Transmittal

June 1, 2021

To: Ted Uecker, Department of Ecology
Eastern Regional Office
4601 N. Monroe Street, Suite 202
Spokane, WA 99205-1295

Ref. No.: 11226610

From: Moshghan Mansoori

GHD Tel: 425-563-6516

Subject: 2020 Annual Groundwater Monitoring Report

No. of Copies	Description/Title	Drawing No./ Document Ref.	Issue
1	2020 Annual Groundwater Monitoring Report		

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Remarks:

Copy to: Rich Soloman, P66; Kathy Reimer, Spokane Airport Business Park

Completed by: Moshghan Mansoori [Please Print] Signed:

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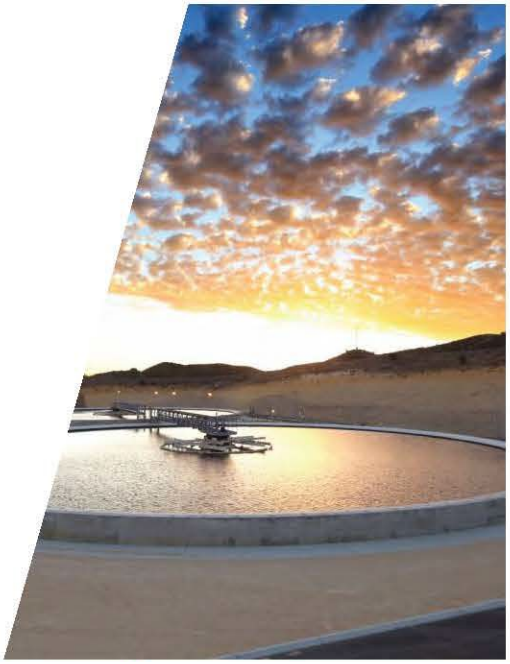
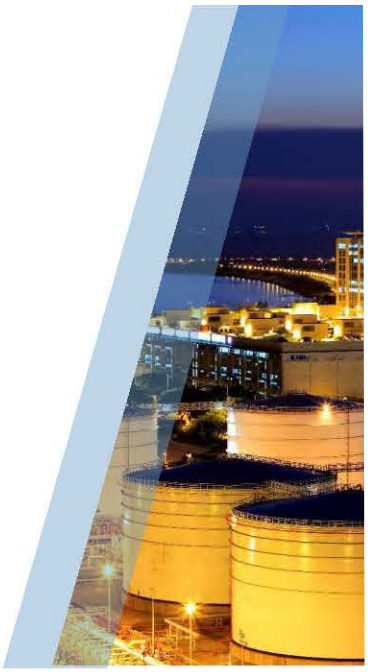
GHD
9725 3rd Avenue NE Ste 204 Seattle Washington 98115 USA
T 425 563 6500 **F** 425 563 6599 **W** www.ghd.com



2020 Annual Groundwater Monitoring Report

Phillips 66 Facility No. 6880
Geiger Corrections Facility –
USAAC Geiger Field GF003
Spokane, Washington
Facility/Site No 663
VCP Project No. EA0263

Phillips 66 Company



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Appendix Index

1. Introduction

GHD Services Inc. (GHD) is submitting this *2020 Annual Groundwater Monitoring Report* on behalf of Phillips 66 Company (P66) for the P66 Geiger Corrections Facility (No. 6880) located at the southeast corner of South Spotted Road and Alton Road in Spokane, Washington (Site, Figure 1).

The purpose of this annual report is to present the results of the quarterly groundwater monitoring events conducted at the Site. Due to COVID restrictions, fourth quarter activities were not completed in 2020 (email to Ecology November 18, 2020). The Property is currently in the Washington State Department of Ecology Voluntary Cleanup Program (VCP) under the VCP Project Number EA0263 and Facility Site ID number 663.

2. Site Activities and Findings

2.1 Current Activities

During 2020, groundwater monitoring and sampling was completed by GHD according to the established monitoring program with the exception of the fourth quarter 2020 monitoring event that was not performed as discussed above. Groundwater monitoring and sampling consisted of measuring depth to water in select wells from the surveyed top of casing elevation and collecting a groundwater sample using low-flow sampling procedures. Groundwater samples were placed immediately on ice and shipped under chain of custody to an approved laboratory for analysis of the Site constituents of concern.

GHD prepared a Site location map (Figure 1), Site plan (Figure 2), and groundwater contour and chemical concentration maps (Figures 3A through 5B). GHD prepared Tables 1A and 1B summarizing groundwater monitoring data and laboratory analytical results. Field forms and the laboratory analytical reports are included as Appendices A and B, respectively.

2.2 Findings

Quarter/Date (Figures 3A and 3B)	**1st/March 5, 2020**
Shallow Zone:	
Groundwater Flow Direction	East
Hydraulic Gradient	0.002 foot/foot
Depth to Water	4.21 to 11.73 feet below top of well casing
Intermediate Zone:	
Groundwater Flow Direction	Northwest
Hydraulic Gradient	0.009 foot/foot

Depth to Water	30.94 to 31.98 feet below top of well casing
Quarter/Date (Figures 4A and 4B)	**2nd/June 3, 2020**
Shallow Zone:	
Groundwater Flow Direction	East
Hydraulic Gradient	0.002 foot/foot
Depth to Water	4.12 to 12.00 feet below top of well casing
Intermediate Zone:	
Groundwater Flow Direction	Northwest
Hydraulic Gradient	0.006 foot/foot
Depth to Water	31.80 to 33.18 feet below top of well casing
Quarter/Date (Figures 5A and 5B)	**3rd/September 9, 2020**
Shallow Zone:	
Groundwater Flow Direction	Northeast
Hydraulic Gradient	0.003 foot/foot
Depth to Water	4.70 to 5.75 feet below top of well casing
Intermediate Zone:	
Groundwater Flow Direction	Northwest
Hydraulic Gradient	0.007 foot/foot
Depth to Water	33.52 to 34.43 feet below top of well casing

As shown in Tables 1A and 1B, laboratory analytical results indicate total petroleum hydrocarbons (TPH) as gasoline (TPHg) and as diesel (TPHd) concentrations were above MTCA Method A cleanup levels (CULs) in shallow zone monitoring wells MP-1R and MW-2. Wells in the intermediate zone were below CULs except for monitoring well MW-7 where TPHd exceeded the CUL during the third quarter event. Laboratory analytical results indicated benzene, toluene, ethylbenzene and total xylenes (BTEX) concentrations were below CULs or not detected in every sample collected during all three quarters of 2020.

3. 2020 Investigation Derived Waste

All investigation derived waste (IDW) including purge water and decontamination water was stored on-Site in Department of Transportation (DOT)-compliant 55-gallon drum(s) for subsequent disposal. During the first quarter 2020 event, IDW water was transported by DH Environmental to Chemical Waste Management of the Northwest in Arlington, Oregon for disposal. During the second quarter 2020, IDW water was transported by DH Environmental via vac truck/bulk pickup and transported to Chemical Waste Management of the Northwest in Arlington, Oregon for disposal. Waste derived from the third quarter activities has been stored on-Site for subsequent transport/disposal during the first half of 2021.

Waste manifest documentation is provided in Appendix C.

4. Conclusions and Recommendations

Groundwater monitoring events were conducted during three quarters in 2020. As communicated on November 18, 2020, due to site access restrictions related to COVID, the fourth quarter activities were not completed. Groundwater monitoring results indicate that groundwater in the shallow zone typically flows toward the east at an approximate hydraulic gradient of 0.002 foot per foot. Additionally, groundwater in the intermediate zone typically flows toward the northwest at an approximate hydraulic gradient of 0.007 foot per foot. Groundwater sampling analytical results indicate that TPHg and TPHd concentrations in the shallow zone exceed the CULs in wells MP-1R and MW-2. In the intermediate zone, only one well, MW-7, exceeded the TPHd CUL during the third quarter sampling event. BTEX concentrations in both zones remain below CULs. Since Site monitoring began in 2001, TPHg, TPHd, and BTEX concentrations have decreased significantly. BTEX concentrations have been below method reporting limits for several years in all Site wells and as a result, further sampling reductions are warranted.

GHD recommends the following:

- Reduce the quarterly groundwater monitoring and sampling frequency to Semi-Annual during the first and third quarters of each year.
- Discontinue BTEX analyses

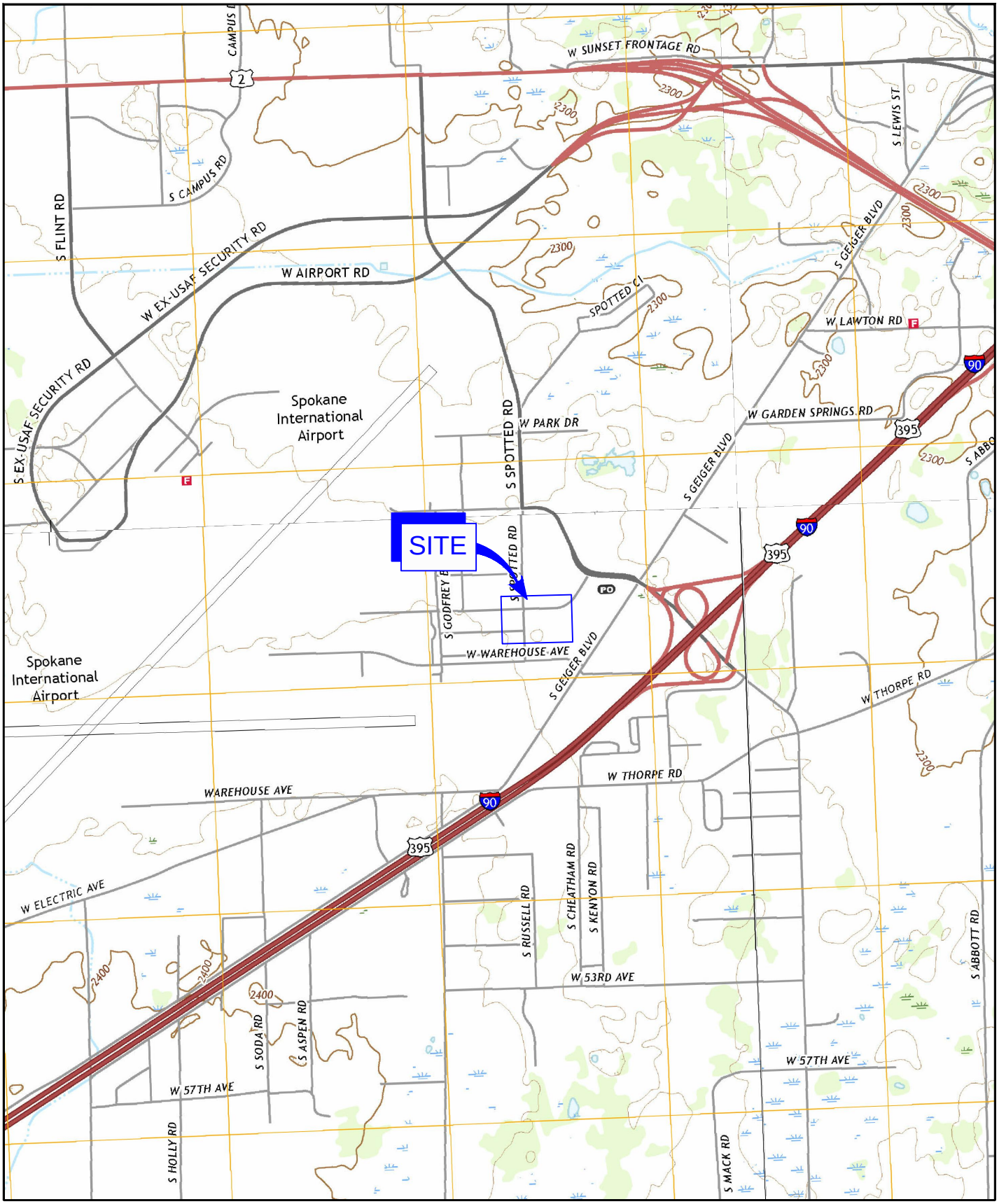
All of Which is Respectfully Submitted,

GHD

Moshghan Mansoori

Jeff Gaarder

Figures



Source: USGS QUADRANGLE MAPS: SPOKANE NW, WA. (2017)., SPOKANE SW, WA. (2017)., FOUR LAKES, WA. (2017)., & AIRWAY HEIGHTS, WA. (2017).

0 1000 2000ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

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

11145847-5MN00

Jan 14, 2020

SITE LOCATION MAP

FIGURE 1

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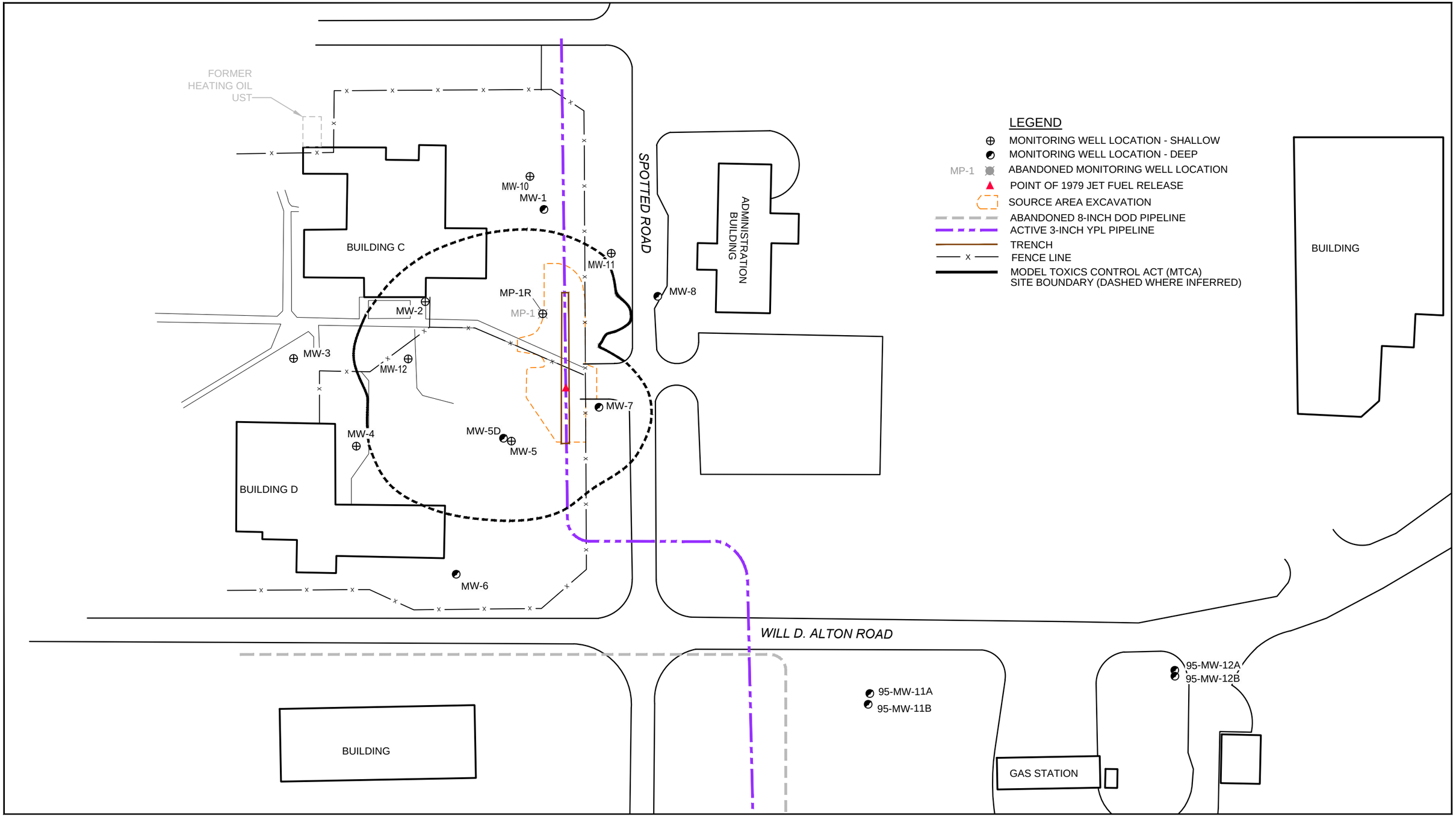

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0 40 80ft

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

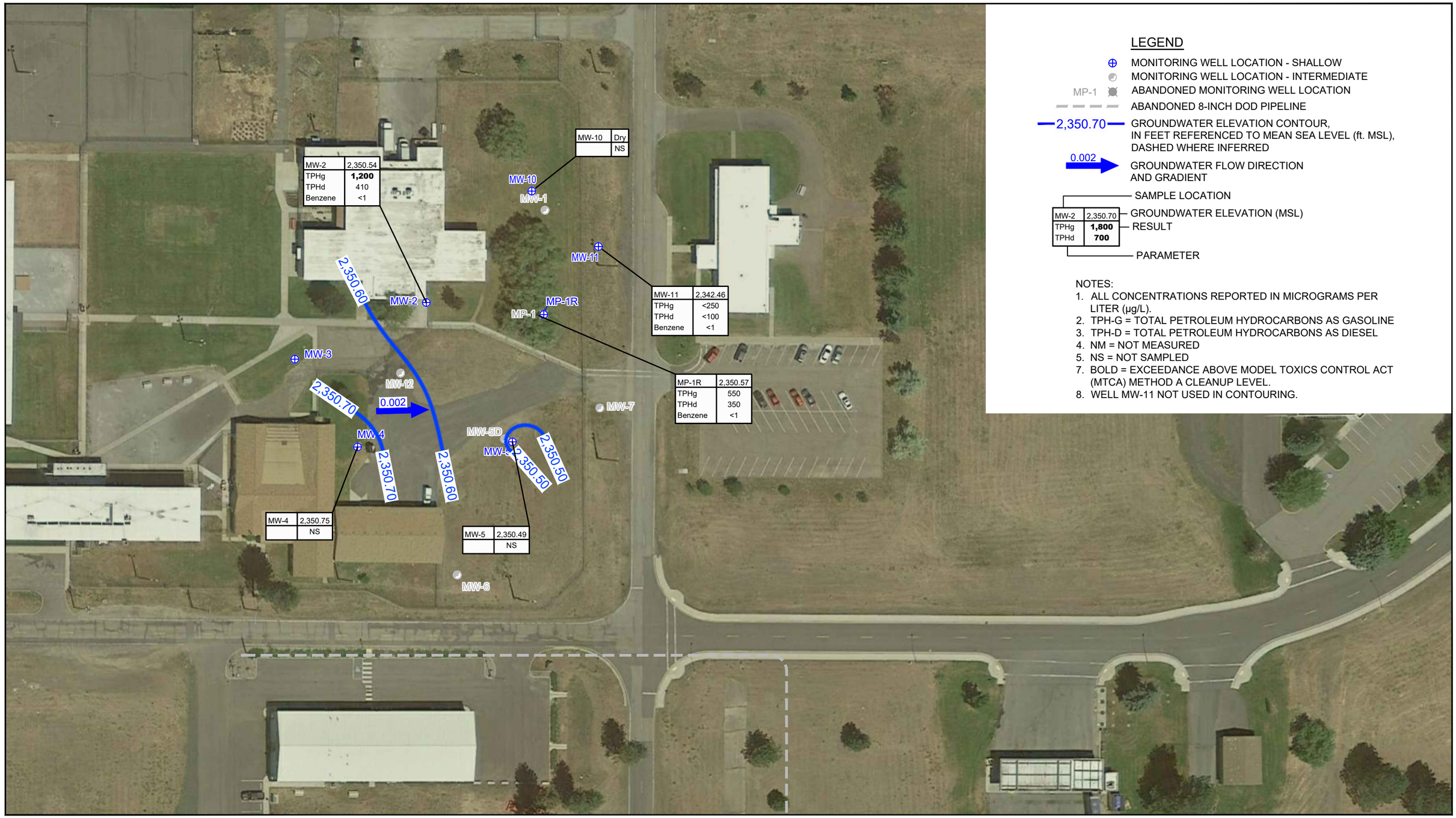
11145847-5MN00

Dec 20, 2019

SITE PLAN

FIGURE 2

CAD File: N:\US\Santa Rosa\Projects\Sonoma Legacy\Sonoma.Public\CAD\drawings\11140000s\11145847\11145847-REPORTS\11145847-5MN00(011)GN\11145847-5MN00(011)GN-SO003.DWG



LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - INTERMEDIATE
- 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
- 0.002 — GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-2	2,350.70
TPHg	**1,800**
TPHd	**700**

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.
8. WELL MW-11 NOT USED IN CONTOURING.

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 AND WELL LOCATIONS DATED 2/7/2014. MAXIM Technologies, Inc. Figures 3 and 4 dated July 2001. AECOM Soil Analytical Results 2/7/2014. StateWide Land Surveying Inc. date 12/23/19.

0 40 80ft

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

11210714
Jan 27, 2021

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP SHALLOW ZONE - MARCH 5, 2020

FIGURE 3A

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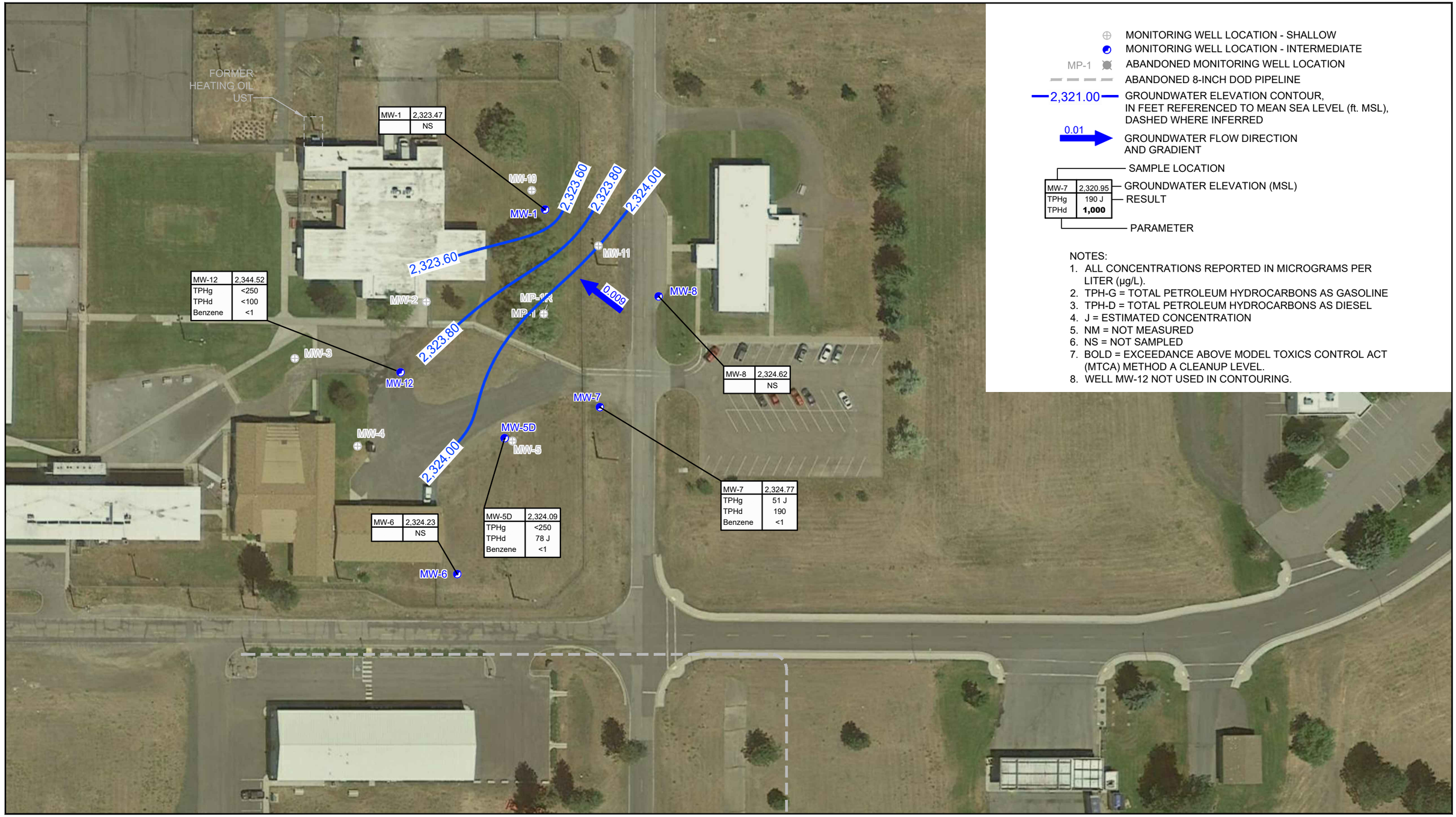

MONITORING WELL LOCATION - SHALLOW

MONITORING WELL LOCATION - INTERMEDIATE

MP-1 ABANDONED MONITORING WELL LOCATION

ABANDONED 8-INCH DOD PIPELINE

2,321.00 GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED

0.01 GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-7	2,320.95	← GROUNDWATER ELEVATION (MSL)
TPHg	190 J	← RESULT
TPHd	**1,000**	

← SAMPLE LOCATION

← 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.
8. WELL MW-12 NOT USED IN CONTOURING.

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0 40 80ft

N

GHD

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SPOKANE, WASHINGTON

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Jan 27, 2021

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP INTERMEDIATE ZONE - MARCH 5, 2020

FIGURE 3B

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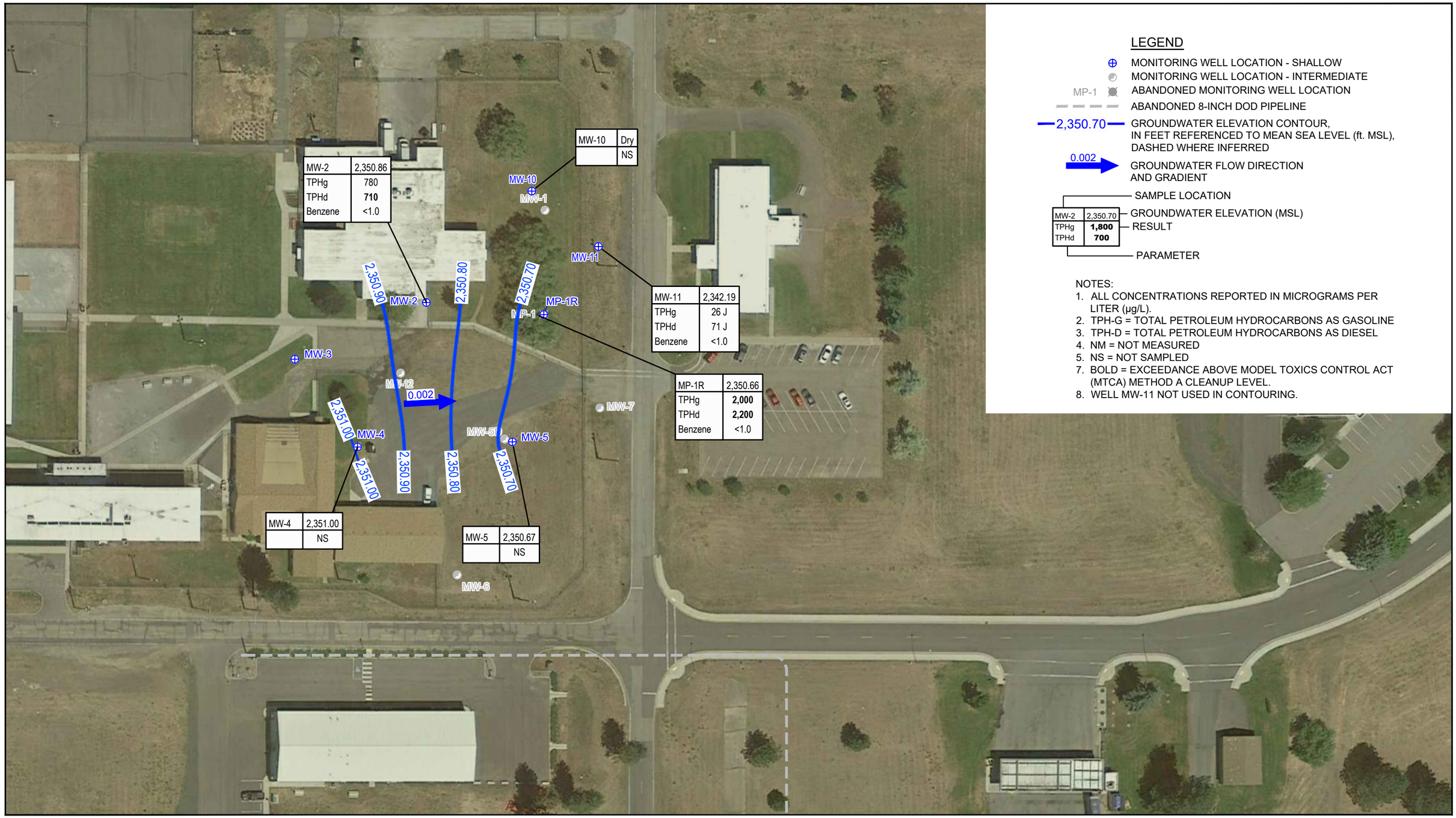

LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - INTERMEDIATE
- 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
- 0.002 — GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-2	2,350.70
TPHg	**1,800**
TPHd	**700**

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.
8. WELL MW-11 NOT USED IN CONTOURING.

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0 40 80ft

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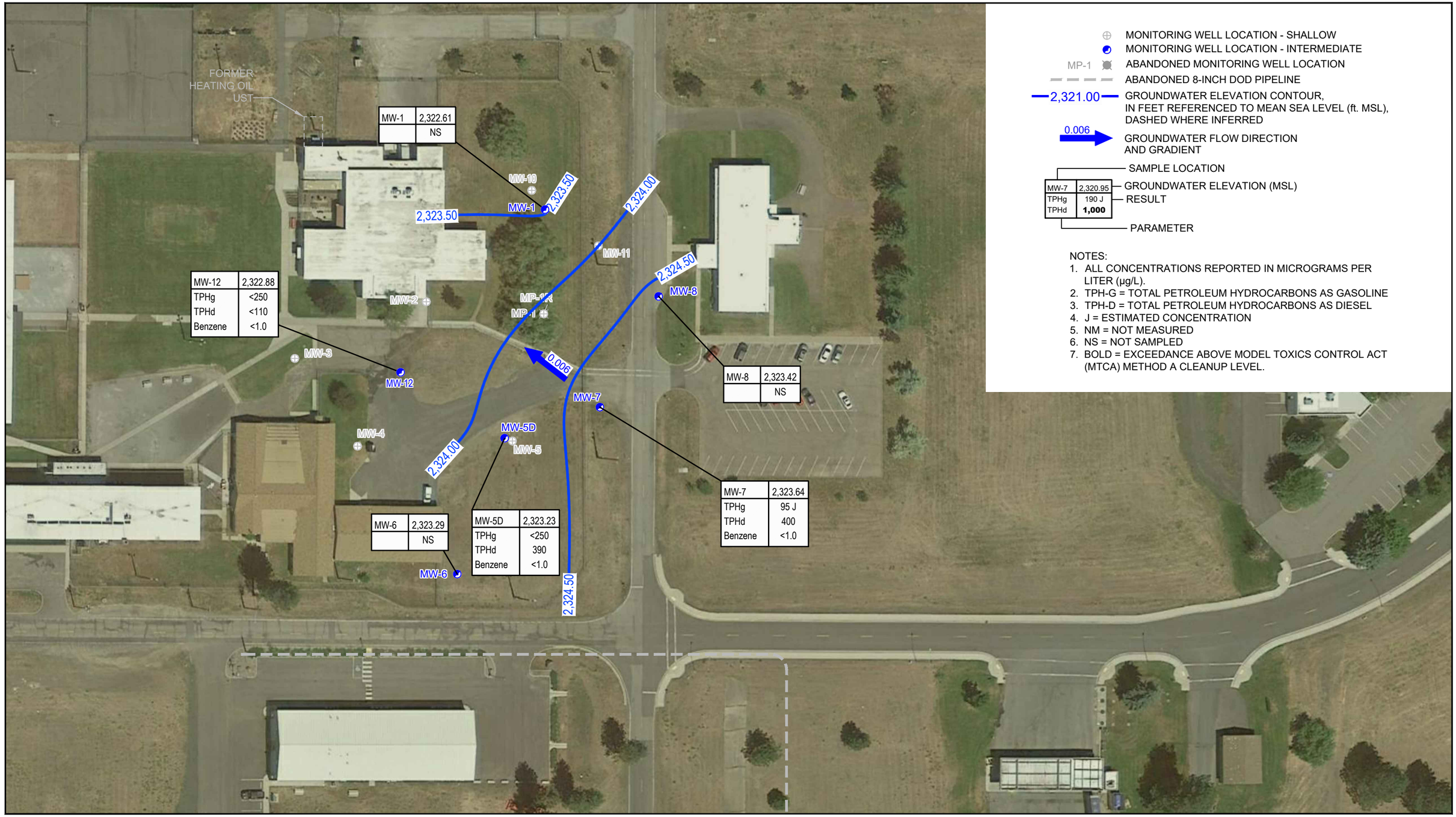
SPOKANE, WASHINGTON

11210714
Jan 27, 2021

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP SHALLOW ZONE - JUNE 3, 2020

FIGURE 4A

CAD File: N:\US\Lynnwood\Projects\663\11210714\Digital_Design\ACAD 2020\Figures\REPORT\RPT001\11210714(RPT001)GN-SO003.DWG



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.

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0 40 80ft

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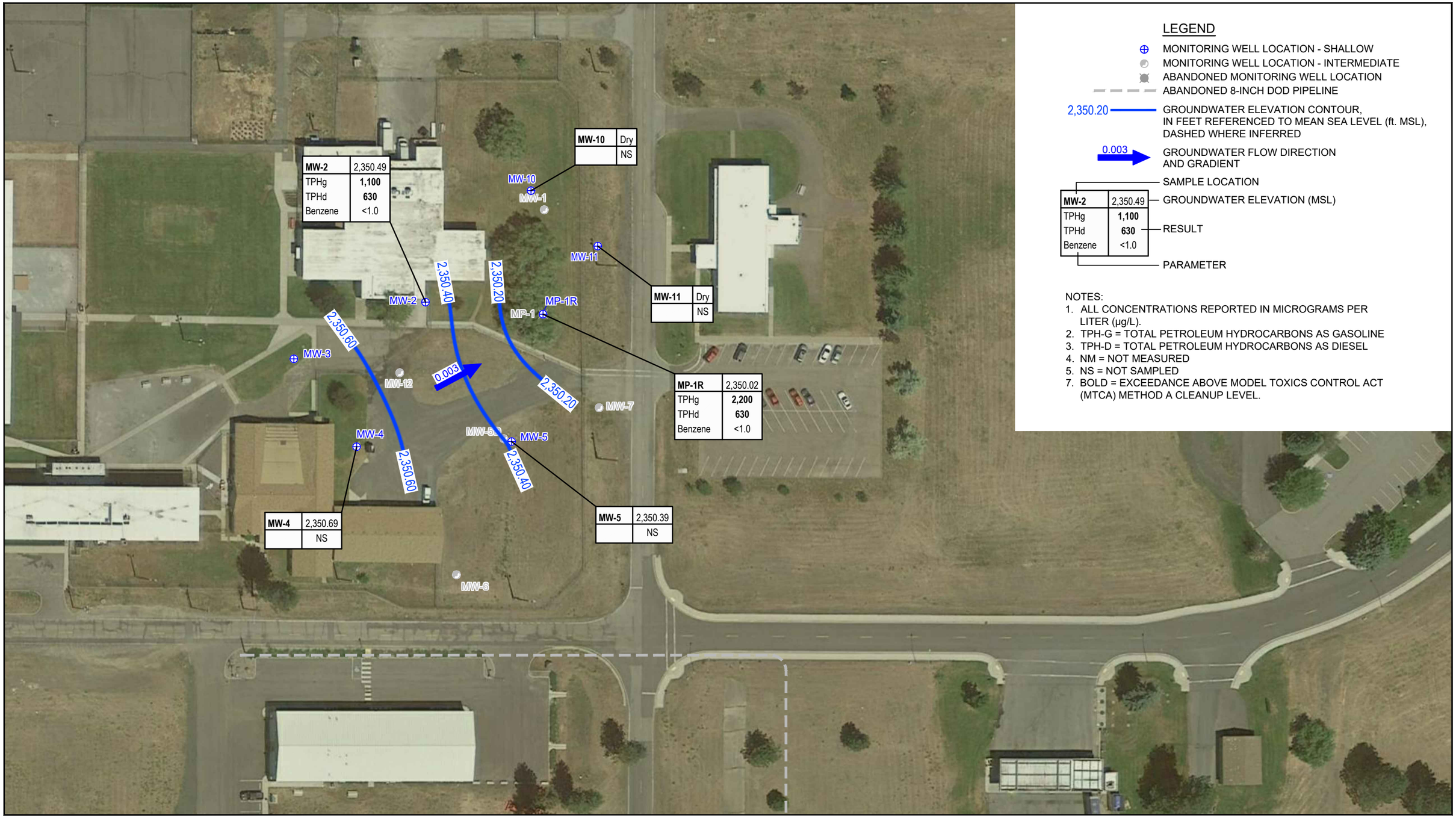
SPOKANE, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP INTERMEDIATE ZONE - JUNE 3, 2020

11210714
Jan 27, 2021

FIGURE 4B

CAD File: N:\US\Lynnwood\Projects\663\11210714\Digital_Design\ACAD 2020\Figures\REPORT\RPT001\11210714(RPT001)GN-SO004.DWG



LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - INTERMEDIATE
- ABANDONED MONITORING WELL LOCATION
- ABANDONED 8-INCH DOD PIPELINE
- 2,350.20 — GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED
- 0.003 → GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-2	2,350.49
TPHg	**1,100**
TPHd	**630**
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
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5. NS = NOT SAMPLED
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0 40 80ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

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

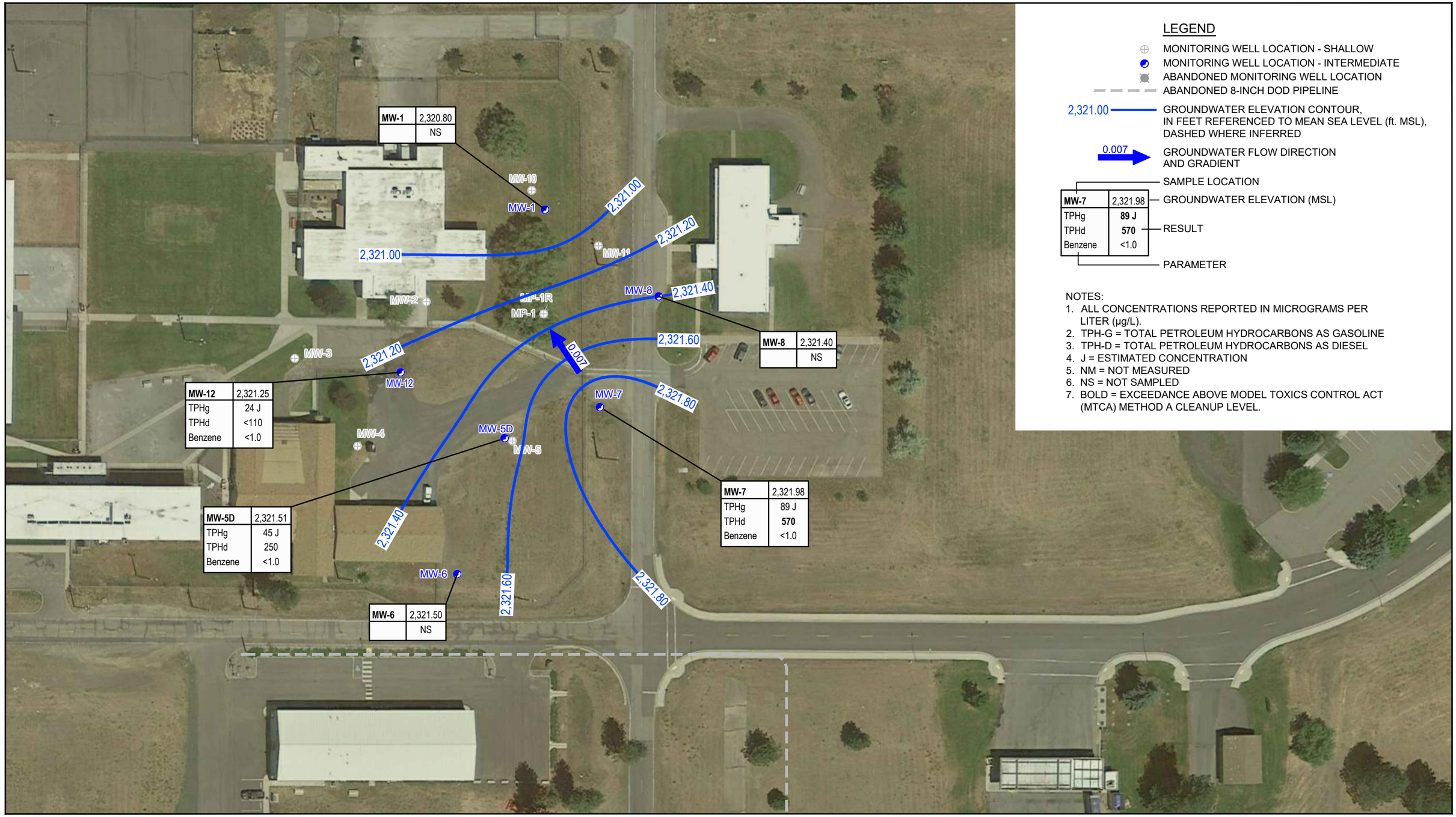
11210714

Jan 27, 2021

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP SHALLOW ZONE - SEPTEMBER 3, 2020

FIGURE 5A

CAD File: N:\US\Lynnwood\Projects\663\11210714\Digital_Design\ACAD 2020\Figures\REPORT\RPT001\11210714(RPT001)GN-SO005.DWG



LEGEND

- MONITORING WELL LOCATION - SHALLOW
- MONITORING WELL LOCATION - INTERMEDIATE
- ABANDONED MONITORING WELL LOCATION
- ABANDONED 8-INCH DOD PIPELINE
- 2,321.00 — GROUNDWATER ELEVATION CONTOUR, IN FEET REFERENCED TO MEAN SEA LEVEL (ft. MSL), DASHED WHERE INFERRED
- 0.007 — GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-7	2,321.98	← SAMPLE LOCATION; GROUNDWATER ELEVATION (MSL)
TPHg	**89 J**	
TPHd	**570**	← RESULT
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
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6. NS = NOT SAMPLED
7. BOLD = EXCEEDANCE ABOVE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL.

Source: Google ©2017 Image. AECOM SITE PLAN AND WELL LOCATIONS DATED 2/7/2014. MAXIM Technologies, Inc. Figures 3 and 4 dated July 2001. AECOM Soil Analytical Results 2/7/2014. StateWide Land Surveying Inc. date 12/23/19.

0 40 80ft

Coordinate System:
WASHINGTON NORTH
STATE PLANE NAD83 FEET

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

11210714
Jan 27, 2021

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP INTERMEDIATE ZONE - SEPTEMBER 3, 2020

FIGURE 5B

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Tables

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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 obstruction					---	---	---	---	---	---	---	---
MP-1	02/02/11	---	2,354.90	3.96	---	2350.94	---	---	---	---	---	---	---	---
MP-1	04/26/11	---	2,354.90	4.20	---	2350.70	---	---	---	---	---	---	---	---
MP-1	07/12/11	---	2,354.90	DRY	---	---	---	---	---	---	---	---	---	---
MP-1	10/28/11	---	2,354.90	Obstruction in Well at 4.59 Feet				---	---	---	---	---	---	---
MP-1	10/09/13	---	2,354.90	Well Decommissioned			---	---	---	---	---	---	---	---
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	---	---	---	---	---

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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 B**	**2,200 H**	170 J H	<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	--
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
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

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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	06/03/09	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	---
MW-2	06/03/20	N	2355.19	4.33	--	2350.86	780 B	**710 H**	<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-3	08/20/01	NS	---	---	---	---	---	---	---	---	---	---	---	---

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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	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	---	---	---	---	---	---	---	---	---	---	---	---
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

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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	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-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
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

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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	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	200 J	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	---	---	---	---	---	---	---	---
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-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

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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	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
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	---	---	---	---	---	---	---	---	---	---	---

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)			1000/800 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	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-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-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 H	<260	<1.0	<1.0	<1.0	<6.0	--
MW-11	09/03/20	NS	2354.19	Dry	--	--	--	--	--	--	--	--	--	--

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
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.

Table 1A

Summary of Groundwater Monitoring Data - Shallow 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 Screening Levels (Shallow GW)							1000/800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

>S = The cleanup level exceeds the saturation level; therefore, the absense of separate phase hydrocarbons (SPH) indicates compliance with the TPH cleanup level.
B = Compound was found in the blank and sample
H = Sample was prepped or anlayzed beyond the specified holding time

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	08/09/10	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	---
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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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-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	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	500	500	5	1000	700	1000	160
							ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-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 H	120 J H	<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-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
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	---	---	---	---	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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
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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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-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	---	---	---	---	---	---	---	---	---	---	---	---
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

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	06/04/14	N	2,356.31	34.37	---	2321.94	201	<400	<400	<1.0	<1.0	<1.0	<3.0	<4.0
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 H	<300 H	<1.0	<1.0	<1.0	<6.0	---
MW-7	06/03/20	FD	2356.31	32.67	---	2323.64	60 J	270 H	<250 H	<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-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	---	---	---	---	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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
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

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	03/13/13	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
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	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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-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	---	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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
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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	06/21/18	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	31.10	---	2344.52	<250	<100	<260	<1	<1	<1	<6	---
MW-12	06/03/20	N	2354.82	31.94	---	2322.88	<250	<110 H	<270 H	<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	---
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	---	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)				1000/800	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	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	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---

Table 1B

Summary of Groundwater Monitoring Data - Intermediate 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)					1000/800	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

FD = Field duplicate

N = Normal

NS = Not sampled

NM = Not measured

J = Concentration is between the method detection limit (MDL) and the limit of quantitation (LOQ) and is therefore estimated.

B = Compound was found in the blank and sample

H = Sample was prepped or anlayzed beyond the specified holding time

--- = 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.

Appendices

Appendix A
Field Data Sheets

DAILY FIELD REPORT

Project Number: 1114384	Date: 3/5/20	Site Address:
Project Name: Geiger Corrections	Field Technician: D. Tinder	GHD PM: M. Mansoor
Weather: 39° sunny	HSE Meeting Conducted: ☒ Yes ☐ No	
Equipment ID (GHD or rented):	Calibrated Completed: ☑ Yes ☐ No ☐ NA Documented below or "D" form attached: ☑ Yes ☐ No ☐ NA Calibration certificate for rental attached: ☑ Yes ☐ No ☐ NA	

Time	Activity/Comments
0700	- Onsite DT/JL
	- get Joe visitor badge / check in w/ warden
	- get access to fenced in area
	- HTS tailgate safety / HASP review.
	- begin gauging wells. see Data Sheet
	- Sample monitor wells. See purge forms
1215	- Done Sampling
	-drum up purge water
	-pack up / check out w/ warden depart site
1300	- Buy ice / pack all samples (3 sites) fill out COC'S
	- JRL Depart to seattle
1330	- DT ship samples @ airport fedex
	- DT to holly terminal.
1415	-check in w/ operator's.
	-load all equipment / clean basement shed
1445	- GHD offsite to hotel finish notes

Well Gauging Details
Phillips 66 RM Site No. 6880
Geiger Corrections Center
Spokane, Washington

Well ID	Date Installed	Well Diameter (inches)	Well Depth (ft BTOC)	Screen Length (ft)	Screened Interval (ft BTOC)	Screen Slot Size	Sump Length (ft)	Date	DTW (ft BTOC)	DTP (ft BTOC)	DTB (ft BTOC)	Sample ID	Notes
MP-1	2001	2	8.5	5	3.5-8.5	0.02	0.5	Abandoned					
MP-1R	2013	2	13.5	10	3.5-13.5	0.02	0.5	3/5/20	4.21	—	—	GW-1145847-030520-JRL-MP1R	
MW-1	2002	2	50.15	25	24.7-49.7	0.02	0.5	3/5/20	31.13	—	—	NO SAMPLE	
MW-2	2002	2	14	10	3.5-13.5	0.02	0.5	3/5/20	4.65	—	—	GW-1145847-030520-JRL-MW2	
MW-3	2002	2	14	10	3.5-13.5	0.02	0.5	—	—				
MW-4	2002	2	13.51	10	3.0-13.0	0.02	0.5	3/5/20	5.69	—			
MW-5	2002	2	13.34	10	2.8-12.8	0.02	0.5	3/5/20	4.62	—			
MW-5D	2013	2	45	20	25.0-45.0	0.02	0.5	3/5/20	30.94	—			
MW-6	2002	2	41.52	20	21.0-41.0	0.02	0.5	3/5/20	31.7	—			
MW-7	2002	2	44.74	20	24.2-44.2	0.02	0.5	3/5/20	31.54	—			
MW-8	2002	2	47.12	20	26.6-46.6	0.02	0.5	3/5/20	31.98	—			
MW-10	2019	2	15	12	3.0-15.0	0.01	0.5	3/5/20	—	—	15.87	Dry	
MW-11	2019	2	15	12	3.0-15.0	0.01	0.5	3/5/20	11.73	—	14.57		
MW-12	2019	2	49	25	24.0-49.0	0.01	0.5	3/5/20	10.30	—			
95-MW-11A	1990	2	99.5	10	84.95-94.5	0.01	5						
95-MW-11B	1990	2	49.05	20	24.7-44.7	0.01	5.25						
95-MW-12A	1990	2	81	10	68.1-78.1	0.01	2.25						
95-MW-12B	1990	2	49.72	20	25.0-45.0	0.01	5.25						

Gauge all wells on-Site
Sample 2020

Monitoring Well Record for Low- rging
(Form SP-09)

Project Data:

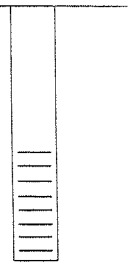
Project Name: GREIGER CORRECTIONAL
Ref. No.: 11145847

Date: 3/5/20
Personnel: JRL

Monitoring Well Data:

Well No.: MW-2
Vapour PID (ppm):
Measurement Point: TOC
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in): 2"
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 4.65



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0910	—	START	PUMPING	—	—	—	—	—	—	—	—
0915	120	4.66		9.66	0.396	9.46	—	7.61	-78.7		
0920	120	4.66		9.69	0.399	11.98	—	7.57	-71.3		
0925	120	4.66		9.68	0.402	4.80	—	7.54	-62.0		
0930	120	4.66		9.64	0.406	4.82	—	7.52	-56.7		
0935	120	4.65		9.67	0.407	4.60	—	7.52	-54.3		

Sample ID: GW - ~~0505200~~ 11145847 - 030520 - JRL - MW5

Sample Time: 0940 DUP WAS TAKEN HERE

Notes: "DO" METER IS NOT READING CORRECTLY

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

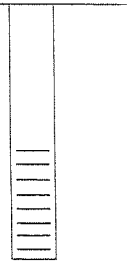
(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low- irging
(Form SP-09)

Project Data:
Project Name: GEIGER CORRECTIONS
Ref. No.: 11145847
Date: 3/5/20
Personnel: JRa

Monitoring Well Data:
Well No.: MW-11
Vapour PID (ppm):
Measurement Point: TOC
Constructed Well Depth (m/ft): 14.57
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):
Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in): 2"
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 11.73



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1030	120	12.50		9.86	5.525		—	6.92	40.5		
1035	100	13.92		9.93	5.571	2.52	—	6.98	38.1		
1040	100	14.10		9.84	5.766	2.33	—	6.97	38.8		
1045	100	14.25		9.89	5.908	12.1	—	6.95	40.0		
1050		DRY									

Sample ID: GW-11145847-030520-JRa-MW11
Sample Time: 1105

Notes: HAD TO LET WELL RECHARGE TO SAMPLE.

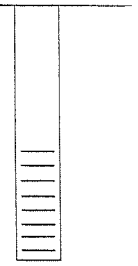
(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches
(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.
(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.
(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Project Data:

Project Name: Georgina Corrections
Ref. No.: 11145847
Date: 3/05/20
Personnel: SR

Monitoring Well Data:

Well No.: MP-1R
Vapour PID (ppm):
Measurement Point: TOC
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):
Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in): 2"
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 4.21



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0820	—	START	Pumping	—	—	—	—	—	—		
0825	120	4.21		7.28	2.389	3.54	—	7.43	-98.1		
0830	120	4.22		7.07	2.324	5.06	—	7.47	-96.6		
0835	120	4.23		7.07	2.313	4.97	—	7.48	-93.4		
0840	120	4.22		6.79	2.245	5.15	—	7.49	-94.6		
0845	120	4.21		6.72	2.240	5.07	—	7.49	-94.2		
0850	120	4.21		6.69	2.237	5.02	—	7.50	-94.2		

Sample ID: GW-11145847-030520-SR-MP1R
Sample Time: 0855

Notes: "DO" METER IS NOT READING CORRECTLY

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low- irging
(Form SP-09)

Project Data:
Project Name: 11145847
Ref. No.: Geiger corrections
Date: 3/5/20
Personnel: D. Tudeau

MW-5D

Monitoring Well Data:
Well No.: MW-5D
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):
Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in): 2"
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 30.94

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0830	Start pump										
0900	150	30.18	0.24	11.6	0.460	17.0	0.19	7.82	-44.1		
0905		30.18	0.24	11.5	0.458	16.2	0.20	7.81	-41.9		
0910		30.18	0.24	11.6	0.456	15.7	0.23	7.81	-39.9		
0915	Sampled										

Sample ID: Gw-11145847-030520-DT-MW5D
Sample Time: 0915

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Project Data:

Project Name: 11145847
Ref. No.: gauge corrections

Date: 3/5/20
Personnel: D. Tusen

MW-7

Monitoring Well Data:

Well No.: MW-7
Vapour PID (ppm):
Measurement Point: TOC
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 31.54

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1115	start pump										
1145	150	32.80	1.26	11.4	5.64	26.8	0.30	7.04	-17.1		
1150	↓	32.75	1.21	11.3	5.60	18.1	0.31	7.04	-16.6		
1155	↓	32.75	1.21	11.3	5.58	21.3	0.30	7.03	-16.3		
1200	Sampled										

Sample ID: GW-11145847-030520-DT-MW7 Sample Time: 1200

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

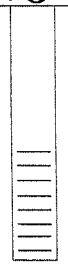
Monitoring Well Record for Low- irging
(form SP-09)

Project Data:

Project Name: 1114584?
Ref. No.: guage corrections

Date: 3/5/20
Personnel: D. Tudeau

MW-12



Monitoring Well Data:

Well No.: MW-12
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 31.10

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0940	Start pump										
1010	150	31.27	0.14	12.3	0.73	61.3	0.23	7.39	-55.4		
1015	↓	31.27	0.14	12.3	0.73	64.7	0.24	7.38	-57.3		
1020	↓	31.25	0.15	12.4	0.73	59.5	0.21	7.39	-58.0		
1030	Sampled										

Sample ID: GW.1114584?.030520.DT.MW 12

Sample Time: 1030

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Field Data Record Form
Meter, ORP/Temp./Turb./Cond./pH, YSI ProDSS Water Quality Meter
(QSF-551D)

Control number: 08832
Date (mm/dd/yyyy): 3/5/20
User (print name): D. Tindall

Project number: Geiger corrections
Project name: 11145847

Location: Airway, Spokane

Calibration solution(s): ph 4, 7, 10
Lot #(s):
Supplier(s): Fel
Expiration date(s):

Additional information:

Field procedure before use:

	Check when completed
pH, ORP, Conductivity, and Turbidity Calibration	
1. Ensure the equipment used for calibration is clean and rinsed. *Note*: The sensor guard and calibration cup are required for turbidity. Other containers (e.g. beaker) can be used for pH, ORP, ISE, and conductivity calibrations as long as care is used to protect the sensors from damage.	☑
2. Fill the calibration container with enough fresh standard to cover the temperature sensor and the sensing end of the sensor to be calibrated. Completely submerge the top vent hole when calibrating the conductivity sensor. If using the calibration cup, fill to the first line for pH, ORP, and turbidity calibration. Fill to the second (i.e. top) line for conductivity. *Note*: First calibration point for turbidity must be 0 NTU. Deionized or distilled water can be used.	☑ ☐
3. Press the Cal key.	☑
4. Highlight the parameter you wish to calibrate and press the Enter key. For Conductivity, a second menu will offer the option of calibrating **Specific Conductance, Conductivity, or Salinity**. Calibrating one automatically calibrates the other two. Specific conductance is recommended.	☑
5. Allow at least one minute for the temperature to stabilize. Calibration solution values for pH and ORP standards are temperature dependent (e.g. pH 7 buffer calibration solution value is 7.02 at 20 °C and 7.00 at 25 °C).	☑
6. Enter the calibration solution value by highlighting **Calibration Value**, pressing the Enter key, and then using the alpha/numeric keypad to enter the known value for the standard. Once you have entered the value of the calibration standard, highlight **ENTER** and press the Enter key.	☑
7. Allow the readings to stabilize by observing the white line on the graph located at the bottom of the calibration screen. Once stable, highlight **Accept Calibration** and press the Enter key to calibrate.	☑
8. For pH, ISEs, and turbidity, continue with the next point by placing the sensor in a second standard solution and following the procedure previously described. To complete the calibration, highlight **Finish Calibration** and press the Enter key. Up to 3 calibration points can be completed for these sensors.	☑

Filing: Field file

Signature:

This completed form is a quality record

Environmental Analysis Request/Chain of Custody

381613

eurofins | Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only
Acct. # _____ Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

1 Client Information

Client: 42241 / 11145847	Acct. #:
Project Name/#: Geiser Corrections	PWSID #:
Project Manager: M. Mansoori	P.O. #:
Sampler: D. Tindall / JRL	Quote #:
Name of state where samples were collected:	

4 Matrix: Sediment ☐ Soil ☐ | Water: Ground ☒ Potable ☐ Surface ☐ NPDES ☐ | Other: ☐ | Total # of Containers

5 Analysis Requested — Preservation Codes

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

6 Remarks

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Matrix	Total # of Containers	5 Analysis Requested
GW · 11145847 · 030520 · DT · MW5D	3/5/20	0915	X		GW		NUTRH 6X / NUTRH DX / BTEX 8260
" " " " · MW12	"	1030	X		"		"
" " " " · MW7	"	1200	X		"		"
" " " JRL · MP1R	"	0855	X		"		"
" " " " · MW2	"	0940	X		"		"
" " " " · MW11	"	1105	X		"		"
" " Dup	"		X		"		"
trip blanks					TB		

7 Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____

E-mail address: _____

8 Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP)
Type VI (Raw Data Only)
Type III (Reduced non-CLP)
TX TRRP-13
NYSDEC Category A or B
MA MCP
CT RCP

Relinquished by	Date	Time	Received by	Date	Time
D. Tindall	3/5/20	1300			

9

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt _____ °C

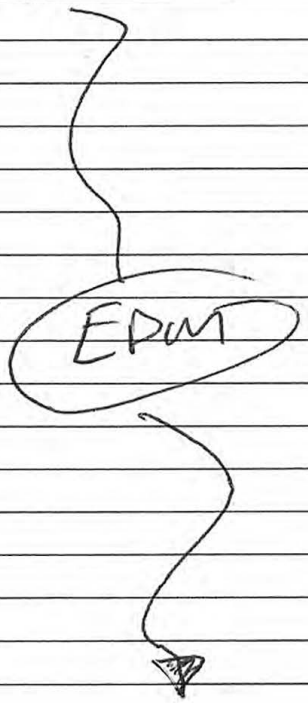
DAILY FIELD REPORT

Project Number: 1121074	Date: 6/3/20	Site Address:
Project Name: Geiger Corrections	Field Technician: E. Maise	GHD PM:
Weather: clear 75°	HSE Meeting Conducted: ☑ Yes ☐ No	

Equipment ID (GHD or rented):
03z. y-r;
<J8J>L.fof-ur i eter

Calibrated Completed: ☑ Yes ☐ No D NA
Documented below or "D" form attached: es ☐ No ☐ NA
Calibration certificate for rental attached: D Yes ☐ No A

Time	Activity/Comments
0720	GHD on-site. H&S meeting and meet with prison operations for COVID-19 screening.
0800	Begin ground water sampling event
0900	Sample GW-1121074-060320-EM_MPIR collected
1010	Sample GW-1121074-060320-EM-MW2 collected. µ I,V'-(C) is dry, no sample collected.
1120	Sample GW-1121074-060320-EM-MW11 collected. Well draw down was approaching dry so sample collected
1330	Sample GW-1121074-060320-EM-MW5D collected.
1500	Sample GW-1121074-060320-EM-MW12 collected
1640	Sample GW-1121074-060320-EM-MW7 collected
1645	Sample GW-1121074-060320-EM-DUP collected at MW-7
1700	Finish gauging remaining wells
1730	GHD off-site



JOC 509-688-3913

Well Gauging Details
Phillips 66 RM Site No. 6880
Geiger Corrections Center
Spokane, Washington

Well ID	Date Installed	Well Diameter (inches)	Well Depth (ft BTOC)	Screen Length (ft)	Screened Interval (ft BTOC)	Screen Slot Size	Sump Length (ft)	Date	DTW (ft BTOC)	DTP (ft BTOC)	DTB (ft BTOC)	Sample ID	Notes
MP-1	2001	2	8.5	5	3.5-8.5	0.02	0.5						Decommissioned
MP-1R	2013	2	13.5	10	3.5-13.5	0.02	0.5	6/3/20	4.12				
MW-1	2002	2	50.15	25	24.7-49.7	0.02	0.5		31.99				
MW-2	2002	2	14	10	3.5-13.5	0.02	0.5		4.33				
MW-3	2002	2	14	10	3.5-13.5	0.02	0.5						
MW-4	2002	2	13.51	10	3.0-13.0	0.02	0.5		5.44				
MW-5	2002	2	13.34	10	2.8-12.8	0.02	0.5		4.44				
MW-5D	2013	2	45	20	25.0-45.0	0.02	0.5		31.80				
MW-6	2002	2	41.52	20	21.0-41.0	0.02	0.5		32.64				
MW-7	2002	2	44.74	20	24.2-44.2	0.02	0.5		32.67				
MW-8	2002	2	47.12	20	26.6-46.6	0.02	0.5		33.18				
MW-10	2019	2	15	12	3.0-15.0	0.01	0.5		Dry				
MW-11	2019	2	15	12	3.0-15.0	0.01	0.5		12.0				
MW-12	2019	2	49	25	24.0-49.0	0.01	0.5		31.94				
95-MW-11A	1990	2	99.5	10	84.95-94.5	0.01	5						
95-MW-11B	1990	2	49.05	20	24.7-44.7	0.01	5.25						
95-MW-12A	1990	2	81	10	68.1-78.1	0.01	2.25						
95-MW-12B	1990	2	49.72	20	25.0-45.0	0.01	5.25						

Gauge all wells on-Site
Sample 2020

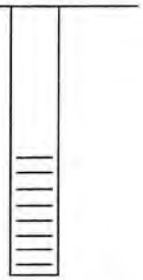
Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

Project Name: Geiger Corrections
Ref. No.: 1121074
Date: 6/3/20
Personnel: E. Maise

Monitoring Well Data:

Well No.: MP-1R
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):
Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 4.12



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
8:08		4.12	purging								
8:40	150	4.13	0.01	13.1	2.73	15.5	1.02	6.17	-115.3		
8:45	150	4.13	0	13.0	2.75	7.8	0.86	6.12	-114.5		
8:50	150	4.13	0	13.3	2.73	3.1	0.83	6.12	-117.1		
8:55	150	4.13	0	13.6	2.74	3.3	0.80	6.12	-116.9		
9:00	Sample										

Sample ID: GW-1121074-060320-EM-MP1R
Sample Time: 0900

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

Project Name: Geiger Corrections
Ref. No.: ~~1121074~~ 1121074

Date: 6/3/20
Personnel: Eric Maise

Monitoring Well Data:

Well No.: MW-2
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 4.33

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0930	150	4.33	purging								
0955	150	4.33	0	13.6	1.44	3.1	0.57	6.28	-107.7		
1000	150	4.34	0.01	13.6	1.47	1.5	0.51	6.25	-111.4		
1005	150	4.35	0.02	13.6	1.51	1.5	0.48	6.35	-116.6		
1010	sample										

Sample ID: GW-1121074-060320-EM-MW2
Sample Time: 1010

Notes: gas odor

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

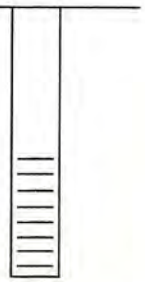
Project Name: Geiger Corrections
Ref. No.: 1121074

Date: 6/3/20
Personnel: Eric Maise

Monitoring Well Data:

Well No.: MW-11
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 12.0



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1037	150	12	Purging								
1100	150	12.74	0.74	18.9	6.63	1.7	6.13	6.49	2.9		
1105	130	12.89	0.89	16.5	6.93	1.0	5.44	6.42	19		
1110	130	12.99	0.99	16.1	7.13	1.6	5.39	6.41	27		
1115	130	13.10	1.1	16.4	7.18	1.4	5.41	6.41	32		
1120	Sample										

Sample ID: GW-1121074-060320-EM-MW11
Sample Time: 1120

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

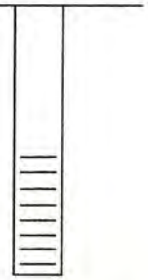
Project Name: Geiger Corrections
Ref. No.: 1121074

Date: 6/3/20
Personnel:

Monitoring Well Data:

Well No.: MW-5D
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 31.80



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1246	150	31.8	Purging								
1310	150	32.07	0.27	14.1	0.89	35.6	0.97	7.2	25.1		
1315	150	32.07		14.1	0.89	39.8	0.41	6.90	35.1		
1320	150	32.07		14.0	0.88	39.3	0.38	6.79	42.1		
1325	150	32.07		14.0	0.87	36.5	0.39	6.74	46.8		

Sample ID: GW-1121074-060320-EM-MW5D **Sample Time:** 1330

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

Project Name: Geiger Corrections
Ref. No.: 1121074

Date: 6/3/20
Personnel: Eric Maise

Monitoring Well Data:

Well No.: MW-12
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 31.62

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1407	150	31.62	purging								
1440	150	32.07	0.45	17.6	1.26	39.9	0.31	6.75	18.8		
1445	150	32.05	0.43	17.8	1.28	32.4	0.28	6.64	15.3		
1450	150	32.05	0.43	17.7	1.26	24.6	0.30	6.66	15.8		
1455	150	32.05	0.43	17.9	1.25	26.0	0.30	6.63	16.2		
1500	sample										

Sample ID: GW-1121074-060320-EM-MW12
Sample Time: 1500

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

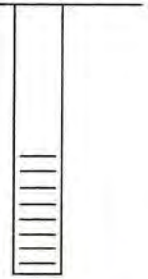
Project Name: Geiger Corrections
Ref. No.: 1121074

Date: 6/3/20
Personnel:

Monitoring Well Data:

Well No.: MW-7
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 32.55



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1550	150	32.55	Purging								
1620	150	34.06		17.1	10.56	21.3	0.54	7.03	29.92	4	
1625				15.2	9.28	16.3	0.59	6.87	3.7		
1630											
1635											
1640	Sample										
1645	Dup Sample										

Sample ID: GW-1121074-060320-EM-MW7

Sample Time: EM ~~1635~~ 1640

Notes: Duplicate Sample ID: EM ~~DUP~~ GW-112074-060320-EM-DUP Sample time: ~~1640~~ EM 1645

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Field Data Record Form
Meter, Water Level
(QSF-251D)

Control number: 07582
Date (mm/dd/yyyy): 06/03/20
User (print name): Eric Maise

Project number: 11210714
Project name: Geiger Corrections

Location:

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check for broken or missing parts.	
• Check battery	☑
• Check operation of buzzer.	☑
• Check operation of signal light.	☑
• Test probe in water to ensure unit operates, both visually and audibly.	☑
• Check cable.	☑

Filing: Field file

Signature: Eric Maise

Field Data Record Form
Meter, pH/Cond./Temp. (Portable), Hydac
(QSF-291D)

Control number: 08832
Date (mm/dd/yyyy): 6/3/20
User (print name): Eric Maise

Project number: ~~11210714~~ 11210714
Project name: Geiger corrections

Location:

Calibration solution(s): pH 4, 7, 10 conductivity
Lot #(s): 7812347, 7901499, 7901447
Supplier(s): FEI
Expiration date(s): 1/1/21, 11/8/20, 2/21/21

Additional information:

Field procedure before use:

	Check when completed
Conductivity calibration:	☑
• Conductance accuracy can be checked using a solution of known conductance in the sample cup. Switch function selector to conductivity, and display should read the same value as conductive solution used. If not, notify Field Equipment manager for repair, and another meter will be selected.	
pH calibration:	
• Place pH electrode in the pH 7.0 buffer solution bottle and press the read button and hold. While pressing read button, Adjust the "ZERO" potentiometer (Screw Adjustment Knob) on the face of the tester so the digital display indicates 7.00. Rinse the pH electrode with DI water.	☑
• Place pH electrode in the pH 4.0 buffer solution bottle and press the read button and hold. While pressing read button, Adjust the "SLOPE" potentiometer (Screw Adjustment Knob) on the face of the tester so the digital display indicates 4.00. Rinse the pH electrode with DI water.	☑
• Repeat steps for pH 7.0 and 4.0 due to interaction between the Zero and Slope potentiometers.	☑
• The unit is now ready for use.	

Filing: Field file

Signature: Eric Maise

Field data:

Field Data Record Form
Meter, Turbidity (Portable) Hach 2100P and 2100Q
(QSF-421D)

Control number: 8840
Date (mm/dd/yyyy): 6/3/20
User (print name): Eric Maise

Project number: 11210714
Project name: Geiger Corrections

Location:

Additional equipment control numbers and descriptions:

Field procedure before use:

Do not calibrate in the field.

	Check when completed
Check kit contents; • Meter • STABLCAL standards (2100Q) • Low 0-10, medium 0-100, high standards (2100P) • Extra AA batteries • Sample vials	☑ ☑ ☑ ☑ ☑
Test and record standards:	☑

Gelex (2100P)/STABLCAL (2100Q) Standard	*Meter Reading*
10	9.8
100	99.3

Note: Condensation on outside of sample bottles affects meter readings.

Filing: Field file

Signature: Eric Maise

DAILY FIELD REPORT

Project Number: 11210714	Date: 9/3/20	Site Address:
Project Name: Geiger corrections	Field Technician: DT / EM	GHD PM: M. MANSOUR
Weather:	HSE Meeting Conducted: ☐ Yes ☐ No	
Equipment ID (GHD or rented):	Calibrated Completed: ☐ Yes ☐ No ☐ NA Documented below or "D" form attached: ☐ Yes ☐ No ☐ NA Calibration certificate for rental attached: ☐ Yes ☐ No ☐ NA	

Time	Activity/Comments
0700	- ONsite - HES
	- Check in w/ prison
	- Go through prison covid screening
	- Gain access to site.
	- Ship/ sample wells. see purge forms.
1215	- complete sampling
1245	- drum up water / Check out of prison
1400	- ice / package samples ship @ Airport fedex.
	- mob back to Seattle / Wenatchee

Well Gauging Details
Phillips 66 RM Site No. 6880
Geiger Corrections Center
Spokane, Washington

Well ID	Date Installed	Well Diameter (inches)	Well Depth (ft BTOC)	Screen Length (ft)	Screened Interval (ft BTOC)	Screen Slot Size	Sump Length (ft)	Date	DTW (ft BTOC)	DTP (ft BTOC)	DTB (ft BTOC)	Sample ID	Notes
MP-1	2001	2	8.5	5	3.5-8.5	0.02	0.5						Decommissioned
MP-1R	2013	2	13.5	10	3.5-13.5	0.02	0.5	9/3/20	4.76				roots/biogrowth in well starting at top of screen.
MW-1	2002	2	50.15	25	24.7-49.7	0.02	0.5		33.8				
MW-2	2002	2	14	10	3.5-13.5	0.02	0.5		4.70				
MW-3	2002	2	14	10	3.5-13.5	0.02	0.5						
MW-4	2002	2	13.51	10	3.0-13.0	0.02	0.5		5.75				
MW-5	2002	2	13.34	10	2.8-12.8	0.02	0.5		4.72				
MW-5D	2013	2	45	20	25.0-45.0	0.02	0.5		33.52				
MW-6	2002	2	41.52	20	21.0-41.0	0.02	0.5		34.43				
MW-7	2002	2	44.74	20	24.2-44.2	0.02	0.5		34.33				
MW-8	2002	2	47.12	20	26.6-46.6	0.02	0.5		~~35.2~~ 34.2				
MW-10	2019	2	15	12	3.0-15.0	0.01	0.5		Dry				
MW-11	2019	2	15	12	3.0-15.0	0.01	0.5		Dry				
MW-12	2019	2	49	25	24.0-49.0	0.01	0.5		33.57				
95-MW-11A	1990	2	99.5	10	84.95-94.5	0.01	5						
95-MW-11B	1990	2	49.05	20	24.7-44.7	0.01	5.25						
95-MW-12A	1990	2	81	10	68.1-78.1	0.01	2.25						
95-MW-12B	1990	2	49.72	20	25.0-45.0	0.01	5.25						

Gauge all wells on-Site
Sample 2020

Project Data:

Project Name: 11210714
Ref. No.: Geiger corrections

Date: 9/3/20
Personnel:

Monitoring Well Data:

Well No.: MP-1R
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 4.76

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0800	purging										
0825	120	4.78		14.4	1.41	47.9	0.21	7.16	-164.5		
0830		4.78		14.5	1.41	33.3	0.15	7.1	-171.2		
0835		4.8		14.5	1.41	19.4	0.14	7.03	-174.9		
0840		4.8		14.6	1.41	15	0.14	7.0	-175.6		
0845	sample										

Sample ID: GW-11210714-090320-DT-MP1R

Sample Time: 8:45

Notes: slight odor

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Project Data:

Project Name: Geiger Corrections
Ref. No.: 1121071-4

Date: 9/3/20
Personnel: D. Tudor

MW-7

Monitoring Well Data:

Well No.: MW-7
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 34.33

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1120	Start pump										
1150	150	34.34	0.01	15.0	4.99	6.94	0.41	6.85	-56.3		
1155	↓	34.33	—	15.0	4.98	6.38	0.39	6.85	-55.6		
1200	↓	34.33	—	14.7	5.00	5.57	0.36	6.85	-54.9		
1210	Sampled										

Sample ID: OW-1121071-4-090320-DT-MW7

Sample Time: 1210

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

MW-12

Project Data:
Project Name: Geiger Corrections
Ref. No.: 11210714

Date: 9/3/20
Personnel: D. Tudeau

Monitoring Well Data:
Well No.: MW-12
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 33.57

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1010	Start pump										
1040	150	33.60	0.03	14.1	0.85	22.7	0.20	6.92	-12.9		
1045	↓	33.58	0.01	14.3	0.85	21.1	0.20	6.93	-13.1		
1050	↓	33.58	0.01	14.3	0.85	23.2	0.20	6.92	-13.4		
1100	sampled										

Sample ID: GW-11210714-090320-DT-MW12

Sample Time: 1100

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

MW-SD

Project Data:
Project Name: Geiger Connections
Ref. No.: 11210714

Date: 9/3/20
Personnel: D. Tudor

Monitoring Well Data:
Well No.: MW-SD
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 33.52

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0900	Start pump										
0930	150	13.55	0.03	13.8	0.69	8.91	0.18	7.14	-51.4		
0935	↓	13.55	0.03	13.8	0.69	8.80	0.15	7.13	-50.8		
0940	↓	13.54	0.02	13.8	0.69	7.98	0.15	7.13	-49.7		
0945	Sample										
0950	Dup										

Sample ID: GW-11210714-090320-DT-MW SD Dup
Sample Time: 0945 0950 - Dup.

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

MW-2

Project Data:
Project Name: Geiger Corrections
Ref. No.: 11210714

Date: 9/3/20
Personnel: D. Tudor

Monitoring Well Data:
Well No.: MW-2
Vapour PID (ppm):
Measurement Point: TOC
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in): 2"
Well Screen Volume, V_s (L)[1,2]:
Initial Depth to Water (m/ft): 4.70

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0745	Start pump										
0815	150	4.72	0.02	16.9	0.90	3.50	0.18	7.46	-174.9		
0820	|	4.72	0.02	16.5	0.91	3.03	0.15	7.45	-174.3		
0825	|	4.72	0.02	17.0	0.91	2.54	0.15	7.46	-173.0		
0830	Sampled										

Sample ID: Gw. 11210714-090320-DT-MW-2

Sample Time: 0830

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Appendix B
Laboratory Analytical Reports

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GHD - P66
2055 Niagara Falls Blvd
Niagara Falls NY 14304

Report Date: March 24, 2020 11:27

Project: Geiger Corrections Center

Account #: 42241
Group Number: 2091134
PO Number: 34043309
Release Number: 11145847
State of Sample Origin: WA

Electronic Copy To	GHD	Attn: Jeffrey Cloud
Electronic Copy To	GHD	Attn: Eric Maise
Electronic Copy To	GHD	Attn: Moshghan Mansoori
Electronic Copy To	GHD	Attn: Rosemarie Borths

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
GW-11145847-030520-DT-MW5D Grab Groundwater	03/05/2020 09:15	1274536
GW-11145847-030520-DT-MW12 Grab Groundwater	03/05/2020 10:30	1274537
GW-11145847-030520-DT-MW7 Grab Groundwater	03/05/2020 12:00	1274538
GW-11145847-030520-JRL-MP1R Grab Groundwater	03/05/2020 08:55	1274539
GW-11145847-030520-JRL-MW2 Grab Groundwater	03/05/2020 09:40	1274540
GW-11145847-030520-JRL-MW11 Grab Groundwater	03/05/2020 11:05	1274541
GW-11145847-030520-DUP Grab Groundwater	03/05/2020	1274542
Trip Blanks Water	03/05/2020	1274543

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: **GW-11145847-030520-DT-MW5D Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020 09:15

GHD - P66
ELLE Sample #: GW 1274536
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	78 J	46	100	1
12899	DX HRO C24-C40	n.a.	N.D.	100	260	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200702AA	03/10/2020 16:12	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200702AA	03/10/2020 16:11	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20070A20A	03/11/2020 00:29	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030C	1	20070A20A	03/11/2020 00:28	Jeremy C Giffin	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200720020A	03/14/2020 08:44	Bridget Kovacs	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	1	200720020A	03/13/2020 08:45	Bojan Milinic	1

*=This limit was used in the evaluation of the final result

Sample Description: **GW-11145847-030520-DT-MW12 Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020 10:30

GHD - P66
ELLE Sample #: GW 1274537
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	N.D.	46	100	1
12899	DX HRO C24-C40	n.a.	N.D.	100	260	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200702AA	03/10/2020 16:36	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200702AA	03/10/2020 16:35	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20071A20A	03/11/2020 17:37	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	20071A20A	03/11/2020 17:36	Marie D Beamenderfer	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200720020A	03/14/2020 09:07	Bridget Kovacs	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	1	200720020A	03/13/2020 08:45	Bojan Milinic	1

*=This limit was used in the evaluation of the final result

Sample Description: **GW-11145847-030520-DT-MW7 Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020 12:00

GHD - P66
ELLE Sample #: GW 1274538
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**		**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.		0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.		0.4	1	1
13130	Toluene	108-88-3	N.D.		0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.		1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	51	J	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**		**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	190		49	110	1
12899	DX HRO C24-C40	n.a.	N.D.		110	270	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200702AA	03/10/2020 17:00	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200702AA	03/10/2020 16:59	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20070A20A	03/11/2020 00:52	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030C	1	20070A20A	03/11/2020 00:51	Jeremy C Giffin	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200720020A	03/14/2020 09:29	Bridget Kovacs	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	1	200720020A	03/13/2020 08:45	Bojan Milinic	1

*=This limit was used in the evaluation of the final result

Sample Description: **GW-11145847-030520-JRL-MP1R Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020 08:55

GHD - P66
ELLE Sample #: GW 1274539
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	550	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	350	46	100	1
12899	DX HRO C24-C40	n.a.	N.D.	100	250	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200702AA	03/10/2020 17:24	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200702AA	03/10/2020 17:23	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20070A20A	03/11/2020 01:16	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030C	1	20070A20A	03/11/2020 01:15	Jeremy C Giffin	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200720020A	03/14/2020 09:52	Bridget Kovacs	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	1	200720020A	03/13/2020 08:45	Bojan Milinic	1

*=This limit was used in the evaluation of the final result

Sample Description: **GW-11145847-030520-JRL-MW2 Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020 09:40

GHD - P66
ELLE Sample #: GW 1274540
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	1,200	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	410	47	100	1
12899	DX HRO C24-C40	n.a.	N.D.	100	260	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200712AA	03/11/2020 15:05	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200712AA	03/11/2020 15:04	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20070A20A	03/11/2020 01:40	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030C	1	20070A20A	03/11/2020 01:39	Jeremy C Giffin	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200720020A	03/14/2020 10:15	Bridget Kovacs	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	1	200720020A	03/13/2020 08:45	Bojan Milinic	1

*=This limit was used in the evaluation of the final result

Sample Description: **GW-11145847-030520-JRL-MW11 Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020 11:05

GHD - P66
ELLE Sample #: GW 1274541
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	N.D.	46	100	1
12899	DX HRO C24-C40	n.a.	N.D.	100	260	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200712AA	03/11/2020 15:29	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200712AA	03/11/2020 15:28	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20070A20A	03/11/2020 02:03	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030C	1	20070A20A	03/11/2020 02:02	Jeremy C Giffin	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200720020A	03/14/2020 10:37	Bridget Kovacs	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	1	200720020A	03/13/2020 08:45	Bojan Milinic	1

*=This limit was used in the evaluation of the final result

Sample Description: **GW-11145847-030520-DUP Grab Groundwater**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020

GHD - P66
ELLE Sample #: GW 1274542
ELLE Group #: 2091134
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	1,100	19	250	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	**ug/l**	
12899	DX DRO C12-C24	n.a.	460	47	110	1
12899	DX HRO C24-C40	n.a.	N.D.	110	260	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200712AA	03/11/2020 15:53	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200712AA	03/11/2020 15:52	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20070A20A	03/11/2020 02:26	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030C	1	20070A20A	03/11/2020 02:25	Jeremy C Giffin	1
12899	DRO/DX Mini-extraction Master	ECY 97-602 NWTPH-Dx modified	1	200780019A	03/24/2020 01:47	Timothy M Emrick	1
12907	Mini-extraction DRO DX (water)	ECY 97-602 NWTPH-Dx 06/97	2	200780019A	03/18/2020 15:20	Osvaldo R Sanchez	1

*=This limit was used in the evaluation of the final result

Sample Description: **Trip Blanks Water**
Geiger Corrections Center

Project Name: **Geiger Corrections Center**

Submittal Date/Time: 03/06/2020 09:58
Collection Date/Time: 03/05/2020

GHD - P66
ELLE Sample #: GW 1274543
ELLE Group #: 2091134
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
13130	Benzene	71-43-2	N.D.	0.2	1	1
13130	Ethylbenzene	100-41-4	N.D.	0.4	1	1
13130	Toluene	108-88-3	N.D.	0.2	1	1
13130	Xylene (Total)	1330-20-7	N.D.	1	6	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	19	250	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13130	BTEX	SW-846 8260C	1	D200702AA	03/10/2020 11:48	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D200702AA	03/10/2020 11:47	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	20071A20A	03/11/2020 12:55	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	20071A20A	03/11/2020 12:54	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: GHD - P66 Group Number: 2091134
Reported: 03/24/2020 11:27

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 was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: D200702AA	Sample number(s): 1274536-1274539,1274543		
Benzene	N.D.	0.2	1
Ethylbenzene	N.D.	0.4	1
Toluene	N.D.	0.2	1
Xylene (Total)	N.D.	1	6
Batch number: D200712AA	Sample number(s): 1274540-1274542		
Benzene	N.D.	0.2	1
Ethylbenzene	N.D.	0.4	1
Toluene	N.D.	0.2	1
Xylene (Total)	N.D.	1	6
Batch number: 20070A20A	Sample number(s): 1274536,1274538-1274542		
NWTPH-Gx water C7-C12	N.D.	19	250
Batch number: 20071A20A	Sample number(s): 1274537,1274543		
NWTPH-Gx water C7-C12	N.D.	19	250
Batch number: 200720020A	Sample number(s): 1274536-1274541		
DX DRO C12-C24	N.D.	45	100
DX HRO C24-C40	N.D.	100	250
Batch number: 200780019A	Sample number(s): 1274542		
DX DRO C12-C24	N.D.	45	100
DX HRO C24-C40	N.D.	100	250

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D200702AA	Sample number(s): 1274536-1274539,1274543								
Benzene	20	22.48			112		80-120		
Ethylbenzene	20	22.23			111		80-120		
Toluene	20	23.17			116		80-120		
Xylene (Total)	60	68.18			114		80-120		
Batch number: D200712AA	Sample number(s): 1274540-1274542								
Benzene	20	20.13	20	19.89	101	99	80-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: GHD - P66 Group Number: 2091134
Reported: 03/24/2020 11:27

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Ethylbenzene	20	19.58	20	19.28	98	96	80-120	2	30
Toluene	20	20.7	20	20.21	104	101	80-120	2	30
Xylene (Total)	60	59.94	60	59.02	100	98	80-120	2	30
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 20070A20A	Sample number(s): 1274536,1274538-1274542								
NWTPH-Gx water C7-C12	1100	1046.53	1100	1061.52	95	97	64-131	1	30
Batch number: 20071A20A	Sample number(s): 1274537,1274543								
NWTPH-Gx water C7-C12	1100	1095.36	1100	1109.12	100	101	64-131	1	30
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 200720020A	Sample number(s): 1274536-1274541								
DX DRO C12-C24	600.15	387.74	600.15	373.59	65	62	14-115	4	20
Batch number: 200780019A	Sample number(s): 1274542								
DX DRO C12-C24	600.15	287.46	600.15	301.22	48	50	14-115	5	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX
Batch number: D200702AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
1274536	97	96	103	91
1274537	98	96	101	92
1274538	97	93	103	93
1274539	99	95	103	94
1274543	97	95	102	91
Blank	97	94	102	93
LCS	95	93	102	96
Limits:	80-120	80-120	80-120	80-120

Analysis Name: BTEX
Batch number: D200712AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
1274540	98	94	102	94
1274541	97	93	102	94
1274542	99	95	102	94

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: GHD - P66 Group Number: 2091134
Reported: 03/24/2020 11:27

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX
Batch number: D200712AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	97	92	102	91
LCS	95	96	103	95
LCSD	95	95	103	95
Limits:	80-120	80-120	80-120	80-120

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 20070A20A

	Trifluorotoluene-F
1274536	80
1274538	81
1274539	79
1274540	83
1274541	74
1274542	81
Blank	82
LCS	94
LCSD	91
Limits:	50-150

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 20071A20A

	Trifluorotoluene-F
1274537	77
1274543	80
Blank	79
LCS	90
LCSD	90
Limits:	50-150

Analysis Name: DRO/DX Mini-extraction Master
Batch number: 200720020A

	Orthoterphenyl
1274536	85
1274537	85
1274538	75
1274539	85
1274540	85
1274541	87
Blank	93

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: GHD - P66 Group Number: 2091134
Reported: 03/24/2020 11:27

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: DRO/DX Mini-extraction Master
Batch number: 200720020A

	Orthoterphenyl
LCS	96
LCSD	94
Limits:	50-150

Analysis Name: DRO/DX Mini-extraction Master
Batch number: 200780019A

	Orthoterphenyl
1274542	87
Blank	62
LCS	79
LCSD	79
Limits:	50-150

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 4224 | For Eurofins Lancaster Laboratories Environmental use only Group # 2091134 Sample # 127536-43

Instructions on reverse side correspond with circled numbers.

381613

1 Client Information

Client: 42241 | 11145847	Acct. #:
Project Name/#: Geiger Correctians	PWSID #:
Project Manager: M. Mansoori	P.O. #:
Sampler: D. Tyndall | JRL	Quote #:
Name of state where samples were collected:	

4 Matrix

Sediment ☐ Soil ☐ | Ground ☒ Potable ☐ Water | Surface ☐ NPDES ☐ | Other: ☐

5 Analysis Requested

Preservation Codes

For Lab Use Only

FSC:

SCR#:

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

6 Remarks

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	NWTPH GX	NWTPH DX	BTEX 8260
GW · 11145847 · 030520 · DT · MW5D	3/5/20	0915	X		GW	X	X	X
· MW12		1030	X			X	X	X
· MW7		1200	X			X	X	X
JRL · MP1R		0855	X			X	X	X
· MW2		0940	X			X	X	X
· MW11		1105	X			X	X	X
Dup			X			X	X	X
trip blanks					TB	X		X

7 Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed:

E-mail address:

8 Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP)
Type VI (Raw Data Only)
Type III (Reduced non-CLP)
TX TRRP-13
NYSDEC Category A or B
MA MCP
CT RCP

Relinquished by	Date	Time	Received by	Date	Time
D. Tyndall	3/5/20	1300			
				3/6/20	958

9

EDD Required? Yes No

If yes, format:

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS FedEx Other

Temperature upon receipt 0.8 °C

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 278044

Group Number(s): 2091134

Client: GHD

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Date:	03/06/2020
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Melvin Sanchez

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.8	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

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.

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

Tests 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.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYTICAL REPORT

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

Laboratory Job ID: 410-3631-1
Client Project/Site: 11210714 Geiger Corrections Center

For:
GHD Services Inc.
20818 44th Ave W
Suite 190
Lynnwood, Washington 98036

Attn: Moshghan Mansoori

Authorized for release by:
7/28/2020 9:15:00 AM

Katherine Klinefelter, Principal Project Manager
(717)556-7256
katherineklinefelter@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 data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. 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. 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 LANACASTER 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. 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.

Katherine Klinefelter
Principal Project Manager
7/28/2020 9:15:00 AM

Table of Contents

Definitions/Glossary

Client: GHD Services Inc. Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: 410-3631-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-3631-1

Comments
No additional comments.

Receipt
The samples were received on 6/6/2020 9:26 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.1° C and 2.1° C.

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

GC VOA
Method NWTPH-Gx: The method blank for analytical batch 410-12301 contained GRO above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

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

Organic Prep
Method 3510C: The following samples were prepared outside of preparation holding time due to laboratory error: GW-1121074-060320-EM-MP1R (410-3631-1), GW-1121074-060320-EM-MW2 (410-3631-2), GW-1121074-060320-EM-MW11 (410-3631-3), GW-1121074-060320-EM-MW5D (410-3631-4), GW-1121074-060320-EM-MW12 (410-3631-5), GW-1121074-060320-EM-MW7 (410-3631-6) and GW-1121074-060320-EM-DUP (410-3631-7).

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

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

Detection Summary

Client: GHD Services Inc.
Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

Client Sample ID: GW-1121074-060320-EM-MP1R — Lab Sample ID: 410-3631-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	2000	B	1300	95	ug/L	5		NWTPH-Gx	Total/NA
C12-C24	2200	H	110	49	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	170	J H	270	110	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-1121074-060320-EM-MW2 — Lab Sample ID: 410-3631-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	780	B	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	710	H	100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-1121074-060320-EM-MW11 — Lab Sample ID: 410-3631-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	26	J	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	71	J H	100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-1121074-060320-EM-MW5D — Lab Sample ID: 410-3631-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C12-C24	390	H	100	47	ug/L	1		NWTPH-Dx	Total/NA
C24-C40	120	J H	260	100	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-1121074-060320-EM-MW12 — Lab Sample ID: 410-3631-5

No Detections.

Client Sample ID: GW-1121074-060320-EM-MW7 — Lab Sample ID: 410-3631-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	95	J	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	400	H	120	55	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-1121074-060320-EM-DUP — Lab Sample ID: 410-3631-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	60	J	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	270	H	100	45	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 410-3631-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-1121074-060320-EM-MP1R
Lab Sample ID: 410-3631-1
Date Collected: 06/03/20 09:00
Matrix: Groundwater
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 16:14	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 16:14	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 16:14	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*06/15/20 16:14*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*06/15/20 16:14*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*06/15/20 16:14*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/15/20 16:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	2000	B	1300	95	ug/L			06/11/20 23:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*99*				*06/11/20 23:43*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	2200	H	110	49	ug/L		06/11/20 18:23	06/13/20 05:42	1
C24-C40	170	J H	270	110	ug/L		06/11/20 18:23	06/13/20 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*69*		*50 - 150*	*06/11/20 18:23*	*06/13/20 05:42*	*1*

Client Sample ID: GW-1121074-060320-EM-MW2
Lab Sample ID: 410-3631-2
Date Collected: 06/03/20 10:10
Matrix: Groundwater
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 16:35	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 16:35	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 16:35	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*06/15/20 16:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/15/20 16:35*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*06/15/20 16:35*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/15/20 16:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	780	B	250	19	ug/L			06/11/20 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*98*				*06/11/20 23:17*	*1*

Client Sample ID: GW-1121074-060320-EM-MW2 — Lab Sample ID: 410-3631-2

Date Collected: 06/03/20 10:10 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	710	H	100	46	ug/L		06/11/20 18:23	06/13/20 06:05	1
C24-C40	ND	H	260	100	ug/L		06/11/20 18:23	06/13/20 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*92*		*50 - 150*	*06/11/20 18:23*	*06/13/20 06:05*	*1*

Client Sample ID: GW-1121074-060320-EM-MW11 — Lab Sample ID: 410-3631-3

Date Collected: 06/03/20 11:20 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 16:57	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 16:57	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 16:57	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/15/20 16:57*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/15/20 16:57*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*06/15/20 16:57*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/15/20 16:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	26	J	250	19	ug/L			06/15/20 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*82*		*50 - 150*		*06/15/20 18:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	71	J H	100	46	ug/L		06/11/20 18:23	06/13/20 06:27	1
C24-C40	ND	H	260	100	ug/L		06/11/20 18:23	06/13/20 06:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*92*		*50 - 150*	*06/11/20 18:23*	*06/13/20 06:27*	*1*

Client Sample ID: GW-1121074-060320-EM-MW5D — Lab Sample ID: 410-3631-4

Date Collected: 06/03/20 13:30 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 17:19	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 17:19	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 17:19	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*06/15/20 17:19*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*06/15/20 17:19*	*1*

Client Sample ID: GW-1121074-060320-EM-MW5D
Lab Sample ID: 410-3631-4
Date Collected: 06/03/20 13:30
Matrix: Groundwater
Date Received: 06/06/20 09:26

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*06/15/20 17:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/15/20 17:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	19	ug/L			06/15/20 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	*80*		*50 - 150*		*06/15/20 19:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**390**	**H**	100	47	ug/L		06/11/20 18:23	06/13/20 06:50	1
C24-C40	**120**	**J H**	260	100	ug/L		06/11/20 18:23	06/13/20 06:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*91*		*50 - 150*	*06/11/20 18:23*	*06/13/20 06:50*	*1*

Client Sample ID: GW-1121074-060320-EM-MW12
Lab Sample ID: 410-3631-5
Date Collected: 06/03/20 15:00
Matrix: Groundwater
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 17:41	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 17:41	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 17:41	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/15/20 17:41*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*06/15/20 17:41*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/15/20 17:41*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/15/20 17:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	19	ug/L			06/15/20 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	*84*		*50 - 150*		*06/15/20 19:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND	H	110	49	ug/L		06/11/20 18:23	06/13/20 07:13	1
C24-C40	ND	H	270	110	ug/L		06/11/20 18:23	06/13/20 07:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	*89*		*50 - 150*	*06/11/20 18:23*	*06/13/20 07:13*	*1*

Client Sample ID: GW-1121074-060320-EM-MW7 — Lab Sample ID: 410-3631-6

Date Collected: 06/03/20 16:40 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 18:03	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 18:03	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 18:03	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/15/20 18:03*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/15/20 18:03*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*06/15/20 18:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/15/20 18:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**95**	**J**	250	19	ug/L			06/15/20 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*81*		*50 - 150*		*06/15/20 20:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**400**	**H**	120	55	ug/L		06/11/20 18:23	06/13/20 07:36	1
C24-C40	ND	H	300	120	ug/L		06/11/20 18:23	06/13/20 07:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*88*		*50 - 150*	*06/11/20 18:23*	*06/13/20 07:36*	*1*

Client Sample ID: GW-1121074-060320-EM-DUP — Lab Sample ID: 410-3631-7

Date Collected: 06/03/20 16:45 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 18:25	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 18:25	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 18:25	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*06/15/20 18:25*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/15/20 18:25*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/15/20 18:25*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/15/20 18:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**60**	**J**	250	19	ug/L			06/15/20 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*79*		*50 - 150*		*06/15/20 20:34*	*1*

Client: GHD Services Inc.
Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

Client Sample ID: GW-1121074-060320-EM-DUP
Lab Sample ID: 410-3631-7
Date Collected: 06/03/20 16:45
Matrix: Groundwater
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	270	H	100	45	ug/L		06/11/20 18:23	06/13/20 07:58	1
C24-C40	ND	H	250	100	ug/L		06/11/20 18:23	06/13/20 07:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*88*		*50 - 150*	*06/11/20 18:23*	*06/13/20 07:58*	*1*

Client Sample ID: Trip Blank
Lab Sample ID: 410-3631-8
Date Collected: 06/03/20 00:00
Matrix: Water
Date Received: 06/06/20 09:26

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 12:13	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 12:13	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 12:13	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*06/15/20 12:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*06/15/20 12:13*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*06/15/20 12:13*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/15/20 12:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	19	ug/L			06/15/20 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*80*		*50 - 150*		*06/15/20 16:17*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11210714 Geiger Corrections Center

Job ID: 410-3631-1

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)
410-3631-1	GW-1121074-060320-EM-MP1F	101	100	100	96
410-3631-2	GW-1121074-060320-EM-MW2	101	98	101	95
410-3631-3	GW-1121074-060320-EM-MW11	99	96	98	97
410-3631-4	GW-1121074-060320-EM-MW5D	102	97	101	98
410-3631-5	GW-1121074-060320-EM-MW12	99	97	99	98
410-3631-6	GW-1121074-060320-EM-MW7	99	99	100	98
410-3631-7	GW-1121074-060320-EM-DUP	98	98	99	99

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)
410-3631-8	Trip Blank	102	97	101	97
LCS 410-13066/5	Lab Control Sample	100	100	99	99
MB 410-13066/7	Method Blank	99	97	98	98
MRL 410-13066/6	Lab Control Sample	101	100	99	99

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	
410-3631-1	GW-1121074-060320-EM-MP1F	99
410-3631-2	GW-1121074-060320-EM-MW2	98

Surrogate Legend

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

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)
410-3631-3	GW-1121074-060320-EM-MW1	82

Surrogate Summary

Client: GHD Services Inc. Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT-F1 (50-150)
410-3631-4	GW-1121074-060320-EM-MW5I	80
410-3631-5	GW-1121074-060320-EM-MW12	84
410-3631-6	GW-1121074-060320-EM-MW7	81
410-3631-7	GW-1121074-060320-EM-DUP	79

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)
Lab Sample ID	Client Sample ID	TFT-F1 (50-150)
410-3631-8	Trip Blank	80
LCS 410-13147/5	Lab Control Sample	84
LCSD 410-13147/6	Lab Control Sample Dup	79
MB 410-13147/4	Method Blank	83

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)
Lab Sample ID	Client Sample ID	TFT-F1
LCS 410-12301/6	Lab Control Sample	91
LCSD 410-12301/7	Lab Control Sample Dup	93
MB 410-12301/5	Method Blank	99

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)
410-3631-1	GW-1121074-060320-EM-MP1F	69
410-3631-2	GW-1121074-060320-EM-MW2	92
410-3631-3	GW-1121074-060320-EM-MW11	92
410-3631-4	GW-1121074-060320-EM-MW5D	91
410-3631-5	GW-1121074-060320-EM-MW12	89
410-3631-6	GW-1121074-060320-EM-MW7	88
410-3631-7	GW-1121074-060320-EM-DUP	88

Surrogate Legend

Surrogate Summary

Client: GHD Services Inc. Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center
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 410-12412/2-A	Lab Control Sample	86
LCSD 410-12412/3-A	Lab Control Sample Dup	84
MB 410-12412/1-A	Method Blank	90

Surrogate Legend
OTP = o- terphenyl (Surr)

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

Lab Sample ID: MB 410-13066/7
Matrix: Water
Analysis Batch: 13066

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			06/15/20 11:26	1
Ethylbenzene	ND		1.0	0.40	ug/L			06/15/20 11:26	1
Toluene	ND		1.0	0.20	ug/L			06/15/20 11:26	1
Xylenes, Total	ND		6.0	1.4	ug/L			06/15/20 11:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/15/20 11:26*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*06/15/20 11:26*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*06/15/20 11:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/15/20 11:26*	*1*

Lab Sample ID: LCS 410-13066/5
Matrix: Water
Analysis Batch: 13066

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	19.2		ug/L		96	80 - 120
Ethylbenzene	20.0	20.3		ug/L		101	80 - 120
Toluene	20.0	19.7		ug/L		98	80 - 120
Xylenes, Total	60.0	62.2		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MRL 410-13066/6
Matrix: Water
Analysis Batch: 13066

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.00	ND		ug/L		0	
Ethylbenzene	1.00	0.991	J	ug/L		99	
Toluene	1.00	1.06		ug/L		106	
Xylenes, Total	3.00	2.83	J	ug/L		94	

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: MB 410-12301/5
Matrix: Water
Analysis Batch: 12301

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	38.3	J	250	19	ug/L			06/11/20 14:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*99*				*06/11/20 14:43*	*1*

Lab Sample ID: LCS 410-12301/6
Matrix: Water
Analysis Batch: 12301

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	1030		ug/L		94	64 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*91*		

Lab Sample ID: LCSD 410-12301/7
Matrix: Water
Analysis Batch: 12301

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	1030		ug/L		93	64 - 131	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*93*		

Lab Sample ID: MB 410-13147/4
Matrix: Water
Analysis Batch: 13147

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	19	ug/L			06/15/20 14:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*83*		*50 - 150*		*06/15/20 14:43*	*1*

Lab Sample ID: LCS 410-13147/5
Matrix: Water
Analysis Batch: 13147

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	1000		ug/L		91	64 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*84*		*50 - 150*

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

Lab Sample ID: LCSD 410-13147/6
Matrix: Water
Analysis Batch: 13147

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	1010		ug/L		92	64 - 131	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*79*		*50 - 150*

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

Lab Sample ID: MB 410-12412/1-A
Matrix: Water
Analysis Batch: 12767

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	45	ug/L		06/11/20 18:23	06/13/20 01:55	1
C24-C40	ND		250	100	ug/L		06/11/20 18:23	06/13/20 01:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*90*		*50 - 150*	*06/11/20 18:23*	*06/13/20 01:55*	*1*

Lab Sample ID: LCS 410-12412/2-A
Matrix: Water
Analysis Batch: 12767

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C12-C24			600	300		ug/L		50	10 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o- terphenyl (Surr)	*86*		*50 - 150*

Lab Sample ID: LCSD 410-12412/3-A
Matrix: Water
Analysis Batch: 12767

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12412

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C12-C24			600	280		ug/L		47	10 - 115	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o- terphenyl (Surr)	*84*		*50 - 150*

GC/MS VOA

Analysis Batch: 13066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3631-1	GW-1121074-060320-EM-MP1R	Total/NA	Groundwater	8260C	
410-3631-2	GW-1121074-060320-EM-MW2	Total/NA	Groundwater	8260C	
410-3631-3	GW-1121074-060320-EM-MW11	Total/NA	Groundwater	8260C	
410-3631-4	GW-1121074-060320-EM-MW5D	Total/NA	Groundwater	8260C	
410-3631-5	GW-1121074-060320-EM-MW12	Total/NA	Groundwater	8260C	
410-3631-6	GW-1121074-060320-EM-MW7	Total/NA	Groundwater	8260C	
410-3631-7	GW-1121074-060320-EM-DUP	Total/NA	Groundwater	8260C	
410-3631-8	Trip Blank	Total/NA	Water	8260C	
MB 410-13066/7	Method Blank	Total/NA	Water	8260C	
LCS 410-13066/5	Lab Control Sample	Total/NA	Water	8260C	
MRL 410-13066/6	Lab Control Sample	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 12301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3631-1	GW-1121074-060320-EM-MP1R	Total/NA	Groundwater	NWTPH-Gx	
410-3631-2	GW-1121074-060320-EM-MW2	Total/NA	Groundwater	NWTPH-Gx	
MB 410-12301/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-12301/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-12301/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 13147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3631-3	GW-1121074-060320-EM-MW11	Total/NA	Groundwater	NWTPH-Gx	
410-3631-4	GW-1121074-060320-EM-MW5D	Total/NA	Groundwater	NWTPH-Gx	
410-3631-5	GW-1121074-060320-EM-MW12	Total/NA	Groundwater	NWTPH-Gx	
410-3631-6	GW-1121074-060320-EM-MW7	Total/NA	Groundwater	NWTPH-Gx	
410-3631-7	GW-1121074-060320-EM-DUP	Total/NA	Groundwater	NWTPH-Gx	
410-3631-8	Trip Blank	Total/NA	Water	NWTPH-Gx	
MB 410-13147/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-13147/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-13147/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 12412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3631-1	GW-1121074-060320-EM-MP1R	Total/NA	Groundwater	3510C	
410-3631-2	GW-1121074-060320-EM-MW2	Total/NA	Groundwater	3510C	
410-3631-3	GW-1121074-060320-EM-MW11	Total/NA	Groundwater	3510C	
410-3631-4	GW-1121074-060320-EM-MW5D	Total/NA	Groundwater	3510C	
410-3631-5	GW-1121074-060320-EM-MW12	Total/NA	Groundwater	3510C	
410-3631-6	GW-1121074-060320-EM-MW7	Total/NA	Groundwater	3510C	
410-3631-7	GW-1121074-060320-EM-DUP	Total/NA	Groundwater	3510C	
MB 410-12412/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-12412/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-12412/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 12767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3631-1	GW-1121074-060320-EM-MP1R	Total/NA	Groundwater	NWTPH-Dx	12412

GC Semi VOA (Continued)

Analysis Batch: 12767 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3631-2	GW-1121074-060320-EM-MW2	Total/NA	Groundwater	NWTPH-Dx	12412
410-3631-3	GW-1121074-060320-EM-MW11	Total/NA	Groundwater	NWTPH-Dx	12412
410-3631-4	GW-1121074-060320-EM-MW5D	Total/NA	Groundwater	NWTPH-Dx	12412
410-3631-5	GW-1121074-060320-EM-MW12	Total/NA	Groundwater	NWTPH-Dx	12412
410-3631-6	GW-1121074-060320-EM-MW7	Total/NA	Groundwater	NWTPH-Dx	12412
410-3631-7	GW-1121074-060320-EM-DUP	Total/NA	Groundwater	NWTPH-Dx	12412
MB 410-12412/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	12412
LCS 410-12412/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	12412
LCSD 410-12412/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	12412

Lab Chronicle

Client: GHD Services Inc. Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

Client Sample ID: GW-1121074-060320-EM-MP1R — Lab Sample ID: 410-3631-1

Date Collected: 06/03/20 09:00 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 16:14	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		5	12301	06/11/20 23:43	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 05:42	IUSB	ELLE

Client Sample ID: GW-1121074-060320-EM-MW2 — Lab Sample ID: 410-3631-2

Date Collected: 06/03/20 10:10 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 16:35	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	12301	06/11/20 23:17	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 06:05	IUSB	ELLE

Client Sample ID: GW-1121074-060320-EM-MW11 — Lab Sample ID: 410-3631-3

Date Collected: 06/03/20 11:20 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 16:57	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	13147	06/15/20 18:38	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 06:27	IUSB	ELLE

Client Sample ID: GW-1121074-060320-EM-MW5D — Lab Sample ID: 410-3631-4

Date Collected: 06/03/20 13:30 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 17:19	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	13147	06/15/20 19:01	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 06:50	IUSB	ELLE

Client Sample ID: GW-1121074-060320-EM-MW12 — Lab Sample ID: 410-3631-5

Date Collected: 06/03/20 15:00 — **Matrix: Groundwater**
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 17:41	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	13147	06/15/20 19:25	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 07:13	IUSB	ELLE

Lab Chronicle

Client: GHD Services Inc.
Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

Client Sample ID: GW-1121074-060320-EM-MW7
Lab Sample ID: 410-3631-6
Date Collected: 06/03/20 16:40
Matrix: Groundwater
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 18:03	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	13147	06/15/20 20:11	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 07:36	IUSB	ELLE

Client Sample ID: GW-1121074-060320-EM-DUP
Lab Sample ID: 410-3631-7
Date Collected: 06/03/20 16:45
Matrix: Groundwater
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 18:25	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	13147	06/15/20 20:34	JJT8	ELLE
Total/NA	Prep	3510C			12412	06/11/20 18:23	QQ3P	ELLE
Total/NA	Analysis	NWTPH-Dx		1	12767	06/13/20 07:58	IUSB	ELLE

Client Sample ID: Trip Blank
Lab Sample ID: 410-3631-8
Date Collected: 06/03/20 00:00
Matrix: Water
Date Received: 06/06/20 09:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	13066	06/15/20 12:13	NSK7	ELLE
Total/NA	Analysis	NWTPH-Gx		1	13147	06/15/20 16:17	JJT8	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: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

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	04-11-21

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
NWTPH-Dx	3510C	Groundwater	C12-C24
NWTPH-Gx		Groundwater	C7-C12 (1C)
NWTPH-Gx		Water	C7-C12 (1C)

Method Summary

Client: GHD Services Inc.
Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

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.
Job ID: 410-3631-1
Project/Site: 11210714 Geiger Corrections Center

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-3631-1	GW-1121074-060320-EM-MP1R	Groundwater	06/03/20 09:00	06/06/20 09:26	
410-3631-2	GW-1121074-060320-EM-MW2	Groundwater	06/03/20 10:10	06/06/20 09:26	
410-3631-3	GW-1121074-060320-EM-MW11	Groundwater	06/03/20 11:20	06/06/20 09:26	
410-3631-4	GW-1121074-060320-EM-MW5D	Groundwater	06/03/20 13:30	06/06/20 09:26	
410-3631-5	GW-1121074-060320-EM-MW12	Groundwater	06/03/20 15:00	06/06/20 09:26	
410-3631-6	GW-1121074-060320-EM-MW7	Groundwater	06/03/20 16:40	06/06/20 09:26	
410-3631-7	GW-1121074-060320-EM-DUP	Groundwater	06/03/20 16:45	06/06/20 09:26	
410-3631-8	Trip Blank	Water	06/03/20 00:00	06/06/20 09:26	

Environmental Analysis Reque[illegible]dy

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For Eurofins Acct. # _____ Group # _____

410-3631 Chain of Custody

COC # 397642

Client Information

Client: GHD	Acct. #:
Project Name/#: 1121074	PWSID #:
Project Manager: Moshghan Mansoori	P.O. #:
Sampler: Eric Maise	Quote #:
State where samples were collected: WA	For Compliance: Yes ☐ No ☐

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Matrix: Soil	Sediment	Water: Ground	Potable	Surface	NPDES	Other:	Total # of Containers	Preservation Codes	Analysis Requested: 8260 BTEX	MWTPH-Gx	DRO/DX
GW-1121074-060320-EM-MP1R	6/3	0900	X				X					8	H	X	X	X
GW-1121074-060320-EM-MW2	6/3	1010	X									8	H	X	X	X
GW-1121074-060320-EM-MW11	6/3	1120	X									8	H	X	X	X
GW-1121074-060320-EM-MW5D	6/3	1330	X									8	H	X	X	X
GW-1121074-060320-EM-MW12	6/3	1500	X									8	H	X	X	X
GW-1121074-060320-EM-MW7	6/3	1640	X									8	H	X	X	X
GW-1121074-060320-EM-DUP	6/3	1645	X									8	H	X	X	X
Trip blank												4	H	X	X	

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____

E-mail address: _____

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP)
Type VI (Raw Data Only)
Type III (Reduced non-CLP)
TX TRRP-13
NYSDEC Category A or B
MA MCP
CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[illegible] GHD	6/5/20	1200			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
				6/6/20	926

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt 1.1 °C

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 410-3631-1

Login Number: 3631
List Number: 1
Creator: Sanchez, Melvin E

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 410-13071-1
Client Project/Site: 11210714 Geiger Corrections

For:
GHD Inc.
4550 Kruse Way
Suite 300
Lake Oswego, Oregon 97035

Attn: Jeffrey Cloud

Authorized for release by:
9/22/2020 4:38:33 PM
Nicole Maljovec, Client Services Manager
(717)556-7259
NicoleMaljovec@EurofinsUs.com

Designee for

Katherine Klinefelter, Principal Project Manager
(717)556-7256
katherineklinefelter@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 recoveries that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result.

* 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 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. 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 LANACASTER 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. 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.

Nicole Maljovec
Client Services Manager
9/22/2020 4:38:33 PM

Table of Contents

Definitions/Glossary

Client: GHD Inc.
Job ID: 410-13071-1
Project/Site: 11210714 Geiger Corrections

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: 410-13071-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-13071-1

Receipt
The samples were received on 9/4/2020 11:04 AM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 3.8°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 Inc.
Job ID: 410-13071-1
Project/Site: 11210714 Geiger Corrections

Client Sample ID: GW-11210714-090320-DT-MW-2 — Lab Sample ID: 410-13071-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	1100		250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	630		110	48	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-11210714-090320-DT-MP1R — Lab Sample ID: 410-13071-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	2200		250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	630		510	230	ug/L	5		NWTPH-Dx	Total/NA

Client Sample ID: GW-11210714-090320-DT-MW5D — Lab Sample ID: 410-13071-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	45	J	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	250		100	46	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-11210714-090320-DT-DUP — Lab Sample ID: 410-13071-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	33	J	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	240		110	48	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GW-11210714-090320-DT-MW12 — Lab Sample ID: 410-13071-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	24	J	250	19	ug/L	1		NWTPH-Gx	Total/NA

Client Sample ID: GW-11210714-090320-DT-MW7 — Lab Sample ID: 410-13071-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C7-C12 (1C)	89	J	250	19	ug/L	1		NWTPH-Gx	Total/NA
C12-C24	570		110	49	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 410-13071-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample ID: GW-11210714-090320-DT-MW-2

Lab Sample ID: 410-13071-1

Date Collected: 09/03/20 08:30

Matrix: Water

Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/16/20 03:26	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/16/20 03:26	1
Toluene	ND		1.0	0.20	ug/L			09/16/20 03:26	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/16/20 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/16/20 03:26*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*09/16/20 03:26*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*09/16/20 03:26*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/16/20 03:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**1100**		250	19	ug/L			09/10/20 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*85*		*50 - 150*		*09/10/20 15:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**630**		110	48	ug/L		09/10/20 07:15	09/11/20 05:58	1
C24-C40	ND		270	110	ug/L		09/10/20 07:15	09/11/20 05:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*96*		*50 - 150*	*09/10/20 07:15*	*09/11/20 05:58*	*1*

Client Sample ID: GW-11210714-090320-DT-MP1R

Lab Sample ID: 410-13071-2

Date Collected: 09/03/20 08:45

Matrix: Water

Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/16/20 02:38	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/16/20 02:38	1
Toluene	ND		1.0	0.20	ug/L			09/16/20 02:38	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/16/20 02:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*09/16/20 02:38*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/16/20 02:38*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*09/16/20 02:38*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/16/20 02:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**2200**		250	19	ug/L			09/10/20 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*87*		*50 - 150*		*09/10/20 18:03*	*1*

Client Sample ID: GW-11210714-090320-DT-MP1R
Lab Sample ID: 410-13071-2

Date Collected: 09/03/20 08:45
Matrix: Water
Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	630		510	230	ug/L		09/10/20 07:15	09/20/20 22:15	5
C24-C40	ND		1300	510	ug/L		09/10/20 07:15	09/20/20 22:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*99*		*50 - 150*	*09/10/20 07:15*	*09/20/20 22:15*	*5*

Client Sample ID: GW-11210714-090320-DT-MW5D
Lab Sample ID: 410-13071-3

Date Collected: 09/03/20 09:45
Matrix: Water
Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/16/20 00:17	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/16/20 00:17	1
Toluene	ND		1.0	0.20	ug/L			09/16/20 00:17	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/16/20 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/16/20 00:17*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/16/20 00:17*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*09/16/20 00:17*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*09/16/20 00:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	45	J	250	19	ug/L			09/10/20 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*85*		*50 - 150*		*09/10/20 16:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	250		100	46	ug/L		09/10/20 07:15	09/11/20 07:06	1
C24-C40	ND		260	100	ug/L		09/10/20 07:15	09/11/20 07:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*94*		*50 - 150*	*09/10/20 07:15*	*09/11/20 07:06*	*1*

Client Sample ID: GW-11210714-090320-DT-DUP
Lab Sample ID: 410-13071-4

Date Collected: 09/03/20 09:50
Matrix: Water
Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/16/20 00:40	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/16/20 00:40	1
Toluene	ND		1.0	0.20	ug/L			09/16/20 00:40	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/16/20 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/16/20 00:40*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/16/20 00:40*	*1*

Client Sample ID: GW-11210714-090320-DT-DUP — Lab Sample ID: 410-13071-4

Date Collected: 09/03/20 09:50 **Matrix: Water**
Date Received: 09/04/20 11:04

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*09/16/20 00:40*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/16/20 00:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**33**	**J**	250	19	ug/L			09/10/20 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*85*		*50 - 150*		*09/10/20 16:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**240**		110	48	ug/L		09/10/20 07:15	09/11/20 07:28	1
C24-C40	ND		270	110	ug/L		09/10/20 07:15	09/11/20 07:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*86*		*50 - 150*	*09/10/20 07:15*	*09/11/20 07:28*	*1*

Client Sample ID: GW-11210714-090320-DT-MW12 — Lab Sample ID: 410-13071-5

Date Collected: 09/03/20 11:00 **Matrix: Water**
Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/16/20 01:04	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/16/20 01:04	1
Toluene	ND		1.0	0.20	ug/L			09/16/20 01:04	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/16/20 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*09/16/20 01:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/16/20 01:04*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*09/16/20 01:04*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/16/20 01:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**24**	**J**	250	19	ug/L			09/10/20 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*85*		*50 - 150*		*09/10/20 17:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		110	52	ug/L		09/10/20 07:15	09/11/20 07:51	1
C24-C40	ND		290	110	ug/L		09/10/20 07:15	09/11/20 07:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*98*		*50 - 150*	*09/10/20 07:15*	*09/11/20 07:51*	*1*

Client Sample ID: GW-11210714-090320-DT-MW7

Lab Sample ID: 410-13071-6

Date Collected: 09/03/20 12:10

Matrix: Water

Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/16/20 01:27	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/16/20 01:27	1
Toluene	ND		1.0	0.20	ug/L			09/16/20 01:27	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/16/20 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*09/16/20 01:27*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/16/20 01:27*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*09/16/20 01:27*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/16/20 01:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	**89**	**J**	250	19	ug/L			09/10/20 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*85*		*50 - 150*		*09/10/20 17:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	**570**		110	49	ug/L		09/10/20 07:15	09/11/20 08:14	1
C24-C40	ND		270	110	ug/L		09/10/20 07:15	09/11/20 08:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*95*		*50 - 150*	*09/10/20 07:15*	*09/11/20 08:14*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 410-13071-7

Date Collected: 09/03/20 00:00

Matrix: Water

Date Received: 09/04/20 11:04

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/15/20 20:43	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/15/20 20:43	1
Toluene	ND		1.0	0.20	ug/L			09/15/20 20:43	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/15/20 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/15/20 20:43*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/15/20 20:43*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*09/15/20 20:43*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/15/20 20:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	19	ug/L			09/10/20 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*86*		*50 - 150*		*09/10/20 14:37*	*1*

Surrogate Summary

Client: GHD Inc.
Project/Site: 11210714 Geiger Corrections

Job ID: 410-13071-1

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)
410-13071-1	GW-11210714-090320-DT-MW-2	103	97	104	93
410-13071-2	GW-11210714-090320-DT-MP1R	106	96	102	92
410-13071-3	GW-11210714-090320-DT-MW5D	102	93	104	91
410-13071-4	GW-11210714-090320-DT-DUP	103	95	104	95
410-13071-5	GW-11210714-090320-DT-MW12	104	92	104	94
410-13071-6	GW-11210714-090320-DT-MW7	105	96	103	95
410-13071-7	Trip Blank	103	90	107	93
LCS 410-44105/4	Lab Control Sample	102	95	104	93
LCSD 410-44105/5	Lab Control Sample Dup	106	96	102	92
MB 410-44105/7	Method Blank	99	90	103	92

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: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		TFT-F1
Lab Sample ID	Client Sample ID	(50-150)
410-13071-1	GW-11210714-090320-DT-MW-2	85
410-13071-2	GW-11210714-090320-DT-MP1R	87
410-13071-3	GW-11210714-090320-DT-MW5D	85
410-13071-4	GW-11210714-090320-DT-DUP	85
410-13071-5	GW-11210714-090320-DT-MW12	85
410-13071-6	GW-11210714-090320-DT-MW7	85
410-13071-7	Trip Blank	86
LCS 410-42561/5	Lab Control Sample	78
LCSD 410-42561/6	Lab Control Sample Dup	79
MB 410-42561/4	Method Blank	85

Surrogate Legend

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

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)
410-13071-1	GW-11210714-090320-DT-MW-2	96
410-13071-1 DU	GW-11210714-090320-DT-MW-2	94

Surrogate Summary

Client: GHD Inc. Job ID: 410-13071-1

Project/Site: 11210714 Geiger Corrections

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

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

		Percent Surrogate Recovery (Acceptance Limits)							
		OTP							
Lab Sample ID	Client Sample ID	(50-150)							
410-13071-2	GW-11210714-090320-DT-MP1R	99							
410-13071-3	GW-11210714-090320-DT-MW5D	94							
410-13071-4	GW-11210714-090320-DT-DUP	86							
410-13071-5	GW-11210714-090320-DT-MW12	98							
410-13071-6	GW-11210714-090320-DT-MW7	95							
LCS 410-42399/2-A	Lab Control Sample	96							
LCSD 410-42399/3-A	Lab Control Sample Dup	101							
MB 410-42399/1-A	Method Blank	95							

Surrogate Legend

OTP = o- terphenyl (Surr)

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

Lab Sample ID: MB 410-44105/7
Matrix: Water
Analysis Batch: 44105

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.20	ug/L			09/15/20 19:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/15/20 19:01	1
Toluene	ND		1.0	0.20	ug/L			09/15/20 19:01	1
Xylenes, Total	ND		6.0	1.4	ug/L			09/15/20 19:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*09/15/20 19:01*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/15/20 19:01*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*09/15/20 19:01*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/15/20 19:01*	*1*

Lab Sample ID: LCS 410-44105/4
Matrix: Water
Analysis Batch: 44105

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	20.2		ug/L		101	80 - 120
Ethylbenzene	20.0	18.0		ug/L		90	80 - 120
Toluene	20.0	18.1		ug/L		91	80 - 120
Xylenes, Total	60.0	54.8		ug/L		91	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: LCSD 410-44105/5
Matrix: Water
Analysis Batch: 44105

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	21.7		ug/L		108	80 - 120	7	30
Ethylbenzene	20.0	19.4		ug/L		97	80 - 120	8	30
Toluene	20.0	19.5		ug/L		97	80 - 120	7	30
Xylenes, Total	60.0	59.1		ug/L		99	80 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*92*		*80 - 120*

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

Lab Sample ID: MB 410-42561/4
Matrix: Water
Analysis Batch: 42561

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C7-C12 (1C)	ND		250	19	ug/L			09/10/20 13:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid) (1C)	*85*		*50 - 150*		*09/10/20 13:19*	*1*

Lab Sample ID: LCS 410-42561/5
Matrix: Water
Analysis Batch: 42561

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	1020		ug/L		92	64 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*78*		*50 - 150*

Lab Sample ID: LCSD 410-42561/6
Matrix: Water
Analysis Batch: 42561

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	1030		ug/L		93	64 - 131	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid) (1C)	*79*		*50 - 150*

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

Lab Sample ID: MB 410-42399/1-A
Matrix: Water
Analysis Batch: 42771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C12-C24	ND		100	45	ug/L		09/10/20 07:15	09/11/20 04:50	1
C24-C40	ND		250	100	ug/L		09/10/20 07:15	09/11/20 04:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o- terphenyl (Surr)	*95*		*50 - 150*	*09/10/20 07:15*	*09/11/20 04:50*	*1*

Lab Sample ID: LCS 410-42399/2-A
Matrix: Water
Analysis Batch: 42771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42399

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C12-C24			600	360		ug/L		60	14 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o- terphenyl (Surr)	*96*		*50 - 150*

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

Lab Sample ID: LCSD 410-42399/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 42771
Prep Batch: 42399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C12-C24			600	350		ug/L		58	14 - 115	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o- terphenyl (Surr)	*101*		*50 - 150*

Lab Sample ID: 410-13071-1 DU
Client Sample ID: GW-11210714-090320-DT-MW-2
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 42771
Prep Batch: 42399

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C12-C24	630			596		ug/L				5	20
C24-C40	ND			ND		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o- terphenyl (Surr)	*94*		*50 - 150*

GC/MS VOA

Analysis Batch: 44105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-13071-1	GW-11210714-090320-DT-MW-2	Total/NA	Water	8260C	
410-13071-2	GW-11210714-090320-DT-MP1R	Total/NA	Water	8260C	
410-13071-3	GW-11210714-090320-DT-MW5D	Total/NA	Water	8260C	
410-13071-4	GW-11210714-090320-DT-DUP	Total/NA	Water	8260C	
410-13071-5	GW-11210714-090320-DT-MW12	Total/NA	Water	8260C	
410-13071-6	GW-11210714-090320-DT-MW7	Total/NA	Water	8260C	
410-13071-7	Trip Blank	Total/NA	Water	8260C	
MB 410-44105/7	Method Blank	Total/NA	Water	8260C	
LCS 410-44105/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 410-44105/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 42561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-13071-1	GW-11210714-090320-DT-MW-2	Total/NA	Water	NWTPH-Gx	
410-13071-2	GW-11210714-090320-DT-MP1R	Total/NA	Water	NWTPH-Gx	
410-13071-3	GW-11210714-090320-DT-MW5D	Total/NA	Water	NWTPH-Gx	
410-13071-4	GW-11210714-090320-DT-DUP	Total/NA	Water	NWTPH-Gx	
410-13071-5	GW-11210714-090320-DT-MW12	Total/NA	Water	NWTPH-Gx	
410-13071-6	GW-11210714-090320-DT-MW7	Total/NA	Water	NWTPH-Gx	
410-13071-7	Trip Blank	Total/NA	Water	NWTPH-Gx	
MB 410-42561/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-42561/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-42561/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 42399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-13071-1	GW-11210714-090320-DT-MW-2	Total/NA	Water	3510C	
410-13071-2	GW-11210714-090320-DT-MP1R	Total/NA	Water	3510C	
410-13071-3	GW-11210714-090320-DT-MW5D	Total/NA	Water	3510C	
410-13071-4	GW-11210714-090320-DT-DUP	Total/NA	Water	3510C	
410-13071-5	GW-11210714-090320-DT-MW12	Total/NA	Water	3510C	
410-13071-6	GW-11210714-090320-DT-MW7	Total/NA	Water	3510C	
MB 410-42399/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-42399/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-42399/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
410-13071-1 DU	GW-11210714-090320-DT-MW-2	Total/NA	Water	3510C	

Analysis Batch: 42771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-13071-1	GW-11210714-090320-DT-MW-2	Total/NA	Water	NWTPH-Dx	42399
410-13071-3	GW-11210714-090320-DT-MW5D	Total/NA	Water	NWTPH-Dx	42399
410-13071-4	GW-11210714-090320-DT-DUP	Total/NA	Water	NWTPH-Dx	42399
410-13071-5	GW-11210714-090320-DT-MW12	Total/NA	Water	NWTPH-Dx	42399
410-13071-6	GW-11210714-090320-DT-MW7	Total/NA	Water	NWTPH-Dx	42399
MB 410-42399/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	42399
LCS 410-42399/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	42399
LCSD 410-42399/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	42399
410-13071-1 DU	GW-11210714-090320-DT-MW-2	Total/NA	Water	NWTPH-Dx	42399

QC Association Summary

Client: GHD Inc.
Job ID: 410-13071-1
Project/Site: 11210714 Geiger Corrections

GC Semi VOA

Analysis Batch: 45781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-13071-2	GW-11210714-090320-DT-MP1R	Total/NA	Water	NWTPH-Dx	42399

Client Sample ID: GW-11210714-090320-DT-MW-2 Lab Sample ID: 410-13071-1

Date Collected: 09/03/20 08:30 **Matrix: Water**
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/16/20 03:26	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 15:54	JJT8	ELLE
Total/NA	Prep	3510C			42399	09/10/20 07:15	R9CT	ELLE
Total/NA	Analysis	NWTPH-Dx		1	42771	09/11/20 05:58	KP5X	ELLE

Client Sample ID: GW-11210714-090320-DT-MP1R Lab Sample ID: 410-13071-2

Date Collected: 09/03/20 08:45 **Matrix: Water**
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/16/20 02:38	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 18:03	JJT8	ELLE
Total/NA	Prep	3510C			42399	09/10/20 07:15	R9CT	ELLE
Total/NA	Analysis	NWTPH-Dx		5	45781	09/20/20 22:15	KP5X	ELLE

Client Sample ID: GW-11210714-090320-DT-MW5D Lab Sample ID: 410-13071-3

Date Collected: 09/03/20 09:45 **Matrix: Water**
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/16/20 00:17	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 16:20	JJT8	ELLE
Total/NA	Prep	3510C			42399	09/10/20 07:15	R9CT	ELLE
Total/NA	Analysis	NWTPH-Dx		1	42771	09/11/20 07:06	KP5X	ELLE

Client Sample ID: GW-11210714-090320-DT-DUP Lab Sample ID: 410-13071-4

Date Collected: 09/03/20 09:50 **Matrix: Water**
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/16/20 00:40	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 16:46	JJT8	ELLE
Total/NA	Prep	3510C			42399	09/10/20 07:15	R9CT	ELLE
Total/NA	Analysis	NWTPH-Dx		1	42771	09/11/20 07:28	KP5X	ELLE

Client Sample ID: GW-11210714-090320-DT-MW12 Lab Sample ID: 410-13071-5

Date Collected: 09/03/20 11:00 **Matrix: Water**
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/16/20 01:04	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 17:11	JJT8	ELLE
Total/NA	Prep	3510C			42399	09/10/20 07:15	R9CT	ELLE
Total/NA	Analysis	NWTPH-Dx		1	42771	09/11/20 07:51	KP5X	ELLE

Lab Chronicle

Client: GHD Inc.
Job ID: 410-13071-1
Project/Site: 11210714 Geiger Corrections

Client Sample ID: GW-11210714-090320-DT-MW7
Lab Sample ID: 410-13071-6

Date Collected: 09/03/20 12:10
Matrix: Water
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/16/20 01:27	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 17:37	JJT8	ELLE
Total/NA	Prep	3510C			42399	09/10/20 07:15	R9CT	ELLE
Total/NA	Analysis	NWTPH-Dx		1	42771	09/11/20 08:14	KP5X	ELLE

Client Sample ID: Trip Blank
Lab Sample ID: 410-13071-7

Date Collected: 09/03/20 00:00
Matrix: Water
Date Received: 09/04/20 11:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	44105	09/15/20 20:43	R64Z	ELLE
Total/NA	Analysis	NWTPH-Gx		1	42561	09/10/20 14:37	JJT8	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 Inc.
Job ID: 410-13071-1
Project/Site: 11210714 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	04-11-21

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		Water	Benzene
8260C		Water	Ethylbenzene
8260C		Water	Toluene
8260C		Water	Xylenes, Total
NWTPH-Dx	3510C	Water	C12-C24
NWTPH-Gx		Water	C7-C12 (1C)

Method Summary

Client: GHD Inc.
Job ID: 410-13071-1
Project/Site: 11210714 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 Inc.
Job ID: 410-13071-1
Project/Site: 11210714 Geiger Corrections

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-13071-1	GW-11210714-090320-DT-MW-2	Water	09/03/20 08:30	09/04/20 11:04	
410-13071-2	GW-11210714-090320-DT-MP1R	Water	09/03/20 08:45	09/04/20 11:04	
410-13071-3	GW-11210714-090320-DT-MW5D	Water	09/03/20 09:45	09/04/20 11:04	
410-13071-4	GW-11210714-090320-DT-DUP	Water	09/03/20 09:50	09/04/20 11:04	
410-13071-5	GW-11210714-090320-DT-MW12	Water	09/03/20 11:00	09/04/20 11:04	
410-13071-6	GW-11210714-090320-DT-MW7	Water	09/03/20 12:10	09/04/20 11:04	
410-13071-7	Trip Blank	Water	09/03/20 00:00	09/04/20 11:04	

Analysis Request/Chain of Custody

410-13071 Chain of Custody

For Eurofins Lancaster Laboratories Environmental use only

Acct. # _____ Group # _____ Sample # _____

COC # 397730

Client Information

Client: GHD

Acct. #:

Project Name/#: 11210714 Geiger Corrections

PWSID #:

Project Manager: Mushghan Marsoori

P.O. #:

Sampler: Dave Trudeau

Quote #:

State where samples were collected: WA

For Compliance: Yes ☑ No ☐

Matrix

Sediment ☐ Soil ☐ | Ground ☑ Potable ☐ Water | Surface ☐ NPDES ☐ Other: _____

Analysis Requested

Preservation Codes

For Lab Use Only

FSC: _____

SCR#: _____

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	# H	# H	# H	NWTPH-Dx	BTEX 8260	DRO/DX
GW-11210714-090320-DT-MW-2	9/3	8:30	X		3	X	X	X	X	X	X
GW-11210714-090320-DT-MPIR		8:45	X		3	X	X	X	X	X	X
GW-11210714-090320-DT-MW5D		9:45	X		3	X	X	X	X	X	X
GW-11210714-090320-DT-DUP		9:50	X		3	X	X	X	X	X	X
GW-11210714-090320-DT-MW12		11:00	X		3	X	X	X	X	X	X
GW-11210714-090320-DT-MW7		12:10	X		3	X	X	X	X	X	X

Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____

E-mail address: Jeffrey.Cloud@ghd.com

Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)

Type III (Reduced non-CLP) TX TRRP-13

NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
GHD	9/3	1400			
				9/4/20	1104

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS _____ FedEx X Other _____

Temperature upon receipt 0.9 | 3.8

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0615

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # ______ Group # ______ Sample # ______

COC # 397730

Client Information

Client: GHD
Acct. #:
Project Name/#: 11210714 Geiger Corrections
PWSID #:
Project Manager: Moshahan Mansoori
P.O. #:
Sampler: Dave Trudeau
Quote #:
State where samples were collected: WA
For Compliance: Yes ☑ No ☐

Matrix: Sediment ☐ Soil ☐ / Water: Ground ☑ Surface ☐ Potable ☐ NPDES ☐ / Other:

Analysis Requested — Preservation Codes: H, H, H

Sample Identification	Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers	NWTPH-Gx (H)	BTEX 8260 (H)	DRO/DX (H)
GW-11210714-090320-DT-MW-2	9/3	8:30	X			GW		8	X	X	X
GW-11210714-090320-DT-MPIR	↓	8:45	X			↓		8	X	X	X
GW-11210714-090320-DT-MW5D	↓	9:45	X			↓		8	X	X	X
GW-11210714-090320-DT-DUP	↓	9:50	X			↓		8	X	X	X
GW-11210714-090320-DT-MW12	↓	11:00	X			↓		8	X	X	X
GW-11210714-090320-DT-MW7	↓	12:10	X			↓		8	X	X	X

For Lab Use Only
FSC: ______
SCR#: ______

Preservation Codes
H=HCl T=Thiosulfate
$N=HNO_3$ B=NaOH
$S=H_2SO_4$ O=Other

Remarks

Turnaround Time (TAT) Requested (please circle): (Standard) Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: ______

E-mail address: Jeffrey.Cloud@ghd.com

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[signature] GHD	9/3	1400			
			[signature]	9/4/2020	1054

EDD Required? (Yes) No
If yes, format: ______

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS ______ FedEx ______ Other ______

Temperature upon receipt 0.9 | 3 °C

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0615

Login Sample Receipt Checklist

Client: GHD Inc.

Job Number: 410-13071-1

Login Number: 13071

List Source: Eurofins Lancaster Laboratories Env

List Number: 1

Creator: Colon Martinez, Jessenia C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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 Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

Appendix C
Waste Manifests

476929 6/21

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: Map Required
2. Page 1 of: 2
3. Emergency Response Phone: 800-337-7455
4. Waste Tracking Number: P66-GHD-000820-0

5. Generator's Name and Mailing Address
Phillip 66 Geiger Deliv
3900 Kilroy Airport Way
Longbeach CA 90806
Generator's Phone:

Generator's Site Address (if different than mailing address)
Phillip 66 Geiger Deliv
S Spotted RD and W Electric Ave
Spokane WA 99224

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 Water OR344302)	02	TP	330	G	
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1) Profile# OR344302 AOC 6547
WMNW 970223

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: D. Jensen on behalf of P66
Signature:
Month 6 Day 10 Year 20

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Al Lagatang
Signature:
Month 6 Day 10 Year 20

Transporter 2 Printed/Typed Name: PETE CAMARA
Signature:
Month 6 Day 11 Year 20

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month 6 Day 14 Year 20

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY'S COPY

CWMI

476929

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)	19. Generator ID Number NONE REQUIRED	20. Page of 2	21. Waste Tracking Number P66-GHD-060620-02

22. Generator's Name PHILLIP 66 GEIGER DELI

23. Transporter 3 Company Name UNION PACIFIC RAILROAD — U.S. EPA ID Number NED001792910

24. Transporter ____ Company Name COLUMBIA RIDGE LANDFILL — U.S. EPA ID Number ORD087173457

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

CONTAINR # WMXU 970223

TRANSPORTER

30. Transporter 3 Acknowledgment of Receipt of Materials

Printed/Typed Name GAltheimer — Signature GA — Month 6 Day 15 Year 20

31. Transporter ____ Acknowledgment of Receipt of Materials

Printed/Typed Name Jennifer Williams — Signature — Month 6 Day 22 Year 20

DESIGNATED FACILITY

32. Discrepancy

170-BLC-O 6 10502 (Rev. 8/06)

DESIGNATED FACILITY'S COPY

475668

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number N/A	2. Page 1 of 2	3. Emergency Response Phone (800) 337-7455	4. Waste Tracking Number P66GC-030420-05

5. Generator's Name and Mailing Address: Phillips 66, 3900 Kilroy Airport Way, Long Beach, CA 90806, (562) 290-1551 Attn: Rich Solomon

Generator's Site Address (if different than mailing address): Phillips 66 Spokane, NW S Spotted Rd & Will D Alton Dr, Spokane, WA 99260

Generator's Phone:

6. Transporter 1 Company Name: DH Environmental, Inc. — U.S. EPA ID Number: WAH000047217

7. Transporter 2 Company Name: Chemical Waste Management of the Northwest — U.S. EPA ID Number: ORD089452353

8. Designated Facility Name and Site Address: Chemical Waste Management of the Northwest, 17629 Cedar Springs Lane, Arlington, OR 97812 — U.S. EPA ID Number: ORD089452353

Facility's Phone: (541) 454-2643

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Material Not Regulated by DOT (non-regulated IDW soil)	08	DM	560	P	X004
2.	Material Not Regulated by DOT (non-regulated IDW water)	01	DM	400	P	X004
3.						
4.						

13. Special Handling Instructions and Additional Information

1. OR344301 – LF01/STAB01
2. OR344304 – STAB01

CWMXCU 970238

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: D. Inderv on behalf of P66 — Signature: [signature] — Month 3 Day 4 Year 20

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Leonard J. Warnock — Signature: [signature] — Month 03 Day 04 Year 20
Transporter 2 Printed/Typed Name: G Pinault — Signature: [signature] — Month 3 Day 5 Year 2020

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: Dean Dunlap — Signature: [signature] — Month 3 Day 6 Year 20

169-BLC-O 6 10498 (Rev. 9/09) DESIGNATED FACILITY'S COPY

475668

NON-HAZARDOUS WASTE MANIFEST (Continuation Sheet)

19. Generator ID Number

20. Page 2 of 2

21. Waste Tracking Number P66GC-030420-05

22. Generator's Name PHILLIPS 66 GEIGER COR AGC6885

23. Transporter 3 Company Name UNION PACIFIC RAILROAD

U.S. EPA ID Number [illegible] 3-13-20

24. Transporter ____ Company Name COLUMBIA RIDGE LANDFILL

U.S. EPA ID Number ORD987173457

	25. Waste Shipping Name and Description	26. Containers No.	26. Containers Type	27. Total Quantity	28. Unit Wt./Vol.	

GENERATOR

29. Special Handling Instructions and Additional Information
CONTAINER # WMXU 970238

TRANSPORTER

30. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name H. Malo Signature H. Malo Month 3 Day 10 Year 20

31. Transporter 4 Acknowledgment of Receipt of Materials
Printed/Typed Name Brittney Havins Signature Brittney Havins Month 3 Day 11 Year 20

DESIGNATED FACILITY

32. Discrepancy

170-BLC-O 6 10502 (Rev. 8/06)

DESIGNATED FACILITY'S COPY

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

Jeff Gaarder
Jeff.gaarder@ghd.com
425.563.6504

Moshghan Mansoori
Moshghan.mansoori@ghd.com
425.563.6516

www.ghd.com