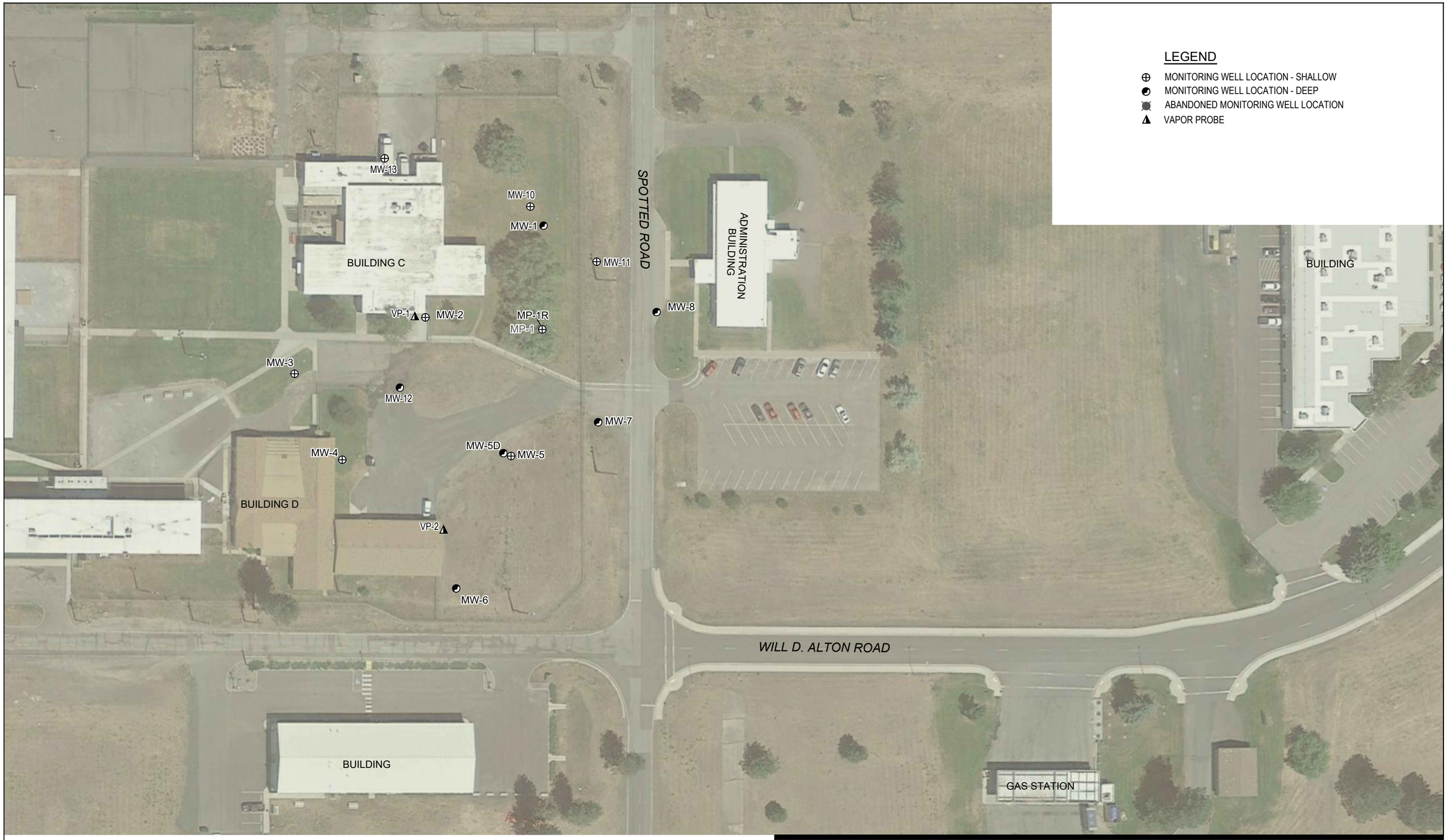
Data Source: Source: USGS Quad Maps: Spokane NW & SW, WA, (2017), Four Lakes, WA. (2017), & Airway Heights, WA. (2017).



0 40 80 ft

1" = 80 ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

N

GHD

PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

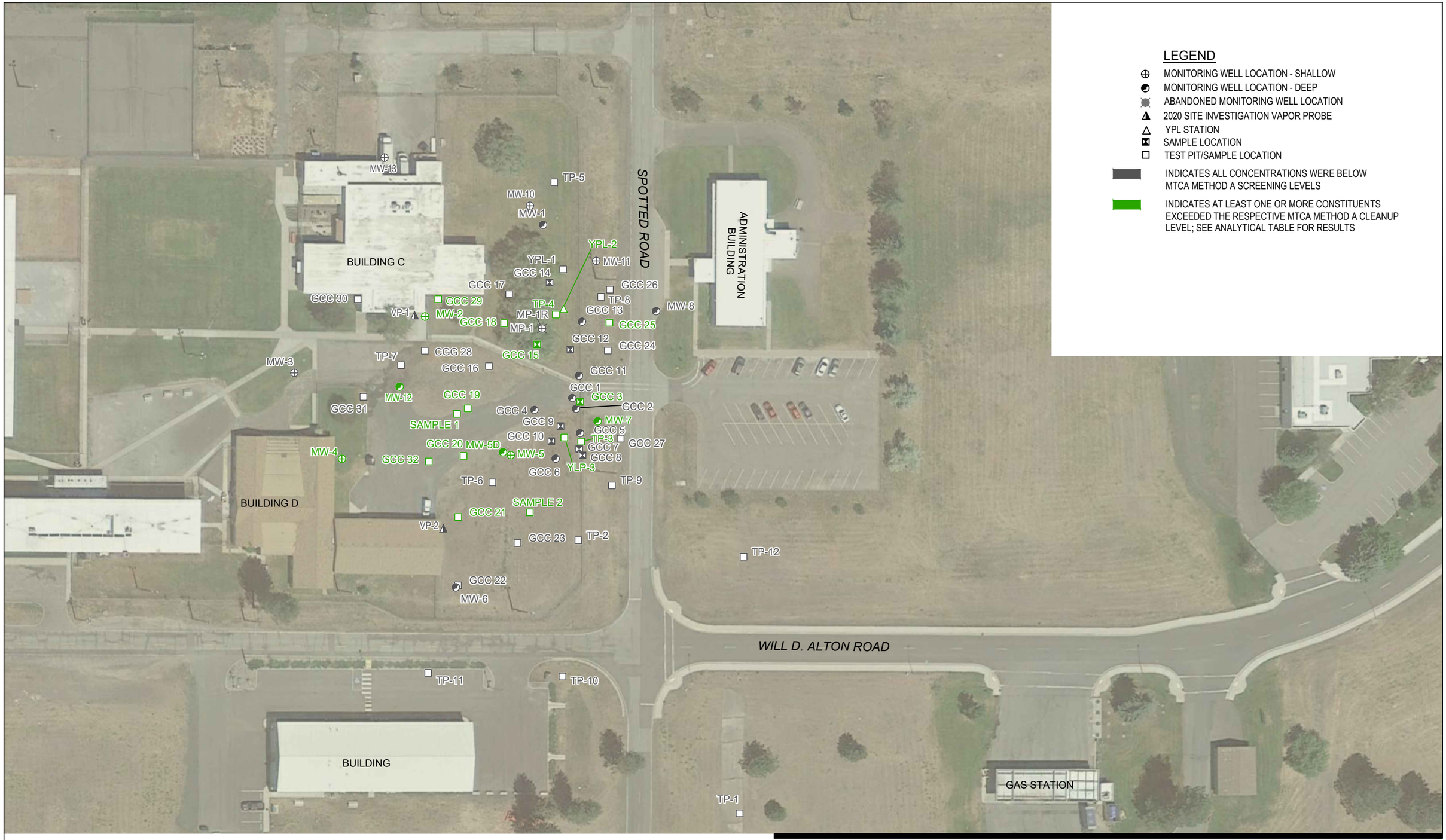
SITE PLAN

Project No. **12576484**
Date **August 2023**

FIGURE 2

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D102_SO-001.dwg
Plot Date: 18 August 2023 10:28 AM

Data Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date Jun/2015 - Sep/2016, Accessed: 2017. Google ©2017 Image. AECOM SITE PLAN & WELL LOCATIONS DATED 2/7/14. MAXIM Technologies, Inc. Figures 3 & 4 dated July 2001. AECOM Soil Analytical Results 2/7/14. StateWide Land Surveying Inc. reports dated 12/23/19 and 4/20/2022. Department of Ecology State of Washington EIM Online Map Search Lat/Long Coordiinates (VCPEA0263 EMILocation.xlsx).



PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

Project No. **12576484**
Date **August 2023**

SOIL INVESTIGATION MAP

FIGURE 3

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D104_SO-001.dwg
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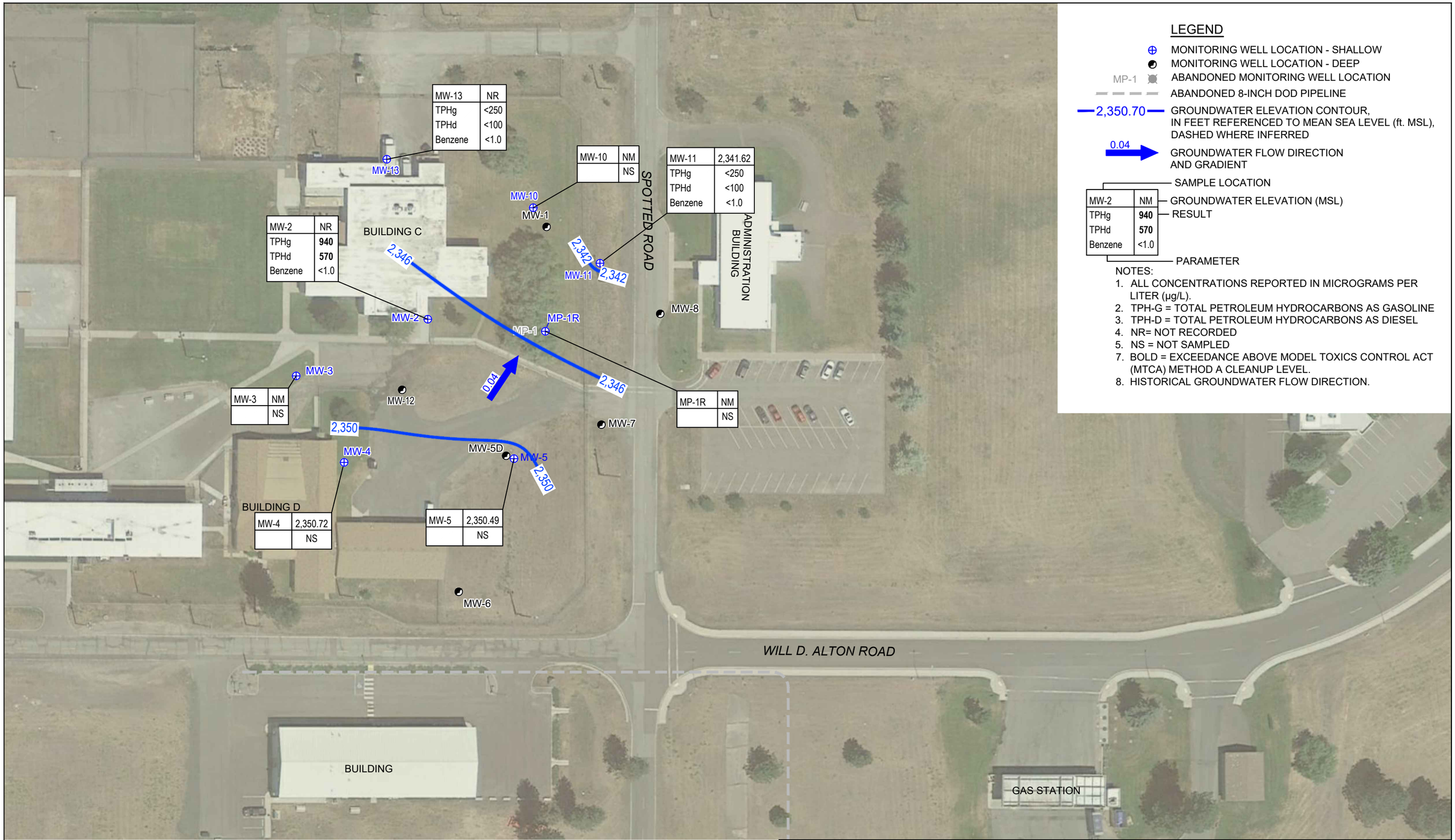


LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - DEEP
- MP-1 — ABANDONED MONITORING WELL LOCATION
- ABANDONED 8-INCH DOD PIPELINE
- 2,350.70 — GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED
- 0.04 — GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-2	NM	← SAMPLE LOCATION; NM = GROUNDWATER ELEVATION (MSL)
TPHg	**940**	← RESULT
TPHd	**570**	
Benzene	<1.0	← PARAMETER

NOTES:

1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L).
2. TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
3. TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
4. NR= NOT RECORDED
5. NS = NOT SAMPLED
7. BOLD = EXCEEDANCE ABOVE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL.
8. HISTORICAL GROUNDWATER FLOW DIRECTION.

0 40 80 ft
1" = 80 ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

N

GHD

PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

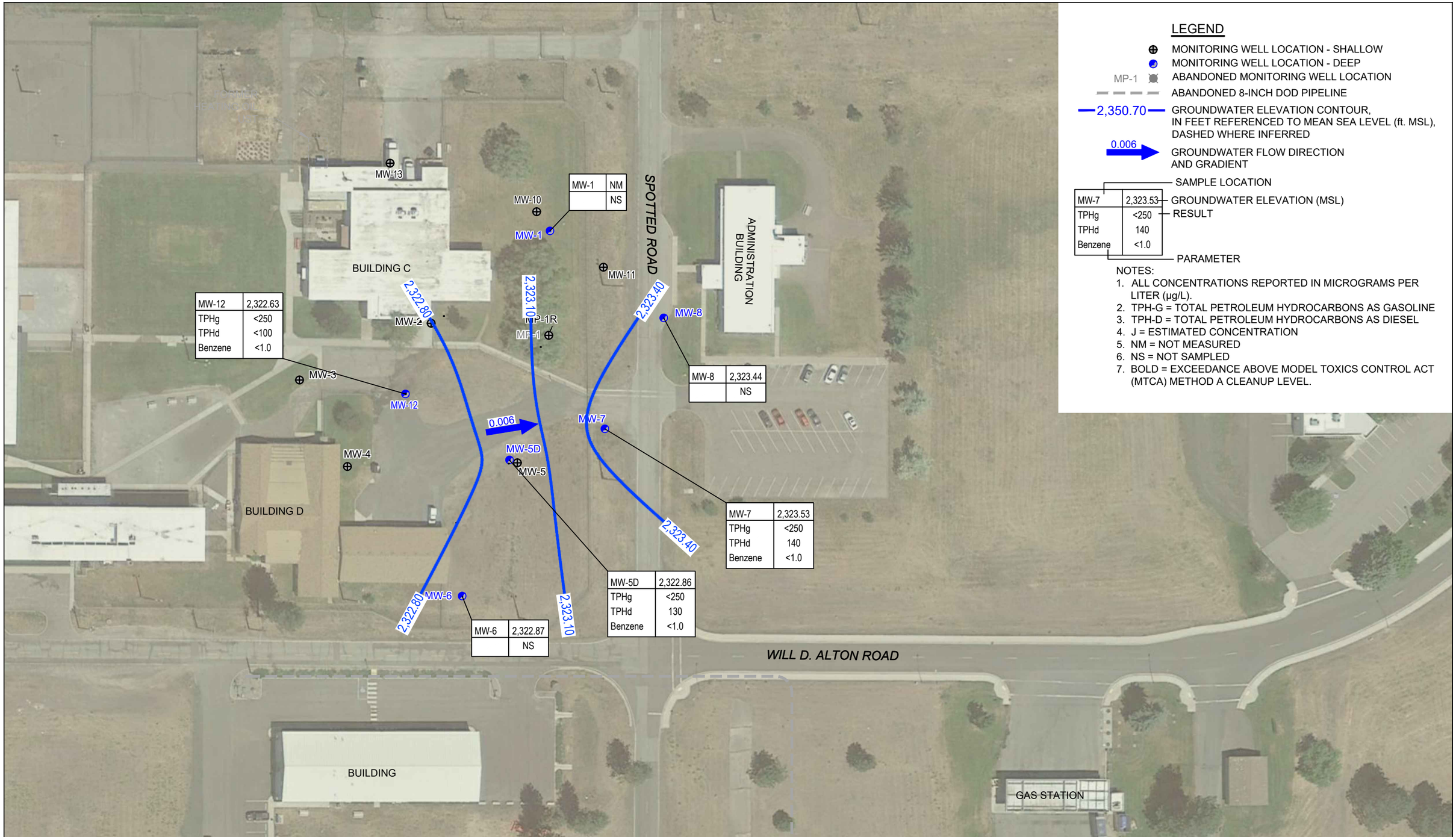
GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP SHALLOW ZONE - APRIL 20, 2022

Project No. **12576484**
Date **August 2023**

FIGURE 4

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D109_SO-001.dwg
Plot Date: 18 August 2023 11:20 AM

Data Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date Jun/2015 - Sep/2016, Accessed: 2017. Google ©2017 Image. AECOM SITE PLAN & WELL LOCATIONS DATED 2/7/14. MAXIM Technologies, Inc. Figures 3 & 4 dated July 2001. AECOM Soil Analytical Results 2/7/14. StateWide Land Surveying Inc. reports dated 12/23/19 and 4/20/2022. Department of Ecology State of Washington EIM Online Map Search Lat/Long Coordiinates (VCPEA0263 EMILocation.xlsx).



LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - DEEP
- MP-1 ABANDONED MONITORING WELL LOCATION
- ABANDONED 8-INCH DOD PIPELINE
- 2,350.70 GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED
- 0.006 GROUNDWATER FLOW DIRECTION AND GRADIENT

SAMPLE LOCATION	
MW-7	2,323.53 — GROUNDWATER ELEVATION (MSL)
TPHg	<250 — RESULT
TPHd	140
Benzene	<1.0 — PARAMETER

NOTES:

1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L).
2. TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
3. TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
4. J = ESTIMATED CONCENTRATION
5. NM = NOT MEASURED
6. NS = NOT SAMPLED
7. BOLD = EXCEEDANCE ABOVE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL.

0 40 80 ft
1" = 80 ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

N

GHD

PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP DEEP ZONE - APRIL 20, 2022

Project No. **12576484**
Date **August 2023**

FIGURE 5

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D110_SO-001.dwg
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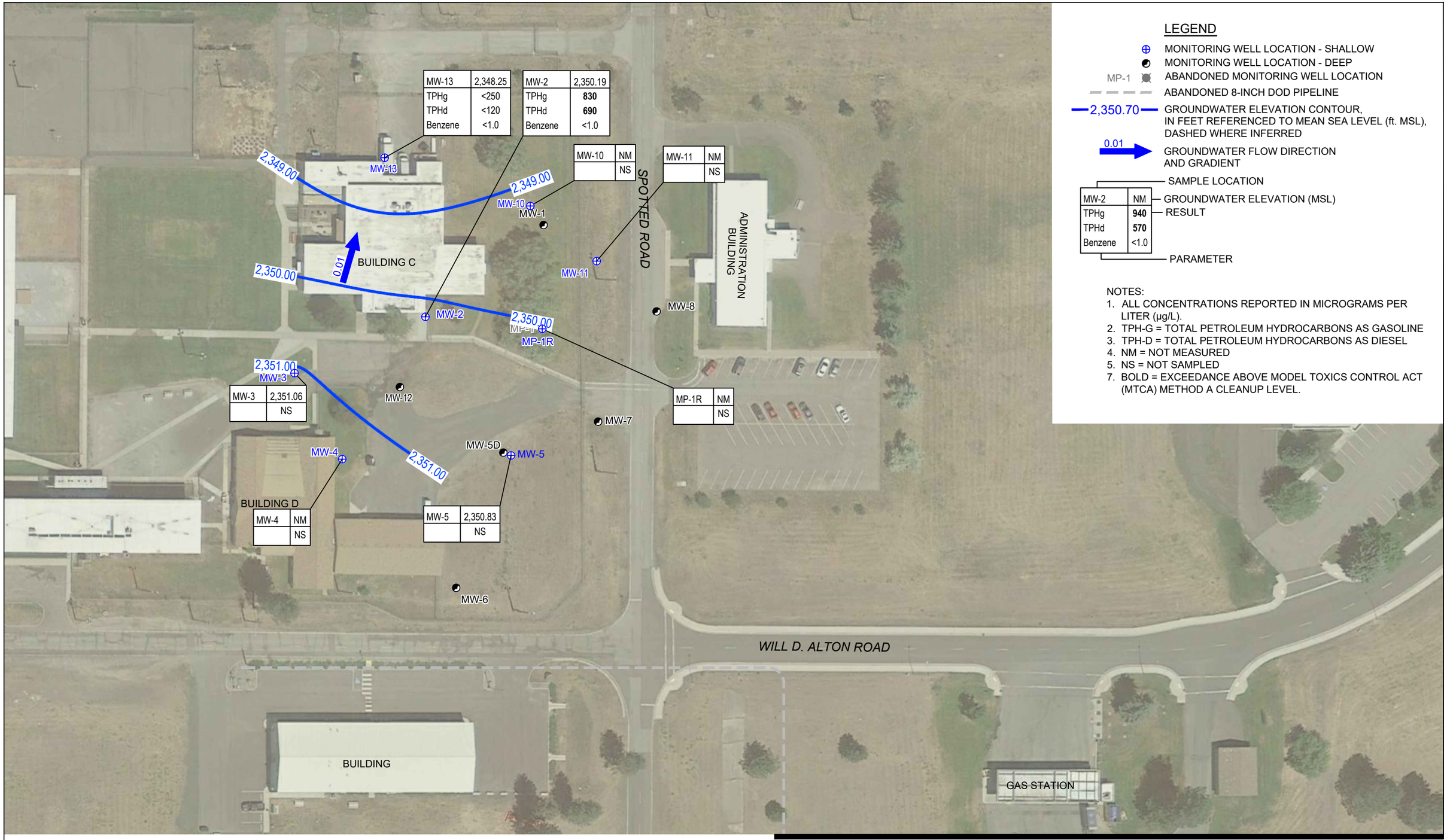

LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - DEEP
- MP-1 — ABANDONED MONITORING WELL LOCATION
- ABANDONED 8-INCH DOD PIPELINE
- 2,350.70 — GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED
- 0.01 — GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-2	NM
TPHg	**940**
TPHd	**570**
Benzene	<1.0

SAMPLE LOCATION; GROUNDWATER ELEVATION (MSL); RESULT; PARAMETER

NOTES:
1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L).
2. TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
3. TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
4. NM = NOT MEASURED
5. NS = NOT SAMPLED
7. BOLD = EXCEEDANCE ABOVE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL.

0 40 80 ft
1" = 80 ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

N

GHD

PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP SHALLOW ZONE - DECEMBER 7, 2022

Project No. **12576484**
Date **August 2023**

FIGURE 6

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D111_SO-001.dwg
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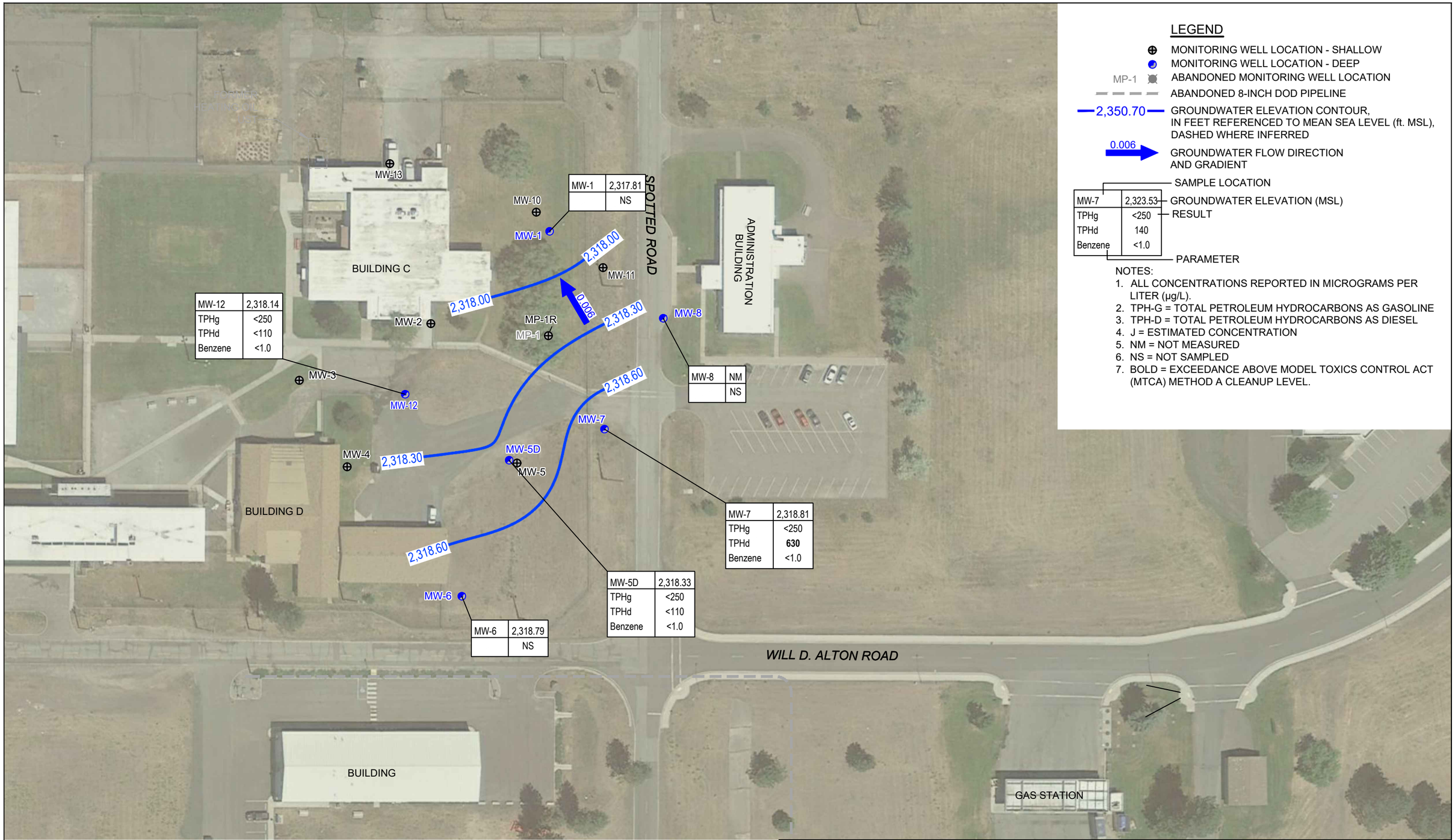
Data Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date Jun/2015 - Sep/2016, Accessed: 2017. Google ©2017 Image. AECOM SITE PLAN & WELL LOCATIONS DATED 2/7/14. MAXIM Technologies, Inc. Figures 3 & 4 dated July 2001. AECOM Soil Analytical Results 2/7/14. StateWide Land Surveying Inc. reports dated 12/23/19 and 4/20/2022. Department of Ecology State of Washington EIM Online Map Search Lat/Long Coordiinates (VCPEA0263 EMILocation.xlsx).



LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - DEEP
- MP-1 — ABANDONED MONITORING WELL LOCATION
- ABANDONED 8-INCH DOD PIPELINE
- 2,350.70 — GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED
- 0.006 — GROUNDWATER FLOW DIRECTION AND GRADIENT

SAMPLE LOCATION	
MW-7	2,323.53 — GROUNDWATER ELEVATION (MSL)
TPHg	<250 — RESULT
TPHd	140
Benzene	<1.0
PARAMETER	

NOTES:

1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L).
2. TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
3. TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
4. J = ESTIMATED CONCENTRATION
5. NM = NOT MEASURED
6. NS = NOT SAMPLED
7. BOLD = EXCEEDANCE ABOVE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL.

0 40 80 ft

1" = 80 ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

N

GHD

PHILLIPS 66 FACILITY NO. 6880
GEIGER CORRECTIONS FACILITY
SPOKANE, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP DEEP ZONE - DECEMBER 7, 2022

Project No. **12576484**
Date **August 2023**

FIGURE 7

Filename: N:\US\Lynnwood\Projects\561\12576484\Digital_Design\ACAD\Figures\RPT001\12576484-GHD-00-00-RPT-EN-D112_SO-001.dwg
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Appendices

Appendix A

Summary of Previous Site Investigations and Remedial Activities and Environmental Documents List

Appendix A Summary of Previous Site Investigations and Remedial Activities

2001 Subsurface Site Characterization: Beginning in March 2001, Maxim Technologies Inc. (Maxim) conducted a subsurface site characterization to investigate whether soil and groundwater impacts on the Geiger Heights Minimum Security Correctional Facility (Geiger Corrections) were caused by a release along the adjacent Yellowstone Pipeline (YPL). According to Maxim, Geiger Corrections was constructed in 1979 from buildings formerly belonging to the Geiger Air Force Base. A small release of aviation fuel was reported along the YPL on March 30, 1979, releasing approximately 42 gallons of fuel. The spilled fuel along with 50 gallons of perched groundwater was recovered and the pipeline was patched. In 1996, petroleum impacted soil and groundwater was encountered on the Geiger Corrections property during excavation for building footings. Building construction was ceased due to the discovery.

In 1998, two heating oil underground storage tanks (USTs) with 8,000-10,000 gallon capacity were removed from the Geiger Corrections property. One of the two USTs had leaked from the manway cover; approximately 100 tons of petroleum impacted soil was removed from the UST excavation. At the final extent of excavation, impacted soil still remained in exceedance of cleanup levels. A concentration of greater than 10,000 milligrams per kilogram of total petroleum hydrocarbons as diesel (TPHd) was detected in soil.

In 2000, the Spokane Airport Business Park (SABP), which owns the Geiger Corrections property and adjacent YPL right-of-way, informed YPL that they believed the YPL pipeline was the source of significant impacts on the Geiger Corrections property. On March 19 and 20, 2001, Maxim dug 12 test pits. The test pits were advanced until bedrock was encountered at approximately 5 to 6 feet below ground surface (bgs). A total of nine soil samples (including one field duplicate) were collected and analyzed for TPH as gasoline (TPHg), TPHd, TPH as oil (TPHo), benzene, toluene, ethylbenzene and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), and polyaromatic hydrocarbons (PAHs) including naphthalenes. In addition, Maxim excavated a portion of the pipeline within the Geiger Corrections property to inspect the pipeline after petroleum impacts were identified in several of the test pits. The pipeline is approximately 4 feet bgs, approximately 1-2 feet above competent bedrock. Two additional test pits were excavated as well. Light non-aqueous phase liquid (LNAPL) was encountered within a 60-foot section of the pipeline. A sample of the LNAPL was collected along with two additional soil samples. The LNAPL correlated with the section of pipeline that had leaked in 1979 and been patched. The pipeline was cut and removed, and a new section of pipe was welded into place. Line pressure testing was conducted and passed, and the trench was backfilled in March 24, 2001. Results of the LNAPL sampling indicated a combination of weathered petroleum, consistent with the 1979 aviation fuel release, with a newer petroleum, consistent with the product in the pipeline at the time of the excavation. Soil analytical results indicated TPHg exceeding the Model Toxics Control Act (MTCA) Method A cleanup level in five of the samples, TPHd exceeding the MTCA Method A cleanup level in two of the samples, and naphthalenes exceeding the MTCA Method A cleanup level in one of the samples. Additional information is available in Maxim's Subsurface Site Characterization Report dated July 23, 2001.

2001 Remedial Excavation: Based on the results of the 2001 subsurface site characterization, a remedial soil excavation was conducted by Maxim in October 2001. Approximately 400 cubic yards of soil was removed and disposed of at a licensed Class II landfill. The excavation was advanced until approximately 8 feet bgs where bedrock was encountered. The excavation revealed a larger area of soil impacts than anticipated and therefore, 17 additional test pits were advanced to the west, south, and east of the excavation. One groundwater monitoring well (MP-1) was installed. The test pits revealed a scour fill deposit within the center of the Geiger Corrections property, which appeared to act as a preferential pathway for petroleum migration. A total of 25 soil samples were collected from the pipeline excavation and the test pits. Samples were analyzed for TPHd, and TPHo; select samples were analyzed for BTEX and naphthalenes. Results indicated TPHd exceeding the MTCA Method A cleanup level in eight of the samples, and naphthalenes exceeding the MTCA Method A cleanup level in two of the samples.

Additional information is available in Maxim's Remedial Excavation and Assessment Report dated January 2002.

2002 Additional Site Characterization: In March 2002, Maxim installed eight groundwater monitoring wells (MW-1 through MW-8). Four of the wells were installed at shallow depths within the scour fill deposit (MW-2, MW-3, MW-4, and MW-5), and four wells were installed within the deeper regional aquifer (MW-1, MW-6, MW-7, and MW-8). Soil samples were collected from each well location at varying depths and analyzed for TPHd, TPHo, BTEX, and naphthalenes. Results indicated naphthalene exceeding MTCA Method A cleanup levels in four of the 13 samples. No other concentrations exceeded cleanup levels. Additional information is available in Maxim's Additional Site Characterization Report dated May 2002.

2013 Site Investigation: In October 2013, AECOM decommissioned groundwater monitoring well MP-1, installed two groundwater monitoring wells (MP-1R and MW-5D) and attempted to install a third well (MW-9) at two different locations, but terminated the locations as borings only. Well MW-1R was installed within the shallow perched groundwater, and MW-5D was installed within the deeper regional aquifer. A total of five soil samples were collected and analyzed for TPHg, TPHd, TPHo, and BTEX. Results indicated that TPHg exceeded the MTCA Method A cleanup level in two of the samples, and TPHd exceeded the MTCA Method A cleanup level in one of the samples. Additional information is available in AECOM's Site Investigation Report dated February 2014.

2019 Site Investigation: In October 2019, GHD advanced four soil borings (B1 through B4), and installed three monitoring wells (MW-10 through MW-12). The borings were advanced to evaluate soil conditions at the Site and the extent of groundwater contamination within the shallow and deep water bearing zones.

A total of 16 soil samples were submitted for laboratory analyses. Concentrations of TPHg above the MTCA Method A cleanup level were reported in soil samples collected from borings B-1 through B-4, and monitoring well MW-12. Elevated soil concentrations were primarily observed at 5 to 6 feet bgs. Additionally, a TPHd concentration was reported above the MTCA Method A cleanup level in the soil sample collected from boring B-1 at approximately 6 feet bgs. The remaining soil analytical results were either below laboratory reporting limits and/or MTCA Method A cleanup levels. Based on field screening, shallow soil samples collected from borings B1, B2, and MW-12 were additionally analyzed for EPH/VPH and n-hexane by EPA Method 8260, which may be used to develop Site-specific soil cleanup levels in the revised RI report, if appropriate.

Monitoring wells MW-10 and MW-11 were installed to the northeast to evaluate the shallow groundwater bearing zone and define groundwater impacts; however, both wells have remained dry since installation. Soil samples from MW-10 and MW-11 were below MTCA Method A cleanup levels. Monitoring well MW-12 was installed to evaluate the deep groundwater bearing zone and confirm historical impacts; however, the well was not sampled as it required re-development.

Appendix B

Boring/Well Logs

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Geiger Corrections
PROJECT NUMBER: 12576484
CLIENT: Phillips 66
LOCATION: 3507 South Spotted Road, Spokane, WA

HOLE DESIGNATION: MW13
DATE COMPLETED: 14 March 2022
DRILLING METHOD: Vacuum/Sonic
FIELD PERSONNEL: N. Adamowski

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
0	ASPHALT	0.50	Concrete					0.0
	GRAVEL, silty sand	0.80						0.0
2	ML-SANDY SILT, compact, brown-tan, moist, no odor, trace organics	1.20	Bentonite Chips					0.0
	ML-SANDY SILT, trace poorly sand, compact, tan-brown, moist, no odor	3.20						0.0
4	SM-SILTY SAND, poorly sorted, loose, brown-tan-grey, moist, no odor	4.50						0.0
6	SC-CLAYEY SAND, trace silt, compact, brown-tan-grey, moist, no odor, trace iron			MW13				0.0
8			Sand Pack					0.0
			Well Screen					0.2
10	CL-SANDY SILTY CLAY, very compact, red-orange-brown, moist, no odor	10.00						0.2
12								0.0
14								0.0
	END OF BOREHOLE @ 15.00ft BGS	15.00						0.0
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
3.00 to 15.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: .010
Material: PVC
Sand Pack:
2.00 to 15.00ft BGS
Material: Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS (MW13)

File: N:\US\LYNNWOOD\PROJECTS\561\12576484\TECH\12576484-FIELD\GINT\12576484.GPJ Library File: GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 14/4/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Geiger Corrections
PROJECT NUMBER: 12576484
CLIENT: Phillips 66
LOCATION: 3507 South Spotted Road, Spokane, WA

HOLE DESIGNATION: VP1
DATE COMPLETED: 15 March 2022
DRILLING METHOD: Vacuum/Auger
FIELD PERSONNEL: N. Adamowski

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	VAPOR PROBE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
0	GRASS	0.20	Concrete					0.0
	ML-SANDY SILT, trace gravel, compact, dark brown, moist, organic odor		Bentonite Chips					0.0
2	ML-SILT, trace sand, compact, dark brown, moist, organic odor	2.00						0.0
	- interlaced basalt bedrock to 5.0ft BGS		Well Screen					0.0
4	ML-SANDY SILT, trace gravel, compact, brown, wet, no odor	4.20	Sand Pack					0.0
		5.00		VP1				0.0
6	END OF BOREHOLE @ 5.00ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
3.00 to 3.50ft BGS
Length: 0.5ft
Diameter: 0.3in
Sand Pack:
2.00 to 5.00ft BGS
Material: Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS (VP1)

File: N:\US\LYNNWOOD\PROJECTS\661\12576484\TECH\12576484-FIELD\GINT\12576484.GPJ Library File: GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 14/4/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Geiger Corrections
PROJECT NUMBER: 12576484
CLIENT: Phillips 66
LOCATION: 3507 South Spotted Road, Spokane, WA

HOLE DESIGNATION: VP2
DATE COMPLETED: 15 March 2022
DRILLING METHOD: Vacuum/Auger
FIELD PERSONNEL: N. Adamowski

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	VAPOR PROBE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
0	GRAVEL	0.20	Concrete					0.0
	ML-SANDY SILT, trace gravel, loose/compact, dark brown, moist, no odor		Bentonite Chips					
2		2.00						0.0
	ML-SANDY SILT, with interlaced basalt bedrock, dark brown, moist, no odor	3.00	Sand Pack Well Screen					0.0
4	BASALT BEDROCK	4.00		VP2				0.0
	END OF BOREHOLE @ 4.00ft BGS		WELL DETAILS Screened interval: 3.00 to 3.50ft BGS Length: 0.5ft Diameter: 0.3in Sand Pack: 2.00 to 4.00ft BGS Material: Silica					
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (VP2)

Appendix C

Monitoring Well Elevation Survey

STATEWIDE LAND SURVEYING INC.

Phillips 66 Facility No. 6880					Survey Date: 4/20/2022		
Horizontal Datum		**UTM Zone**	**Vertical Datum**	**Address**			
NAD83/2011 Washington State Plane North Zone 4601, US Survey Ft		11	NAVD88	7109 W Will D Alton Dr, Spokane, WA 99224			
Well	**Northing (Y)**	**Easting (X)**	**Latitude**	**Longitude**	**El. Surface**	**El. Rim**	**El. PVC**
MONITORING WELLS							
MW-10	244622.96	2458843.77	N47°37'20.00014"	W117°30'48.95524"	2354.63	2354.78	2354.38
MW-11	244574.27	2458902.27	N47°37'19.49506"	W117°30'48.13269"	2354.69	2354.76	2354.19
MW-12	244463.20	2458728.67	N47°37'18.47381"	W117°30'50.73443"	2355.32	2355.41	2354.82
MW-13	244665.50	2458715.22	N47°37'20.48247"	W117°30'50.80789"	2352.92	2352.92	2352.60
Well	**Northing (Y)**	**Easting (X)**	**Latitude**	**Longitude**	**El. Surface**	**El. Rim**	**El. PVC**
BORINGS							
B-1	244531.49	2458762.26	N47°37'19.13287"	W117°30'50.20162"	2355.38		
B-2	244350.21	2458773.24	N47°37'17.34074"	W117°30'50.15557"	2355.49		
B-3	244504.35	2458847.17	N47°37'18.82919"	W117°30'48.98032"	2355.02		
B-4	244402.14	2458819.11	N47°37'17.83327"	W117°30'49.45387"	2355.06		
Well	**Northing (Y)**	**Easting (X)**	**Latitude**	**Longitude**	**El. Surface**	**El. Rim**	**El. PVC**
VAPOR PROBES							
VP-1	244526.36	2458741.89	N47°37'19.09098"	W117°30'50.50187"	2355.75		
VP-2	244338.20	2458767.30	N47°37'17.22488"	W117°30'50.24968"	2355.83		
Notes							
Project elevations were established with the Washington GPS Network. Differential levels were used to collect the well data from the project elevation reference point. See provided well exhbit map.							

43 NW Ava Avenue Gresham, Oregon 97030
www.statewidesurveying.com survey@statewidesurveying.com
(o) 503.665-7777 (f) 503-665.7988

MONITORING WELL SURVEY

PHILLIPS 66 FACILITY NO. 6880

SITUATED IN THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 25 NORTH, RANGE 42 EAST OF THE WILLAMETTE MERIDIAN, COUNTY OF SPOKANE, STATE OF WASHINGTON

N

SCALE: 1"=40'

0' 40' 80'

GHD

LEGEND

- = BORING AS NOTED
- = MONITORING WELL AS NOTED
- = VAPOR PROBE AS NOTED

HORIZONTAL DATUM

NAD 83/2011 EPOCH 2010.0000
WASHINGTON STATE PLANE COORDINATE SYSTEM
NORTH ZONE 4601, US SURVEY FEET.

VERTICAL DATUM

NAVD 88 (GEOID2012B)

NOTES

AERIAL PHOTO SHOWN FOR VISUALIZATION PURPOSE ONLY. LOCATION IS APPROXIMATE. IMAGE FROM GOOGLE EARTH.

GREGORY D. SPURLOCK
STATE OF WASHINGTON
24356
REGISTERED PROFESSIONAL LAND SURVEYOR

SIGNED: 04/21/22

STATEWIDE LAND SURVEYING INC.
43 NW AVA AVE. GRESHAM, OR 97030
O: 503-665-7777 F: 503-665-7988
EMAIL: SURVEY@STATEWIDESURVEYING.COM
WEB: WWW.STATEWIDESURVEYING.COM

DRAWN DATE: 04/21/2022
REVIEW DATE: 04/21/2022
SURVEY DATE: 04/20/2022
DRAWN: J.B.
REVIEWED: G.D.S.
SHEET: 1/1
CLIENT: GHD
JOB NUMBER: 2019-332-2
SCALE: 1"=40'

Appendix D

Laboratory Analytical Reports

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

April 7, 2022

Arthur Clauss
GHD
9725 3rd Avenue NE, Ste. 204
Seattle, WA 98115

RE: Geiger Corrections / 12576484

Dear Arthur:

Enclosed are the results of the samples submitted to our laboratory on March 18, 2022. For your reference, these analyses have been assigned our service request number P2201209.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 5:18 pm, Apr 07, 2022

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: GHD
Project: Geiger Corrections / 12576484

Service Request No: P2201209

CASE NARRATIVE

The samples were received intact under chain of custody on March 18, 2022 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Fixed Gases Analysis

The samples were analyzed for fixed gases (hydrogen, oxygen, nitrogen, carbon monoxide, methane and carbon dioxide) according to EPA Method 3C (duplicate injection) using a gas chromatograph equipped with a thermal conductivity detector (TCD). This procedure is described in laboratory SOP VOA-EPA3C. This method is included on the laboratory's DoD-ELAP scope of accreditation, however it is not part of the NELAP accreditation.

Air-Phase Petroleum Hydrocarbons (APH) Analysis

The samples were also analyzed for total aliphatic and aromatic gasoline range hydrocarbons by gas chromatography/mass spectrometry according to the Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Massachusetts Department of Environmental Protection, Revision 1, December, 2009. This method is included on the laboratory's NELAP scope of accreditation, however it is not part of the DoD-ELAP accreditation.

Significant non-petroleum related peaks (i.e. halogenated, oxygenated, terpenes, etc.) are subtracted from the hydrocarbon range areas when present. Any internal/tuning standards and target APH analytes eluting in the hydrocarbon ranges are also subtracted. Additionally, C_9-C_{10} Aromatic Hydrocarbons are excluded from the C_9-C_{12} Aliphatic Hydrocarbon range.

Volatile Organic Compound Analysis

The samples were also analyzed in SIM mode for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. The method was modified to include the use of helium as a diluent gas in place of zero-grade air for container pressurization. When necessary, analytical sample volumes were adjusted by a correction factor for containers pressurized with helium. A summary sheet has been included listing the affected samples. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: GHD
Project: Geiger Corrections / 12576484

Service Request No: P2201209

CASE NARRATIVE

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

2655 Park Center Dr., Suite A
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T: +1 805 526 7161
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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: GHD Service Request: P2201209

Project ID: Geiger Corrections / 12576484

Date Received: 3/18/2022

Time Received: 10:01

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	2nd Pi (psig)	2nd Pf (psig)	3C Modified - Fxd Gases Can	MA APH 1.0 - MA VOC PH Can	TO-15 Modified - VOC SIM
A-12576484-031622-NA-VP1	P2201209-001	Air	3/16/2022	10:50	SSC00328	-1.83	4.09			X	X	X
A-12576484-031622-NA-VP2	P2201209-002	Air	3/16/2022	11:52	AC02274	-0.57	4.68			X	X	X
A-12576484-031622-NA-AMB	P2201209-003	Air	3/16/2022	12:24	AC01047	-1.80	4.32			X	X	X

ALS ENVIRONMENTAL

Sample Volume Correction for Helium Pressurization for SCAN Analysis

Sample ID	Pi	Pf	Sample Volume (L)	Adjusted Volume (L)
P2201209-001	-1.83	4.09	0.892	1.00
P2201209-002	-0.57	4.68	0.903	1.00
P2201209-003	-1.80	4.32	0.890	1.00

ALS ENVIRONMENTAL

Sample Volume Correction for Helium Pressurization for SIM Analysis

Sample ID	Pi	Pf	DF	Sample Volume (L)	Adjusted Volume (L)
P2201209-001	-1.83	4.09	1.46	0.892	1.00
P2201209-002	-0.57	4.68	1.37	0.903	1.00
P2201209-003	-1.80	4.32	1.47	0.890	1.00

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. PZ201209

Company Name & Address (Reporting Information): GHD 9725 3rd Ave NE Seattle, WA 98115

Project Name: Geiger Corrections

Project Number: 12576484

Project Manager: Arthur Clauss

P.O. # / Billing Information: SSOW#: 11226610 · 2021 · 03

Phone: 206 · 643 · 2461 Fax:

Email Address for Result Reporting: Arthur.Clauss@ghd.com

Sampler (Print & Sign): N. Adamowski

ALS Contact:

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPH Fractions	VOCs	Fixed Gases	Comments e.g. Actual Preservative or specific instructions
A-12576484-031622-NA-VP1	1	3-16-22	1050	11542	OA01292	-27	-3	6L	X		X	
-VP2	2		1152	ND700	OA01404	-22	-1	6L	X		X	
-AMB	3		1224	AC01047	OA00431	-27	-3	6L	X		X	

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____ Tier III (Results + QC & Calibration Summaries) _____
Tier II (Results + QC Summaries) _____ Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
N. Adamowski	3-16-22	1600		3-18-22	1001
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

ALS Environmental
Sample Acceptance Check Form

Client: GHD Services Inc. Work order: P2201209

Project: Geiger Corrections / 12576484

Sample(s) received on: 3/18/22 Date opened: 3/18/22 by: KYLE.WOODIN

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2201209-001.01	6.0 L Silonite Can					
P2201209-002.01	6.0 L Ambient Can					
P2201209-003.01	6.0 L Ambient Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP1**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P2201209-001

Test Code: EPA Method 3C Modified
Instrument ID: Agilent 8890/GC38/TCD
Analyst: Stephanie Reynoso
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: SSC00328

Date Collected: 3/16/22
Date Received: 3/18/22
Date Analyzed: 4/6/22
Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -1.83 Final Pressure (psig): 4.09

Container Dilution Factor: 1.46

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	ND	0.15	
7782-44-7	**Oxygen***	**22.1**	0.15	
7727-37-9	**Nitrogen**	**77.8**	0.15	
630-08-0	Carbon Monoxide	ND	0.15	
74-82-8	Methane	ND	0.15	
124-38-9	Carbon Dioxide	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP2**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P2201209-002

Test Code: EPA Method 3C Modified
Instrument ID: Agilent 8890/GC38/TCD
Analyst: Stephanie Reynoso
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: AC02274

Date Collected: 3/16/22
Date Received: 3/18/22
Date Analyzed: 4/6/22
Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -0.57 Final Pressure (psig): 4.68

Container Dilution Factor: 1.37

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	ND	0.14	
7782-44-7	**Oxygen***	**21.7**	0.14	
7727-37-9	**Nitrogen**	**78.2**	0.14	
630-08-0	Carbon Monoxide	ND	0.14	
74-82-8	Methane	ND	0.14	
124-38-9	Carbon Dioxide	ND	0.14	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-AMB**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P2201209-003

Test Code: EPA Method 3C Modified
Instrument ID: Agilent 8890/GC38/TCD
Analyst: Stephanie Reynoso
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: AC01047

Date Collected: 3/16/22
Date Received: 3/18/22
Date Analyzed: 4/6/22
Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -1.80 Final Pressure (psig): 4.32

Container Dilution Factor: 1.47

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	ND	0.15	
7782-44-7	**Oxygen***	**22.3**	0.15	
7727-37-9	**Nitrogen**	**77.6**	0.15	
630-08-0	Carbon Monoxide	ND	0.15	
74-82-8	Methane	ND	0.15	
124-38-9	Carbon Dioxide	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **Method Blank** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P220406-MB

Test Code: EPA Method 3C Modified Date Collected: NA
Instrument ID: Agilent 8890/GC38/TCD Date Received: NA
Analyst: Stephanie Reynoso Date Analyzed: 4/06/22
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.10 ml(s)
Test Notes:

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	ND	0.10	
7782-44-7	Oxygen*	ND	0.10	
7727-37-9	Nitrogen	ND	0.10	
630-08-0	Carbon Monoxide	ND	0.10	
74-82-8	Methane	ND	0.10	
124-38-9	Carbon Dioxide	ND	0.10	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **GHD**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P220406-DLCS

Test Code: EPA Method 3C Modified Date Collected: NA
Instrument ID: Agilent 8890/GC38/TCD Date Received: NA
Analyst: Stephanie Reynoso Date Analyzed: 4/06/22
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: NA ml(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS ppmV	Result LCS ppmV	Result DLCS ppmV	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
1333-74-0	Hydrogen	41,200	41,100	41,100	**100**	**100**	85-115	0	15	
7782-44-7	Oxygen*	24,900	25,400	25,300	**102**	**102**	85-115	0	15	
7727-37-9	Nitrogen	48,400	50,000	49,800	**103**	**103**	85-115	0	15	
630-08-0	Carbon Monoxide	51,500	51,500	51,300	**100**	**100**	85-115	0	15	
74-82-8	Methane	39,700	41,000	40,900	**103**	**103**	85-115	0	15	
124-38-9	Carbon Dioxide	47,900	50,000	50,100	**104**	**105**	85-115	1.0	15	

* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP1**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P2201209-001

Test Code: Massachusetts APH, Revision 1, December 2009
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: SSC00328

Date Collected: 3/16/22
Date Received: 3/18/22
Date Analyzed: 3/25/22
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.83 Final Pressure (psig): 4.09

Container Dilution Factor: 1.46

Compound	Result µg/m³	MRL µg/m³	Data Qualifier
C_5 - C_8 Aliphatic Hydrocarbons[1,2]	**52**	29	
C_9 - C_{12} Aliphatic Hydrocarbons[1,3]	**30**	15	
C_9 - C_{10} Aromatic Hydrocarbons	**6.7**	3.7	

Significant non-petroleum related peaks (i.e. halogenated, oxygenated, terpenes, etc.) are subtracted from the hydrocarbon range areas when present.

[1]Hydrocarbon Range data from total ion chromatogram excluding any internal/tuning standards eluting in that range.

[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target APH analytes eluting in that range.

[3]C_9-C_{12} Aliphatic Hydrocarbons exclude concentration of Target APH Analytes eluting in that range and concentration of C_9-C_{10} Aromatic Hydrocarbons.

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP2**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P2201209-002

Test Code: Massachusetts APH, Revision 1, December 2009
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: AC02274

Date Collected: 3/16/22
Date Received: 3/18/22
Date Analyzed: 3/25/22
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -0.57 Final Pressure (psig): 4.68

Container Dilution Factor: 1.37

Compound	Result µg/m³	MRL µg/m³	Data Qualifier
C_5 - C_8 Aliphatic Hydrocarbons[1,2]	**60**	27	
C_9 - C_{12} Aliphatic Hydrocarbons[1,3]	**17**	14	
C_9 - C_{10} Aromatic Hydrocarbons	**6.8**	3.4	

Significant non-petroleum related peaks (i.e. halogenated, oxygenated, terpenes, etc.) are subtracted from the hydrocarbon range areas when present.

[1]Hydrocarbon Range data from total ion chromatogram excluding any internal/tuning standards eluting in that range.

[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target APH analytes eluting in that range.

[3]C_9-C_{12} Aliphatic Hydrocarbons exclude concentration of Target APH Analytes eluting in that range and concentration of C_9-C_{10} Aromatic Hydrocarbons.

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-AMB** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P2201209-003

Test Code: Massachusetts APH, Revision 1, December 2009 Date Collected: 3/16/22
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/18/22
Analyst: Wida Ang Date Analyzed: 3/25/22
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01047
Initial Pressure (psig): -1.80 Final Pressure (psig): 4.32

Container Dilution Factor: 1.47

Compound	Result µg/m³	MRL µg/m³	Data Qualifier
C_5 - C_8 Aliphatic Hydrocarbons[1,2]	ND	29	
C_9 - C_{12} Aliphatic Hydrocarbons[1,3]	ND	15	
C_9 - C_{10} Aromatic Hydrocarbons	ND	3.7	

Significant non-petroleum related peaks (i.e. halogenated, oxygenated, terpenes, etc.) are subtracted from the hydrocarbon range areas when present.
[1]Hydrocarbon Range data from total ion chromatogram excluding any internal/tuning standards eluting in that range.
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target APH analytes eluting in that range.
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude concentration of Target APH Analytes eluting in that range and concentration of C_9-C_{10} Aromatic Hydrocarbons.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **Method Blank**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P220325-MB

Test Code: Massachusetts APH, Revision 1, December 2009
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/22
Volume(s) Analyzed: 1.00 Liter(s)

Compound	Result µg/m³	MRL µg/m³	Data Qualifier
C_5 - C_8 Aliphatic Hydrocarbons[1,2]	ND	20	
C_9 - C_{12} Aliphatic Hydrocarbons[1,3]	ND	10	
C_9 - C_{10} Aromatic Hydrocarbons	ND	2.5	

Significant non-petroleum related peaks (i.e. halogenated, oxygenated, terpenes, etc.) are subtracted from the hydrocarbon range areas when present.

[1]Hydrocarbon Range data from total ion chromatogram excluding any internal/tuning standards eluting in that range.

[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target APH analytes eluting in that range.

[3]C_9-C_{12} Aliphatic Hydrocarbons exclude concentration of Target APH Analytes eluting in that range and concentration of C_9-C_{10} Aromatic Hydrocarbons.

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **GHD**
Client Sample ID: **Lab Control Sample** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P220325-LCS

Test Code: Massachusetts APH, Revision 1, December 2009 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/25/22
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

Compound	Spike Amount µg/m³	**Result µg/m³**	**% Recovery**	ALS Acceptance Limits	**Data Qualifier**
C5 - C8 Aliphatic Hydrocarbons	206	**198**	**96**	70-130	
C9 - C12 Aliphatic Hydrocarbons	208	**179**	**86**	70-130	
C9 - C10 Aromatic Hydrocarbons	414	**418**	**101**	70-130	

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP1** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P2201209-001DUP

Test Code: Massachusetts APH, Revision 1, December 2009 Date Collected: 3/16/22
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 3/18/22
Analyst: Wida Ang Date Analyzed: 3/25/22
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SSC00328
Initial Pressure (psig): -1.83 Final Pressure (psig): 4.09

Container Dilution Factor: 1.46

Compound	Sample Result µg/m³	Duplicate Sample Result µg/m³	Average µg/m³	% RPD	RPD Limit	Data Qualifier
C_5 - C_8 Aliphatic Hydrocarbons[1,2]	51.7	54.2	52.95	**5**	30	
C_9 - C_{12} Aliphatic Hydrocarbons[1,3]	29.9	26.4	28.15	**12**	30	
C_9 - C_{10} Aromatic Hydrocarbons	6.65	7.05	6.85	**6**	30	

Significant non-petroleum related peaks (i.e. halogenated, oxygenated, terpenes, etc.) are subtracted from the hydrocarbon range areas when present.
[1]Hydrocarbon Range data from total ion chromatogram excluding any internal/tuning standards eluting in that range.
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target APH analytes eluting in that range.
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude concentration of Target APH Analytes eluting in that range and concentration of C_9-C_{10} Aromatic Hydrocarbons.
ND = Compound was analyzed for, but not detected.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP1**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P2201209-001

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19
Analyst: Topacio Zavala
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: SSC00328

Date Collected: 3/16/22
Date Received: 3/18/22
Date Analyzed: 3/25/22
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.83 Final Pressure (psig): 4.09

Container Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.037	0.018	ND	0.010	0.0049	
107-06-2	1,2-Dichloroethane	**0.046**	0.037	0.012	**0.011**	0.0090	0.0030	
71-43-2	Benzene	**0.39**	0.11	0.022	**0.12**	0.034	0.0069	
108-88-3	Toluene	**0.89**	0.15	0.018	**0.24**	0.039	0.0047	
106-93-4	1,2-Dibromoethane	ND	0.037	0.0098	ND	0.0048	0.0013	
100-41-4	Ethylbenzene	**0.33**	0.15	0.018	**0.076**	0.034	0.0040	
179601-23-1	m,p-Xylenes	**1.5**	0.15	0.035	**0.33**	0.034	0.0081	
95-47-6	o-Xylene	**0.58**	0.15	0.019	**0.13**	0.034	0.0044	
91-20-3	Naphthalene	**0.79**	0.15	0.032	**0.15**	0.028	0.0061	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-VP2** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P2201209-002

Test Code: EPA TO-15 SIM Modified Date Collected: 3/16/22
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 3/18/22
Analyst: Topacio Zavala Date Analyzed: 3/25/22
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC02274

Initial Pressure (psig): -0.57 Final Pressure (psig): 4.68

Container Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.034	0.016	ND	0.0095	0.0046	
107-06-2	1,2-Dichloroethane	**0.15**	0.034	0.011	**0.038**	0.0085	0.0028	
71-43-2	Benzene	**0.54**	0.10	0.021	**0.17**	0.032	0.0064	
108-88-3	Toluene	**2.8**	0.14	0.016	**0.75**	0.036	0.0044	
106-93-4	1,2-Dibromoethane	ND	0.034	0.0092	ND	0.0045	0.0012	
100-41-4	Ethylbenzene	**0.89**	0.14	0.016	**0.21**	0.032	0.0038	
179601-23-1	m,p-Xylenes	**3.2**	0.14	0.033	**0.73**	0.032	0.0076	
95-47-6	o-Xylene	**1.3**	0.14	0.018	**0.30**	0.032	0.0041	
91-20-3	Naphthalene	**0.64**	0.14	0.030	**0.12**	0.026	0.0058	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **A-12576484-031622-NA-AMB** ALS Project ID: P2201209
Client Project ID: **Geiger Corrections / 12576484** ALS Sample ID: P2201209-003

Test Code: EPA TO-15 SIM Modified Date Collected: 3/16/22
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 3/18/22
Analyst: Topacio Zavala Date Analyzed: 3/25/22
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01047
Initial Pressure (psig): -1.80 Final Pressure (psig): 4.32

Container Dilution Factor: 1.47

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.037	0.018	ND	0.010	0.0049	
107-06-2	1,2-Dichloroethane	**0.051**	0.037	0.012	**0.013**	0.0091	0.0030	
71-43-2	Benzene	**0.23**	0.11	0.022	**0.073**	0.035	0.0069	
108-88-3	Toluene	**0.12**	0.15	0.018	**0.032**	0.039	0.0047	**J**
106-93-4	1,2-Dibromoethane	ND	0.037	0.0098	ND	0.0048	0.0013	
100-41-4	Ethylbenzene	**0.032**	0.15	0.018	**0.0074**	0.034	0.0041	**J**
179601-23-1	m,p-Xylenes	**0.10**	0.15	0.035	**0.024**	0.034	0.0081	**J**
95-47-6	o-Xylene	**0.046**	0.15	0.019	**0.011**	0.034	0.0044	**J**
91-20-3	Naphthalene	**0.12**	0.15	0.032	**0.022**	0.028	0.0062	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **GHD**
Client Sample ID: **Method Blank**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P220325-MB

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19
Analyst: Topacio Zavala
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/22
Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.025	0.012	ND	0.0069	0.0033	
107-06-2	1,2-Dichloroethane	ND	0.025	0.0083	ND	0.0062	0.0021	
71-43-2	Benzene	ND	0.075	0.015	ND	0.023	0.0047	
108-88-3	Toluene	ND	0.10	0.012	ND	0.027	0.0032	
106-93-4	1,2-Dibromoethane	ND	0.025	0.0067	ND	0.0033	0.00087	
100-41-4	Ethylbenzene	ND	0.10	0.012	ND	0.023	0.0028	
179601-23-1	m,p-Xylenes	ND	0.10	0.024	ND	0.023	0.0055	
95-47-6	o-Xylene	ND	0.10	0.013	ND	0.023	0.0030	
91-20-3	Naphthalene	ND	0.10	0.022	ND	0.019	0.0042	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **GHD**
Client Project ID: **Geiger Corrections / 12576484** ALS Project ID: P2201209

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 3/16/22
Analyst: Topacio Zavala Date(s) Received: 3/18/22
Sample Type: 6.0 L Silonite Canister(s) / 6.0 L Summa Canister(s) Date(s) Analyzed: 3/25/22
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P220325-MB	**95**	**100**	**98**	70-130	
Lab Control Sample	P220325-LCS	**96**	**98**	**107**	70-130	
Duplicate Lab Control Sample	P220325-DLCS	**96**	**98**	**108**	70-130	
A-12576484-031622-NA-VP1	P2201209-001	**99**	**100**	**102**	70-130	
A-12576484-031622-NA-VP2	P2201209-002	**95**	**99**	**110**	70-130	
A-12576484-031622-NA-AMB	P2201209-003	**96**	**99**	**111**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **GHD**
Client Sample ID: **Duplicate Lab Control Sample**
Client Project ID: **Geiger Corrections / 12576484**

ALS Project ID: P2201209
ALS Sample ID: P220325-DLCS

Test Code: EPA TO-15 SIM Modified
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19
Analyst: Topacio Zavala
Sample Type: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/22
Volume(s) Analyzed: 0.050 Liter(s)

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	20.6	19.7	19.7	**96**	**96**	75-131	0	25	
107-06-2	1,2-Dichloroethane	21.0	18.8	18.8	**90**	**90**	68-118	0	25	
71-43-2	Benzene	20.8	18.7	18.7	**90**	**90**	60-122	0	25	
108-88-3	Toluene	20.6	17.2	17.3	**83**	**84**	69-120	1	25	
106-93-4	1,2-Dibromoethane	20.8	17.6	17.6	**85**	**85**	72-124	0	25	
100-41-4	Ethylbenzene	20.6	17.9	18.0	**87**	**87**	70-134	0	25	
179601-23-1	m,p-Xylenes	41.6	35.9	36.0	**86**	**87**	73-132	1	25	
95-47-6	o-Xylene	20.8	18.4	18.5	**88**	**89**	69-136	1	25	
91-20-3	Naphthalene	21.0	14.0	14.1	**67**	**67**	43-144	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 14, 2022

Becky Pavlik, Project Manager
GHD
9725 3rd Avenue NE Ste 204
Seattle, WA 98115

Dear Ms Pavlik:

Included are the results from the testing of material submitted on September 1, 2022 from the Geiger Corrections Spokane WA 340-007290, F&BI 209001 project. There are 14 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Jeffrey Cloud
GHD0914R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 1, 2022 by Friedman & Bruya, Inc. from the GHD Geiger Corrections Spokane WA 340-007290, F&BI 209001 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	GHD
209001 -01	A-12576484-083022-NA-VP1
209001 -02	A-12576484-083022-NA-DUP1
209001 -03	A-12576484-083022-NA-VP2
209001 -04	A-12576484-083022-NA-AMB

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

Sample A-12576484-083022-NA-VP1, A-12576484-083022-NA-DUP1, and A-12576484-083022-NA-VP2 were sent to Fremont Analytical for major gasses analysis. The report is enclosed.

All quality control requirements were acceptable.

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	A-12576484-083022-NA-VP1	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-01 1/6.7
Date Analyzed:	09/10/22	Data File:	090926.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<500
APH EC9-12 aliphatics	250
APH EC9-10 aromatics	<170

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	A-12576484-083022-NA-DUP1	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-02 1/6.9
Date Analyzed:	09/10/22	Data File:	090927.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	540
APH EC9-12 aliphatics	240
APH EC9-10 aromatics	<170

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	A-12576484-083022-NA-VP2	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-03 1/6.5
Date Analyzed:	09/10/22	Data File:	090928.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<490
APH EC9-12 aliphatics	200
APH EC9-10 aromatics	<160

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	A-12576484-083022-NA-AMB	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-04 1/6.7
Date Analyzed:	09/10/22	Data File:	090929.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<500
APH EC9-12 aliphatics	<170
APH EC9-10 aromatics	<170

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	GHD
Date Received:	Not Applicable	Project:	340-007290, F&BI 209001
Date Collected:	Not Applicable	Lab ID:	02-2144 MB
Date Analyzed:	09/09/22	Data File:	090910.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	86	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<75
APH EC9-12 aliphatics	<25
APH EC9-10 aromatics	<25

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	A-12576484-083022-NA-VP1	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-01 1/6.7
Date Analyzed:	09/10/22	Data File:	090926.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration ug/m3	ppbv
Methyl t-butyl ether (MTBE)	<48	<13
1,2-Dichloroethane (EDC)	<0.27	<0.067
Benzene	<2.1	<0.67
Toluene	<130	<33
1,2-Dibromoethane (EDB)	<0.51	<0.067
Ethylbenzene	<2.9	<0.67
m,p-Xylene	<5.8	<1.3
o-Xylene	<2.9	<0.67
Naphthalene	3.1	0.60

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	A-12576484-083022-NA-DUP1	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-02 1/6.9
Date Analyzed:	09/10/22	Data File:	090927.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3	ppbv
Methyl t-butyl ether (MTBE)	<50	<14
1,2-Dichloroethane (EDC)	<0.28	<0.069
Benzene	<2.2	<0.69
Toluene	<130	<34
1,2-Dibromoethane (EDB)	<0.53	<0.069
Ethylbenzene	<3	<0.69
m,p-Xylene	<6	<1.4
o-Xylene	<3	<0.69
Naphthalene	<1.8	<0.34

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	A-12576484-083022-NA-VP2	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-03 1/6.5
Date Analyzed:	09/10/22	Data File:	090928.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration ug/m3	ppbv
Methyl t-butyl ether (MTBE)	<47	<13
1,2-Dichloroethane (EDC)	<0.26	<0.065
Benzene	<2.1	<0.65
Toluene	<120	<32
1,2-Dibromoethane (EDB)	<0.5	<0.065
Ethylbenzene	<2.8	<0.65
m,p-Xylene	<5.6	<1.3
o-Xylene	<2.8	<0.65
Naphthalene	<1.7	<0.32

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	A-12576484-083022-NA-AMB	Client:	GHD
Date Received:	09/01/22	Project:	340-007290, F&BI 209001
Date Collected:	08/30/22	Lab ID:	209001-04 1/6.7
Date Analyzed:	09/10/22	Data File:	090929.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration ug/m3	ppbv
Methyl t-butyl ether (MTBE)	<48	<13
1,2-Dichloroethane (EDC)	<0.27	<0.067
Benzene	<2.1	<0.67
Toluene	<130	<33
1,2-Dibromoethane (EDB)	<0.51	<0.067
Ethylbenzene	<2.9	<0.67
m,p-Xylene	<5.8	<1.3
o-Xylene	<2.9	<0.67
Naphthalene	<1.8	<0.33

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	GHD
Date Received:	Not Applicable	Project:	340-007290, F&BI 209001
Date Collected:	Not Applicable	Lab ID:	02-2144 MB
Date Analyzed:	09/09/22	Data File:	090910.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	87	70	130

Compounds:	Concentration ug/m3	ppbv
Methyl t-butyl ether (MTBE)	<7.2	<2
1,2-Dichloroethane (EDC)	<0.04	<0.01
Benzene	<0.32	<0.1
Toluene	<19	<5
1,2-Dibromoethane (EDB)	<0.077	<0.01
Ethylbenzene	<0.43	<0.1
m,p-Xylene	<0.87	<0.2
o-Xylene	<0.43	<0.1
Naphthalene	<0.26	<0.05

Date of Report: 09/14/22
Date Received: 09/01/22
Project: Geiger Corrections Spokane WA 340-007290, F&BI 209001

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD MA-APH

Laboratory Code: 209080-32 1/6.2 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	550	560	2
APH EC9-12 aliphatics	ug/m3	420	440	5
APH EC9-10 aromatics	ug/m3	200	170	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	87	70-130
APH EC9-12 aliphatics	ug/m3	67	110	70-130
APH EC9-10 aromatics	ug/m3	67	96	70-130

Date of Report: 09/14/22
Date Received: 09/01/22
Project: Geiger Corrections Spokane WA 340-007290, F&BI 209001

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 209080-32 1/6.2 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl t-butyl ether (MTBE)	ug/m3	<45	<45	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.25	<0.25	nm
Benzene	ug/m3	<2	<2	nm
Toluene	ug/m3	<120	<120	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.48	<0.48	nm
Ethylbenzene	ug/m3	<2.7	<2.7	nm
m,p-Xylene	ug/m3	<5.4	<5.4	nm
o-Xylene	ug/m3	3.2	3.1	3
Naphthalene	ug/m3	2.3	2.4	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Methyl t-butyl ether (MTBE)	ug/m3	49	87	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	98	70-130
Benzene	ug/m3	43	97	70-130
Toluene	ug/m3	51	96	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	109	70-130
Ethylbenzene	ug/m3	59	94	70-130
m,p-Xylene	ug/m3	120	95	70-130
o-Xylene	ug/m3	59	97	70-130
Naphthalene	ug/m3	71	86	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

209005

SAMPLE CHAIN OF CUSTODY 09-01-22

Page # 1 of 1

Report To Becky Pavlik
Company GHD
Address 9725 3rd Ave NE
City, State, ZIP Seattle, WA 98115
Phone 4038088548 Email becky.pavlik@ghd.com

SAMPLERS (*signature*)

PROJECT NAME & ADDRESS	PO #
Geiger Corrections Spokane, WA	340-007290
NOTES: SSOW#: 12576484-2022-05	INVOICE TO GHD

TURNAROUND TIME
~~Standard~~
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
~~Default: Clean following final report delivery~~
☐ Hold (Fee may apply):

SAMPLE INFORMATION										ANALYSIS REQUESTED						
Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Fixed Gases	See SSOW for additional analytes Notes
A-12576484-083022-VA-UP1	01	3255	66	IA / (SG)	8.30.22	-28	1232	-3	1237		X		X		X	1L Summa + Tedlar
-DUP	02	9561	303	IA / (SG)		-27	1232	-3	1237		X		X		X	↓
-VP2	03	3675	54	IA / (SG)		-28	1356	-3	1402		X		X		X	
-AMB	04	9560	69	IA / (SG)	↓	-28	1447	-3	1453		X		X			1L Summa
				IA / SG												
				IA / SG												
				IA / SG												
				IA / SG												

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		K. Adamowicz	GHD	9.1.22	0717
Received by:		James Bruya	F&B	9/1	0717
Relinquished by:					
Received by:					

~~Samples received at~~ 22 °C

FORMS\COC\COCTO-15.DOC

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 209001
Work Order Number: 2209018

September 09, 2022

Attention Michael Erdahl:

Fremont Analytical, Inc. received 3 sample(s) on 9/1/2022 for the analyses presented in the following report.

Major Gases by EPA Method 3C

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *09/09/2022*

CLIENT: Friedman & Bruya
Project: 209001
Work Order: 2209018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2209018-001	A-12576484-083022-VA-VP1	08/30/2022 12:27 PM	09/01/2022 12:22 PM
2209018-002	A-12576484-083022-VA-DUP1	08/30/2022 12:37 PM	09/01/2022 12:22 PM
2209018-003	A-12576484-083022-VA-VP2	08/30/2022 2:02 PM	09/01/2022 12:22 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2209018**
Date: **9/9/2022**

CLIENT: Friedman & Bruya
Project: 209001

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Major gases are reported as % ratio of the Major Gases analyzed (Carbon dioxide, Carbon Monoxide, Methane, Nitrogen, Oxygen and Hydrogen).

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS). The LCS is processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Note: The estimated BTU calculation is based off of the methane result.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2209018**
Date Reported: **9/9/2022**

CLIENT: Friedman & Bruya
Project: 209001

Lab ID: 2209018-001 **Collection Date:** 8/30/2022 12:27:00 PM
Client Sample ID: **A-12576484-083022-VA-VP1** **Matrix:** Air

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Major Gases by EPA Method 3C				Batch ID: R78078		Analyst: TC
Carbon Dioxide	2.84	0.0500		%	1	9/2/2022 7:53:00 AM
Carbon Monoxide	ND	0.0500		%	1	9/2/2022 7:53:00 AM
Methane	ND	0.0500		%	1	9/2/2022 7:53:00 AM
Nitrogen	73.2	0.0500		%	1	9/2/2022 7:53:00 AM
Oxygen	23.9	0.0500		%	1	9/2/2022 7:53:00 AM
Hydrogen	ND	0.0500		%	1	9/2/2022 7:53:00 AM
BTU	0.429			BTU/ft^3	1	9/2/2022 7:53:00 AM

Lab ID: 2209018-002 **Collection Date:** 8/30/2022 12:37:00 PM
Client Sample ID: **A-12576484-083022-VA-DUP1** **Matrix:** Air

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Major Gases by EPA Method 3C				Batch ID: R78078		Analyst: TC
Carbon Dioxide	2.78	0.0500		%	1	9/2/2022 8:05:00 AM
Carbon Monoxide	ND	0.0500		%	1	9/2/2022 8:05:00 AM
Methane	ND	0.0500		%	1	9/2/2022 8:05:00 AM
Nitrogen	73.2	0.0500		%	1	9/2/2022 8:05:00 AM
Oxygen	24.0	0.0500		%	1	9/2/2022 8:05:00 AM
Hydrogen	ND	0.0500		%	1	9/2/2022 8:05:00 AM
BTU	ND			BTU/ft^3	1	9/2/2022 8:05:00 AM

Analytical Report

Work Order: **2209018**
Date Reported: **9/9/2022**

CLIENT: Friedman & Bruya
Project: 209001

Lab ID: 2209018-003 **Collection Date:** 8/30/2022 2:02:00 PM
Client Sample ID: **A-12576484-083022-VA-VP2** **Matrix:** Air

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Major Gases by EPA Method 3C				Batch ID: R78078		Analyst: TC
Carbon Dioxide	3.16	0.0500		%	1	9/2/2022 8:18:00 AM
Carbon Monoxide	ND	0.0500		%	1	9/2/2022 8:18:00 AM
Methane	ND	0.0500		%	1	9/2/2022 8:18:00 AM
Nitrogen	73.0	0.0500		%	1	9/2/2022 8:18:00 AM
Oxygen	23.8	0.0500		%	1	9/2/2022 8:18:00 AM
Hydrogen	ND	0.0500		%	1	9/2/2022 8:18:00 AM
BTU	ND			BTU/ft^3	1	9/2/2022 8:18:00 AM

Work Order: 2209018
CLIENT: Friedman & Bruya
Project: 209001

QC SUMMARY REPORT

Major Gases by EPA Method 3C

Sample ID: **LCS-R78078** SampType: **LCS** Units: **%** Prep Date: **9/2/2022** RunNo: **78078**
Client ID: **LCSS** Batch ID: **R78078** Analysis Date: **9/2/2022** SeqNo: **1604593**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon Dioxide	99.5	0.0500	100.0	0	99.5	70	130				
Carbon Monoxide	99.4	0.0500	100.0	0	99.4	70	130				
Methane	99.4	0.0500	100.0	0	99.4	70	130				
Nitrogen	99.9	0.0500	100.0	0	99.9	70	130				
Oxygen	100	0.0500	100.0	0	100	70	130				
Hydrogen	105	0.0500	100.0	0	105	70	130				

Sample ID: **2209018-001AREP** SampType: **REP** Units: **%** Prep Date: **9/2/2022** RunNo: **78078**
Client ID: **A-12576484-083022-VA-** Batch ID: **R78078** Analysis Date: **9/2/2022** SeqNo: **1604595**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon Dioxide	2.83	0.0500						2.843	0.513	30	
Carbon Monoxide	ND	0.0500						0		30	
Methane	ND	0.0500						0		30	
Nitrogen	73.2	0.0500						73.18	0.00208	30	
Oxygen	24.0	0.0500						23.93	0.244	30	
Hydrogen	ND	0.0500						0		30	
BTU	ND							0.4294	200		

Sample Log-In Check List

Client Name:	FB	Work Order Number:	2209018
Logged by:	Elisabeth Samoray	Date Received:	9/1/2022 12:22:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☐	No	☑	NA ☐
		Sample is air				
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes	☐	No	☑	NA ☐
		Sample is air				
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☐	No	☐	NA ☑
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

19. Additional remarks:

Item Information

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2209018

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER: FREMONT

PROJECT NAME/NO.: 209001

PO #: C-338

REMARKS

Page # ____ of ____

TURNAROUND TIME
- ☒ Standard TAT
- ☐ RUSH ____

Rush charges authorized by: ____

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Dioxins/Furans	EPH	VPH	FIXED GASES EPA 3C							Notes
A-12576484-083022-NA-VP1		8/30/22	12:37	AIR	1				✓							
A-12576484-083022-NA-DUP1		|	12:37		1				✓							
A-12576484-083022-NA-VP2		|	14:02	|	1				✓							
~~A-12576484-083022-NA-AMB~~		|	~~14:53~~	|	~~1~~	~~Ef 9/1~~										

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Michael Erdahl Eric Young	Friedman & Bruya	9/1/22	10 AM
Received by: Yuji Chen	Yuji	Fremont Analytical	9/1/22	12:22
Relinquished by:				
Received by:				

209005

SAMPLE CHAIN OF CUSTODY

09-01-22 2209018

Page # 1 of 1

Report To Becky Pavlik
Company GHD
Address 9725 3rd Ave NE
City, State, ZIP Seattle, WA 98115
Phone 4038088548 Email becky.pavlik@ghd.com

SAMPLERS (signature)

PROJECT NAME & ADDRESS: Geiger Corrections Spokane, WA
PO #: 340-007290

NOTES: SSDS#: 12576484-2022-05

INVOICE TO: GHD

TURNAROUND TIME
☒ Standard
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☒ Default: Clean following final report delivery
☐ Hold (Fee may apply):

Page 10 of 10

SAMPLE INFORMATION										ANALYSIS REQUESTED						
Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Fixed Gases	See SSOW for additional analytes Notes
A-12576484-083022-VA-UP1	01	3255	66	IA / (SG)	8.30.22	-28	1232	-3	1237		X		X		X	1L Summa + Teller
-DUP	02	9561	303	IA / (SG)		-27	1232	-3	1237		X		X		X	↓
-VP2	03	3675	54	IA / (SG)		-28	1356	-3	1402		X		X		X	
-AMB	04	9560	69	IA / (SG)		-28	1447	-3	1453		X		X			1L Summa
				IA / SG												
				IA / SG												
				IA / SG												
				IA / SG												

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Mike Adamowicz	GHD	9.1.22	0717
Received by:	James Broyles	F&B	9/1	0717
Relinquished by:				
Received by:				

Samples received at 22 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-76509-1
Client Project/Site: Geiger Corrections

For:
GHD Services Inc.
9725 3rd Avenue NE, Suite 204
Seattle, Washington 98115

Attn: Arthur Clauss

Authorized for release by:
3/31/2022 7:18:06 AM

Megan Moeller, Client Services Manager
(717)556-7261
Megan.Moeller@eurofinset.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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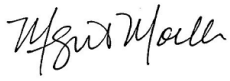

Megan Moeller
Client Services Manager
3/31/2022 7:18:06 AM

Table of Contents

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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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

Case Narrative

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-76509-1

Job ID: 410-76509-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-76509-1

Receipt
The samples were received on 3/17/2022 3:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.9°C

Receipt Exceptions
A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

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

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

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

Detection Summary

Client: GHD Services Inc.
Job ID: 410-76509-1
Project/Site: Geiger Corrections

Client Sample ID: WG-12576484-031622-NA-MW13 — Lab Sample ID: 410-76509-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C12-C24	120		100		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: WG-12576484-031622-NA-MW7 — Lab Sample ID: 410-76509-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C12-C24	190		110		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 410-76509-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: WG-12576484-031622-NA-MW13

Lab Sample ID: 410-76509-1

Date Collected: 03/16/22 09:37

Matrix: Groundwater

Date Received: 03/17/22 15:15

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			03/22/22 00:22	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/22 00:22	1
Toluene	<1.0		1.0		ug/L			03/22/22 00:22	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/22 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*03/22/22 00:22*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/22/22 00:22*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/22/22 00:22*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/22/22 00:22*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			03/21/22 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*111*		*50 - 150*		*03/21/22 14:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**120**		100		ug/L		03/30/22 09:27	03/30/22 22:35	1
C24-C40	<250		250		ug/L		03/30/22 09:27	03/30/22 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*80*		*50 - 150*	*03/30/22 09:27*	*03/30/22 22:35*	*1*

Client Sample ID: WG-12576484-031622-NA-MW7

Lab Sample ID: 410-76509-2

Date Collected: 03/16/22 14:10

Matrix: Groundwater

Date Received: 03/17/22 15:15

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			03/22/22 00:45	1
Ethylbenzene	<1.0		1.0		ug/L			03/22/22 00:45	1
Toluene	<1.0		1.0		ug/L			03/22/22 00:45	1
Xylenes, Total	<1.0		1.0		ug/L			03/22/22 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*03/22/22 00:45*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/22/22 00:45*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/22/22 00:45*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/22/22 00:45*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			03/21/22 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*112*		*50 - 150*		*03/21/22 14:39*	*1*

Client Sample Results

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-76509-1

Client Sample ID: WG-12576484-031622-NA-MW7

Lab Sample ID: 410-76509-2

Date Collected: 03/16/22 14:10

Matrix: Groundwater

Date Received: 03/17/22 15:15

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	190		110		ug/L		03/30/22 09:27	03/30/22 22:58	1
C24-C40	<270		270		ug/L		03/30/22 09:27	03/30/22 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*84*		*50 - 150*	*03/30/22 09:27*	*03/30/22 22:58*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 410-76509-3

Date Collected: 03/16/22 00:00

Matrix: Water

Date Received: 03/17/22 15:15

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			03/21/22 11:32	1
Ethylbenzene	<1.0		1.0		ug/L			03/21/22 11:32	1
Toluene	<1.0		1.0		ug/L			03/21/22 11:32	1
Xylenes, Total	<1.0		1.0		ug/L			03/21/22 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 120*		*03/21/22 11:32*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/21/22 11:32*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*03/21/22 11:32*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/21/22 11:32*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			03/21/22 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*104*		*50 - 150*		*03/21/22 13:05*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-76509-1

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

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-76509-1	WG-12576484-031622-NA-MW13	96	93	92	103
410-76509-2	WG-12576484-031622-NA-MW7	95	92	92	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-76509-3	Trip Blank	91	94	90	103
LCS 410-235654/4	Lab Control Sample	90	93	91	103
LCS 410-235944/4	Lab Control Sample	93	92	91	104
LCSD 410-235944/5	Lab Control Sample Dup	94	92	90	103
MB 410-235654/6	Method Blank	92	94	91	103
MB 410-235944/7	Method Blank	93	92	92	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
410-76509-1	WG-12576484-031622-NA-MW13	111
410-76509-2	WG-12576484-031622-NA-MW7	112

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
410-76509-3	Trip Blank	104
LCS 410-235738/5	Lab Control Sample	108
LCSD 410-235738/6	Lab Control Sample Dup	101
MB 410-235738/4	Method Blank	114

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-76509-1

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

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

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTP							
Lab Sample ID	Client Sample ID	(50-150)							
410-76509-1	WG-12576484-031622-NA-MW13	80							
410-76509-2	WG-12576484-031622-NA-MW7	84							
410-76509-2 DU	WG-12576484-031622-NA-MW7	81							

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTP							
Lab Sample ID	Client Sample ID	(50-150)							
LCS 410-239043/2-A	Lab Control Sample	88							
LCSD 410-239043/3-A	Lab Control Sample Dup	91							
MB 410-239043/1-A	Method Blank	85							

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Lab Sample ID: MB 410-235654/6
Matrix: Water
Analysis Batch: 235654

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			03/21/22 10:22	1
Ethylbenzene	<1.0		1.0		ug/L			03/21/22 10:22	1
Toluene	<1.0		1.0		ug/L			03/21/22 10:22	1
Xylenes, Total	<1.0		1.0		ug/L			03/21/22 10:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*		*03/21/22 10:22*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/21/22 10:22*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/21/22 10:22*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/21/22 10:22*	*1*

Lab Sample ID: LCS 410-235654/4
Matrix: Water
Analysis Batch: 235654

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			20.0	16.5		ug/L		82	80 - 120		
Ethylbenzene			20.0	18.6		ug/L		93	80 - 120		
Toluene			20.0	18.4		ug/L		92	80 - 120		
Xylenes, Total			60.0	56.3		ug/L		94	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 410-235944/7
Matrix: Water
Analysis Batch: 235944

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			03/21/22 22:49	1
Ethylbenzene	<1.0		1.0		ug/L			03/21/22 22:49	1
Toluene	<1.0		1.0		ug/L			03/21/22 22:49	1
Xylenes, Total	<1.0		1.0		ug/L			03/21/22 22:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*03/21/22 22:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/21/22 22:49*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/21/22 22:49*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/21/22 22:49*	*1*

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

Lab Sample ID: LCS 410-235944/4
Matrix: Water
Analysis Batch: 235944

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			20.0	17.4		ug/L		87	80 - 120		
Ethylbenzene			20.0	18.7		ug/L		94	80 - 120		
Toluene			20.0	18.6		ug/L		93	80 - 120		
Xylenes, Total			60.0	56.6		ug/L		94	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: LCSD 410-235944/5
Matrix: Water
Analysis Batch: 235944

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
Benzene			20.0	17.1		ug/L		86	80 - 120	2	30
Ethylbenzene			20.0	19.1		ug/L		96	80 - 120	2	30
Toluene			20.0	18.8		ug/L		94	80 - 120	1	30
Xylenes, Total			60.0	57.9		ug/L		97	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-235738/4
Matrix: Water
Analysis Batch: 235738

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			03/21/22 10:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*114*		*50 - 150*		*03/21/22 10:42*	*1*

Lab Sample ID: LCS 410-235738/5
Matrix: Water
Analysis Batch: 235738

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C7-C12 (1C)			1100	1080		ug/L		98	64 - 131		

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

Lab Sample ID: LCS 410-235738/5
Matrix: Water
Analysis Batch: 235738

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	*108*		*50 - 150*

Lab Sample ID: LCSD 410-235738/6
Matrix: Water
Analysis Batch: 235738

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
C7-C12 (1C)			1100	1040		ug/L		94	64 - 131	4	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	*101*		*50 - 150*

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

Lab Sample ID: MB 410-239043/1-A
Matrix: Water
Analysis Batch: 239345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 239043

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		03/30/22 09:27	03/30/22 21:28	1
C24-C40	<250		250		ug/L		03/30/22 09:27	03/30/22 21:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*85*		*50 - 150*	*03/30/22 09:27*	*03/30/22 21:28*	*1*

Lab Sample ID: LCS 410-239043/2-A
Matrix: Water
Analysis Batch: 239345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239043

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C12-C24			600	292		ug/L		49	14 - 115		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o- terphenyl (Surr)	*88*		*50 - 150*

Lab Sample ID: LCSD 410-239043/3-A
Matrix: Water
Analysis Batch: 239345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 239043

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C12-C24			600	304		ug/L		51	14 - 115	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o- terphenyl (Surr)	*91*		*50 - 150*

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

Lab Sample ID: 410-76509-2 DU
Matrix: Groundwater
Analysis Batch: 239345

Client Sample ID: WG-12576484-031622-NA-MW7
Prep Type: Total/NA
Prep Batch: 239043

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C12-C24	190			157		ug/L				18	20
C24-C40	<270			<250		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o- terphenyl (Surr)	*81*		*50 - 150*

QC Association Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-76509-1

GC/MS VOA

Analysis Batch: 235654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-76509-3	Trip Blank	Total/NA	Water	8260C	
MB 410-235654/6	Method Blank	Total/NA	Water	8260C	
LCS 410-235654/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 235944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-76509-1	WG-12576484-031622-NA-MW13	Total/NA	Groundwater	8260C	
410-76509-2	WG-12576484-031622-NA-MW7	Total/NA	Groundwater	8260C	
MB 410-235944/7	Method Blank	Total/NA	Water	8260C	
LCS 410-235944/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 410-235944/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 235738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-76509-1	WG-12576484-031622-NA-MW13	Total/NA	Groundwater	NWTPH-Gx	
410-76509-2	WG-12576484-031622-NA-MW7	Total/NA	Groundwater	NWTPH-Gx	
410-76509-3	Trip Blank	Total/NA	Water	NWTPH-Gx	
MB 410-235738/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-235738/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-235738/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 239043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-76509-1	WG-12576484-031622-NA-MW13	Total/NA	Groundwater	3510C	
410-76509-2	WG-12576484-031622-NA-MW7	Total/NA	Groundwater	3510C	
MB 410-239043/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-239043/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-239043/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-76509-2 DU	WG-12576484-031622-NA-MW7	Total/NA	Groundwater	3510C	

Analysis Batch: 239345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-76509-1	WG-12576484-031622-NA-MW13	Total/NA	Groundwater	NWTPH-Dx	239043
410-76509-2	WG-12576484-031622-NA-MW7	Total/NA	Groundwater	NWTPH-Dx	239043
MB 410-239043/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	239043
LCS 410-239043/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	239043
LCSD 410-239043/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	239043
410-76509-2 DU	WG-12576484-031622-NA-MW7	Total/NA	Groundwater	NWTPH-Dx	239043

Lab Chronicle

Client: GHD Services Inc.
Job ID: 410-76509-1
Project/Site: Geiger Corrections

Client Sample ID: WG-12576484-031622-NA-MW13
Lab Sample ID: 410-76509-1
Date Collected: 03/16/22 09:37
Matrix: Groundwater
Date Received: 03/17/22 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	235944	03/22/22 00:22	K4WN	ELLE
Total/NA	Analysis	NWTPH-Gx		1	235738	03/21/22 14:15	NND8	ELLE
Total/NA	Prep	3510C			239043	03/30/22 09:27	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	239345	03/30/22 22:35	KP5X	ELLE

Client Sample ID: WG-12576484-031622-NA-MW7
Lab Sample ID: 410-76509-2
Date Collected: 03/16/22 14:10
Matrix: Groundwater
Date Received: 03/17/22 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	235944	03/22/22 00:45	K4WN	ELLE
Total/NA	Analysis	NWTPH-Gx		1	235738	03/21/22 14:39	NND8	ELLE
Total/NA	Prep	3510C			239043	03/30/22 09:27	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	239345	03/30/22 22:58	KP5X	ELLE

Client Sample ID: Trip Blank
Lab Sample ID: 410-76509-3
Date Collected: 03/16/22 00:00
Matrix: Water
Date Received: 03/17/22 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	235654	03/21/22 11:32	ULCP	ELLE
Total/NA	Analysis	NWTPH-Gx		1	235738	03/21/22 13:05	NND8	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 410-76509-1
Project/Site: Geiger Corrections

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-12-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Groundwater	Benzene
8260C		Groundwater	Ethylbenzene
8260C		Groundwater	Toluene
8260C		Groundwater	Xylenes, Total
8260C		Water	Benzene
8260C		Water	Ethylbenzene
8260C		Water	Toluene
8260C		Water	Xylenes, Total

Method Summary

Client: GHD Services Inc.
Job ID: 410-76509-1
Project/Site: Geiger Corrections

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ELLE
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ELLE
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-76509-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-76509-1	WG-12576484-031622-NA-MW13	Groundwater	03/16/22 09:37	03/17/22 15:15
410-76509-2	WG-12576484-031622-NA-MW7	Groundwater	03/16/22 14:10	03/17/22 15:15
410-76509-3	Trip Blank	Water	03/16/22 00:00	03/17/22 15:15

410-76509 Chain of Custody

v, LLC

Chain of Custody Record

eurofins Environment Testing America

Client Contact: Arthur Clauss	Sampler: N. Adamowski	Lab PM: Moeller, Megan	Carrier Tracking No(s):	COC No: 410-51683-14484.1
Company: GHD Services Inc.	Phone: 248-860-0803	E-Mail: Megan.Moeller@eurofinset.com	State of Origin: WA	Page: Page 1 of 1
Address: 9725 3rd Avenue NE, Suite 204	PWSID:			Job #: 1257 6484
City: Seattle	Due Date Requested:			
State, Zip: WA, 98115	TAT Requested (days): Standar			
Phone: 206-643-2451	Compliance Project: Δ Yes Δ No			
Email: arthur.clauss@ghd.com	PO #: Purchase Order Requested			
Project Name: Geiger Corrections	WO #:			
Site: Geiger Corrections	Project #: 41001970			
	SSOW#:			

Analysis Requested: Field Filtered Sample (Yes or No); Perform MS/MSD (Yes or No); NWTPH_Dx; NWTPH_Gx; 8260C-BTEX Volatiles (Trial/ray); NWTPH_O; Total Number of containers

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, 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	MS/MSD	NWTPH_Dx	NWTPH_Gx	8260C-BTEX	NWTPH_O	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
WG-12576484-031622-NA-MW13	3-16-22	0937	G	W			X	X	X	X		
↓ ↓ ↓ ↓ -MW7	↓	1410	G	↓			X	X	X	X		

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
N. Adamowski	3-16-22 1600				
			[signature]	3/17/22 1515	ELVE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.9

KAM

Ver: 06/08/2021

3/31/2022

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 410-76509-1

Login Number: 76509

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

Creator: Metzger, Katherine A

Question	Answer	Comment
The cooler's custody seal is 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 (</=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.	False	Received Trip Blank(s) not listed on COC.
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?	True	
Sample custody seals are intact.	True	

March 24, 2022

Mr. Arthur Clauss
GHD Services
9725 - 3rd Ave NE, Suite 204
Seattle, WA 98115

Dear Mr. Clauss,

On March 17th, 3 samples were received by our laboratory and assigned our laboratory project number EV22030122. The project was identified as your 12576484. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Glen Perry
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE:	3/24/2022
		ALS JOB#:	EV22030122
		ALS SAMPLE#:	EV22030122-01
CLIENT CONTACT:	Arthur Clauss	DATE RECEIVED:	03/17/2022
CLIENT PROJECT:	12576484	COLLECTION DATE:	3/14/2022 3:00:00 PM
CLIENT SAMPLE ID	SO-12576484-031422-NA-VP1-5'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/18/2022	KLS
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	03/21/2022	JNF
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	03/21/2022	JNF
Dichlorodifluoromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Vinyl Chloride	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromomethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Carbon Tetrachloride	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trichlorofluoromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Carbon Disulfide	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Acetone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,1-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Methylene Chloride	EPA-8260	U	0.020	1	MG/KG	03/23/2022	DLC
Acrylonitrile	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Methyl T-Butyl Ether	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1-Dichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Butanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2,2-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromochloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloroform	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Benzene	EPA-8260	U	0.0050	1	MG/KG	03/23/2022	DLC
Trichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Dibromomethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromodichloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
4-Methyl-2-Pentanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Toluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Hexanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,3-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE: ALS JOB#: ALS SAMPLE#:	3/24/2022 EV22030122 EV22030122-01
CLIENT CONTACT:	Arthur Clauss	DATE RECEIVED:	03/17/2022
CLIENT PROJECT:	12576484	COLLECTION DATE:	3/14/2022 3:00:00 PM
CLIENT SAMPLE ID	SO-12576484-031422-NA-VP1-5'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Tetrachloroethylene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Dibromochloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.0050	1	MG/KG	03/23/2022	DLC
Chlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Ethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Styrene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromoform	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Isopropylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
N-Propyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Chlorotoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
4-Chlorotoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
T-Butyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
S-Butyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
P-Isopropyltoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
N-Butylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Hexachlorobutadiene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Naphthalene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Xylenes	EPA-8260	U	0.020	1	MG/KG	03/23/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**83.6**	03/18/2022	KLS
C25	NWTPH-DX	**96.1**	03/21/2022	JNF
1,2-Dichloroethane-d4	EPA-8260	**102**	03/23/2022	DLC
Toluene-d8	EPA-8260	**101**	03/23/2022	DLC
4-Bromofluorobenzene	EPA-8260	**107**	03/23/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE:	3/24/2022
		ALS JOB#:	EV22030122
		ALS SAMPLE#:	EV22030122-02
CLIENT CONTACT:	Arthur Clauss	DATE RECEIVED:	03/17/2022
CLIENT PROJECT:	12576484	COLLECTION DATE:	3/15/2022 8:40:00 AM
CLIENT SAMPLE ID	SO-12576484-031522-NA-MW13-6'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/18/2022	KLS
TPH-Diesel Range	NWTPH-DX	U, f2	28	1	MG/KG	03/21/2022	JNF
TPH-Oil Range	NWTPH-DX	U, f2	56	1	MG/KG	03/21/2022	JNF
Dichlorodifluoromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Vinyl Chloride	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromomethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Carbon Tetrachloride	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trichlorofluoromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Carbon Disulfide	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Acetone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,1-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Methylene Chloride	EPA-8260	U	0.020	1	MG/KG	03/23/2022	DLC
Acrylonitrile	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Methyl T-Butyl Ether	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1-Dichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Butanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2,2-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromochloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloroform	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Benzene	EPA-8260	U	0.0050	1	MG/KG	03/23/2022	DLC
Trichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Dibromomethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromodichloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
4-Methyl-2-Pentanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Toluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Hexanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,3-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Tetrachloroethylene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE: ALS JOB#: ALS SAMPLE#:	3/24/2022 EV22030122 EV22030122-02
CLIENT CONTACT:	Arthur Clauss	DATE RECEIVED:	03/17/2022
CLIENT PROJECT:	12576484	COLLECTION DATE:	3/15/2022 8:40:00 AM
CLIENT SAMPLE ID	SO-12576484-031522-NA-MW13-6'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dibromochloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.0050	1	MG/KG	03/23/2022	DLC
Chlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Ethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Styrene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromoform	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Isopropylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
N-Propyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Chlorotoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
4-Chlorotoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
T-Butyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
S-Butyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
P-Isopropyltoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
N-Butylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Hexachlorobutadiene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Naphthalene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Xylenes	EPA-8260	U	0.020	1	MG/KG	03/23/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**81.6**	03/18/2022	KLS
C25	NWTPH-DX	**87.7**	03/21/2022	JNF
1,2-Dichloroethane-d4	EPA-8260	**104**	03/23/2022	DLC
Toluene-d8	EPA-8260	**98.7**	03/23/2022	DLC
4-Bromofluorobenzene	EPA-8260	**96.9**	03/23/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.
f2 - Reporting limit for compound raised due to low percent solids.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE:	3/24/2022
		ALS JOB#:	EV22030122
		ALS SAMPLE#:	EV22030122-03
CLIENT CONTACT:	Arthur Clauss	DATE RECEIVED:	03/17/2022
CLIENT PROJECT:	12576484	COLLECTION DATE:	3/15/2022 9:50:00 AM
CLIENT SAMPLE ID	SO-12576484-031522-NA-VP2-4'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/18/2022	KLS
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	03/21/2022	JNF
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	03/21/2022	JNF
Dichlorodifluoromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Vinyl Chloride	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromomethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Carbon Tetrachloride	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trichlorofluoromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Carbon Disulfide	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Acetone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,1-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Methylene Chloride	EPA-8260	U	0.020	1	MG/KG	03/23/2022	DLC
Acrylonitrile	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Methyl T-Butyl Ether	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1-Dichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Butanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2,2-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromochloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Chloroform	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Benzene	EPA-8260	U	0.0050	1	MG/KG	03/23/2022	DLC
Trichloroethene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Dibromomethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromodichloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
4-Methyl-2-Pentanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
Toluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Hexanone	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,3-Dichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Tetrachloroethylene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE: ALS JOB#: ALS SAMPLE#:	3/24/2022 EV22030122 EV22030122-03
CLIENT CONTACT:	Arthur Clauss	DATE RECEIVED:	03/17/2022
CLIENT PROJECT:	12576484	COLLECTION DATE:	3/15/2022 9:50:00 AM
CLIENT SAMPLE ID	SO-12576484-031522-NA-VP2-4'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dibromochloromethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.0050	1	MG/KG	03/23/2022	DLC
Chlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Ethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Styrene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromoform	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Isopropylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Bromobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
N-Propyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
2-Chlorotoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
4-Chlorotoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
T-Butyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
S-Butyl Benzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
P-Isopropyltoluene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
N-Butylbenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	0.050	1	MG/KG	03/23/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Hexachlorobutadiene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Naphthalene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	0.010	1	MG/KG	03/23/2022	DLC
Xylenes	EPA-8260	U	0.020	1	MG/KG	03/23/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**93.9**	03/18/2022	KLS
C25	NWTPH-DX	**95.1**	03/21/2022	JNF
1,2-Dichloroethane-d4	EPA-8260	**97.4**	03/23/2022	DLC
Toluene-d8	EPA-8260	**99.7**	03/23/2022	DLC
4-Bromofluorobenzene	EPA-8260	**100**	03/23/2022	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE:	3/24/2022
		ALS SDG#:	EV22030122
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arthur Clauss		
CLIENT PROJECT:	12576484		

LABORATORY BLANK RESULTS

MBG-031722S - Batch 176503 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	03/17/2022	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-032122S - Batch 176643 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	MG/KG	25	03/21/2022	JNF
TPH-Oil Range	NWTPH-DX	U	MG/KG	50	03/21/2022	JNF

U - Analyte analyzed for but not detected at level above reporting limit.

MB-032322S - Batch 176708 - Soil by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Chloromethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Vinyl Chloride	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Bromomethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Chloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Carbon Tetrachloride	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Trichlorofluoromethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Carbon Disulfide	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Acetone	EPA-8260	U	MG/KG	0.050	03/23/2022	DLC
1,1-Dichloroethene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Methylene Chloride	EPA-8260	U	MG/KG	0.020	03/23/2022	DLC
Acrylonitrile	EPA-8260	U	MG/KG	0.050	03/23/2022	DLC
Methyl T-Butyl Ether	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,1-Dichloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
2-Butanone	EPA-8260	U	MG/KG	0.050	03/23/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
2,2-Dichloropropane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Bromochloromethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Chloroform	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,1-Dichloropropene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2-Dichloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Benzene	EPA-8260	U	MG/KG	0.0050	03/23/2022	DLC
Trichloroethene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC

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		ALS SDG#:	EV22030122
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arthur Clauss		
CLIENT PROJECT:	12576484		

LABORATORY BLANK RESULTS

MB-032322S - Batch 176708 - Soil by EPA-8260

1,2-Dichloropropane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Dibromomethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Bromodichloromethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
4-Methyl-2-Pentanone	EPA-8260	U	MG/KG	0.050	03/23/2022	DLC
Toluene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
2-Hexanone	EPA-8260	U	MG/KG	0.050	03/23/2022	DLC
1,3-Dichloropropane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Tetrachloroethylene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Dibromochloromethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2-Dibromoethane	EPA-8260	U	MG/KG	0.0050	03/23/2022	DLC
Chlorobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Ethylbenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Styrene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Bromoform	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Isopropylbenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Bromobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
N-Propyl Benzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
2-Chlorotoluene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
4-Chlorotoluene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
T-Butyl Benzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
S-Butyl Benzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
P-Isopropyltoluene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
N-Butylbenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2-Dichlorobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	MG/KG	0.050	03/23/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Hexachlorobutadiene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Naphthalene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	MG/KG	0.010	03/23/2022	DLC
Xylenes	EPA-8260	U	MG/KG	0.020	03/23/2022	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	GHD Services 9725 - 3rd Ave NE, Suite 204 Seattle, WA 98115	DATE:	3/24/2022
		ALS SDG#:	EV22030122
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arthur Clauss		
CLIENT PROJECT:	12576484		

LABORATORY BLANK RESULTS

MB-032322S - Batch 176708 - Soil by EPA-8260

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CERTIFICATE OF ANALYSIS

CLIENT: GHD Services
9725 - 3rd Ave NE, Suite 204
Seattle, WA 98115

CLIENT CONTACT: Arthur Clauss
CLIENT PROJECT: 12576484

DATE: 3/24/2022
ALS SDG#: EV22030122
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 176503 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**105**			66.5	122.7	03/17/2022	KLS
TPH-Volatile Range - BSD	NWTPH-GX	**103**	**1**		66.5	122.7	03/17/2022	KLS

ALS Test Batch ID: 176643 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**96.9**			75.5	122.1	03/21/2022	JNF
TPH-Diesel Range - BSD	NWTPH-DX	**101**	**4**		75.5	122.1	03/21/2022	JNF

ALS Test Batch ID: 176708 - Soil by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane - BS	EPA-8260	**106**			50	150	03/23/2022	DLC
Dichlorodifluoromethane - BSD	EPA-8260	**103**	**2**		50	150	03/23/2022	DLC
Chloromethane - BS	EPA-8260	**115**			50	150	03/23/2022	DLC
Chloromethane - BSD	EPA-8260	**112**	**2**		50	150	03/23/2022	DLC
Vinyl Chloride - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
Vinyl Chloride - BSD	EPA-8260	**107**	**1**		50	150	03/23/2022	DLC
Bromomethane - BS	EPA-8260	**110**			50	150	03/23/2022	DLC
Bromomethane - BSD	EPA-8260	**110**	**0**		50	150	03/23/2022	DLC
Chloroethane - BS	EPA-8260	**112**			50	150	03/23/2022	DLC
Chloroethane - BSD	EPA-8260	**111**	**1**		50	150	03/23/2022	DLC
Carbon Tetrachloride - BS	EPA-8260	**96.6**			50	150	03/23/2022	DLC
Carbon Tetrachloride - BSD	EPA-8260	**96.5**	**0**		50	150	03/23/2022	DLC
Trichlorofluoromethane - BS	EPA-8260	**99.6**			50	150	03/23/2022	DLC
Trichlorofluoromethane - BSD	EPA-8260	**99.6**	**0**		50	150	03/23/2022	DLC
Carbon Disulfide - BS	EPA-8260	**97.5**			50	150	03/23/2022	DLC
Carbon Disulfide - BSD	EPA-8260	**96.6**	**1**		50	150	03/23/2022	DLC
Acetone - BS	EPA-8260	**104**			50	150	03/23/2022	DLC
Acetone - BSD	EPA-8260	**105**	**1**		50	150	03/23/2022	DLC
1,1-Dichloroethene - BS	EPA-8260	**105**			70	130	03/23/2022	DLC
1,1-Dichloroethene - BSD	EPA-8260	**105**	**0**		70	130	03/23/2022	DLC
Methylene Chloride - BS	EPA-8260	**103**			50	150	03/23/2022	DLC
Methylene Chloride - BSD	EPA-8260	**103**	**0**		50	150	03/23/2022	DLC
Acrylonitrile - BS	EPA-8260	**113**			50	150	03/23/2022	DLC
Acrylonitrile - BSD	EPA-8260	**111**	**2**		50	150	03/23/2022	DLC
Methyl T-Butyl Ether - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
Methyl T-Butyl Ether - BSD	EPA-8260	**109**	**0**		50	150	03/23/2022	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	**108**			50	150	03/23/2022	DLC

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CERTIFICATE OF ANALYSIS

CLIENT: GHD Services
9725 - 3rd Ave NE, Suite 204
Seattle, WA 98115

CLIENT CONTACT: Arthur Clauss
CLIENT PROJECT: 12576484

DATE: 3/24/2022
ALS SDG#: EV22030122
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Trans-1,2-Dichloroethene - BSD	EPA-8260	**107**	**1**		50	150	03/23/2022	DLC
1,1-Dichloroethane - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
1,1-Dichloroethane - BSD	EPA-8260	**105**	**3**		50	150	03/23/2022	DLC
2-Butanone - BS	EPA-8260	**121**			50	150	03/23/2022	DLC
2-Butanone - BSD	EPA-8260	**117**	**3**		50	150	03/23/2022	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	**109**			50	150	03/23/2022	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	**107**	**2**		50	150	03/23/2022	DLC
2,2-Dichloropropane - BS	EPA-8260	**107**			50	150	03/23/2022	DLC
2,2-Dichloropropane - BSD	EPA-8260	**104**	**3**		50	150	03/23/2022	DLC
Bromochloromethane - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
Bromochloromethane - BSD	EPA-8260	**106**	**2**		50	150	03/23/2022	DLC
Chloroform - BS	EPA-8260	**103**			50	150	03/23/2022	DLC
Chloroform - BSD	EPA-8260	**104**	**2**		50	150	03/23/2022	DLC
1,1,1-Trichloroethane - BS	EPA-8260	**107**			50	150	03/23/2022	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	**108**	**1**		50	150	03/23/2022	DLC
1,1-Dichloropropene - BS	EPA-8260	**113**			50	150	03/23/2022	DLC
1,1-Dichloropropene - BSD	EPA-8260	**111**	**2**		50	150	03/23/2022	DLC
1,2-Dichloroethane - BS	EPA-8260	**106**			50	150	03/23/2022	DLC
1,2-Dichloroethane - BSD	EPA-8260	**105**	**1**		50	150	03/23/2022	DLC
Benzene - BS	EPA-8260	**106**			75	138	03/23/2022	DLC
Benzene - BSD	EPA-8260	**106**	**0**		75	138	03/23/2022	DLC
Trichloroethene - BS	EPA-8260	**106**			75	136	03/23/2022	DLC
Trichloroethene - BSD	EPA-8260	**106**	**0**		75	136	03/23/2022	DLC
1,2-Dichloropropane - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
1,2-Dichloropropane - BSD	EPA-8260	**108**	**0**		50	150	03/23/2022	DLC
Dibromomethane - BS	EPA-8260	**102**			50	150	03/23/2022	DLC
Dibromomethane - BSD	EPA-8260	**97.6**	**4**		50	150	03/23/2022	DLC
Bromodichloromethane - BS	EPA-8260	**110**			50	150	03/23/2022	DLC
Bromodichloromethane - BSD	EPA-8260	**110**	**0**		50	150	03/23/2022	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	**108**	**0**		50	150	03/23/2022	DLC
4-Methyl-2-Pentanone - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
4-Methyl-2-Pentanone - BSD	EPA-8260	**109**	**0**		50	150	03/23/2022	DLC
Toluene - BS	EPA-8260	**102**			71.6	122.1	03/23/2022	DLC
Toluene - BSD	EPA-8260	**103**	**0**		71.6	122.1	03/23/2022	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	**109**	**0**		50	150	03/23/2022	DLC
1,1,2-Trichloroethane - BS	EPA-8260	**105**			50	150	03/23/2022	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	**105**	**1**		50	150	03/23/2022	DLC
2-Hexanone - BS	EPA-8260	**104**			50	150	03/23/2022	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
2-Hexanone - BSD	EPA-8260	**105**	**1**		50	150	03/23/2022	DLC
1,3-Dichloropropane - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
1,3-Dichloropropane - BSD	EPA-8260	**106**	**2**		50	150	03/23/2022	DLC
Tetrachloroethylene - BS	EPA-8260	**107**			50	150	03/23/2022	DLC
Tetrachloroethylene - BSD	EPA-8260	**111**	**4**		50	150	03/23/2022	DLC
Dibromochloromethane - BS	EPA-8260	**97.6**			50	150	03/23/2022	DLC
Dibromochloromethane - BSD	EPA-8260	**98.6**	**1**		50	150	03/23/2022	DLC
1,2-Dibromoethane - BS	EPA-8260	**111**			50	150	03/23/2022	DLC
1,2-Dibromoethane - BSD	EPA-8260	**113**	**1**		50	150	03/23/2022	DLC
Chlorobenzene - BS	EPA-8260	**105**			79	128	03/23/2022	DLC
Chlorobenzene - BSD	EPA-8260	**106**	**1**		79	128	03/23/2022	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	**104**			50	150	03/23/2022	DLC
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	**108**	**3**		50	150	03/23/2022	DLC
Ethylbenzene - BS	EPA-8260	**106**			50	150	03/23/2022	DLC
Ethylbenzene - BSD	EPA-8260	**108**	**1**		50	150	03/23/2022	DLC
Styrene - BS	EPA-8260	**103**			50	150	03/23/2022	DLC
Styrene - BSD	EPA-8260	**104**	**1**		50	150	03/23/2022	DLC
Bromoform - BS	EPA-8260	**104**			50	150	03/23/2022	DLC
Bromoform - BSD	EPA-8260	**107**	**3**		50	150	03/23/2022	DLC
Isopropylbenzene - BS	EPA-8260	**102**			50	150	03/23/2022	DLC
Isopropylbenzene - BSD	EPA-8260	**104**	**2**		50	150	03/23/2022	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	**114**			50	150	03/23/2022	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	**111**	**2**		50	150	03/23/2022	DLC
1,2,3-Trichloropropane - BS	EPA-8260	**111**			50	150	03/23/2022	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	**109**	**2**		50	150	03/23/2022	DLC
Bromobenzene - BS	EPA-8260	**107**			50	150	03/23/2022	DLC
Bromobenzene - BSD	EPA-8260	**105**	**2**		50	150	03/23/2022	DLC
N-Propyl Benzene - BS	EPA-8260	**105**			50	150	03/23/2022	DLC
N-Propyl Benzene - BSD	EPA-8260	**104**	**2**		50	150	03/23/2022	DLC
2-Chlorotoluene - BS	EPA-8260	**105**			50	150	03/23/2022	DLC
2-Chlorotoluene - BSD	EPA-8260	**102**	**2**		50	150	03/23/2022	DLC
1,3,5-Trimethylbenzene - BS	EPA-8260	**106**			50	150	03/23/2022	DLC
1,3,5-Trimethylbenzene - BSD	EPA-8260	**105**	**1**		50	150	03/23/2022	DLC
4-Chlorotoluene - BS	EPA-8260	**109**			50	150	03/23/2022	DLC
4-Chlorotoluene - BSD	EPA-8260	**107**	**1**		50	150	03/23/2022	DLC
T-Butyl Benzene - BS	EPA-8260	**112**			50	150	03/23/2022	DLC
T-Butyl Benzene - BSD	EPA-8260	**112**	**0**		50	150	03/23/2022	DLC
1,2,4-Trimethylbenzene - BS	EPA-8260	**107**			50	150	03/23/2022	DLC
1,2,4-Trimethylbenzene - BSD	EPA-8260	**105**	**2**		50	150	03/23/2022	DLC
S-Butyl Benzene - BS	EPA-8260	**112**			50	150	03/23/2022	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: GHD Services
9725 - 3rd Ave NE, Suite 204
Seattle, WA 98115

CLIENT CONTACT: Arthur Clauss
CLIENT PROJECT: 12576484

DATE: 3/24/2022
ALS SDG#: EV22030122
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
S-Butyl Benzene - BSD	EPA-8260	**109**	**2**		50	150	03/23/2022	DLC
P-Isopropyltoluene - BS	EPA-8260	**109**			50	150	03/23/2022	DLC
P-Isopropyltoluene - BSD	EPA-8260	**106**	**3**		50	150	03/23/2022	DLC
1,3-Dichlorobenzene - BS	EPA-8260	**112**			50	150	03/23/2022	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	**110**	**2**		50	150	03/23/2022	DLC
1,4-Dichlorobenzene - BS	EPA-8260	**106**			50	150	03/23/2022	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	**103**	**3**		50	150	03/23/2022	DLC
N-Butylbenzene - BS	EPA-8260	**108**			50	150	03/23/2022	DLC
N-Butylbenzene - BSD	EPA-8260	**105**	**3**		50	150	03/23/2022	DLC
1,2-Dichlorobenzene - BS	EPA-8260	**110**			50	150	03/23/2022	DLC
1,2-Dichlorobenzene - BSD	EPA-8260	**105**	**4**		50	150	03/23/2022	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	**118**			50	150	03/23/2022	DLC
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	**115**	**3**		50	150	03/23/2022	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	**109**			50	150	03/23/2022	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	**105**	**4**		50	150	03/23/2022	DLC
Hexachlorobutadiene - BS	EPA-8260	**106**			50	150	03/23/2022	DLC
Hexachlorobutadiene - BSD	EPA-8260	**103**	**3**		50	150	03/23/2022	DLC
Naphthalene - BS	EPA-8260	**112**			50	150	03/23/2022	DLC
Naphthalene - BSD	EPA-8260	**110**	**1**		50	150	03/23/2022	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	**112**			50	150	03/23/2022	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	**108**	**3**		50	150	03/23/2022	DLC

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV22030122

Date 3.16.22 Page 1 Of 1

PROJECT ID:	125764484
REPORT TO COMPANY:	GHD
PROJECT MANAGER:	Arthur Clauss
ADDRESS:	9725 3rd Ave NE Seattle, WA 98115
PHONE:	206 643 2451 P.O. #:
E-MAIL:	Arthur.Clauss@GHD.com
INVOICE TO COMPANY:	GHD
ATTENTION:	
ADDRESS:	

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8260 ☒ / BTEX by EPA 8021 ☐	MTBE by EPA 8260 ☐ / MTBE by EPA 8021 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ / Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ / RCRA-8 ☐ / Pri Pol ☐ / TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ / VOA ☐ / Semi-Vol ☐ / Pest ☐ / Herbs ☐	Naphthalene								NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 50·125764484·031422-NA·VP1-5	3-14-22	1500	G	1		X	X	X			X									X								5	
2. 031522 MW13-6 VP2-4	3-15-22	0840	↓	2		X	X	X			X									X								↓	
3.		0950		3		X	X	X			X									X									
4.																													
5.																													
6.																													
7.																													
8.																													
9.																													
10.																													

SPECIAL INSTRUCTIONS SSOW #: 11226610.2021.02

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: N. Alamuyska GHD 3.17.22 NA 1457 ~~1600~~
   Received By: Shuttle ALS 3/17/22 1457
2. Relinquished By: _____
   Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: (10 Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: (5 Standard) 3 1 SAME DAY

OTHER: Specify: _____

*Turnaround request less than standard may incur Rush Charges

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-81340-1
Client Project/Site: Geiger Corrections

For:
GHD Services Inc.
9725 3rd Avenue NE, Suite 204
Seattle, Washington 98115

Attn: Arthur Clauss

Authorized for release by:
5/4/2022 2:34:07 PM

Megan Moeller, Client Services Manager
(717)556-7261
Megan.Moeller@et.eurofinsus.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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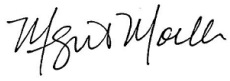

Megan Moeller
Client Services Manager
5/4/2022 2:34:07 PM

Table of Contents

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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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

Case Narrative

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

Job ID: 410-81340-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-81340-1

Receipt
The samples were received on 4/23/2022 10:11 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

Receipt Exceptions
The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC):
WG-12576484-042022-DUP1 (410-81340-7)

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

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

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

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

Detection Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

Client Sample ID: WG-12576484-042022-LP-MW11 — Lab Sample ID: 410-81340-1

No Detections.

Client Sample ID: WG-12576484-042022-NA-MW12 — Lab Sample ID: 410-81340-2

No Detections.

Client Sample ID: WG-12576484-042022-LP-MW13 — Lab Sample ID: 410-81340-3

No Detections.

Client Sample ID: WG-12576484-042022-LP-MW2 — Lab Sample ID: 410-81340-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	940		250		ug/L	1		NWTPH-Gx	Total/NA
C12-C24	570		100		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: WG-12576484-042022-NA-MW5D — Lab Sample ID: 410-81340-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C12-C24	130		100		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: WG-12576484-042022-NA-MW7 — Lab Sample ID: 410-81340-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C12-C24	140		100		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: WG-12576484-042022-DUP1 — Lab Sample ID: 410-81340-7

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 410-81340-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: WG-12576484-042022-LP-MW11

Lab Sample ID: 410-81340-1

Date Collected: 04/20/22 17:07

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 11:38	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 11:38	1
Toluene	<1.0		1.0		ug/L			05/02/22 11:38	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*05/02/22 11:38*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/02/22 11:38*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*05/02/22 11:38*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 11:38*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*93*		*50 - 150*		*04/26/22 13:10*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		05/01/22 14:00	05/02/22 12:54	1
C24-C40	<250		250		ug/L		05/01/22 14:00	05/02/22 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*83*		*50 - 150*	*05/01/22 14:00*	*05/02/22 12:54*	*1*

Client Sample ID: WG-12576484-042022-NA-MW12

Lab Sample ID: 410-81340-2

Date Collected: 04/20/22 09:19

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 12:00	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 12:00	1
Toluene	<1.0		1.0		ug/L			05/02/22 12:00	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*05/02/22 12:00*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*05/02/22 12:00*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*05/02/22 12:00*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 12:00*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*95*		*50 - 150*		*04/26/22 13:34*	*1*

Client Sample ID: WG-12576484-042022-NA-MW12

Lab Sample ID: 410-81340-2

Date Collected: 04/20/22 09:19

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		05/01/22 14:00	05/02/22 13:17	1
C24-C40	<260		260		ug/L		05/01/22 14:00	05/02/22 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*82*		*50 - 150*	*05/01/22 14:00*	*05/02/22 13:17*	*1*

Client Sample ID: WG-12576484-042022-LP-MW13

Lab Sample ID: 410-81340-3

Date Collected: 04/20/22 15:25

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 12:22	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 12:22	1
Toluene	<1.0		1.0		ug/L			05/02/22 12:22	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*05/02/22 12:22*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/02/22 12:22*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*05/02/22 12:22*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 12:22*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*94*		*50 - 150*		*04/26/22 13:57*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		05/03/22 09:44	05/03/22 22:17	1
C24-C40	<250		250		ug/L		05/03/22 09:44	05/03/22 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*86*		*50 - 150*	*05/03/22 09:44*	*05/03/22 22:17*	*1*

Client Sample ID: WG-12576484-042022-LP-MW2

Lab Sample ID: 410-81340-4

Date Collected: 04/20/22 12:05

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 12:44	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 12:44	1
Toluene	<1.0		1.0		ug/L			05/02/22 12:44	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*05/02/22 12:44*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/02/22 12:44*	*1*

Client Sample ID: WG-12576484-042022-LP-MW2

Lab Sample ID: 410-81340-4

Date Collected: 04/20/22 12:05
Date Received: 04/23/22 10:11

Matrix: Groundwater

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*05/02/22 12:44*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/02/22 12:44*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**940**		250	ug/L			04/26/22 14:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	*93*		*50 - 150*		*04/26/22 14:21*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**570**		100	ug/L		05/03/22 09:44	05/03/22 22:40	1
C24-C40	<250		250	ug/L		05/03/22 09:44	05/03/22 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*83*		*50 - 150*	*05/03/22 09:44*	*05/03/22 22:40*	*1*

Client Sample ID: WG-12576484-042022-NA-MW5D

Lab Sample ID: 410-81340-5

Date Collected: 04/20/22 11:13
Date Received: 04/23/22 10:11

Matrix: Groundwater

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			05/02/22 13:06	1
Ethylbenzene	<1.0		1.0	ug/L			05/02/22 13:06	1
Toluene	<1.0		1.0	ug/L			05/02/22 13:06	1
Xylenes, Total	<1.0		1.0	ug/L			05/02/22 13:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*05/02/22 13:06*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/02/22 13:06*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*05/02/22 13:06*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 13:06*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250	ug/L			04/26/22 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	*95*		*50 - 150*		*04/26/22 14:45*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**130**		100	ug/L		05/03/22 09:44	05/03/22 23:02	1
C24-C40	<250		250	ug/L		05/03/22 09:44	05/03/22 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*87*		*50 - 150*	*05/03/22 09:44*	*05/03/22 23:02*	*1*

Client Sample ID: WG-12576484-042022-NA-MW7

Lab Sample ID: 410-81340-6

Date Collected: 04/20/22 12:20

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 13:28	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 13:28	1
Toluene	<1.0		1.0		ug/L			05/02/22 13:28	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*05/02/22 13:28*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/02/22 13:28*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*05/02/22 13:28*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 13:28*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*94*		*50 - 150*		*04/26/22 15:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**140**		100		ug/L		05/03/22 09:44	05/03/22 23:25	1
C24-C40	<260		260		ug/L		05/03/22 09:44	05/03/22 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*85*		*50 - 150*	*05/03/22 09:44*	*05/03/22 23:25*	*1*

Client Sample ID: WG-12576484-042022-DUP1

Lab Sample ID: 410-81340-7

Date Collected: 04/20/22 00:00

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 13:50	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 13:50	1
Toluene	<1.0		1.0		ug/L			05/02/22 13:50	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*05/02/22 13:50*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/02/22 13:50*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*05/02/22 13:50*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 13:50*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*88*		*50 - 150*		*04/26/22 15:32*	*1*

Client Sample ID: WG-12576484-042022-DUP1

Lab Sample ID: 410-81340-7

Date Collected: 04/20/22 00:00

Matrix: Groundwater

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		05/03/22 09:44	05/03/22 23:48	1
C24-C40	<260		260		ug/L		05/03/22 09:44	05/03/22 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*80*		*50 - 150*	*05/03/22 09:44*	*05/03/22 23:48*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 410-81340-8

Date Collected: 04/20/22 00:00

Matrix: Water

Date Received: 04/23/22 10:11

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 11:16	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 11:16	1
Toluene	<1.0		1.0		ug/L			05/02/22 11:16	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 11:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*05/02/22 11:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/02/22 11:16*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*05/02/22 11:16*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/02/22 11:16*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*94*		*50 - 150*		*04/26/22 12:46*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

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

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-81340-1	WG-12576484-042022-LP-MW11	100	97	100	98
410-81340-2	WG-12576484-042022-NA-MW12	100	96	102	98
410-81340-3	WG-12576484-042022-LP-MW13	103	97	102	98
410-81340-4	WG-12576484-042022-LP-MW2	101	98	101	96
410-81340-5	WG-12576484-042022-NA-MW5D	102	99	101	98
410-81340-6	WG-12576484-042022-NA-MW7	100	97	102	98
410-81340-7	WG-12576484-042022-DUP1	100	98	100	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-81340-8	Trip Blank	99	99	99	98
LCS 410-250475/4	Lab Control Sample	99	100	99	99
LCSD 410-250475/5	Lab Control Sample Dup	99	99	96	100
MB 410-250475/7	Method Blank	101	99	100	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
410-81340-1	WG-12576484-042022-LP-MW11	93
410-81340-2	WG-12576484-042022-NA-MW12	95
410-81340-3	WG-12576484-042022-LP-MW13	94
410-81340-4	WG-12576484-042022-LP-MW2	93
410-81340-5	WG-12576484-042022-NA-MW5D	95
410-81340-6	WG-12576484-042022-NA-MW7	94
410-81340-7	WG-12576484-042022-DUP1	88

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
410-81340-8	Trip Blank	94
LCS 410-248406/5	Lab Control Sample	99
LCSD 410-248406/6	Lab Control Sample Dup	97
MB 410-248406/4	Method Blank	94

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

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

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTP
Lab Sample ID	Client Sample ID	(50-150)
410-81340-1	WG-12576484-042022-LP-MW11	83
410-81340-2	WG-12576484-042022-NA-MW 12	82
410-81340-3	WG-12576484-042022-LP-MW 13	86
410-81340-4	WG-12576484-042022-LP-MW 2	83
410-81340-5	WG-12576484-042022-NA-MW 5D	87
410-81340-6	WG-12576484-042022-NA-MW 7	85
410-81340-7	WG-12576484-042022-DUP1	80
410-81340-7 DU	WG-12576484-042022-DUP1	78

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTP
Lab Sample ID	Client Sample ID	(50-150)
LCS 410-250359/2-A	Lab Control Sample	76
LCS 410-250937/2-A	Lab Control Sample	88
LCSD 410-250359/3-A	Lab Control Sample Dup	72
LCSD 410-250937/3-A	Lab Control Sample Dup	88
MB 410-250359/1-A	Method Blank	73
MB 410-250937/1-A	Method Blank	78

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Lab Sample ID: MB 410-250475/7
Matrix: Water
Analysis Batch: 250475

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/02/22 10:46	1
Ethylbenzene	<1.0		1.0		ug/L			05/02/22 10:46	1
Toluene	<1.0		1.0		ug/L			05/02/22 10:46	1
Xylenes, Total	<1.0		1.0		ug/L			05/02/22 10:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*05/02/22 10:46*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/02/22 10:46*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*05/02/22 10:46*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/02/22 10:46*	*1*

Lab Sample ID: LCS 410-250475/4
Matrix: Water
Analysis Batch: 250475

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.0	18.5		ug/L		92	80 - 120		
Ethylbenzene			20.0	18.7		ug/L		94	80 - 120		
Toluene			20.0	18.2		ug/L		91	80 - 120		
Xylenes, Total			60.0	56.5		ug/L		94	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCSD 410-250475/5
Matrix: Water
Analysis Batch: 250475

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
Benzene			20.0	18.2		ug/L		91	80 - 120	1	30
Ethylbenzene			20.0	18.5		ug/L		93	80 - 120	1	30
Toluene			20.0	18.1		ug/L		90	80 - 120	1	30
Xylenes, Total			60.0	56.1		ug/L		94	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-248406/4
Matrix: Water
Analysis Batch: 248406

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			04/26/22 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*94*		*50 - 150*		*04/26/22 11:35*	*1*

Lab Sample ID: LCS 410-248406/5
Matrix: Water
Analysis Batch: 248406

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)			1100	1170		ug/L		106	64 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*99*		*50 - 150*

Lab Sample ID: LCSD 410-248406/6
Matrix: Water
Analysis Batch: 248406

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
C7-C12 (1C)			1100	1140		ug/L		104	64 - 131	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*97*		*50 - 150*

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

Lab Sample ID: MB 410-250359/1-A
Matrix: Water
Analysis Batch: 250569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250359

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		05/01/22 14:00	05/02/22 11:45	1
C24-C40	<250		250		ug/L		05/01/22 14:00	05/02/22 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*73*		*50 - 150*	*05/01/22 14:00*	*05/02/22 11:45*	*1*

Lab Sample ID: LCS 410-250359/2-A
Matrix: Water
Analysis Batch: 250569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250359

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24			600	254		ug/L		42	14 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o- terphenyl (Surr)	*76*		*50 - 150*

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

Lab Sample ID: LCSD 410-250359/3-A
Matrix: Water
Analysis Batch: 250569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250359

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24			600	287		ug/L		48	14 - 115	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o- terphenyl (Surr)	*72*		*50 - 150*

Lab Sample ID: MB 410-250937/1-A
Matrix: Water
Analysis Batch: 251214

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250937

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		05/03/22 09:44	05/03/22 21:09	1
C24-C40	<250		250		ug/L		05/03/22 09:44	05/03/22 21:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*78*		*50 - 150*	*05/03/22 09:44*	*05/03/22 21:09*	*1*

Lab Sample ID: LCS 410-250937/2-A
Matrix: Water
Analysis Batch: 251214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250937

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24			600	274		ug/L		46	14 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o- terphenyl (Surr)	*88*		*50 - 150*

Lab Sample ID: LCSD 410-250937/3-A
Matrix: Water
Analysis Batch: 251214

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250937

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24			600	270		ug/L		45	14 - 115	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o- terphenyl (Surr)	*88*		*50 - 150*

Lab Sample ID: 410-81340-7 DU
Matrix: Groundwater
Analysis Batch: 251214

Client Sample ID: WG-12576484-042022-DUP1
Prep Type: Total/NA
Prep Batch: 250937

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C12-C24	<100			<110		ug/L				NC	20
C24-C40	<260			<260		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o- terphenyl (Surr)	*78*		*50 - 150*

GC/MS VOA

Analysis Batch: 250475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-1	WG-12576484-042022-LP-MW11	Total/NA	Groundwater	8260C	
410-81340-2	WG-12576484-042022-NA-MW12	Total/NA	Groundwater	8260C	
410-81340-3	WG-12576484-042022-LP-MW13	Total/NA	Groundwater	8260C	
410-81340-4	WG-12576484-042022-LP-MW2	Total/NA	Groundwater	8260C	
410-81340-5	WG-12576484-042022-NA-MW5D	Total/NA	Groundwater	8260C	
410-81340-6	WG-12576484-042022-NA-MW7	Total/NA	Groundwater	8260C	
410-81340-7	WG-12576484-042022-DUP1	Total/NA	Groundwater	8260C	
410-81340-8	Trip Blank	Total/NA	Water	8260C	
MB 410-250475/7	Method Blank	Total/NA	Water	8260C	
LCS 410-250475/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 410-250475/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 248406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-1	WG-12576484-042022-LP-MW11	Total/NA	Groundwater	NWTPH-Gx	
410-81340-2	WG-12576484-042022-NA-MW12	Total/NA	Groundwater	NWTPH-Gx	
410-81340-3	WG-12576484-042022-LP-MW13	Total/NA	Groundwater	NWTPH-Gx	
410-81340-4	WG-12576484-042022-LP-MW2	Total/NA	Groundwater	NWTPH-Gx	
410-81340-5	WG-12576484-042022-NA-MW5D	Total/NA	Groundwater	NWTPH-Gx	
410-81340-6	WG-12576484-042022-NA-MW7	Total/NA	Groundwater	NWTPH-Gx	
410-81340-7	WG-12576484-042022-DUP1	Total/NA	Groundwater	NWTPH-Gx	
410-81340-8	Trip Blank	Total/NA	Water	NWTPH-Gx	
MB 410-248406/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-248406/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-248406/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 250359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-1	WG-12576484-042022-LP-MW11	Total/NA	Groundwater	3510C	
410-81340-2	WG-12576484-042022-NA-MW12	Total/NA	Groundwater	3510C	
MB 410-250359/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-250359/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-250359/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 250569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-1	WG-12576484-042022-LP-MW11	Total/NA	Groundwater	NWTPH-Dx	250359
410-81340-2	WG-12576484-042022-NA-MW12	Total/NA	Groundwater	NWTPH-Dx	250359
MB 410-250359/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	250359
LCS 410-250359/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	250359
LCSD 410-250359/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	250359

Prep Batch: 250937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-3	WG-12576484-042022-LP-MW13	Total/NA	Groundwater	3510C	
410-81340-4	WG-12576484-042022-LP-MW2	Total/NA	Groundwater	3510C	
410-81340-5	WG-12576484-042022-NA-MW5D	Total/NA	Groundwater	3510C	
410-81340-6	WG-12576484-042022-NA-MW7	Total/NA	Groundwater	3510C	

GC Semi VOA (Continued)

Prep Batch: 250937 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-7	WG-12576484-042022-DUP1	Total/NA	Groundwater	3510C	
MB 410-250937/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-250937/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-250937/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-81340-7 DU	WG-12576484-042022-DUP1	Total/NA	Groundwater	3510C	

Analysis Batch: 251214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-81340-3	WG-12576484-042022-LP-MW13	Total/NA	Groundwater	NWTPH-Dx	250937
410-81340-4	WG-12576484-042022-LP-MW2	Total/NA	Groundwater	NWTPH-Dx	250937
410-81340-5	WG-12576484-042022-NA-MW5D	Total/NA	Groundwater	NWTPH-Dx	250937
410-81340-6	WG-12576484-042022-NA-MW7	Total/NA	Groundwater	NWTPH-Dx	250937
410-81340-7	WG-12576484-042022-DUP1	Total/NA	Groundwater	NWTPH-Dx	250937
MB 410-250937/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	250937
LCS 410-250937/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	250937
LCSD 410-250937/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	250937
410-81340-7 DU	WG-12576484-042022-DUP1	Total/NA	Groundwater	NWTPH-Dx	250937

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

Client Sample ID: WG-12576484-042022-LP-MW11

Lab Sample ID: 410-81340-1

Date Collected: 04/20/22 17:07

Matrix: Groundwater

Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 11:38	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 13:10	JJT8	ELLE
Total/NA	Prep	3510C			250359	05/01/22 14:00	L2TS	ELLE
Total/NA	Analysis	NWTPH-Dx		1	250569	05/02/22 12:54	UHEW	ELLE

Client Sample ID: WG-12576484-042022-NA-MW12

Lab Sample ID: 410-81340-2

Date Collected: 04/20/22 09:19

Matrix: Groundwater

Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 12:00	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 13:34	JJT8	ELLE
Total/NA	Prep	3510C			250359	05/01/22 14:00	L2TS	ELLE
Total/NA	Analysis	NWTPH-Dx		1	250569	05/02/22 13:17	UHEW	ELLE

Client Sample ID: WG-12576484-042022-LP-MW13

Lab Sample ID: 410-81340-3

Date Collected: 04/20/22 15:25

Matrix: Groundwater

Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 12:22	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 13:57	JJT8	ELLE
Total/NA	Prep	3510C			250937	05/03/22 09:44	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	251214	05/03/22 22:17	KP5X	ELLE

Client Sample ID: WG-12576484-042022-LP-MW2

Lab Sample ID: 410-81340-4

Date Collected: 04/20/22 12:05

Matrix: Groundwater

Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 12:44	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 14:21	JJT8	ELLE
Total/NA	Prep	3510C			250937	05/03/22 09:44	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	251214	05/03/22 22:40	KP5X	ELLE

Client Sample ID: WG-12576484-042022-NA-MW5D

Lab Sample ID: 410-81340-5

Date Collected: 04/20/22 11:13

Matrix: Groundwater

Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 13:06	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 14:45	JJT8	ELLE
Total/NA	Prep	3510C			250937	05/03/22 09:44	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	251214	05/03/22 23:02	KP5X	ELLE

Lab Chronicle

Client: GHD Services Inc.
Job ID: 410-81340-1
Project/Site: Geiger Corrections

Client Sample ID: WG-12576484-042022-NA-MW7
Lab Sample ID: 410-81340-6
Date Collected: 04/20/22 12:20
Matrix: Groundwater
Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 13:28	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 15:08	JJT8	ELLE
Total/NA	Prep	3510C			250937	05/03/22 09:44	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	251214	05/03/22 23:25	KP5X	ELLE

Client Sample ID: WG-12576484-042022-DUP1
Lab Sample ID: 410-81340-7
Date Collected: 04/20/22 00:00
Matrix: Groundwater
Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 13:50	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 15:32	JJT8	ELLE
Total/NA	Prep	3510C			250937	05/03/22 09:44	XPN5	ELLE
Total/NA	Analysis	NWTPH-Dx		1	251214	05/03/22 23:48	KP5X	ELLE

Client Sample ID: Trip Blank
Lab Sample ID: 410-81340-8
Date Collected: 04/20/22 00:00
Matrix: Water
Date Received: 04/23/22 10:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250475	05/02/22 11:16	TQ4J	ELLE
Total/NA	Analysis	NWTPH-Gx		1	248406	04/26/22 12:46	JJT8	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 410-81340-1
Project/Site: Geiger Corrections

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-23

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
8260C		Groundwater	Benzene
8260C		Groundwater	Ethylbenzene
8260C		Groundwater	Toluene
8260C		Groundwater	Xylenes, Total
8260C		Water	Benzene
8260C		Water	Ethylbenzene
8260C		Water	Toluene
8260C		Water	Xylenes, Total

Method Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ELLE
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ELLE
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-81340-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-81340-1	WG-12576484-042022-LP-MW11	Groundwater	04/20/22 17:07	04/23/22 10:11
410-81340-2	WG-12576484-042022-NA-MW12	Groundwater	04/20/22 09:19	04/23/22 10:11
410-81340-3	WG-12576484-042022-LP-MW13	Groundwater	04/20/22 15:25	04/23/22 10:11
410-81340-4	WG-12576484-042022-LP-MW2	Groundwater	04/20/22 12:05	04/23/22 10:11
410-81340-5	WG-12576484-042022-NA-MW5D	Groundwater	04/20/22 11:13	04/23/22 10:11
410-81340-6	WG-12576484-042022-NA-MW7	Groundwater	04/20/22 12:20	04/23/22 10:11
410-81340-7	WG-12576484-042022-DUP1	Groundwater	04/20/22 00:00	04/23/22 10:11
410-81340-8	Trip Blank	Water	04/20/22 00:00	04/23/22 10:11

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

410-81340 Chain of Custody

Environment Testing America

Client Information	Sampler: Nick Adamowski	Lab PM: Moeller, Megan		9.1
Client Contact: Arthur Clauss	Phone: 248-860-0803	E-Mail: Megan.Moeller@et.eurofinsus.com	State of Origin: WA	Page 1 of 1
Company: GHD Services Inc.	PWSID:			Job #: 12576484
Address: 9725 3rd Avenue NE, Suite 204	Due Date Requested:			
City: Seattle	TAT Requested (days): Standard			
State, Zip: WA, 98115	Compliance Project: Δ Yes Δ No			
Phone:	PO #: See SSOW in Docs			
Email: arthur.clauss@ghd.com	WO #:			
Project Name: Geiger Corrections	Project #: 41001970			
Site: Geiger Corrections	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)	NWTPH-Dx	8260C-BTEX Volatiles (TMB only)	NWTPH-Gx										Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	A											
WG-12576484-042022-LP-MW11	4/20/2022	1707	G	Water			X	X	X										8	
WG-12576484-042022-NA-MW12		0914					X	X	X										8	
WG-12576484-042022-LP-MW13		1525					X	X	X										8	
WG-12576484-042022-LP-MW2		1205					X	X	X										8	
WG-12576484-042022-NA-MW5D		1113					X	X	X										8	
WG-12576484-042022-NA-MW7		1220					X	X	X										8	

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
Luca Pisciotello	4/21/2022 1700	GHD			
				4/23/22 1011	GMT

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 410-81340-1

Login Number: 81340
List Number: 1
Creator: Hess, Anna

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

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.	False	Received extra samples not listed on COC.
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?	True	
Sample custody seals are intact.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Arthur Clauss
GHD Services Inc.
9725 3rd Avenue NE, Suite 204
Seattle, Washington 98115

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JOB DESCRIPTION

Geiger Corrections

JOB NUMBER

410-108468-1

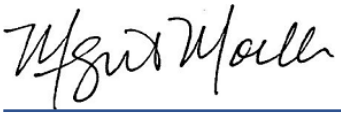
Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Megan Moeller, Client Services Manager
Megan.Moeller@et.eurofinsus.com
(717)556-7261

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

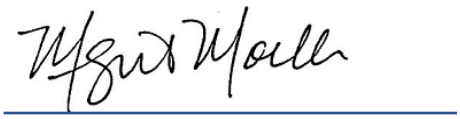

Table of Contents

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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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

Job ID: 410-108468-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-108468-1

Receipt
The samples were received on 12/8/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

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

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

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

Detection Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

Client Sample ID: TB-1 — Lab Sample ID: 410-108468-1

No Detections.

Client Sample ID: MW-2 — Lab Sample ID: 410-108468-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	830		250		ug/L	1		NWTPH-Gx	Total/NA
C12-C24	690		120		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-5D — Lab Sample ID: 410-108468-3

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 410-108468-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C12-C24	630		120		ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 410-108468-5

No Detections.

Client Sample ID: MW-13 — Lab Sample ID: 410-108468-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-1

Lab Sample ID: 410-108468-1

Date Collected: 12/07/22 09:00

Matrix: Water

Date Received: 12/08/22 10:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/19/22 23:00	1
Ethylbenzene	<1.0		1.0		ug/L			12/19/22 23:00	1
Toluene	<1.0		1.0		ug/L			12/19/22 23:00	1
Xylenes, Total	<1.0		1.0		ug/L			12/19/22 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*12/19/22 23:00*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*12/19/22 23:00*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/19/22 23:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/19/22 23:00*	*1*

Client Sample ID: MW-2

Lab Sample ID: 410-108468-2

Date Collected: 12/07/22 13:51

Matrix: Groundwater

Date Received: 12/08/22 10:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/20/22 00:58	1
Ethylbenzene	<1.0		1.0		ug/L			12/20/22 00:58	1
Toluene	<1.0		1.0		ug/L			12/20/22 00:58	1
Xylenes, Total	<1.0		1.0		ug/L			12/20/22 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/20/22 00:58*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*12/20/22 00:58*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/20/22 00:58*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/20/22 00:58*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**830**		250		ug/L			12/13/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*101*		*50 - 150*		*12/13/22 20:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**690**		120		ug/L		12/19/22 15:49	12/20/22 05:49	1
C24-C40	<290		290		ug/L		12/19/22 15:49	12/20/22 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*95*		*50 - 150*	*12/19/22 15:49*	*12/20/22 05:49*	*1*

Client Sample ID: MW-5D

Lab Sample ID: 410-108468-3

Date Collected: 12/07/22 12:32

Matrix: Groundwater

Date Received: 12/08/22 10:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/20/22 01:18	1
Ethylbenzene	<1.0		1.0		ug/L			12/20/22 01:18	1
Toluene	<1.0		1.0		ug/L			12/20/22 01:18	1

Client Sample ID: MW-5D

Date Collected: 12/07/22 12:32
Date Received: 12/08/22 10:00

Lab Sample ID: 410-108468-3

Matrix: Groundwater

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<1.0		1.0		ug/L			12/20/22 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/20/22 01:18*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*12/20/22 01:18*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/20/22 01:18*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/20/22 01:18*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			12/13/22 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*101*		*50 - 150*		*12/13/22 21:11*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<110		110		ug/L		12/19/22 15:49	12/20/22 06:11	1
C24-C40	<270		270		ug/L		12/19/22 15:49	12/20/22 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*85*		*50 - 150*	*12/19/22 15:49*	*12/20/22 06:11*	*1*

Client Sample ID: MW-7

Date Collected: 12/07/22 11:46
Date Received: 12/08/22 10:00

Lab Sample ID: 410-108468-4

Matrix: Groundwater

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/20/22 01:38	1
Ethylbenzene	<1.0		1.0		ug/L			12/20/22 01:38	1
Toluene	<1.0		1.0		ug/L			12/20/22 01:38	1
Xylenes, Total	<1.0		1.0		ug/L			12/20/22 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/20/22 01:38*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*12/20/22 01:38*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*12/20/22 01:38*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/22 01:38*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			12/13/22 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*102*		*50 - 150*		*12/13/22 21:37*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**630**		120		ug/L		12/19/22 15:49	12/20/22 06:57	1
C24-C40	<300		300		ug/L		12/19/22 15:49	12/20/22 06:57	1

Client Sample ID: MW-7

Lab Sample ID: 410-108468-4

Date Collected: 12/07/22 11:46

Matrix: Groundwater

Date Received: 12/08/22 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*99*		*50 - 150*	*12/19/22 15:49*	*12/20/22 06:57*	*1*

Client Sample ID: MW-12

Lab Sample ID: 410-108468-5

Date Collected: 12/07/22 13:15

Matrix: Groundwater

Date Received: 12/08/22 10:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			12/20/22 01:57	1
Ethylbenzene	<1.0		1.0	ug/L			12/20/22 01:57	1
Toluene	<1.0		1.0	ug/L			12/20/22 01:57	1
Xylenes, Total	<1.0		1.0	ug/L			12/20/22 01:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*12/20/22 01:57*	*1*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*12/20/22 01:57*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*12/20/22 01:57*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/20/22 01:57*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250	ug/L			12/13/22 22:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	*101*		*50 - 150*		*12/13/22 22:03*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<110		110	ug/L		12/19/22 15:49	12/20/22 07:19	1
C24-C40	<280		280	ug/L		12/19/22 15:49	12/20/22 07:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*87*		*50 - 150*	*12/19/22 15:49*	*12/20/22 07:19*	*1*

Client Sample ID: MW-13

Lab Sample ID: 410-108468-6

Date Collected: 12/07/22 09:51

Matrix: Groundwater

Date Received: 12/08/22 10:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			12/20/22 02:17	1
Ethylbenzene	<1.0		1.0	ug/L			12/20/22 02:17	1
Toluene	<1.0		1.0	ug/L			12/20/22 02:17	1
Xylenes, Total	<1.0		1.0	ug/L			12/20/22 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*12/20/22 02:17*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*12/20/22 02:17*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/20/22 02:17*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/20/22 02:17*	*1*

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

Client Sample ID: MW-13
Date Collected: 12/07/22 09:51
Date Received: 12/08/22 10:00

Lab Sample ID: 410-108468-6
Matrix: Groundwater

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			12/13/22 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*101*		*50 - 150*		*12/13/22 22:29*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<120		120		ug/L		12/19/22 15:49	12/20/22 08:53	1
C24-C40	<290		290		ug/L		12/19/22 15:49	12/20/22 08:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*96*		*50 - 150*	*12/19/22 15:49*	*12/20/22 08:53*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

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

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-108468-2	MW-2	101	86	101	101
410-108468-3	MW-5D	104	86	101	102
410-108468-4	MW-7	103	89	103	105
410-108468-5	MW-12	100	87	102	101
410-108468-6	MW-13	96	88	101	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-108468-1	TB-1	100	89	101	101
LCS 410-328725/5	Lab Control Sample	98	88	101	99
MB 410-328725/7	Method Blank	102	88	103	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
410-108468-2	MW-2	101
410-108468-3	MW-5D	101
410-108468-4	MW-7	102
410-108468-5	MW-12	101
410-108468-6	MW-13	101

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
LCS 410-326692/5	Lab Control Sample	93
LCSD 410-326692/6	Lab Control Sample Dup	93
MB 410-326692/4	Method Blank	101

Surrogate Summary

Client: GHD Services Inc.
Job ID: 410-108468-1
Project/Site: Geiger Corrections

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

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

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTP (50-150)							
410-108468-2	MW-2	95							
410-108468-3	MW-5D	85							
410-108468-3 DU	MW-5D	97							
410-108468-4	MW-7	99							
410-108468-5	MW-12	87							
410-108468-6	MW-13	96							

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTP (50-150)							
LCS 410-328623/2-A	Lab Control Sample	79							
LCSD 410-328623/3-A	Lab Control Sample Dup	75							
MB 410-328623/1-A	Method Blank	88							

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Lab Sample ID: MB 410-328725/7
Matrix: Water
Analysis Batch: 328725

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/19/22 22:00	1
Ethylbenzene	<1.0		1.0		ug/L			12/19/22 22:00	1
Toluene	<1.0		1.0		ug/L			12/19/22 22:00	1
Xylenes, Total	<1.0		1.0		ug/L			12/19/22 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/19/22 22:00*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*12/19/22 22:00*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*12/19/22 22:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/19/22 22:00*	*1*

Lab Sample ID: LCS 410-328725/5
Matrix: Water
Analysis Batch: 328725

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.0	18.4		ug/L		92	80 - 120		
Ethylbenzene			20.0	19.7		ug/L		98	80 - 120		
Toluene			20.0	19.4		ug/L		97	80 - 120		
Xylenes, Total			60.0	61.5		ug/L		103	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 410-326692/4
Matrix: Water
Analysis Batch: 326692

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	<250		250		ug/L			12/13/22 19:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*101*		*50 - 150*		*12/13/22 19:02*	*1*

Lab Sample ID: LCS 410-326692/5
Matrix: Water
Analysis Batch: 326692

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C7-C12 (1C)			1100	938		ug/L		85	64 - 131		

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

Lab Sample ID: LCS 410-326692/5
Matrix: Water
Analysis Batch: 326692

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	93		50 - 150

Lab Sample ID: LCSD 410-326692/6
Matrix: Water
Analysis Batch: 326692

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
C7-C12 (1C)			1100	990		ug/L		90	64 - 131	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid) (1C)	93		50 - 150

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

Lab Sample ID: MB 410-328623/1-A
Matrix: Water
Analysis Batch: 328754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 328623

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	<100		100		ug/L		12/19/22 15:49	12/20/22 00:32	1
C24-C40	<250		250		ug/L		12/19/22 15:49	12/20/22 00:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	88		50 - 150	12/19/22 15:49	12/20/22 00:32	1

Lab Sample ID: LCS 410-328623/2-A
Matrix: Water
Analysis Batch: 328754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 328623

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C12-C24			600	209		ug/L		35	14 - 115		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o- terphenyl (Surr)	79		50 - 150

Lab Sample ID: LCSD 410-328623/3-A
Matrix: Water
Analysis Batch: 328754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 328623

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C12-C24			600	196		ug/L		33	14 - 115	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o- terphenyl (Surr)	75		50 - 150

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

Lab Sample ID: 410-108468-3 DU
Matrix: Groundwater
Analysis Batch: 328754

Client Sample ID: MW-5D
Prep Type: Total/NA
Prep Batch: 328623

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C12-C24	<110			<130		ug/L				19	20
C24-C40	<270			<320		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o- terphenyl (Surr)	*97*		*50 - 150*

QC Association Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

GC/MS VOA

Analysis Batch: 328725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-108468-1	TB-1	Total/NA	Water	8260C	
410-108468-2	MW-2	Total/NA	Groundwater	8260C	
410-108468-3	MW-5D	Total/NA	Groundwater	8260C	
410-108468-4	MW-7	Total/NA	Groundwater	8260C	
410-108468-5	MW-12	Total/NA	Groundwater	8260C	
410-108468-6	MW-13	Total/NA	Groundwater	8260C	
MB 410-328725/7	Method Blank	Total/NA	Water	8260C	
LCS 410-328725/5	Lab Control Sample	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 326692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-108468-2	MW-2	Total/NA	Groundwater	NWTPH-Gx	
410-108468-3	MW-5D	Total/NA	Groundwater	NWTPH-Gx	
410-108468-4	MW-7	Total/NA	Groundwater	NWTPH-Gx	
410-108468-5	MW-12	Total/NA	Groundwater	NWTPH-Gx	
410-108468-6	MW-13	Total/NA	Groundwater	NWTPH-Gx	
MB 410-326692/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-326692/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-326692/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 328623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-108468-2	MW-2	Total/NA	Groundwater	3510C	
410-108468-3	MW-5D	Total/NA	Groundwater	3510C	
410-108468-4	MW-7	Total/NA	Groundwater	3510C	
410-108468-5	MW-12	Total/NA	Groundwater	3510C	
410-108468-6	MW-13	Total/NA	Groundwater	3510C	
MB 410-328623/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-328623/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-328623/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-108468-3 DU	MW-5D	Total/NA	Groundwater	3510C	

Analysis Batch: 328754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-108468-2	MW-2	Total/NA	Groundwater	NWTPH-Dx	328623
410-108468-3	MW-5D	Total/NA	Groundwater	NWTPH-Dx	328623
410-108468-4	MW-7	Total/NA	Groundwater	NWTPH-Dx	328623
410-108468-5	MW-12	Total/NA	Groundwater	NWTPH-Dx	328623
410-108468-6	MW-13	Total/NA	Groundwater	NWTPH-Dx	328623
MB 410-328623/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	328623
LCS 410-328623/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	328623
LCSD 410-328623/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	328623
410-108468-3 DU	MW-5D	Total/NA	Groundwater	NWTPH-Dx	328623

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

Client Sample ID: TB-1

Lab Sample ID: 410-108468-1

Date Collected: 12/07/22 09:00

Matrix: Water

Date Received: 12/08/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	328725	K4WN	ELLE	12/19/22 23:00

Client Sample ID: MW-2

Lab Sample ID: 410-108468-2

Date Collected: 12/07/22 13:51

Matrix: Groundwater

Date Received: 12/08/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	328725	K4WN	ELLE	12/20/22 00:58
Total/NA	Analysis	NWTPH-Gx		1	326692	B9BF	ELLE	12/13/22 20:45
Total/NA	Prep	3510C			328623	T9CY	ELLE	12/19/22 15:49
Total/NA	Analysis	NWTPH-Dx		1	328754	KP5X	ELLE	12/20/22 05:49

Client Sample ID: MW-5D

Lab Sample ID: 410-108468-3

Date Collected: 12/07/22 12:32

Matrix: Groundwater

Date Received: 12/08/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	328725	K4WN	ELLE	12/20/22 01:18
Total/NA	Analysis	NWTPH-Gx		1	326692	B9BF	ELLE	12/13/22 21:11
Total/NA	Prep	3510C			328623	T9CY	ELLE	12/19/22 15:49
Total/NA	Analysis	NWTPH-Dx		1	328754	KP5X	ELLE	12/20/22 06:11

Client Sample ID: MW-7

Lab Sample ID: 410-108468-4

Date Collected: 12/07/22 11:46

Matrix: Groundwater

Date Received: 12/08/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	328725	K4WN	ELLE	12/20/22 01:38
Total/NA	Analysis	NWTPH-Gx		1	326692	B9BF	ELLE	12/13/22 21:37
Total/NA	Prep	3510C			328623	T9CY	ELLE	12/19/22 15:49
Total/NA	Analysis	NWTPH-Dx		1	328754	KP5X	ELLE	12/20/22 06:57

Client Sample ID: MW-12

Lab Sample ID: 410-108468-5

Date Collected: 12/07/22 13:15

Matrix: Groundwater

Date Received: 12/08/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	328725	K4WN	ELLE	12/20/22 01:57
Total/NA	Analysis	NWTPH-Gx		1	326692	B9BF	ELLE	12/13/22 22:03
Total/NA	Prep	3510C			328623	T9CY	ELLE	12/19/22 15:49
Total/NA	Analysis	NWTPH-Dx		1	328754	KP5X	ELLE	12/20/22 07:19

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

Client Sample ID: MW-13
Date Collected: 12/07/22 09:51
Date Received: 12/08/22 10:00

Lab Sample ID: 410-108468-6
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	328725	K4WN	ELLE	12/20/22 02:17
Total/NA	Analysis	NWTPH-Gx		1	326692	B9BF	ELLE	12/13/22 22:29
Total/NA	Prep	3510C			328623	T9CY	ELLE	12/19/22 15:49
Total/NA	Analysis	NWTPH-Dx		1	328754	KP5X	ELLE	12/20/22 08:53

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 410-108468-1
Project/Site: Geiger Corrections

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-23

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
8260C		Groundwater	Benzene
8260C		Groundwater	Ethylbenzene
8260C		Groundwater	Toluene
8260C		Groundwater	Xylenes, Total
8260C		Water	Benzene
8260C		Water	Ethylbenzene
8260C		Water	Toluene
8260C		Water	Xylenes, Total

Method Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ELLE
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ELLE
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: GHD Services Inc.
Project/Site: Geiger Corrections

Job ID: 410-108468-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-108468-1	TB-1	Water	12/07/22 09:00	12/08/22 10:00
410-108468-2	MW-2	Groundwater	12/07/22 13:51	12/08/22 10:00
410-108468-3	MW-5D	Groundwater	12/07/22 12:32	12/08/22 10:00
410-108468-4	MW-7	Groundwater	12/07/22 11:46	12/08/22 10:00
410-108468-5	MW-12	Groundwater	12/07/22 13:15	12/08/22 10:00
410-108468-6	MW-13	Groundwater	12/07/22 09:51	12/08/22 10:00

CHAIN-OF-CUSTODY / Analytical Request Docume

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be comp

410-108468 Chain of Custody

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GHD	Report To:	Rebecca.Pavlik@GHD.com	Attention:	Accounts Payable
Address:		Copy To:	arthur.Clauss@ghd.com	Company Name:	GHD
		Copy To:	jeffrey.cloud@ghd.com	Address:	20818 44th Ave W, Suite 190, 98036
Email To:	Rebecca.Pavlik@GHD.com	Purchase Order No:		Quote Reference:	
Phone:	403-808-8548 Fax:	Client Project ID:	P66 Spokane - Geiger Corrections	Project Manager:	
Requested Due Date/TAT:	Standard	Container Order Number:		Profile #:	

Regulatory Agency

State / Location: WA / Spokane

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

Requested Analysis Filtered (Y/N)

ITEM#	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	NWTPH-Gx	NWTPH-Dx	BTEX	Residual Chlorine (Y/N)
1	TB-1	WT	G	12/07/22	0900				1				X						X			
2	MW-2				1351				8				X						X	X		
3	MW-5D				1232				8				X						X	X		
4	MW-7				1146				8				X						X	X		
5	MW-12				1315				8				X						X	X		
6	MW-13				0951				8				X						X	X		
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Jonah Davis / BTS	12/07/22	1630	Shipped via Fed Ex	12/07/22	1630				
				EHET	12/8/22	10:00	0.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonah Davis

SIGNATURE of SAMPLER: [signature] DATE Signed: 12/07/22

SR

AEH

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 410-108468-1

Login Number: 108468

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Roth, Stephanie

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?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Appendix E

Waste Disposal Documentation

488212

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
None Required	2	800-337-7455	P66-GC-42122

GENERATOR

5. Generator's Name and Mailing Address
Phillips 66 Company
76 Broadway
Sacramento CA 95818
Generator's Phone: 562 290-1551
Alt: ~~Rich Sutherland~~ Eli Gurian

Generator's Site Address (if different than mailing address)
Phillips 66-Geiger Corr (AOC 0880)
NW Spotted Rd & Will D Alton Dr
Spokane WA 99208

6. Transporter 1 Company Name: DH Environmental Inc. — U.S. EPA ID Number: WAH000047217

7. Transporter 2 Company Name: Chemical Waste Management — U.S. EPA ID Number: ORD089452353

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812
Facility's Phone: 541 454-2643
U.S. EPA ID Number: ORD089452353

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. Non-RCRA, non-DOT (IDW Soil OR344301)	002	DM	900	P
2. Non-RCRA, non-DOT (IDW Water OR344304)	001	DM	400	P
3.				
4.				

13. Special Handling Instructions and Additional Information
1) OR344301 2) OR344304

work
970786

14. 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.

Generator's/Offeror's Printed/Typed Name: Nicholas [illegible] on behalf of P66 — Signature — Month 4 Day 21 Year 22

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: Jacob Boiere — Signature — Month 4 Day 21 Year 22

Transporter 2 Printed/Typed Name: PELE LAMAS — Signature — Month 4 Day 22 Year 22

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: Dawn Dunlap — Signature — Month 5 Day 10 Year 22

CWA

488212

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)	19. Generator ID Number NONE REQUIRED	20. Page 2 of 2	21. Waste Tracking Number P66-GC-42122

22. Generator's Name PHILLIPS 66 -GEIGER-CORR (AOC) 6880

23. Transporter UPRR Company Name — U.S. EPA ID Number NED001792910

24. Transporter ~~CRET~~ Company Name DWB 5-10-22 — U.S. EPA ID Number ~~ORD987173457~~ DWB 5-10-22

GENERATOR

	25. Waste Shipping Name and Description	26. Containers No.	26. Containers Type	27. Total Quantity	28. Unit Wt./Vol.	
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						

29. Special Handling Instructions and Additional Information
CONTAINER # WMXU 970798

TRANSPORTER

30. Transporter Acknowledgment of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Allen Hanes		4	25	22

31. Transporter Acknowledgment of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

32. Discrepancy

488212

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
None Required	2	800-337-7455	P66-GC-42122

GENERATOR

5. Generator's Name and Mailing Address
Phillips 66 Company
76 Broadway
Sacramento CA 95818
Generator's Phone: 562 290-1551
Alt: ~~Rich Sutherland~~ Eli Gurian

Generator's Site Address (if different than mailing address)
Phillips 66-Geiger Corr (AOC 0880)
NW Spotted Rd & Will D Alton Dr
Spokane WA 99208

6. Transporter 1 Company Name: DH Environmental Inc. — U.S. EPA ID Number: WAH000047217

7. Transporter 2 Company Name: Chemical Waste Management — U.S. EPA ID Number: ORD089452353

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812
Facility's Phone: 541 454-2643
U.S. EPA ID Number: ORD089452353

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. Non-RCRA, non-DOT (IDW Soil OR344301)	002	DM	900	P
2. Non-RCRA, non-DOT (IDW Water OR344304)	001	DM	400	P
3.				
4.				

13. Special Handling Instructions and Additional Information
1) OR344301 2) OR344304

work
970786

14. 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.

Generator's/Offeror's Printed/Typed Name: Nicholas [illegible] on behalf of P66 — Signature — Month 4 Day 21 Year 22

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: Jacob Boiere — Signature — Month 4 Day 21 Year 22

Transporter 2 Printed/Typed Name: PELE LAMAS — Signature — Month 4 Day 22 Year 22

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: Dawn Dunlap — Signature — Month 5 Day 10 Year 22

CWA

488212

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)	19. Generator ID Number NONE REQUIRED	20. Page 2 of 2	21. Waste Tracking Number P66-GC-42122

22. Generator's Name PHILLIPS 66 -GEIGER-CORR (AOC) 6880

23. Transporter UPRR Company Name — U.S. EPA ID Number NED001792910

24. Transporter ~~CRET~~ Company Name DWB 5-10-22 — U.S. EPA ID Number ~~ORD987173457~~ DWB 5-10-22

GENERATOR

	25. Waste Shipping Name and Description	26. Containers No.	26. Containers Type	27. Total Quantity	28. Unit Wt./Vol.	
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						

29. Special Handling Instructions and Additional Information
CONTAINER # WMXU 970798

TRANSPORTER

30. Transporter Acknowledgment of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Allen Hanes		4	25	22

31. Transporter Acknowledgment of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

32. Discrepancy

Appendix F

Groundater Monitoring Field Data Sheets

Project Number: 12576484

Water Level - 202204-Q2WL

Date:	Technician:	Site:
	Nick Adamowski	P66 Geiger Corrections

Well ID	Date/Time	Depth to LNAPL (ft)	Depth to Water (ft)	Depth to DNAPL (ft)	Depth to Bottom (ft)	Well Dry?	Notes and Comments
MW-11	4/20/22 11:59:24		12.57			No	
MW-12	4/20/22 8:07:40		32.19			No	
MW-2	Not recorded- well was sampled following low flow methods					No	
MW-4	4/20/22 10:12:03		5.72			No	
MW-5	4/20/22 9:48:06		4.62			No	
MW-5D	4/20/22 9:32:20		32.17			No	
MW-6	4/20/22 9:57:31		33.06			No	
MW-7	4/20/22 11:23:11		32.78			No	
MW-8	4/20/22 11:59:12		33.16			No	
MW-13	Not recorded- well was sampled following low flow methods					No	

Well No.: MW-2 **Sampling Event:** 202204-Q2WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** Nick Adamowski GHD **Date:** 4/20/2022

Monitoring Well Data

Well Diameter: Constructed Well Depth: Measured Well Depth:

Screen Material: Water Column Length:

Screen Start Depth: Ref Point Elev: 2355.19

Screen End Depth: Static Water Depth: Measurement Type:

Screen Length: Static Water Elev: Sampling Method:

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	±% 10	± 0.1		± 10		

Field Parameters:

Comments: Sample taken following low flow methods- parameters not available

Total Volume Purged (gal):

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
WG-12576484-042022-LP-MW2	N	WG	G	4/20 12:05			8

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged

Well No.: MW-11 **Sampling Event:** 202204-Q2WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** Nick Adamowski **Date:** 04/20/2022

Monitoring Well Data

Well Diameter: Constructed Well Depth: Measured Well Depth:

Screen Material: Water Column Length:

Screen Start Depth: Ref Point Elev: 2354.19

Screen End Depth: Static Water Depth: Measurement Type:

Screen Length: Static Water Elev: Sampling Method:

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	±% 10	± 0.1		± 10		

Field Parameters:

Comments: Sample taken following low flow methods- parameters not available

Total Volume Purged (gal):

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
WG-12576484-042022-LP-MW11	N	WG	G	04/20 17:07			8

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged

Well No.: MW-13 **Sampling Event: 202204-Q2WG** **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** Nick Adamowski **Date: 04/20/2022**

Monitoring Well Data

Well Diameter: Constructed Well Depth: Measured Well Depth:

Screen Material: Water Column Length:

Screen Start Depth: Ref Point Elev: 2354.19

Screen End Depth: Static Water Depth: Measurement Type:

Screen Length: Static Water Elev: Sampling Method:

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	±% 10	± 0.1		± 10		

Field Parameters: **Comments**: Sample taken following low flow methods- parameters not available Total Volume Purged (gal):

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
WG-12576484-042022-LP-MW13	N	WG	G	04/20 15:25			8

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged

Well No.: MW-12 **Sampling Event:** 202204-Q2WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** Nick Adamowski GHD **Date:** 4/20/2022 8:07:50 AM

Monitoring Well Data

Well Diameter:	2	Constructed Well Depth:	49	Measured Well Depth:	
Screen Material:	PVC	Screen Volume:	0	Water Column Length:	User Entry
Screen Start Depth:	24	Ref Point Elev:	2354.82		
Screen End Depth:	49	Static Water Depth:	32.19	Measurement Type:	Screen
Screen Length:	25	Static Water Elev:	2322.63	Sampling Method:	Bladder pump

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	±% 10	± 0.1		± 10		
4/20 8:20	150	32.19	0.00								0	
4/20 8:45	150		-32.19	11.7	762	1.00	1.10	7.55		33.2	1.01	
4/20 8:50	150		-32.19	11.8	760	0.12	1.10	7.54		31.4	1.2	
4/20 8:55	150		-32.19	11.8	755	1.00	1.09	7.52		30.0	1.39	

Field Parameters:

Comments:

Total Volume Purged (gal): 1.39

# of Screen Volumes:

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
WG-12576484-042022-NA-MW12	N	WG	G	4/20 9:19			8
WG-12576484-042022-NA-DUP1	FD	WG	G	4/20 9:19			8

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
4/20 9:20			-32.19								

Well No.: MW-5D **Sampling Event:** 202204-Q2WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** Nick Adamowski GHD **Date:** 4/20/2022 9:32:26 AM

Monitoring Well Data

Well Diameter:	2	Constructed Well Depth:	45	Measured Well Depth:	45
Screen Material:	PVC	Screen Volume:	0	Water Column Length:	12.83
Screen Start Depth:	25	Ref Point Elev:	2355.03		
Screen End Depth:	45	Static Water Depth:	32.17	Measurement Type:	Screen
Screen Length:	20	Static Water Elev:	2322.86	Sampling Method:	Bladder pump

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	±% 10	± 0.1		± 10		
4/20 9:40	150	32.17	0.00								0	
4/20 10:12	150		-32.17	12.3	650	8.94	0.18	7.36		5.0	1.3	
4/20 10:17	150		-32.17	12.2	652	6.19	0.18	7.35		4.0	1.47	
4/20 10:22	150		-32.17	12.1	650	4.95	0.20	7.34		2.0	1.69	

Field Parameters:

Comments:

Total Volume Purged (gal): 1.69

# of Screen Volumes:

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
WG-12576484-042022-NA-MW5D	N	WG	G	4/20 11:13			8

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
4/20 11:14			-32.17								

Well No.: MW-7 **Sampling Event:** 202204-Q2WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** Nick Adamowski GHD **Date:** 4/20/2022 11:23:15

Monitoring Well Data

Well Diameter:	2	Constructed Well Depth:	44.2	Measured Well Depth:	
Screen Material:	PVC	Screen Volume:	0	Water Column Length:	User Entry
Screen Start Depth:	24.2	Ref Point Elev:	2356.31		
Screen End Depth:	44.2	Static Water Depth:	32.78	Measurement Type:	Screen
Screen Length:	20	Static Water Elev:	2323.53	Sampling Method:	Bladder pump

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
			Precision Required	±% 3	± 5 Or ± 10	< 5 Or ±% 10	±% 10	± 0.1		± 10		
4/20 11:33	150	32.78	0.00								0	
4/20 11:57	150		-32.78	13.9	5146	3.73	0.60	7.11		14.3	.98	
4/20 12:02	150		-32.78	13.9	5150	2.56	0.58	7.10		12.3	1.16	
4/20 12:07	150		-32.78	13.9	5159	2.65	0.54	7.10		10.1	1.36	

Field Parameters:

Comments:

Total Volume Purged (gal): 1.36

# of Screen Volumes:

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
WG-12576484-042022-NA-MW7	N	WG	G	4/20 12:20			8

Time	Pumping Rate (mL/ min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (uS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
4/20 12:20			-32.78								

Project Number: 12576484

Water Level - 2022-Q4WL

Date:	Technician:	Site:
12/07/22	JD	P66 Geiger Corrections

Well ID	Date/Time	Depth to LNAPL (ft)	Depth to Water (ft)	Depth to DNAPL (ft)	Depth to Bottom (ft)	Well Dry?	Notes and Comments
MW-3	12/07/22 13:05		4.38			No	
MW-12	12/07/22 13:33		36.68			No	
MW-2	12/07/22 13:33		5.00			No	
MW-1	12/07/22 14:25		36.71			No	
MW-5	12/07/22 12:18		4.28			No	
MW-5D	12/07/22 12:13		36.70			No	
MW-6	12/07/22 12:44		37.14			No	
MW-7	12/07/22 10:58		37.50			No	
MW-13	12/07/22 9:31		4.55			No	

Well No.: MW-12 **Sampling Event:** 202211-Q4WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** JD GHD **Date:** 12/7/2022 12:59 PM

Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: Measured Well Depth: 48.9

Screen Material: Water Column Length: 12.22

Screen Start Depth: Ref Point Elev: 2354.82

Screen End Depth: Static Water Depth: 36.68 Measurement Type:

Screen Length: Static Water Elev: 2318.14 Sampling Method: Bladder pump

Time	Cumulative Volume Purged (gal)	Purge Rate (mL/min)	Depth To Water (ft BREF)	Drawdown from Initial Water Level (ft)	pH (standard units)	Temp (deg C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (millivolts)	TDS (mg/L)		Color (describe)	Clarity (describe)	Odor (describe)	Notes
			Precision Required	< .4	± .1	±% 3	± 5 or ± 10	±% 10	±% 10 or < 5	± 10						
13:02	600.00	200	36.68	0	7.3	10.69	1250	2.32	236	190.3						
13:05	1200.00	200	36.68	0	7.34	11.00	1250	2.04	188	188.0						
13:08	1800.00	200	36.68	0	7.35	11.10	1250	1.75	184	184.6						
13:11	2400.00	200	36.68	0	7.38	11.15	1250	1.72	182	183.2						
13:14	3000.00	200	36.68	0	7.40	11.12	1250	1.69	179	182.5						

Field Parameters: **Comments**: Total Volume Purged (gal): .8

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Containers
MW-12	N	WG	G	12/7 13:15	No		8

Well No.: MW-13 **Sampling Event:** 202211-Q4WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** JD GHD **Date:** 12/7/2022 9:35 AM

Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: Measured Well Depth: 14.3

Screen Material: Water Column Length: 9.95

Screen Start Depth: Ref Point Elev:

Screen End Depth: Static Water Depth: 4.35 Measurement Type:

Screen Length: Static Water Elev: User Entry Sampling Method: Peristaltic pump

Time	Cumulative Volume Purged (gal)	Purge Rate (mL/min)	Depth To Water (ft BREF)	Drawdown from Initial Water Level (ft)	pH (standard units)	Temp (deg C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (millivolts)	TDS (mg/L)		Color (describe)	Clarity (describe)	Odor (describe)	Notes
			Precision Required	< .4	± .1	±% 3	± 5 or ± 10	±% 10	±% 10 or < 5	± 10						
09:38	600.00	200	4.55	.2	8.13	10.24	1582	1.14	52	153.8						
09:41	1200.00	200	4.96	.61	7.99	10.17	1568	0.93	54	151.2						
09:44	1800.00	200	5.13	.78	7.84	10.03	1560	0.80	51	149.0						
09:47	2400.00	200	5.38	1.03	7.83	10.00	1560	0.80	50	147.4						
09:50	3000.00	200	5.67	1.32	7.81	9.96	1558	0.78	48	146.1						

Field Parameters: **Comments**: Total Volume Purged (gal): .8

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Containers
MW-13	N	WG	G	12/7 9:51	No		8

Well No.: MW-2 **Sampling Event:** 202211-Q4WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** JD GHD **Date:** 12/7/2022 1:35 PM

Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: Measured Well Depth: 14.24

Screen Material: Water Column Length: 9.24

Screen Start Depth: Ref Point Elev: 2355.19

Screen End Depth: Static Water Depth: 5.00 Measurement Type:

Screen Length: Static Water Elev: 2350.19 Sampling Method: Peristaltic pump

Time	Cumulative Volume Purged (gal)	Purge Rate (mL/min)	Depth To Water (ft BREF)	Drawdown from Initial Water Level (ft)	pH (standard units)	Temp (deg C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (millivolts)	TDS (mg/L)		Color (describe)	Clarity (describe)	Odor (describe)	Notes
			Precision Required	< .4	± .1	±% 3	± 5 or ± 10	±% 10	±% 10 or < 5	± 10						
13:38	600.00	200	5.30	.3	7.23	9.6	860	0.58	62	155.7						
13:41	1200.00	200	5.68	.68	7.14	9.75	866	0.33	58	152.6						
13:44	1800.00	200	5.95	.95	7.08	9.82	870	0.27	53	151.3						
13:47	2400.00	200	6.13	1.13	7.05	9.88	873	0.25	50	149.0						
13:50	3000.00	200	6.13	1.13	7.04	9.84	875	0.25	48	147.3						

Field Parameters: **Comments**: Total Volume Purged (gal): .8

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Containers
MW-2	N	WG	G	12/7 13:51	No		8

Well No.: MW-5D **Sampling Event:** 202211-Q4WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** JD GHD **Date:** 12/7/2022 1:11:15 PM

Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: Measured Well Depth: 45.02

Screen Material: Water Column Length: 8.32

Screen Start Depth: Ref Point Elev: 2355.03

Screen End Depth: Static Water Depth: 36.7 Measurement Type:

Screen Length: Static Water Elev: 2318.33 Sampling Method: Bladder pump

Time	Cumulative Volume Purged (gal)	Purge Rate (mL/min)	Depth To Water (ft BREF)	Drawdown from Initial Water Level (ft)	pH (standard units)	Temp (deg C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (millivolts)	TDS (mg/L)		Color (describe)	Clarity (describe)	Odor (describe)	Notes
			Precision Required	< .4	± .1	±% 3	± 5 or ± 10	±% 10	±% 10 or < 5	± 10						
12:19	600.00	200	36.7	0	7.11	9.93	1225	2.53	22	222.3						
12:22	1200.00	200	36.7	0	7.14	10.01	1211	2.64	15	218.9						
12:25	1800.00	200	36.7	0	7.32	10.10	1208	2.72	13	216.7						
12:28	2400.00	200	36.7	0	7.33	10.13	1205	2.71	13	215.4						
12:31	3000.00	200	36.7	0	7.30	10.14	1205	2.75	12	216.8						

Field Parameters: **Comments**: Total Volume Purged (gal): .8

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Containers
MW-5D	N	WG	G	12/7 12:32	No		8

Well No.: MW-7 **Sampling Event:** 202211-Q4WG **SSOW Code:** **Monitoring Well Record for Low-Flow Purging**

Project Name: P66 Geiger Corrections **Ref. No.:** 12576484 **Personnel:** JD GHD **Date:** 12/7/2022 11:30 AM

Monitoring Well Data

Well Diameter: 2 Constructed Well Depth: Measured Well Depth: 44.7

Screen Material: Water Column Length: 7.2

Screen Start Depth: Ref Point Elev: 2356.31

Screen End Depth: Static Water Depth: 37.5 Measurement Type:

Screen Length: Static Water Elev: 2318.81 Sampling Method: Bladder pump

Time	Cumulative Volume Purged (gal)	Purge Rate (mL/min)	Depth To Water (ft BREF)	Drawdown from Initial Water Level (ft)	pH (standard units)	Temp (deg C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (millivolts)	TDS (mg/L)		Color (describe)	Clarity (describe)	Odor (describe)	Notes
			Precision Required	< .4	± .1	±% 3	± 5 or ± 10	±% 10	±% 10 or < 5	± 10						
11:33	600.00	200	37.5	0	7.28	9.77	8875	2.23	10	177.4						
11:36	1200.00	200	37.5	0	7.13	9.89	8923	2.69	7	180.3						
11:39	1800.00	200	37.5	0	7.01	9.94	8965	2.90	5	181.9						
11:42	2400.00	200	37.5	0	6.98	9.96	8968	2.90	5	182.5						
11:45	3000.00	200	37.5	0	6.96	9.98	8970	2.93	5	183.0						

Field Parameters: **Comments**: Total Volume Purged (gal): 3002.24

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Containers
MW-7	N	WG	G	12/7 11:46	No		8

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