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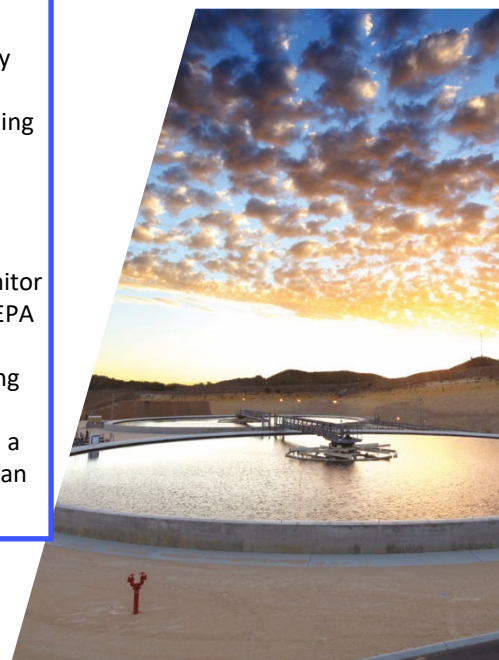
By Nelson Velez at 7:57 am, Feb 16, 2022



Review of 2020 Annual Groundwater Monitoring Report and 2021 Work Scope: **Content satisfactory**

1. OCD currently denies the termination requested due to chloride and TDS levels exceeding the WQCC allowable concentrations in groundwater
2. OCD pre-approves the elimination of BTEX from any future lab analyses of the existing site wells
3. OCD pre-approves semi-annual monitor well sampling for 2022
4. OCD requires the installation of a background well (temporary or permanent) to evaluate chloride and TDS. Deadline for the installation is June 30, 2022
5. Development and sampling of the up-gradient monitor or temporary well will be analyzed initially for BTEX per US EPA Method 8260B (full suite), TDS, and chlorides
6. OCD will re-assess the site for closure upon receiving the initial monitor or temporary well lab report

Submit summarized activities completed and their results in a 2021 Annual Report. Submittal to OCD expected no later than March 31, 2022.



2020 Annual Groundwater Monitoring Report and 2021 Work Scope

O-6-1 4"

Lea County, New Mexico

1RP-4643

ETC Texas Pipeline, Ltd.





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1. Introduction

This report presents the results of a soil sampling event and the groundwater monitoring events performed quarterly at the ETC Texas Pipeline, Ltd. (ETC), O-6-1 4" pipeline release (Site) throughout 2020. The Site is located within Unit J, Section 20, Township 20 South, Range 37 East, in Lea County, New Mexico (**Figure 1**). The property is owned by the New Mexico State Land Office (NMSLO). Site details can be seen on **Figure 2**.

1.1 Background

On March 13, 2017, a release of approximately 150 barrels (bbls) of natural gas liquids/oil was reported to the New Mexico Oil Conservation Division (NMOCD) via Form C-141. The NMOCD then notified the NMSLO. External corrosion caused an approximate 1-inch hole to develop on a section of the O-6-1 pipeline and was the cause of the release. Approximately 50 bbls of the fluids were recovered. Impacted soil were excavated and stockpiled on-Site and the excavation backfilled. NMOCD release number 1RP-4643 was assigned.

The impacted area had been initially excavated to a depth of approximately 15 feet below ground surface (ft bgs) and soil samples were collected by ETC from two locations within the base of the excavation. Concentrations of total petroleum hydrocarbons (TPH) exceeded 100 milligrams per kilogram (mg/Kg), the Recommended Remedial Action Limit (RRAL) for the Site (based on interpreted depth to groundwater of less than 50 ft bgs) at the time of assessment.

Vertical and horizontal assessment at the Site was performed on August 29 and 30, 2017 and included the advancement of six soil borings and the installation of one groundwater monitoring well (MW). Soil samples collected at depth from the six soil borings near the release point were found to be at concentrations below laboratory reporting limits for benzene, toluene, ethylbenzene, xylenes (BTEX) and TPH. Concentrations of TPH above RRAL were recorded in borings at the following depths: MW-1 from 5-22 ft bgs, BN-1 from 10-15 ft bgs, and BE-1 and BE-2 at 10 ft bgs. Additionally, the sample collected from soil boring MW-1 from 15-17 ft bgs returned a chloride concentration of 1,100 mg/Kg, above the RRAL of 600 mg/kg for the Site.

One soil boring advanced near the release point was converted to a groundwater monitoring well, MW-1. A groundwater sample was collected from MW-1 on September 20, 2017 and analyzed for BTEX, TPH, chloride and total dissolved solids (TDS). Benzene, chloride, and TDS were detected at concentrations in excess of New Mexico Water Quality Control Commission (NMWQCC) standards. A second groundwater sample was collected from MW-1 on October 17, 2017 again with similar concentrations above standard for these constituents.

As a result, GHD installed four additional monitoring wells and two air sparge (AS) wells at the Site between December 18, 2017 and January 31, 2018. Well MW-2 was installed to the north, MW-3 to the southeast, MW-4 to the south, and MW-5 to the west of MW-1. The air sparge wells were installed north and south of the O-6-1 line to the west of MW-1.

Soil vapor extraction (SVE) and AS pilot studies were performed at the Site on January 30 and 31, 2018. The data and observations from the pilot studies indicate that AS/SVE is capable of removing petroleum hydrocarbons from the impacted subsurface. Based on vapor



concentrations extracted during the pilot test and using conservative operating parameters, it was estimated that 75 to 90 percent of the mass currently present would be removed in less than a year of operation. However, due to difficulties accessing electricity the system was not installed and no additional SVE or AS efforts were completed in 2018.

Throughout 2019 mobile dual phase extraction (MDPE) events were performed at the Site in place of SVE and AS. One event was performed on MW-1 and two events on MW-2. Each event consisted of 8 hours where vacuum was applied to the selected well and vapors and liquids were pulled from the subsurface. The MDPE events were conducted by Talon LPE (Talon) and overseen by GHD. The MDPE equipment destroyed approximately 1.97 equivalent gallons of hydrocarbons as vapors and removed 1,622 gallons of impacted groundwater. No liquid phase hydrocarbons were observed during the MDPE events. The extracted groundwater was disposed of at a permitted disposal facility and was overseen by ETC.

Groundwater monitoring was performed quarterly by GHD in February, May, August, and November 2020. Additionally, a soil sampling event by direct push technology (DPT) was conducted in July 2020.

2. Groundwater Monitoring Summary, Methodology, and Analytical Results

2.1 Groundwater Monitoring Summary

Quarterly groundwater monitoring events were performed in 2020 during February, May, August, and November. During each monitoring event, an oil/water interface probe was used to measure depth to groundwater and to check for the presence of LNAPL. Before and after each use, the oil/water interface probe was cleaned with an Alconox®/deionized water solution and rinsed with deionized water. Groundwater level gauging data and calculated groundwater elevations for the Site are presented in **Table 1**.

Groundwater flow direction during 2020 was towards the southeast, with a slightly more eastward flow in November. Groundwater gradient calculated for each monitoring period was approximately 0.0027 in February, 0.0022 in May, 0.0034 in August, and 0.0018 feet per foot (ft/ft) November 2020. Groundwater elevations, when compared to elevations at each well measured during the same quarter in 2019, generally declined on average during the first and fourth quarters while rising during the second and third quarters in 2020. A groundwater gradient map has been prepared for each groundwater monitoring event and are included as **Figures 3, 4, 5, and 6**.

2.2 Groundwater Monitoring Methodology

During the 2020 quarterly groundwater monitoring events, monitoring wells were purged of at least three well casing volumes of water, or until dry, using a dedicated, polyethylene bailer prior to sampling. Groundwater quality parameters including pH, temperature, oxidation reduction potential, and conductivity were collected using a calibrated multi-parameter groundwater quality meter and were recorded on groundwater sampling field forms. A summary of field parameters is presented as **Table 2**.



Groundwater samples were placed in laboratory prepared bottles, packed on ice and shipped under chain-of-custody documentation to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico. Groundwater samples were analyzed for BTEX by Environmental Protection Agency (EPA) Method 8260, chloride by EPA Method 300.0, and TDS by Standard Method 2540.

2.3 Groundwater Monitoring Analytical Results

Groundwater samples collected from Site wells were below the NMWQCC standard for BTEX constituents for all of the 2020 monitoring events. Groundwater samples collected from MW-1 through MW-5 have consistently exceeded the NMWQCC standard for chloride of 250 mg/L. During the most recent sampling event in November 2020, chloride concentrations in Site wells ranged between 690 mg/L (MW-3) and 760 mg/L (MW-2). Concentrations of TDS have also consistently been above the NMWQCC standard of 1,000 mg/L with most recent concentrations ranging from 1,910 mg/L (MW-5) to 2,410 mg/L (MW-4) in November 2020.

A summary of groundwater laboratory analytical results is presented in **Table 3** and shown on **Figure 7**. Corresponding laboratory analytical reports are included as **Appendix A**.

3. Direct Push Technology Soil Sampling

A soil sampling event performed by DPT was completed on July 14, 2020. Discreet soil samples were collected during the one-day event to assess if current Site soil concentrations are below 100 mg/Kg TPH and 600 mg/Kg chloride, the Site-specific cleanup standards as described in the New Mexico Administrative Code (NMAC), Title 19, Chapter 15, Part 29 (19.15.29), Table 1 – Closure Criteria for Soils Impacted by a Release, for a site with groundwater less than 50 ft bgs.

Soil samples were collected at 5-foot intervals to a total depth of 20 ft in borings in the general area of the release, MW-1, and soil boring BN-1 where concentrations of TPH above 100 mg/Kg of TPH have been observed (**Table 4**). Soil samples were analyzed for TPH by EPA method 8015 and chloride by EPA Method 300.0.

The majority of soil samples were found to below standard for both TPH and Chloride with two exceptions. Boring DP-1 at 20 ft bgs was found to be above standard for chloride at a concentration of 750 mg/Kg and DP-5 at 5 and 10 ft bgs were found to be above standard for TPH at concentrations of 110 mg/Kg and 120 mg/Kg, respectively. A summary of soil analytical results can be found in **Table 4**.



4. Conclusions and 2021 Recommendations

4.1 Conclusions

Based on 2020 data, GHD makes the following conclusions:

- Groundwater sampled from MW-1 through MW-5, exceeds the NMWQCC standard for chlorides and TDS.
- Data gathered from the DPT soil sampling event completed in 2020, shows that TPH in shallow soils at the Site have been addressed with the exception of soils in the area of DP-5 at a depth of 5 to 10 ft bgs.
- Chloride data gathered from the DPT soil sampling event shows that chloride concentrations in ground water only exceed Site standards in one sample collected from DP-1 at 20 ft bgs.

4.2 2021 Recommendations

Based on the above conclusions, GHD recommends:

- The continuation of quarterly groundwater monitoring and reporting.
- Request Site closure based on the following:
 - TPH in Site soils at a concentration of 110 to 120 mg/Kg, slightly above the Site closure standard of 100 mg/Kg, are only present from 5 to 10 ft bgs at DP-5 with approximately 10 to 15 feet of separation from groundwater.
 - One soil sample collected from DP-1 at 20 ft bgs had a concentration of chloride of 750 mg/L slightly above the 600 mg/Kg Site standard.
 - Groundwater samples collected from Site wells have been below NMWQCC standards for BTEX constituents for eight consecutive quarters.
 - Although chloride and TDS concentrations in groundwater remain elevated above NMWQCC standards at the Site, concentration remain fairly low.
 - None of the above pose an immediate threat to human life or the environment.

All of Which is Respectfully Submitted,

GHD

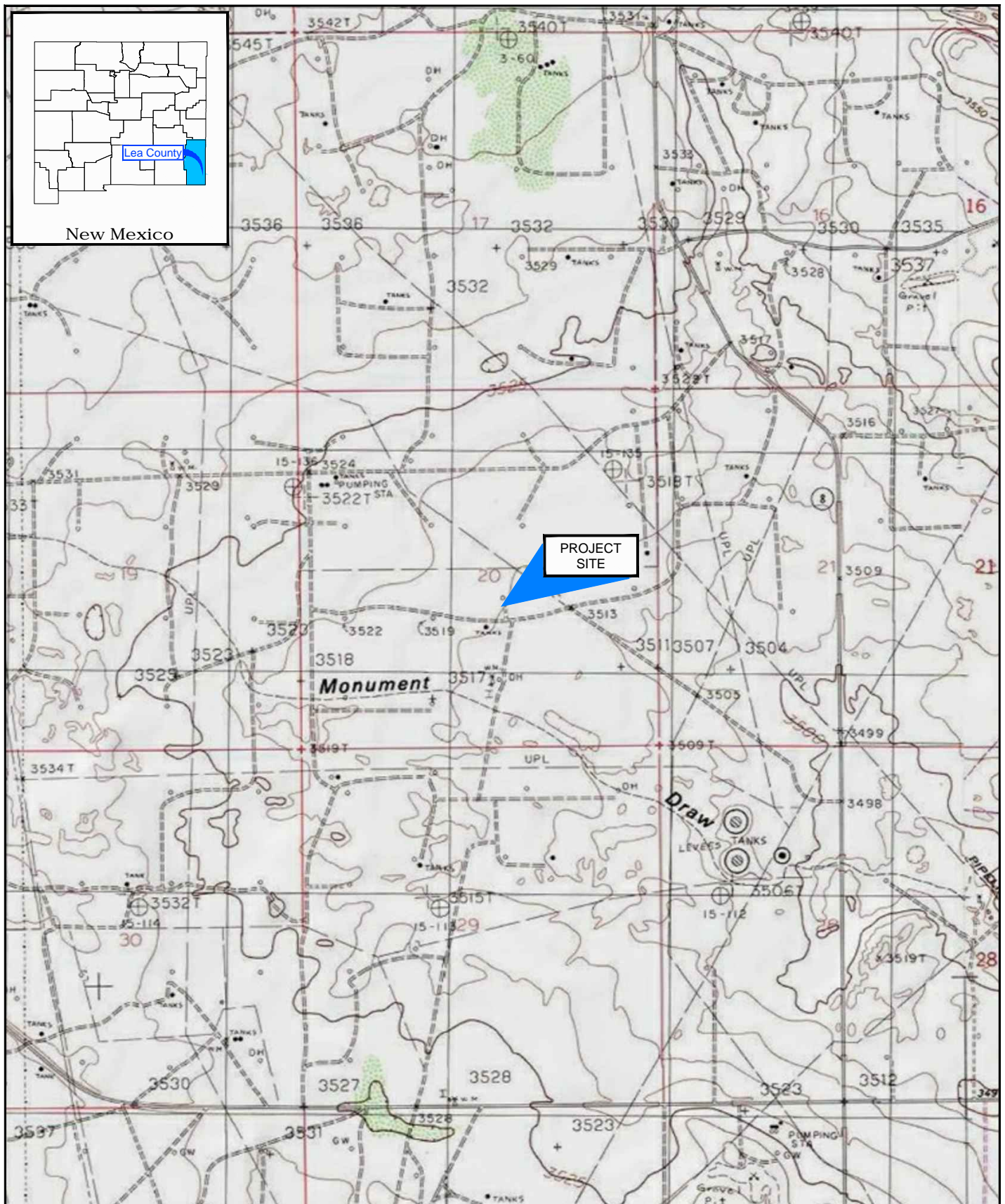
A handwritten signature in blue ink that reads "Charles Neligh".

Charles Neligh
Project Geologist

A handwritten signature in blue ink that reads "Christine Mathews".

Christine Mathews
Project Manager

Figures



Source: USGS 7.5 Minute Quad "Monument South and Hobbs SW, New Mexico"

Lat/Long: 32.557054° North, 103.27255° West

0 1000 2000ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

SITE LOCATION MAP

11209235

Feb 17, 2021

FIGURE 1



Source: Image © 2016 Google - Imagery Date: November 2, 2017

Lat/Long: 32.557054° North, 103.27255° West

0 10 30ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

SITE DETAIL MAP

11209235
Mar 1, 2021

FIGURE 2

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Source: Image © 2016 Google - Imagery Date: November 2, 2017

Lat/Long: 32.557054° North, 103.27255° West

0 10 30ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

FEBRUARY 2020 GROUNDWATER
POTENTIOMETRIC SURFACE MAP

11209235

Feb 17, 2021

FIGURE 3

CAD File: \\ghdnet\ghd\US\Albuquerque\Projects\562\11209235\Digital_Design\ACAD 2017\Figures\11209235-01\11209235-01(003)\11209235-01(003)GN-DL001.dwg



Source: Image © 2016 Google - Imagery Date: November 2, 2017

Lat/Long: 32.557054° North, 103.27255° West

0 10 30ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

MAY 2020 GROUNDWATER
POTENTIOMETRIC SURFACE MAP

11209235

Feb 17, 2021

FIGURE 4

CAD File: \\ghdnet\ghd\US\Albuquerque\Projects\562\11209235\Digital_Design\ACAD 2017\Figures\11209235-01\11209235-01(003)\11209235-01(003)GN-DL001.dwg



Source: Image © 2016 Google - Imagery Date: November 2, 2017

Lat/Long: 32.557054° North, 103.27255° West

0 10 30ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

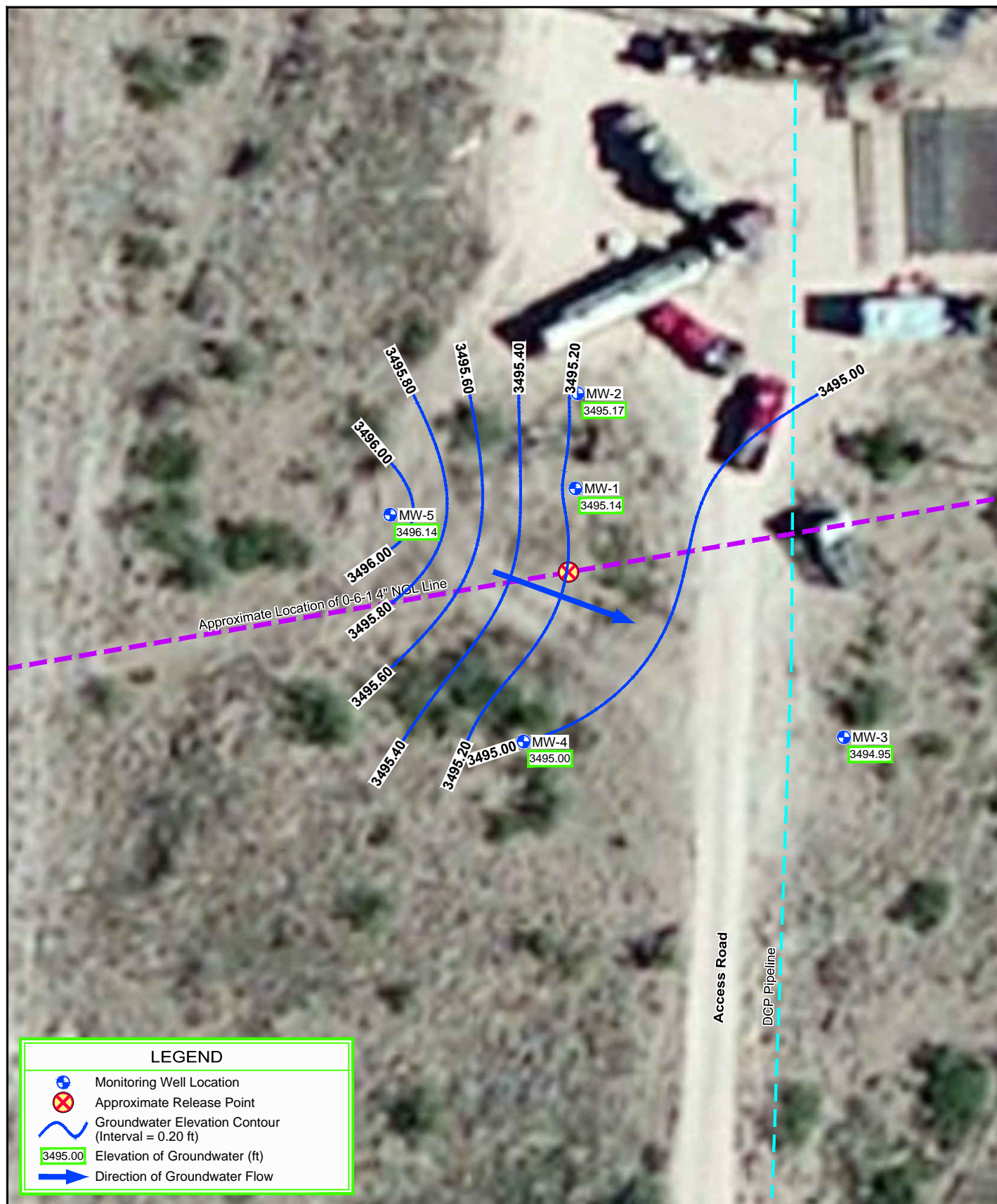
AUGUST 2020 GROUNDWATER
POTENTIOMETRIC SURFACE MAP

11209235

Feb 17, 2021

FIGURE 5

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Source: Image © 2016 Google - Imagery Date: November 2, 2017

Lat/Long: 32.557054° North, 103.27255° West

0 10 30ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

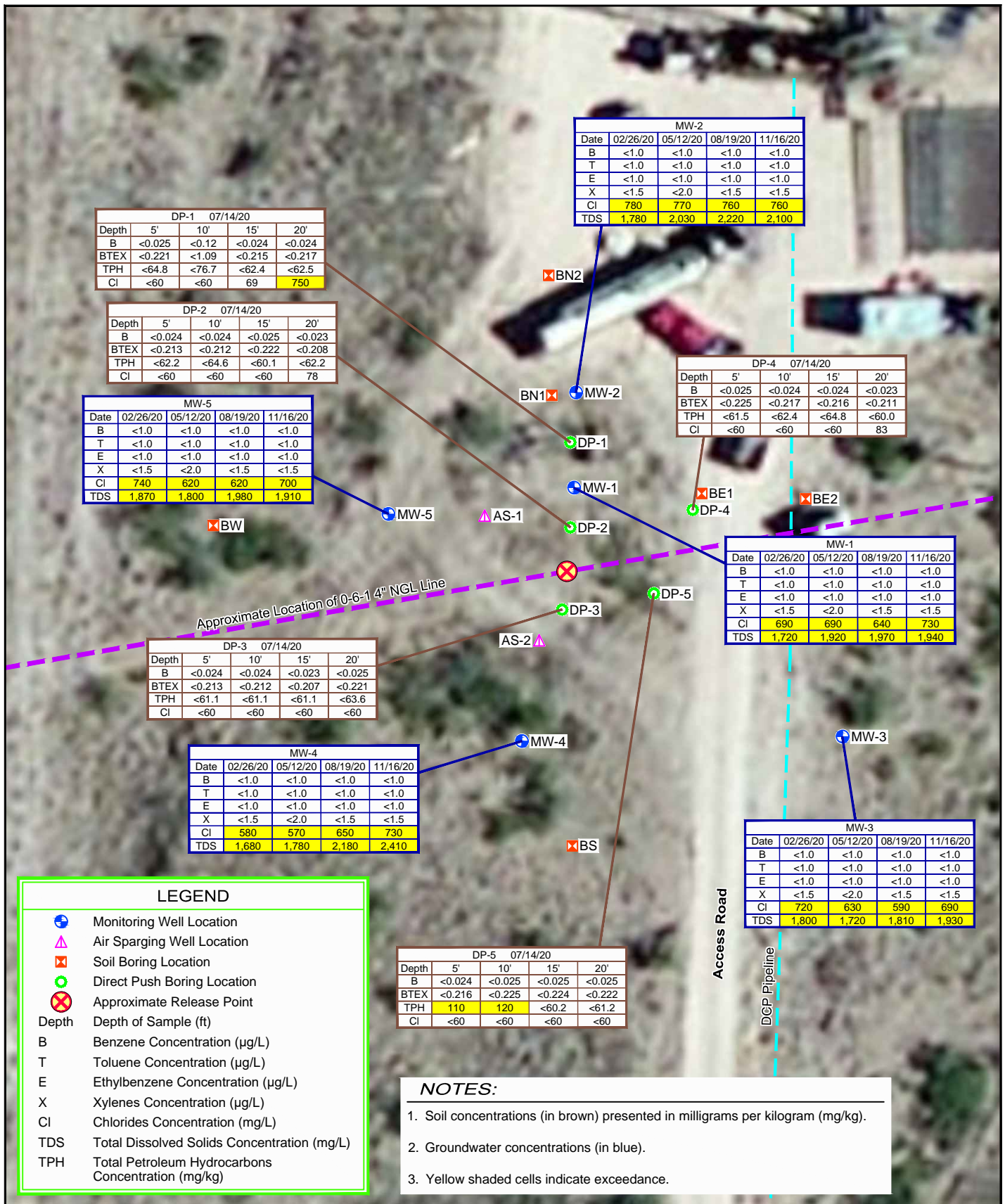
NOVEMBER 2020 GROUNDWATER
POTENTIOMETRIC SURFACE MAP

11209235

Feb 17, 2021

FIGURE 6

CAD File: \\ghdnet\ghd\US\Albuquerque\Projects\562\11209235\Digital_Design\ACAD 2017\Figures\11209235-01\11209235-01(003)\11209235-01(003)GN-DL001.dwg



Source: Image © 2016 Google - Imagery Date: February 1, 2017

Lat/Long: 32.557054° North, 103.27255° West

0 10 30ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
0-6-1 4" LINE RELEASE

2020 CONCENTRATION MAP

11209235
Mar 1, 2021

FIGURE 7

Tables

Table 1
Monitoring Well Specifications and Groundwater Elevations
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Page 1 of 2

Well	TOC Elevation (ft AMSL)	Date	Depth to Water (ft below TOC)	GW Elevation (ft AMSL)
MW-1	3520.293	9/20/2017	24.70	3495.59
		10/17/2017	24.60	3495.69
		1/4/2018	24.43	3495.86
		4/2/2018	24.34	3495.95
		4/12/2018	24.33	3495.96
		4/26/2018	24.64	3495.65
		7/24/2018	24.96	3495.33
		10/1/2018	25.03	3495.26
		3/28/2019	24.37	3495.92
		6/27/2019	24.63	3495.66
		9/25/2019	25.02	3495.27
		12/4/2019	24.82	3495.47
		2/25/2020	24.51	3495.78
		5/12/2020	24.27	3496.02
		8/19/2020	24.95	3495.34
		11/16/2020	25.15	3495.14
MW-2	3520.422	1/4/2018	24.53	3495.76
		4/2/2018	24.41	3495.88
		4/12/2018	24.40	3496.02
		4/26/2018	24.53	3495.89
		7/24/2018	24.86	3495.56
		10/1/2018	25.13	3495.29
		3/28/2019	24.49	3495.93
		6/27/2019	24.71	3495.71
		9/25/2019	25.10	3495.32
		12/4/2019	24.96	3495.46
		2/25/2020	24.62	3495.80
		5/12/2020	24.35	3496.07
		8/19/2020	25.05	3495.37
		11/16/2020	25.25	3495.17
MW-3	3520.451	1/4/2018	24.79	3495.66
		4/2/2018	24.34	3496.11
		4/12/2018	24.34	3496.11
		4/26/2018	24.77	3495.68
		7/24/2018	25.24	3495.21
		10/1/2018	25.40	3495.05
		3/28/2019	24.74	3495.71
		6/27/2019	24.96	3495.49
		9/25/2019	25.35	3495.10
		12/4/2019	25.12	3495.33
		2/25/2020	24.86	3495.59
		5/12/2020	24.61	3495.84
		8/19/2020	25.32	3495.13
		11/16/2020	25.50	3494.95

Table 1
Monitoring Well Specifications and Groundwater Elevations
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Well	TOC Elevation (ft AMSL)	Date	Depth to Water (ft below TOC)	GW Elevation (ft AMSL)
MW-4	3520.350	1/4/2018	24.65	3495.70
		4/2/2018	24.54	3495.81
		4/12/2018	24.50	3495.85
		4/26/2018	24.42	3495.93
		7/24/2018	25.09	3495.26
		10/1/2018	25.25	3495.10
		3/28/2019	24.60	3495.75
		6/27/2019	24.83	3495.52
		9/25/2019	25.41	3494.94
		12/4/2019	24.98	3495.37
		2/25/2020	24.72	3495.63
		5/12/2020	24.45	3495.90
		8/19/2020	25.17	3495.18
		11/16/2020	25.35	3495.00
MW-5	3520.572	1/4/2018	24.70	3495.87
		4/2/2018	24.58	3495.99
		4/12/2018	24.56	3496.01
		4/26/2018	24.68	3495.89
		7/24/2018	25.13	3495.44
		10/1/2018	25.31	3495.26
		3/28/2019	24.63	3495.94
		6/27/2019	24.87	3495.70
		9/25/2019	25.29	3495.28
		12/4/2019	25.04	3495.53
		2/25/2020	24.76	3495.81
		5/12/2020	24.54	3496.03
		8/19/2020	25.19	3495.38
		11/16/2020	24.43	3496.14

Notes:

ft AMSL=feet above mean sea level

TOC=Top of Casing

Table 2
Field Parameters Summary
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Page 1 of 2

Well ID	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)
MW-1	9/20/2017	19.79	6.83	2302	0.42	-151.5
	10/17/2017	19.66	7.11	2587	1.88	-192.3
	1/4/2018	19.11	6.75	2605	2.59	-241.3
	4/12/2018	18.8	7.32	2841	9.37	15.8
	4/26/2018	17.86	7.18	3639	--	--
	7/24/2018	17.62	7.06	2594	2.95	--
	10/1/2018	22.01	7.51	2336	0.86	11.4
	3/28/2019	17.27	7.03	5152	1.84	-48.3
	6/27/2019	19.4	7.14	2801	--	--
	9/25/2019	17.36	7.23	--	--	-73
	12/4/2019	18.71	7.03	2901	1.93	-260.3
	2/25/2020	18.5	7.41	2710	2.15	61.2
	5/12/2020	18.5	10.89	3250	1.2	-213
	8/19/2020	20.6	6.77	2840	1.98	76.8
	11/16/2020	20.46	7.44	3091	2.27	115.4
MW-2	1/4/2018	19.07	7.08	2627	2.9	-191.8
	4/12/2018	18.08	7.34	2955	6.98	-50.6
	4/26/2018	17.58	7.27	3729	--	--
	7/24/2018	18.15	6.63	2560	3.13	--
	10/1/2018	23.29	7.68	2328	1.32	59.8
	3/28/2019	16.89	7	5066	2.54	-29.9
	6/27/2019	19	7.09	2715	--	66
	9/25/2019	17.93	7.24	--	--	-40.6
	12/4/2019	--	--	--	--	--
	2/25/2020	19.1	7.42	2900	2.76	73.4
	5/12/2020	18.2	7.33	3250	1.95	-10.2
	8/19/2020	20.1	6.81	3190	1.97	12
	11/16/2020	20.03	7.33	3397	1.63	127.1
MW-3	1/4/2018	19.2	7.23	2638	3.67	-138
	4/12/2018	18.36	7.31	2979	10.99	-61.6
	4/26/2018	18	7.26	3880	--	--
	7/24/2018	17.9	7.12	2745	2.22	--
	10/1/2018	21.82	7.66	2572	1.85	54.5
	3/28/2019	17.6	7.03	5489	2.26	37.4
	6/27/2019	19.8	7.13	2922	--	310
	9/25/2019	17.17	6.99	--	--	-96
	12/4/2019	18.95	6.91	3214	1.52	-220.1
	2/25/2020	19.6	7.35	2880	2.19	102.5
	5/12/2020	18.9	7.63	2800	1.95	-17.2
	8/19/2020	20.2	6.92	2700	1.69	10.5
	11/16/2020	20.03	7.34	3070	1.44	44.2

Table 2
Field Parameters Summary
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Well ID	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)
MW-4	1/4/2018	19.75	7.04	3081	2.15	-277.2
	4/12/2018	18.37	7.16	3688	3.78	-219.5
	4/26/2018	18.2	7.06	4750	--	--
	7/24/2018	18.6	7.01	3632	2.55	--
	10/1/2018	22.68	7.42	3213	1.09	-183.4
	3/28/2019	7.85	7	5537	2.71	-99.6
	6/27/2019	20.02	7	3376	--	345
	9/25/2019	18.17	6.71	--	--	-122.1
	12/4/2019	19.81	7.01	3151	1.45	-261.5
	2/25/2020	20	7.42	2720	1.64	-48.6
	5/12/2020	18.8	10.7	3070	1.03	-190.1
	8/19/2020	20.4	6.89	3250	1.27	-165.7
	11/16/2020	20.86	7.18	3680	1.23	-136.2
MW-5	1/4/2018	19.45	7.04	2955	2.06	-275.2
	4/12/2018	18.31	7.29	3131	8.93	-161.1
	4/26/2018	17.99	7.29	4024	--	--
	7/24/2018	18.31	7.06	2953	6.17	--
	10/1/2018	21.59	7.39	2636	1.35	-60.4
	3/28/2019	17.3	6.7	5726	2.49	-85.5
	6/27/2019	19.4	6.96	3060	--	379
	9/25/2019	17.51	6.8	--	--	-121.2
	12/4/2019	19.15	6.96	3027	1.42	-271.3
	2/25/2020	19.1	7.25	3010	1.68	0.5
	5/12/2020	18.3	9.03	2800	1.09	-115.7
	8/19/2020	20.1	6.89	2760	1.31	-65
	11/16/2020	20.55	7.24	3010	1.3	-55.4

Notes:

°C = degrees celsius

uS/cm = microsiemens per centimeter

mg/L = milligrams per liter

mV = millivolts

DO = dissolved oxygen

ORP = oxidation reduction potential

Table 3
Groundwater Analytical Results Summary
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Page 1 of 2

Monitoring Well	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Chlorides (mg/L)	TDS (mg/L)
NMWQCC Standards		5	1000	700	620	250	1000
MW-1	9/20/2017	200	77	87	87	580	2010
	10/17/2017	150	50	62	68	560	1620
	1/4/2018	130	<5.0	56	30	620	1720
	4/26/2018	23	<1.0	6.9	1.6	560	NA
	7/24/2018	<1.0	<1.0	<1.0	<1.5	580	1770
	10/1/2018	<1.0	<1.0	<1.0	< 2.0	630	1640
	3/28/2019	<1.0	<1.0	<1.0	<1.5	630	1730
	6/27/2019	<1.0	<1.0	<1.0	<2.0	640	1670
	9/25/2019	<1.0	<1.0	<1.0	<1.5	590	1800
	12/13/2019	<1.0	<1.0	<1.0	<1.5	570	1700
	2/26/2020	<1.0	<1.0	<1.0	<1.5	690	1720
	5/12/2020	<1.0	<1.0	<1.0	<1.5	690	1920
	8/19/2020	<1.0	<1.0	<1.0	<1.5	640	1970
	11/16/2020	<1.0	<1.0	<1.0	<1.5	730	1940
MW-2	1/4/2018	<1.0	<1.0	<1.0	<1.5	710	1840
	4/26/2018	<1.0	<1.0	<1.0	<1.5	590	NA
	7/24/2018	6.7	<1.0	<1.0	<1.5	540	1770
	10/1/2018	<1.0	<1.0	<1.0	< 2.0	630	1690
	3/28/2019	<1.0	<1.0	<1.0	< 2.0	630	1730
	6/27/2019	<1.0	<1.0	<1.0	<2.0	640	1900
	9/25/2019	<1.0	<1.0	<1.0	<1.5	640	1980
	12/4/2019	<1.0	<1.0	<1.0	<1.5	600	1760
	2/26/2020	<1.0	<1.0	<1.0	<1.5	780	1780
	5/12/2020	<1.0	<1.0	<1.0	<1.5	770	2030
	8/19/2020	<1.0	<1.0	<1.0	<1.5	760	2220
	11/16/2020	<1.0	<1.0	<1.0	<1.5	760	2100
MW-3	1/4/2018	<1.0	<1.0	<1.0	<1.5	670	1930
	4/26/2018	<1.0	<1.0	<1.0	<1.5	280	NA
	7/24/2018	<1.0	<1.0	<1.0	<1.5	640	1980
	10/1/2018	<1.0	<1.0	<1.0	< 2.0	740	1880
	3/28/2019	1.5	<1.0	4.5	<1.5	580	1790
	6/27/2019	<1.0	<1.0	<1.0	<2.0	670	1810
	9/25/2019	<1.0	<1.0	<1.0	<1.5	650	2050
	12/4/2019	<1.0	<1.0	<1.0	<1.5	630	1910
	2/26/2020	<1.0	<1.0	<1.0	<1.5	720	1800
	5/12/2020	<1.0	<1.0	<1.0	<1.5	630	1720
	8/19/2020	<1.0	<1.0	<1.0	<1.5	590	1810
	11/16/2020	<1.0	<1.0	<1.0	<1.5	690	1930

Table 3
Groundwater Analytical Results Summary
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Monitoring Well	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Chlorides (mg/L)	TDS (mg/L)
NMWQCC Standards		5	1000	700	620	250	1000
MW-4	1/4/2018	320	<1.0	140	8.9	670	2010
	4/26/2018	170	<1.0	160	<1.5	600	NA
	7/24/2018	130	<1.0	130	<1.5	670	2430
	10/1/2018	40	<1.0	49	< 2.0	750	2430
	3/28/2019	1.5	<1.0	4.5	<1.5	580	1790
	6/27/2019	<1.0	<1.0	3.6	<2.0	670	2200
	9/25/2019	<1.0	<1.0	1.6	<1.5	550	2000
	12/4/2019	<1.0	<1.0	<1.0	<1.5	530	2000
	2/26/2020	<1.0	<1.0	<1.0	<1.5	580	1680
	5/12/2020	<1.0	<1.0	<1.0	<1.5	570	1780
	8/19/2020	<1.0	<1.0	<1.0	<1.5	650	2180
	11/16/2020	<1.0	<1.0	<1.0	<1.5	730	2410
MW-5	1/4/2018	130	15	77	47	690	1920
	4/26/2018	28	<1.0	26	20	590	NA
	7/24/2018	6	<1.0	5.5	<1.5	610	2080
	10/1/2018	1.2	<1.0	1.4	< 2.0	680	1950
	3/28/2019	1.5	<1.0	4.3	<1.5	570	1780
	6/27/2019	<1.0	<1.0	<1.0	<2.0	640	1900
	9/25/2019	<1.0	<1.0	<1.0	<1.5	640	2030
	12/4/2019	<1.0	<1.0	<1.0	<1.5	570	1820
	2/26/2020	<1.0	<1.0	<1.0	<1.5	740	1870
	5/12/2020	<1.0	<1.0	<1.0	<1.5	620	1800
	8/19/2020	<1.0	<1.0	<1.0	<1.5	620	1980
	11/16/2020	<1.0	<1.0	<1.0	<1.5	700	1910

Notes:

TDS = Total dissolved solids

NE = Not established

NMWQCC = New Mexico Water Quality Control Commission

NA = Not analyzed

BOLD = Concentrations that exceed the NMWQCC groundwater quality standard

mg/L = Milligrams per liter (parts per million)

ug/L = Micrograms per liter (parts per billion)

Table 4
Soil Analytical Results Summary
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Sample ID	Date	Sample Depth (ft.)	Chlorides (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (C6-C10) (mg/kg)	TPH DRO (C10-C28) (mg/kg)	TPH ORO (C28-C36) (mg/kg)	Total TPH (C6-C36) (mg/kg)	Field Screen - Hydrocarbons (ppm)
NMOCD Remediation Action Levels			600	10	NE			50	NE			100	NE
Floor 15.5*	3/7/2017	15.5	32	0.084	0.570	0.974	2.62	4.248	45.6	96.2	71.5	213.3	NA
Floor Middle Hole 15.5*	3/8/2017	15.5	16	<0.050	0.076	0.21	0.692	0.978	12.1	51.7	68.4	132.2	NA
MW-1	8/29/2017	5-7											1883
MW-1	8/29/2017	10-12											690
S-11135241-082917-MG-MW-1-15-17	8/29/2017	15-17	1,100	0.032	<0.048	<0.048	<0.096	0.032	<4.8	<9.8	<49	<63.6	0.0
S-11135241-082917-MG-MW-1-20-22	8/29/2017	20-22	170	<0.025	<0.050	<0.050	<0.099	<0.224	<5.0	<9.4	<47	<61.4	111
S-11135241-082917-MG-MW-1-25-27	8/29/2017	25-27	81	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.7	<46	<62.4	19
BN-1	8/29/2017	10											398.6
BN-1	8/29/2017	15											124.6
BN-1	8/29/2017	20											7.0
BN-2	8/29/2017	5											0.5
BN-2	8/29/2017	10											1.5
S-11135241-082917-MG-BN-2-15	8/29/2017	15	210	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.2	<46	<59.9	1.7
S-11135241-082917-MG-BN2-20	8/29/2017	20	130	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.4	<47	<61.1	2.3
BW	8/29/2017	5											0.9
BW	8/29/2017	10											2.1
S-11135241-082917-MG-BW-15	8/29/2017	15	430	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.3	<47	<61.1	9.7
S-11135241-082917-MG-BW-20	8/29/2017	20	54	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.5	<48	<62.3	7.4
BS	8/30/2017	5											42
BS	8/30/2017	10											72
S-11135241-083017-MG-BS-15	8/30/2017	15	360	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.5	<47	<61.4	27
S-11135241-083017-MG-BS-20	8/30/2017	20	140	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.1	<46	<59.8	63
BE-1	8/30/2017	5											195
BE-2	8/30/2017	5											228
BE-2	8/30/2017	10											60
S-11135241-083017-MG-BE2-15	8/30/2017	15	75	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.7	<48	<62.6	72
S-11135241-083017-MG-BE2-20	8/30/2017	20	72	<0.023	<0.046	<0.046	<0.091	<0.206	<4.6	<9.5	<48	<62.1	28
S-11135241-121817-MG-MW-2-5	12/18/2017	5	36	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.8	<49	<63.5	--
S-11135241-121817-MG-MW-2-10	12/18/2017	10	86	<0.023	<0.046	<0.046	<0.092	<0.207	<4.6	<9.0	<45	<58.6	--
S-11135241-121817-MG-MW-2-20	12/18/2017	20	57	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.8	<48	<62.5	--
S-11135241-121917-MG-MW-3-15	12/19/2017	15	140	<0.023	<0.047	<0.047	<0.094	<0.211	<4.6	<9.6	<48	<62.2	--
S-11135241-121917-MG-MW-3-20	12/19/2017	20	120	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<10	<50	<64.8	--
S-11135241-121917-MG-MW-3-35	12/19/2017	35	90	<0.025	<0.050	<0.050	<0.101	<0.225	<5.0	<9.6	<48	<62.6	--
S-11135241-121917-MG-MW-4-10	12/19/2017	10	46	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.8	<49	<63.6	359
S-11135241-121917-MG-MW-4-15	12/19/2017	15	35	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.8	<49	<63.5	128
S-11135241-121917-MG-MW-4-20	12/19/2017	20	130	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.9	<49	<63.7	292
S-11135241-122017-MG-MW-5-10	12/20/2017	10	<30	<0.025	<0.050	<0.050	<0.101	<0.225	<5.0	<9.5	<48	<62.5	199
S-11135241-122017-MG-MW-5-20	12/20/2017	20	<30	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.5	<48	<62.3	99
S-11135241-122017-MG-MW-5-25	12/20/2017	25	73	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.4	<47	<61.1	104
S-11135241-122017-MG-AS-1-10	12/20/2017	10	46	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.9	<50	<64.7	159
S-11135241-122017-MG-AS-1-15	12/20/2017	15	50	<0.023	<0.046	<0.046	<0.093	<0.208	<4.6	<9.3	<46	<59.9	81
S-11135241-122017-MG-AS-1-20	12/20/2017	20	97	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.5	<47	<61.2	70
S-11135241-122117-MG-AS-2-10	12/21/2017	10	<30	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.8	<49	<63.7	102
S-11135241-122117-MG-AS-2-15	12/21/2017	15	<30	<0.023	<0.046	<0.046	<0.092	<0.207	<4.6	<9.3	<47	<60.9	292
S-11135241-122117-MG-AS-2-20	12/21/2017	20	<30	<0.024	<0.049	<0.049	<0.097	<0.220	<4.9	<9.5	<48	<62.4	188
S-11135241-071420-CN-DP1-5	7/14/2020	5	<60	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.9	<50	<64.8	
S-11135241-071420-CN-DP1-10	7/14/2020	10	<60	<0.12	<0.24	<0.24	<0.49	<1.09	<24	<8.7	<44	<76.7	
S-11135241-071420-CN-DP1-15	7/14/2020	15	69	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.6	<48	<62.4	
S-11135241-071420-CN-DP1-20	7/14/2020	20	750	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.7	<48	<62.5	
S-11135241-071420-CN-DP2-5	7/14/2020	5	<60	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<8.8	<44	<62.2	
S-11135241-071420-CN-DP2-10	7/14/2020	10	<60	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.9	<50	<64.6	

Table 4
Soil Analytical Results Summary
O-6-1 4"
Lea County, New Mexico
ETC Texas Pipeline, Ltd.

Sample ID	Date	Sample Depth (ft.)	Chlorides (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (C6-C10) (mg/kg)	TPH DRO (C10-C28) (mg/kg)	TPH ORO (C28-C36) (mg/kg)	Total TPH (C6-C36) (mg/kg)	Field Screen - Hydrocarbons (ppm)
NMOCD Remediation Action Levels			600	10	NE			50	NE			100	NE
S-11135241-071420-CN-DP2-15	7/14/2020	15	<60	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.2	<46	<60.1	
S-11135241-071420-CN-DP2-20	7/14/2020	20	78	<0.023	<0.046	<0.046	<0.093	<0.208	<4.6	<9.6	<48	<62.2	
S-11135241-071420-CN-DP3-5	7/14/2020	5	<60	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<9.4	<47	<61.1	
S-11135241-071420-CN-DP3-10	7/14/2020	10	<60	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.4	<47	<61.1	
S-11135241-071420-CN-DP3-15	7/14/2020	15	<60	<0.023	<0.046	<0.046	<0.092	<0.207	<4.6	<9.5	<47	<61.1	
S-11135241-071420-CN-DP3-20	7/14/2020	20	<60	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.7	<49	<63.6	
S-11135241-071420-CN-DP4-5	7/14/2020	5	<60	<0.025	<0.050	<0.050	<0.100	<0.225	<5.0	<9.5	<47	<61.5	
S-11135241-071420-CN-DP4-10	7/14/2020	10	<60	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.5	<48	<62.4	
S-11135241-071420-CN-DP4-15	7/14/2020	15	<60	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<10	<50	<64.8	
S-11135241-071420-CN-DP4-20	7/14/2020	20	83	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.3	<46	<60.0	
S-11135241-071420-CN-DP5-5	7/14/2020	5	<60	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	10	100	110	
S-11135241-071420-CN-DP5-10	7/14/2020	10	<60	<0.025	<0.050	<0.050	<0.100	<0.225	<5.0	10	110	120	
S-11135241-071420-CN-DP5-15	7/14/2020	15	<60	<0.025	<0.050	<0.050	<0.099	<0.224	<5.0	<9.2	<46	<60.2	
S-11135241-071420-CN-DP5-20	7/14/2020	20	<60	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.3	<47	<61.2	

Note: Concentrations that are bold exceed the NMOCD Remediation Action Level

* Sample taken by ETC Field Services

NE = Not Established

mg/Kg = milligrams per Kilogram

-- = Not Applicable

NA = Not Analyzed

Field screening only

Appendices

Appendix A

Groundwater Laboratory Analytical Reports



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 06, 2020

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: SU 0-6-1

OrderNo.: 2002B36

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/26/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2002B36

Date Reported: 3/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: SU 0-6-1

Lab Order: 2002B36

Lab ID: 2002B36-001

Collection Date: 2/25/2020 2:10:00 PM

Client Sample ID: MW-1

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	690	50	*	mg/L	100	2/27/2020 6:01:42 PM	R6688E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1720	20.0	*	mg/L	1	3/4/2020 10:45:00 AM	50795
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 7:42:14 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 7:42:14 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 7:42:14 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 7:42:14 AM	D66923
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	2/29/2020 7:42:14 AM	D66923
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	2/29/2020 7:42:14 AM	D66923
Surr: Dibromofluoromethane	110	70-130		%Rec	1	2/29/2020 7:42:14 AM	D66923
Surr: Toluene-d8	98.9	70-130		%Rec	1	2/29/2020 7:42:14 AM	D66923

Lab ID: 2002B36-002

Collection Date: 2/25/2020 2:35:00 PM

Client Sample ID: MW-2

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	780	50	*	mg/L	100	2/27/2020 6:27:27 PM	R6688E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1780	20.0	*	mg/L	1	3/4/2020 10:45:00 AM	50795
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 8:11:16 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 8:11:16 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 8:11:16 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 8:11:16 AM	D66923
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	2/29/2020 8:11:16 AM	D66923
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/29/2020 8:11:16 AM	D66923
Surr: Dibromofluoromethane	112	70-130		%Rec	1	2/29/2020 8:11:16 AM	D66923
Surr: Toluene-d8	102	70-130		%Rec	1	2/29/2020 8:11:16 AM	D66923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 7

Analytical Report

Lab Order: 2002B36

Date Reported: 3/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: SU 0-6-1

Lab Order: 2002B36

Lab ID: 2002B36-003

Collection Date: 2/25/2020 3:00:00 PM

Client Sample ID: MW-3

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	720	50	*	mg/L	100	2/27/2020 6:53:12 PM	R6688E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1800	20.0	*	mg/L	1	3/4/2020 10:45:00 AM	50795
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 8:40:23 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 8:40:23 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 8:40:23 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 8:40:23 AM	D66923
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	2/29/2020 8:40:23 AM	D66923
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	2/29/2020 8:40:23 AM	D66923
Surr: Dibromofluoromethane	109	70-130		%Rec	1	2/29/2020 8:40:23 AM	D66923
Surr: Toluene-d8	103	70-130		%Rec	1	2/29/2020 8:40:23 AM	D66923

Lab ID: 2002B36-004

Collection Date: 2/25/2020 1:05:00 PM

Client Sample ID: MW-4

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	580	50	*	mg/L	100	2/27/2020 7:18:57 PM	R6688E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1680	20.0	*	mg/L	1	3/4/2020 10:45:00 AM	50795
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 9:09:37 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 9:09:37 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 9:09:37 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 9:09:37 AM	D66923
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	2/29/2020 9:09:37 AM	D66923
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	2/29/2020 9:09:37 AM	D66923
Surr: Dibromofluoromethane	111	70-130		%Rec	1	2/29/2020 9:09:37 AM	D66923
Surr: Toluene-d8	101	70-130		%Rec	1	2/29/2020 9:09:37 AM	D66923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2002B36

Date Reported: 3/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: SU 0-6-1

Lab Order: 2002B36

Lab ID: 2002B36-005

Collection Date: 2/25/2020 1:40:00 PM

Client Sample ID: MW-5

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	740	50	*	mg/L	100	2/27/2020 8:10:34 PM	R6688E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1870	20.0	*	mg/L	1	3/4/2020 10:45:00 AM	50795
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 9:38:58 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 9:38:58 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 9:38:58 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 9:38:58 AM	D66923
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%Rec	1	2/29/2020 9:38:58 AM	D66923
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	2/29/2020 9:38:58 AM	D66923
Surr: Dibromofluoromethane	101	70-130		%Rec	1	2/29/2020 9:38:58 AM	D66923
Surr: Toluene-d8	100	70-130		%Rec	1	2/29/2020 9:38:58 AM	D66923

Lab ID: 2002B36-006

Collection Date:

Client Sample ID: Trip Blank

Matrix: TRIP BLANK

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 10:08:31 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 10:08:31 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 10:08:31 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 10:08:31 AM	D66923
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	1	2/29/2020 10:08:31 AM	D66923
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/29/2020 10:08:31 AM	D66923
Surr: Dibromofluoromethane	100	70-130		%Rec	1	2/29/2020 10:08:31 AM	D66923
Surr: Toluene-d8	97.9	70-130		%Rec	1	2/29/2020 10:08:31 AM	D66923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2002B36

Date Reported: 3/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: SU 0-6-1

Lab Order: 2002B36

Lab ID: 2002B36-007

Collection Date: 2/25/2020

Client Sample ID: Dup-01

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	720	50	*	mg/L	100	2/27/2020 8:36:17 PM	R6688E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1690	20.0	*	mg/L	1	3/4/2020 10:45:00 AM	50795
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/29/2020 10:37:51 AM	D66923
Toluene	ND	1.0		µg/L	1	2/29/2020 10:37:51 AM	D66923
Ethylbenzene	ND	1.0		µg/L	1	2/29/2020 10:37:51 AM	D66923
Xylenes, Total	ND	1.5		µg/L	1	2/29/2020 10:37:51 AM	D66923
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	2/29/2020 10:37:51 AM	D66923
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	2/29/2020 10:37:51 AM	D66923
Surr: Dibromofluoromethane	103	70-130		%Rec	1	2/29/2020 10:37:51 AM	D66923
Surr: Toluene-d8	102	70-130		%Rec	1	2/29/2020 10:37:51 AM	D66923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2002B36

06-Mar-20

Client: GHD
Project: SU 0-6-1

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R66888	RunNo: 66888								
Prep Date:	Analysis Date: 2/27/2020	SeqNo: 2300387	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: LCS	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R66888	RunNo: 66888								
Prep Date:	Analysis Date: 2/27/2020	SeqNo: 2300388	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002B36

06-Mar-20

Client: GHD
Project: SU 0-6-1

Sample ID: mb2	SampType: MBLK	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: PBW	Batch ID: D66923	RunNo: 66923								
Prep Date:	Analysis Date: 2/28/2020	SeqNo: 2301841	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID: 100ng lcs2	SampType: LCS	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: LCSW	Batch ID: D66923	RunNo: 66923								
Prep Date:	Analysis Date: 2/28/2020	SeqNo: 2301842	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.7	70	130			
Toluene	19	1.0	20.00	0	94.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002B36

06-Mar-20

Client: GHD
Project: SU 0-6-1

Sample ID: MB-50795	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 50795	RunNo: 66999								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2305760	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

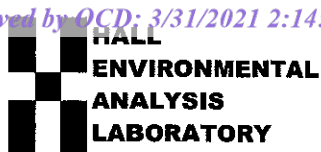
Sample ID: LCS-50795	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 50795	RunNo: 66999								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2305761	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD

Work Order Number: 2002B36

RcptNo: 1

Received By: Desiree Dominguez 2/26/2020 11:20:00 AM

Completed By: Leah Baca 2/26/2020 1:49:06 PM

Reviewed By: Y6 2/27/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 2/27/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good				

Chain-of-Custody Record

Client:

ETC

Mailing Address: 6121 Indian School Road,

NE Ste 200, Albuquerque, NM, 87110

Phone #: 505-269-0088

email or Fax#: Christine.Mathews@GHD.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ AZ Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SU 0-6-1

Project #:

11209235

Project Manager:

Christine Mathews

Sampler: Heath Boyd

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CP): 1.3 to 0 = 1.3 (°C)

Date Time Matrix Sample Name

2/25 1410 GW MW-1

1435 GW MW-2

1500 GW MW-3

1305 GW MW-4

1340 GW MW-5

Trip Blank

DUP-01

Date:

2/25

Relinquished by:

Heath Boyd

Time:

1615

Date:

2/25/20

Received by:

Heath Boyd

Via:

2/25/20

Date:

2/25/20

Time:

1615

Received by:

Heath Boyd

Via:

2/25/20

Date:

2/25/20

Time:

11:20

Remarks:



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 21, 2020

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: 0 6 1

OrderNo.: 2005589

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/14/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2005589

Date Reported: 5/21/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2005589

Project: 0 6 1

Lab ID: 2005589-001

Collection Date: 5/12/2020 3:00:00 PM

Client Sample ID: GW-11209235-051220-CN-MW-1

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	690	50	*	mg/L	100	5/15/2020 2:16:03 PM	R68950
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1920	20.0	*	mg/L	1	5/19/2020 7:18:00 PM	52546
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/15/2020 6:45:00 PM	SL6891
Toluene	ND	1.0		µg/L	1	5/15/2020 6:45:00 PM	SL6891
Ethylbenzene	ND	1.0		µg/L	1	5/15/2020 6:45:00 PM	SL6891
Xylenes, Total	ND	1.5		µg/L	1	5/15/2020 6:45:00 PM	SL6891
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%Rec	1	5/15/2020 6:45:00 PM	SL6891
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	5/15/2020 6:45:00 PM	SL6891
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/15/2020 6:45:00 PM	SL6891
Surr: Toluene-d8	99.0	70-130		%Rec	1	5/15/2020 6:45:00 PM	SL6891

Lab ID: 2005589-002

Collection Date: 5/12/2020 3:45:00 PM

Client Sample ID: GW-11209235-051220-CN-MW-2

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	770	50	*	mg/L	100	5/15/2020 3:07:29 PM	R68950
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2030	40.0	*D	mg/L	1	5/19/2020 7:18:00 PM	52546
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/15/2020 7:09:00 PM	SL6891
Toluene	ND	1.0		µg/L	1	5/15/2020 7:09:00 PM	SL6891
Ethylbenzene	ND	1.0		µg/L	1	5/15/2020 7:09:00 PM	SL6891
Xylenes, Total	ND	1.5		µg/L	1	5/15/2020 7:09:00 PM	SL6891
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%Rec	1	5/15/2020 7:09:00 PM	SL6891
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	5/15/2020 7:09:00 PM	SL6891
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/15/2020 7:09:00 PM	SL6891
Surr: Toluene-d8	100	70-130		%Rec	1	5/15/2020 7:09:00 PM	SL6891

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2005589

Date Reported: 5/21/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2005589

Project: 0 6 1

Lab ID: 2005589-003

Collection Date: 5/12/2020 4:15:00 PM

Client Sample ID: GW-11209235-051220-CN-MW-3

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	630	50	*	mg/L	100	5/15/2020 3:33:13 PM	R68950
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1720	40.0	*D	mg/L	1	5/19/2020 7:18:00 PM	52546
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/15/2020 7:33:00 PM	SL6891
Toluene	ND	1.0		µg/L	1	5/15/2020 7:33:00 PM	SL6891
Ethylbenzene	ND	1.0		µg/L	1	5/15/2020 7:33:00 PM	SL6891
Xylenes, Total	ND	1.5		µg/L	1	5/15/2020 7:33:00 PM	SL6891
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	5/15/2020 7:33:00 PM	SL6891
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	5/15/2020 7:33:00 PM	SL6891
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/15/2020 7:33:00 PM	SL6891
Surr: Toluene-d8	100	70-130		%Rec	1	5/15/2020 7:33:00 PM	SL6891

Lab ID: 2005589-004

Collection Date: 5/12/2020 4:45:00 PM

Client Sample ID: GW-11209235-051220-CN-MW-4

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	570	50	*	mg/L	100	5/15/2020 3:58:56 PM	R68950
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1780	100	*D	mg/L	1	5/19/2020 7:18:00 PM	52546
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/15/2020 7:56:00 PM	SL6891
Toluene	ND	1.0		µg/L	1	5/15/2020 7:56:00 PM	SL6891
Ethylbenzene	ND	1.0		µg/L	1	5/15/2020 7:56:00 PM	SL6891
Xylenes, Total	ND	1.5		µg/L	1	5/15/2020 7:56:00 PM	SL6891
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%Rec	1	5/15/2020 7:56:00 PM	SL6891
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	5/15/2020 7:56:00 PM	SL6891
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/15/2020 7:56:00 PM	SL6891
Surr: Toluene-d8	99.4	70-130		%Rec	1	5/15/2020 7:56:00 PM	SL6891

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2005589

Date Reported: 5/21/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2005589

Project: 0 6 1

Lab ID: 2005589-005

Collection Date: 5/12/2020 5:15:00 PM

Client Sample ID: GW-11209235-051220-CN-MW-5

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	620	50	*	mg/L	100	5/15/2020 4:24:40 PM	R68950
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1800	40.0	*D	mg/L	1	5/19/2020 7:18:00 PM	52546
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/15/2020 8:20:00 PM	SL6891
Toluene	ND	1.0		µg/L	1	5/15/2020 8:20:00 PM	SL6891
Ethylbenzene	ND	1.0		µg/L	1	5/15/2020 8:20:00 PM	SL6891
Xylenes, Total	ND	1.5		µg/L	1	5/15/2020 8:20:00 PM	SL6891
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	5/15/2020 8:20:00 PM	SL6891
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	5/15/2020 8:20:00 PM	SL6891
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/15/2020 8:20:00 PM	SL6891
Surr: Toluene-d8	99.5	70-130		%Rec	1	5/15/2020 8:20:00 PM	SL6891

Lab ID: 2005589-006

Collection Date: 5/12/2020

Client Sample ID: GW-11209235-051220-CN-MW-DUP

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	620	50	*	mg/L	100	5/15/2020 4:50:24 PM	R68950
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1860	40.0	*D	mg/L	1	5/19/2020 7:18:00 PM	52546
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/15/2020 8:44:00 PM	SL6891
Toluene	ND	1.0		µg/L	1	5/15/2020 8:44:00 PM	SL6891
Ethylbenzene	ND	1.0		µg/L	1	5/15/2020 8:44:00 PM	SL6891
Xylenes, Total	ND	1.5		µg/L	1	5/15/2020 8:44:00 PM	SL6891
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	5/15/2020 8:44:00 PM	SL6891
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	5/15/2020 8:44:00 PM	SL6891
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/15/2020 8:44:00 PM	SL6891
Surr: Toluene-d8	100	70-130		%Rec	1	5/15/2020 8:44:00 PM	SL6891

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005589

21-May-20

Client: GHD**Project:** 0 6 1

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R68950	RunNo: 68950								
Prep Date:	Analysis Date: 5/15/2020	SeqNo: 2386519		Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: LCS	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R68950	RunNo: 68950								
Prep Date:	Analysis Date: 5/15/2020	SeqNo: 2386520		Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	97.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005589

21-May-20

Client: GHD

Project: 0 6 1

Sample ID: 100ng lcs	SampType: LCS			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: LCSW	Batch ID: SL68919			RunNo: 68919						
Prep Date:	Analysis Date: 5/15/2020			SeqNo: 2385536		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.5	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.4	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.3	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.2	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: PBW	Batch ID: SL68919			RunNo: 68919						
Prep Date:	Analysis Date: 5/15/2020			SeqNo: 2385537		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.6	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005589

21-May-20

Client: GHD

Project: 0 6 1

Sample ID: MB-52546	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 52546	RunNo: 69017								
Prep Date: 5/18/2020	Analysis Date: 5/19/2020	SeqNo: 2389310	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-52546	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 52546	RunNo: 69017								
Prep Date: 5/18/2020	Analysis Date: 5/19/2020	SeqNo: 2389311	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD

Work Order Number: 2005589

RcptNo: 1

Received By: **Isaiah Ortiz**

5/14/2020 9:30:00 AM

I-Ortiz

Completed By: **John Caldwell**

5/14/2020 10:28:09 AM

John Caldwell

Reviewed By: **LB**

5/15/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good				



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

August 31, 2020

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: 0-6-1

OrderNo.: 2008B88

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/21/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2008B88

Date Reported: 8/31/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2008B88

Project: 0-6-1

Lab ID: 2008B88-001

Collection Date: 8/19/2020 3:15:00 PM

Client Sample ID: GW-11209235-081920-CN-MW-1

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	640	50	*	mg/L	100	8/21/2020 5:35:34 PM	R71286
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1970	20.0	*	mg/L	1	8/26/2020 5:04:00 PM	54656
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	1.0		µg/L	1	8/24/2020 2:53:00 PM	SL7129
Toluene	ND	1.0		µg/L	1	8/24/2020 2:53:00 PM	SL7129
Ethylbenzene	ND	1.0		µg/L	1	8/24/2020 2:53:00 PM	SL7129
Xylenes, Total	ND	1.5		µg/L	1	8/24/2020 2:53:00 PM	SL7129
Surr: 1,2-Dichloroethane-d4	85.0	70-130		%Rec	1	8/24/2020 2:53:00 PM	SL7129
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	8/24/2020 2:53:00 PM	SL7129
Surr: Dibromofluoromethane	95.5	70-130		%Rec	1	8/24/2020 2:53:00 PM	SL7129
Surr: Toluene-d8	101	70-130		%Rec	1	8/24/2020 2:53:00 PM	SL7129

Lab ID: 2008B88-002

Collection Date: 8/19/2020 3:45:00 PM

Client Sample ID: GW-11209235-081920-CN-MW-2

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	760	50	*	mg/L	100	8/21/2020 6:25:12 PM	R71286
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2220	40.0	*D	mg/L	1	8/26/2020 5:04:00 PM	54656
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	1.0		µg/L	1	8/24/2020 3:18:00 PM	SL7129
Toluene	ND	1.0		µg/L	1	8/24/2020 3:18:00 PM	SL7129
Ethylbenzene	ND	1.0		µg/L	1	8/24/2020 3:18:00 PM	SL7129
Xylenes, Total	ND	1.5		µg/L	1	8/24/2020 3:18:00 PM	SL7129
Surr: 1,2-Dichloroethane-d4	86.3	70-130		%Rec	1	8/24/2020 3:18:00 PM	SL7129
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	8/24/2020 3:18:00 PM	SL7129
Surr: Dibromofluoromethane	96.3	70-130		%Rec	1	8/24/2020 3:18:00 PM	SL7129
Surr: Toluene-d8	100	70-130		%Rec	1	8/24/2020 3:18:00 PM	SL7129

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2008B88

Date Reported: 8/31/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2008B88

Project: 0-6-1

Lab ID: 2008B88-003

Collection Date: 8/19/2020 4:15:00 PM

Client Sample ID: GW-11209235-081920-CN-MW-3

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	590	50	*	mg/L	100	8/21/2020 6:50:01 PM	R71286
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1810	40.0	*D	mg/L	1	8/26/2020 5:04:00 PM	54656
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	1.0		µg/L	1	8/24/2020 3:42:00 PM	SL7129
Toluene	ND	1.0		µg/L	1	8/24/2020 3:42:00 PM	SL7129
Ethylbenzene	ND	1.0		µg/L	1	8/24/2020 3:42:00 PM	SL7129
Xylenes, Total	ND	1.5		µg/L	1	8/24/2020 3:42:00 PM	SL7129
Surr: 1,2-Dichloroethane-d4	86.5	70-130		%Rec	1	8/24/2020 3:42:00 PM	SL7129
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	8/24/2020 3:42:00 PM	SL7129
Surr: Dibromofluoromethane	95.3	70-130		%Rec	1	8/24/2020 3:42:00 PM	SL7129
Surr: Toluene-d8	98.5	70-130		%Rec	1	8/24/2020 3:42:00 PM	SL7129

Lab ID: 2008B88-004

Collection Date: 8/19/2020 4:45:00 PM

Client Sample ID: GW-11209235-081920-CN-MW-4

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	650	50	*	mg/L	100	8/21/2020 7:14:50 PM	R71286
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2180	40.0	*D	mg/L	1	8/26/2020 5:04:00 PM	54656
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	1.0		µg/L	1	8/24/2020 4:06:00 PM	SL7129
Toluene	ND	1.0		µg/L	1	8/24/2020 4:06:00 PM	SL7129
Ethylbenzene	ND	1.0		µg/L	1	8/24/2020 4:06:00 PM	SL7129
Xylenes, Total	ND	1.5		µg/L	1	8/24/2020 4:06:00 PM	SL7129
Surr: 1,2-Dichloroethane-d4	85.9	70-130		%Rec	1	8/24/2020 4:06:00 PM	SL7129
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	8/24/2020 4:06:00 PM	SL7129
Surr: Dibromofluoromethane	95.1	70-130		%Rec	1	8/24/2020 4:06:00 PM	SL7129
Surr: Toluene-d8	98.5	70-130		%Rec	1	8/24/2020 4:06:00 PM	SL7129

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
		D	Sample Diluted Due to Matrix	E	Value above quantitation range
		H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
		ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
		PQL	Practical Quantitative Limit	RL	Reporting Limit
		S	% Recovery outside of range due to dilution or matrix		

Page 2 of 7

Analytical Report

Lab Order: 2008B88

Date Reported: 8/31/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2008B88

Project: 0-6-1

Lab ID: 2008B88-005

Collection Date: 8/19/2020 5:20:00 PM

Client Sample ID: GW-11209235-081920-CN-MW-5

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	620	50	*	mg/L	100	8/21/2020 7:39:39 PM	R71286
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1980	40.0	*D	mg/L	1	8/26/2020 5:04:00 PM	54656
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	1.0		µg/L	1	8/24/2020 4:31:00 PM	SL7129
Toluene	ND	1.0		µg/L	1	8/24/2020 4:31:00 PM	SL7129
Ethylbenzene	ND	1.0		µg/L	1	8/24/2020 4:31:00 PM	SL7129
Xylenes, Total	ND	1.5		µg/L	1	8/24/2020 4:31:00 PM	SL7129
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%Rec	1	8/24/2020 4:31:00 PM	SL7129
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	8/24/2020 4:31:00 PM	SL7129
Surr: Dibromofluoromethane	96.5	70-130		%Rec	1	8/24/2020 4:31:00 PM	SL7129
Surr: Toluene-d8	100	70-130		%Rec	1	8/24/2020 4:31:00 PM	SL7129

Lab ID: 2008B88-006

Collection Date: 8/19/2020

Client Sample ID: GW-11209235-081920-CN-DUP

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: RAA
Benzene	ND	1.0		µg/L	1	8/24/2020 4:55:00 PM	SL7129
Toluene	ND	1.0		µg/L	1	8/24/2020 4:55:00 PM	SL7129
Ethylbenzene	ND	1.0		µg/L	1	8/24/2020 4:55:00 PM	SL7129
Xylenes, Total	ND	1.5		µg/L	1	8/24/2020 4:55:00 PM	SL7129
Surr: 1,2-Dichloroethane-d4	87.5	70-130		%Rec	1	8/24/2020 4:55:00 PM	SL7129
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	8/24/2020 4:55:00 PM	SL7129
Surr: Dibromofluoromethane	95.2	70-130		%Rec	1	8/24/2020 4:55:00 PM	SL7129
Surr: Toluene-d8	99.9	70-130		%Rec	1	8/24/2020 4:55:00 PM	SL7129

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008B88

31-Aug-20

Client: GHD**Project:** 0-6-1

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R71286	RunNo: 71286								
Prep Date:	Analysis Date: 8/21/2020	SeqNo: 2487639	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: LCS-B	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R71286	RunNo: 71286								
Prep Date:	Analysis Date: 8/21/2020	SeqNo: 2487641	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.5	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008B88

31-Aug-20

Client: GHD**Project:** 0-6-1

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: PBW	Batch ID: SL71291	RunNo: 71291								
Prep Date:	Analysis Date: 8/24/2020	SeqNo: 2493007	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.9	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.3	70	130			
Surr: Toluene-d8	9.9		10.00		99.2	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: LCSW	Batch ID: SL71291	RunNo: 71291								
Prep Date:	Analysis Date: 8/24/2020	SeqNo: 2493008	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.0	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.7	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: 2008B88-001ams	SampType: MS	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: GW-11209235-08192	Batch ID: SL71291	RunNo: 71291								
Prep Date:	Analysis Date: 8/24/2020	SeqNo: 2493015	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	20	1.0	20.00	0	99.2	70	130			
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.9	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.0	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.7	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: 2008B88-001amsd	SampType: MSD	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: GW-11209235-08192	Batch ID: SL71291	RunNo: 71291								
Prep Date:	Analysis Date: 8/24/2020	SeqNo: 2493016	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.4	70	130	4.14	20	
Toluene	19	1.0	20.00	0	95.5	70	130	3.78	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008B88

31-Aug-20

Client: GHD

Project: 0-6-1

Sample ID: 2008B88-001amsd		SampType: MSD		TestCode: EPA Method 8260: Volatiles Short List						
Client ID: GW-11209235-08192		Batch ID: SL71291		RunNo: 71291						
Prep Date:		Analysis Date: 8/24/2020		SeqNo: 2493016		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.3		10.00		92.7	70	130	0	0	
Surr: Dibromofluoromethane	9.4		10.00		94.0	70	130	0	0	
Surr: Toluene-d8	10		10.00		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008B88

31-Aug-20

Client: GHD

Project: 0-6-1

Sample ID: MB-54656	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 54656	RunNo: 71379								
Prep Date: 8/25/2020	Analysis Date: 8/26/2020	SeqNo: 2491628 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-54656	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 54656	RunNo: 71379								
Prep Date: 8/25/2020	Analysis Date: 8/26/2020	SeqNo: 2491629 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD

Work Order Number: 2008B88

RcptNo: 1

Received By: Cheyenne Cason

8/21/2020 8:11:00 AM

Completed By: Juan Rojas

8/21/2020 11:11:09 AM

Reviewed By: SPA 8.21.20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: one 8/21/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.5	Good				
2	5.1	Good				
3	1.6	Good				



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 02, 2020

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: 0-6-1

OrderNo.: 2011918

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/18/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2011918

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2011918

Project: 0-6-1

Lab ID: 2011918-001

Collection Date: 11/16/2020 3:30:00 PM

Client Sample ID: GW-11209235-111620-CN-MW-1

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	730	25	*	mg/L	50	11/25/2020 1:34:41 AM	R73590
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: MH
Total Dissolved Solids	1940	20.0	*	mg/L	1	11/20/2020 2:05:00 PM	56547
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 2:08:52 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 2:08:52 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 2:08:52 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 2:08:52 PM	R73524
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	11/20/2020 2:08:52 PM	R73524
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/20/2020 2:08:52 PM	R73524
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/20/2020 2:08:52 PM	R73524
Surr: Toluene-d8	96.9	70-130		%Rec	1	11/20/2020 2:08:52 PM	R73524

Lab ID: 2011918-002

Collection Date: 11/16/2020 4:00:00 PM

Client Sample ID: GW-11209235-111620-CN-MW-2

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	760	25	*	mg/L	50	11/25/2020 1:47:05 AM	R73590
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: MH
Total Dissolved Solids	2100	20.0	*	mg/L	1	11/20/2020 2:05:00 PM	56547
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 2:37:17 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 2:37:17 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 2:37:17 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 2:37:17 PM	R73524
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/20/2020 2:37:17 PM	R73524
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	11/20/2020 2:37:17 PM	R73524
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/20/2020 2:37:17 PM	R73524
Surr: Toluene-d8	95.7	70-130		%Rec	1	11/20/2020 2:37:17 PM	R73524

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2011918

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2011918

Project: 0-6-1

Lab ID: 2011918-003

Collection Date: 11/16/2020 5:30:00 PM

Client Sample ID: GW-11209235-111620-CN-MW-3

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	690	25	*	mg/L	50	11/25/2020 1:59:30 AM	R73590
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: MH
Total Dissolved Solids	1930	20.0	*	mg/L	1	11/20/2020 2:05:00 PM	56547
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 4:02:30 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 4:02:30 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 4:02:30 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 4:02:30 PM	R73524
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	11/20/2020 4:02:30 PM	R73524
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	11/20/2020 4:02:30 PM	R73524
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/20/2020 4:02:30 PM	R73524
Surr: Toluene-d8	97.6	70-130		%Rec	1	11/20/2020 4:02:30 PM	R73524

Lab ID: 2011918-004

Collection Date: 11/16/2020 5:00:00 PM

Client Sample ID: GW-11209235-111620-CN-MW-4

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	730	25	*	mg/L	50	11/25/2020 2:11:54 AM	R73590
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: MH
Total Dissolved Solids	2410	20.0	*	mg/L	1	11/20/2020 2:05:00 PM	56547
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 4:30:54 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 4:30:54 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 4:30:54 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 4:30:54 PM	R73524
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%Rec	1	11/20/2020 4:30:54 PM	R73524
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	11/20/2020 4:30:54 PM	R73524
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/20/2020 4:30:54 PM	R73524
Surr: Toluene-d8	101	70-130		%Rec	1	11/20/2020 4:30:54 PM	R73524

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2011918

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2011918

Project: 0-6-1

Lab ID: 2011918-005

Collection Date: 11/16/2020 4:00:00 PM

Client Sample ID: GW-11209235-111620-CN-MW-5

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	700	25	*	mg/L	50	11/25/2020 2:24:19 AM	R73590
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: MH
Total Dissolved Solids	1910	20.0	*	mg/L	1	11/20/2020 2:05:00 PM	56547
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 4:59:20 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 4:59:20 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 4:59:20 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 4:59:20 PM	R73524
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	11/20/2020 4:59:20 PM	R73524
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/20/2020 4:59:20 PM	R73524
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/20/2020 4:59:20 PM	R73524
Surr: Toluene-d8	94.8	70-130		%Rec	1	11/20/2020 4:59:20 PM	R73524

Lab ID: 2011918-006

Collection Date: 11/16/2020

Client Sample ID: GW-11209235-111620-CN-DUP

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	680	25	*	mg/L	50	11/25/2020 2:36:43 AM	R73590
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: MH
Total Dissolved Solids	2380	20.0	*	mg/L	1	11/20/2020 2:05:00 PM	56547
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 5:27:51 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 5:27:51 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 5:27:51 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 5:27:51 PM	R73524
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/20/2020 5:27:51 PM	R73524
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	11/20/2020 5:27:51 PM	R73524
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/20/2020 5:27:51 PM	R73524
Surr: Toluene-d8	96.1	70-130		%Rec	1	11/20/2020 5:27:51 PM	R73524

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2011918

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2011918

Project: 0-6-1

Lab ID: 2011918-007

Collection Date:

Client Sample ID: Trip Blank

Matrix: TRIP BLANK

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/20/2020 5:56:20 PM	R73524
Toluene	ND	1.0		µg/L	1	11/20/2020 5:56:20 PM	R73524
Ethylbenzene	ND	1.0		µg/L	1	11/20/2020 5:56:20 PM	R73524
Xylenes, Total	ND	1.5		µg/L	1	11/20/2020 5:56:20 PM	R73524
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	11/20/2020 5:56:20 PM	R73524
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	11/20/2020 5:56:20 PM	R73524
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/20/2020 5:56:20 PM	R73524
Surr: Toluene-d8	98.2	70-130		%Rec	1	11/20/2020 5:56:20 PM	R73524

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011918

02-Dec-20

Client: GHD**Project:** 0-6-1

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R73590	RunNo: 73590								
Prep Date:	Analysis Date: 11/24/2020	SeqNo: 2593354	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: LCS	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R73590	RunNo: 73590								
Prep Date:	Analysis Date: 11/24/2020	SeqNo: 2593355	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.6	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011918

02-Dec-20

Client: GHD**Project:** 0-6-1

Sample ID: mb1	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R73524	RunNo: 73524								
Prep Date:	Analysis Date: 11/20/2020	SeqNo: 2589529	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.0	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: LCSW	Batch ID: R73524	RunNo: 73524								
Prep Date:	Analysis Date: 11/20/2020	SeqNo: 2589530	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.7	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID: 2011918-002a ms	SampType: MS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: GW-11209235-11162	Batch ID: R73524	RunNo: 73524								
Prep Date:	Analysis Date: 11/20/2020	SeqNo: 2589533	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.3	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Sample ID: 2011918-002a msd	SampType: MSD	TestCode: EPA Method 8260B: VOLATILES								
Client ID: GW-11209235-11162	Batch ID: R73524	RunNo: 73524								
Prep Date:	Analysis Date: 11/20/2020	SeqNo: 2589534	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.7	70	130	8.03	20	
Toluene	19	1.0	20.00	0	94.8	70	130	7.71	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2011918

02-Dec-20

Client: GHD

Project: 0-6-1

Sample ID: 2011918-002a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES						
Client ID: GW-11209235-11162		Batch ID: R73524		RunNo: 73524						
Prep Date:		Analysis Date: 11/20/2020		SeqNo: 2589534		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130	0	0	
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130	0	0	
Surr: Toluene-d8	9.3		10.00		93.0	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011918

02-Dec-20

Client: GHD**Project:** 0-6-1

Sample ID: MB-56547	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 56547	RunNo: 73516								
Prep Date: 11/19/2020	Analysis Date: 11/20/2020	SeqNo: 2589226	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

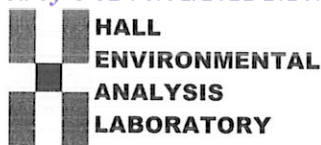
Sample ID: LCS-56547	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 56547	RunNo: 73516								
Prep Date: 11/19/2020	Analysis Date: 11/20/2020	SeqNo: 2589227	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **GHD**Work Order Number: **2011918**RcptNo: **1**Received By: **Emily Mocho**

11/18/2020 8:00:00 AM

Completed By: **Emily Mocho**

11/18/2020 11:30:25 AM

Reviewed By: **SPA 11.18.20**

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SGC 11/18/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			
2	2.2	Good	Yes			
3	2.5	Not Good	Yes			

Chain-of-Custody Record

Client: 64DMailing Address: On FilePhone #: 505 269 0088email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

0-6-1

Project #:

11209235

Project Manager:

Christine MathewsSampler: CMOn Ice: ☒ Yes ☐ No# of Coolers: 3Cooler Temp (including CF): See remarks (°C)

Container Type and #

Preservative Type

HEAL No.

2011918001002003004005006001002003004

Appendix B

Soil Laboratory Analytical Report



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

July 22, 2020

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: 0-6-1

OrderNo.: 2007738

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 20 sample(s) on 7/15/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-001

Collection Date: 7/14/2020 9:35:00 AM

Client Sample ID: S-11135241-071420-CN-DP1-5'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/19/2020 11:11:59 PM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/18/2020 4:50:15 AM	53743
Surr: BFB	94.1	70-130		%Rec	1	7/18/2020 4:50:15 AM	53743
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/17/2020 7:48:23 PM	53751
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/17/2020 7:48:23 PM	53751
Surr: DNOP	139	55.1-146		%Rec	1	7/17/2020 7:48:23 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/18/2020 4:50:15 AM	53743
Toluene	ND	0.049		mg/Kg	1	7/18/2020 4:50:15 AM	53743
Ethylbenzene	ND	0.049		mg/Kg	1	7/18/2020 4:50:15 AM	53743
Xylenes, Total	ND	0.098		mg/Kg	1	7/18/2020 4:50:15 AM	53743
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	7/18/2020 4:50:15 AM	53743
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	7/18/2020 4:50:15 AM	53743
Surr: Dibromofluoromethane	110	70-130		%Rec	1	7/18/2020 4:50:15 AM	53743
Surr: Toluene-d8	101	70-130		%Rec	1	7/18/2020 4:50:15 AM	53743

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-002

Collection Date: 7/14/2020 9:46:00 AM

Client Sample ID: S-11135241-071420-CN-DP1-10'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 12:13:43 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	7/18/2020 5:18:50 AM	53743
Surr: BFB	96.1	70-130		%Rec	5	7/18/2020 5:18:50 AM	53743
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	7/17/2020 8:19:26 PM	53751
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/17/2020 8:19:26 PM	53751
Surr: DNOP	104	55.1-146		%Rec	1	7/17/2020 8:19:26 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.12		mg/Kg	5	7/18/2020 5:18:50 AM	53743
Toluene	ND	0.24		mg/Kg	5	7/18/2020 5:18:50 AM	53743
Ethylbenzene	ND	0.24		mg/Kg	5	7/18/2020 5:18:50 AM	53743
Xylenes, Total	ND	0.49		mg/Kg	5	7/18/2020 5:18:50 AM	53743
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	5	7/18/2020 5:18:50 AM	53743
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	5	7/18/2020 5:18:50 AM	53743
Surr: Dibromofluoromethane	106	70-130		%Rec	5	7/18/2020 5:18:50 AM	53743
Surr: Toluene-d8	103	70-130		%Rec	5	7/18/2020 5:18:50 AM	53743

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-003

Collection Date: 7/14/2020 10:00:00 AM

Client Sample ID: S-11135241-071420-CN-DP1-15'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	69	60		mg/Kg	20	7/20/2020 12:26:03 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/18/2020 5:47:24 AM	53743
Surr: BFB	95.1	70-130		%Rec	1	7/18/2020 5:47:24 AM	53743
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/17/2020 8:29:43 PM	53751
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2020 8:29:43 PM	53751
Surr: DNOP	110	55.1-146		%Rec	1	7/17/2020 8:29:43 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/18/2020 5:47:24 AM	53743
Toluene	ND	0.048		mg/Kg	1	7/18/2020 5:47:24 AM	53743
Ethylbenzene	ND	0.048		mg/Kg	1	7/18/2020 5:47:24 AM	53743
Xylenes, Total	ND	0.095		mg/Kg	1	7/18/2020 5:47:24 AM	53743
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	7/18/2020 5:47:24 AM	53743
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	7/18/2020 5:47:24 AM	53743
Surr: Dibromofluoromethane	104	70-130		%Rec	1	7/18/2020 5:47:24 AM	53743
Surr: Toluene-d8	102	70-130		%Rec	1	7/18/2020 5:47:24 AM	53743

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-004

Collection Date: 7/14/2020 10:20:00 AM

Client Sample ID: S-11135241-071420-CN-DP1-20'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	750	60		mg/Kg	20	7/20/2020 12:38:24 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/18/2020 3:48:58 PM	53744
Surr: BFB	98.2	70-130		%Rec	1	7/18/2020 3:48:58 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/17/2020 8:40:01 PM	53751
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2020 8:40:01 PM	53751
Surr: DNOP	116	55.1-146		%Rec	1	7/17/2020 8:40:01 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/18/2020 3:48:58 PM	53744
Toluene	ND	0.048		mg/Kg	1	7/18/2020 3:48:58 PM	53744
Ethylbenzene	ND	0.048		mg/Kg	1	7/18/2020 3:48:58 PM	53744
Xylenes, Total	ND	0.097		mg/Kg	1	7/18/2020 3:48:58 PM	53744
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/18/2020 3:48:58 PM	53744
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	7/18/2020 3:48:58 PM	53744
Surr: Dibromofluoromethane	108	70-130		%Rec	1	7/18/2020 3:48:58 PM	53744
Surr: Toluene-d8	102	70-130		%Rec	1	7/18/2020 3:48:58 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-005

Collection Date: 7/14/2020 10:55:00 AM

Client Sample ID: S-11135241-071420-CN-DP2-5'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 12:50:45 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/18/2020 5:15:07 PM	53744
Surr: BFB	94.1	70-130		%Rec	1	7/18/2020 5:15:07 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	7/17/2020 8:50:19 PM	53751
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/17/2020 8:50:19 PM	53751
Surr: DNOP	135	55.1-146		%Rec	1	7/17/2020 8:50:19 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/18/2020 5:15:07 PM	53744
Toluene	ND	0.047		mg/Kg	1	7/18/2020 5:15:07 PM	53744
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2020 5:15:07 PM	53744
Xylenes, Total	ND	0.095		mg/Kg	1	7/18/2020 5:15:07 PM	53744
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	7/18/2020 5:15:07 PM	53744
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	7/18/2020 5:15:07 PM	53744
Surr: Dibromofluoromethane	112	70-130		%Rec	1	7/18/2020 5:15:07 PM	53744
Surr: Toluene-d8	100	70-130		%Rec	1	7/18/2020 5:15:07 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-006

Collection Date: 7/14/2020 11:10:00 AM

Client Sample ID: S-11135241-071420-CN-DP2-10'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 1:03:05 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/18/2020 6:42:42 PM	53744
Surr: BFB	92.7	70-130		%Rec	1	7/18/2020 6:42:42 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/17/2020 9:00:34 PM	53751
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/17/2020 9:00:34 PM	53751
Surr: DNOP	106	55.1-146		%Rec	1	7/17/2020 9:00:34 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	7/18/2020 6:42:42 PM	53744
Toluene	ND	0.047		mg/Kg	1	7/18/2020 6:42:42 PM	53744
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2020 6:42:42 PM	53744
Xylenes, Total	ND	0.094		mg/Kg	1	7/18/2020 6:42:42 PM	53744
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/18/2020 6:42:42 PM	53744
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	7/18/2020 6:42:42 PM	53744
Surr: Dibromofluoromethane	112	70-130		%Rec	1	7/18/2020 6:42:42 PM	53744
Surr: Toluene-d8	94.7	70-130		%Rec	1	7/18/2020 6:42:42 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-007

Collection Date: 7/14/2020 11:20:00 AM

Client Sample ID: S-11135241-071420-CN-DP2-15'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 1:15:26 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/18/2020 7:11:35 PM	53744
Surr: BFB	94.1	70-130		%Rec	1	7/18/2020 7:11:35 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	7/17/2020 9:10:50 PM	53751
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/17/2020 9:10:50 PM	53751
Surr: DNOP	117	55.1-146		%Rec	1	7/17/2020 9:10:50 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/18/2020 7:11:35 PM	53744
Toluene	ND	0.049		mg/Kg	1	7/18/2020 7:11:35 PM	53744
Ethylbenzene	ND	0.049		mg/Kg	1	7/18/2020 7:11:35 PM	53744
Xylenes, Total	ND	0.099		mg/Kg	1	7/18/2020 7:11:35 PM	53744
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	7/18/2020 7:11:35 PM	53744
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	7/18/2020 7:11:35 PM	53744
Surr: Dibromofluoromethane	113	70-130		%Rec	1	7/18/2020 7:11:35 PM	53744
Surr: Toluene-d8	95.9	70-130		%Rec	1	7/18/2020 7:11:35 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
		D	Sample Diluted Due to Matrix	E	Value above quantitation range
		H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
		ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
		PQL	Practical Quantitative Limit	RL	Reporting Limit
		S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-008

Collection Date: 7/14/2020 11:25:00 AM

Client Sample ID: S-11135241-071420-CN-DP2-20'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	78	60		mg/Kg	20	7/20/2020 1:27:46 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/18/2020 7:40:22 PM	53744
Surr: BFB	90.8	70-130		%Rec	1	7/18/2020 7:40:22 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/17/2020 9:21:03 PM	53751
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2020 9:21:03 PM	53751
Surr: DNOP	134	55.1-146		%Rec	1	7/17/2020 9:21:03 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	7/18/2020 7:40:22 PM	53744
Toluene	ND	0.046		mg/Kg	1	7/18/2020 7:40:22 PM	53744
Ethylbenzene	ND	0.046		mg/Kg	1	7/18/2020 7:40:22 PM	53744
Xylenes, Total	ND	0.093		mg/Kg	1	7/18/2020 7:40:22 PM	53744
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/18/2020 7:40:22 PM	53744
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	7/18/2020 7:40:22 PM	53744
Surr: Dibromofluoromethane	116	70-130		%Rec	1	7/18/2020 7:40:22 PM	53744
Surr: Toluene-d8	94.4	70-130		%Rec	1	7/18/2020 7:40:22 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-009

Collection Date: 7/14/2020 11:45:00 AM

Client Sample ID: S-11135241-071420-CN-DP3-5'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 1:40:07 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/18/2020 8:09:07 PM	53744
Surr: BFB	95.4	70-130		%Rec	1	7/18/2020 8:09:07 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/17/2020 9:31:19 PM	53751
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2020 9:31:19 PM	53751
Surr: DNOP	87.4	55.1-146		%Rec	1	7/17/2020 9:31:19 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/18/2020 8:09:07 PM	53744
Toluene	ND	0.047		mg/Kg	1	7/18/2020 8:09:07 PM	53744
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2020 8:09:07 PM	53744
Xylenes, Total	ND	0.095		mg/Kg	1	7/18/2020 8:09:07 PM	53744
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	7/18/2020 8:09:07 PM	53744
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	7/18/2020 8:09:07 PM	53744
Surr: Dibromofluoromethane	117	70-130		%Rec	1	7/18/2020 8:09:07 PM	53744
Surr: Toluene-d8	95.9	70-130		%Rec	1	7/18/2020 8:09:07 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-010

Collection Date: 7/14/2020 11:50:00 AM

Client Sample ID: S-11135241-071420-CN-DP3-10'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 2:17:08 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/18/2020 8:37:50 PM	53744
Surr: BFB	91.9	70-130		%Rec	1	7/18/2020 8:37:50 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/17/2020 9:41:30 PM	53751
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2020 9:41:30 PM	53751
Surr: DNOP	95.6	55.1-146		%Rec	1	7/17/2020 9:41:30 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/18/2020 8:37:50 PM	53744
Toluene	ND	0.047		mg/Kg	1	7/18/2020 8:37:50 PM	53744
Ethylbenzene	ND	0.047		mg/Kg	1	7/18/2020 8:37:50 PM	53744
Xylenes, Total	ND	0.094		mg/Kg	1	7/18/2020 8:37:50 PM	53744
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	7/18/2020 8:37:50 PM	53744
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	7/18/2020 8:37:50 PM	53744
Surr: Dibromofluoromethane	114	70-130		%Rec	1	7/18/2020 8:37:50 PM	53744
Surr: Toluene-d8	96.2	70-130		%Rec	1	7/18/2020 8:37:50 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-011

Collection Date: 7/14/2020 12:00:00 PM

Client Sample ID: S-11135241-071420-CN-DP3-15'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 2:29:29 AM	53812
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/18/2020 9:06:33 PM	53744
Surr: BFB	95.0	70-130		%Rec	1	7/18/2020 9:06:33 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/17/2020 9:51:44 PM	53751
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2020 9:51:44 PM	53751
Surr: DNOP	123	55.1-146		%Rec	1	7/17/2020 9:51:44 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	7/18/2020 9:06:33 PM	53744
Toluene	ND	0.046		mg/Kg	1	7/18/2020 9:06:33 PM	53744
Ethylbenzene	ND	0.046		mg/Kg	1	7/18/2020 9:06:33 PM	53744
Xylenes, Total	ND	0.092		mg/Kg	1	7/18/2020 9:06:33 PM	53744
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	7/18/2020 9:06:33 PM	53744
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	7/18/2020 9:06:33 PM	53744
Surr: Dibromofluoromethane	115	70-130		%Rec	1	7/18/2020 9:06:33 PM	53744
Surr: Toluene-d8	100	70-130		%Rec	1	7/18/2020 9:06:33 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-012

Collection Date: 7/14/2020 12:15:00 PM

Client Sample ID: S-11135241-071420-CN-DP3-20'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/19/2020 8:58:48 PM	53811
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/18/2020 10:03:50 PM	53744
Surr: BFB	96.8	70-130		%Rec	1	7/18/2020 10:03:50 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/17/2020 10:01:54 PM	53751
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/17/2020 10:01:54 PM	53751
Surr: DNOP	117	55.1-146		%Rec	1	7/17/2020 10:01:54 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/18/2020 10:03:50 PM	53744
Toluene	ND	0.049		mg/Kg	1	7/18/2020 10:03:50 PM	53744
Ethylbenzene	ND	0.049		mg/Kg	1	7/18/2020 10:03:50 PM	53744
Xylenes, Total	ND	0.098		mg/Kg	1	7/18/2020 10:03:50 PM	53744
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/18/2020 10:03:50 PM	53744
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/18/2020 10:03:50 PM	53744
Surr: Dibromofluoromethane	110	70-130		%Rec	1	7/18/2020 10:03:50 PM	53744
Surr: Toluene-d8	99.4	70-130		%Rec	1	7/18/2020 10:03:50 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-013

Collection Date: 7/14/2020 12:35:00 PM

Client Sample ID: S-11135241-071420-CN-DP4-5'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/19/2020 10:00:51 PM	53811
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/18/2020 10:32:25 PM	53744
Surr: BFB	96.0	70-130		%Rec	1	7/18/2020 10:32:25 PM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/17/2020 10:12:05 PM	53751
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2020 10:12:05 PM	53751
Surr: DNOP	37.4	55.1-146	S	%Rec	1	7/17/2020 10:12:05 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/18/2020 10:32:25 PM	53744
Toluene	ND	0.050		mg/Kg	1	7/18/2020 10:32:25 PM	53744
Ethylbenzene	ND	0.050		mg/Kg	1	7/18/2020 10:32:25 PM	53744
Xylenes, Total	ND	0.10		mg/Kg	1	7/18/2020 10:32:25 PM	53744
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	7/18/2020 10:32:25 PM	53744
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	1	7/18/2020 10:32:25 PM	53744
Surr: Dibromofluoromethane	113	70-130		%Rec	1	7/18/2020 10:32:25 PM	53744
Surr: Toluene-d8	103	70-130		%Rec	1	7/18/2020 10:32:25 PM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-014

Collection Date: 7/14/2020 12:40:00 PM

Client Sample ID: S-11135241-071420-CN-DP4-10'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/19/2020 10:13:16 PM	53811
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/19/2020 12:55:21 AM	53744
Surr: BFB	93.7	70-130		%Rec	1	7/19/2020 12:55:21 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/17/2020 10:22:13 PM	53751
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/17/2020 10:22:13 PM	53751
Surr: DNOP	29.3	55.1-146	S	%Rec	1	7/17/2020 10:22:13 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/19/2020 12:55:21 AM	53744
Toluene	ND	0.048		mg/Kg	1	7/19/2020 12:55:21 AM	53744
Ethylbenzene	ND	0.048		mg/Kg	1	7/19/2020 12:55:21 AM	53744
Xylenes, Total	ND	0.097		mg/Kg	1	7/19/2020 12:55:21 AM	53744
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	7/19/2020 12:55:21 AM	53744
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	7/19/2020 12:55:21 AM	53744
Surr: Dibromofluoromethane	104	70-130		%Rec	1	7/19/2020 12:55:21 AM	53744
Surr: Toluene-d8	99.7	70-130		%Rec	1	7/19/2020 12:55:21 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-015

Collection Date: 7/14/2020 12:50:00 PM

Client Sample ID: S-11135241-071420-CN-DP4-15'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/19/2020 10:25:40 PM	53811
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/19/2020 1:23:58 AM	53744
Surr: BFB	98.3	70-130		%Rec	1	7/19/2020 1:23:58 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/17/2020 10:32:21 PM	53751
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/17/2020 10:32:21 PM	53751
Surr: DNOP	38.2	55.1-146	S	%Rec	1	7/17/2020 10:32:21 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/19/2020 1:23:58 AM	53744
Toluene	ND	0.048		mg/Kg	1	7/19/2020 1:23:58 AM	53744
Ethylbenzene	ND	0.048		mg/Kg	1	7/19/2020 1:23:58 AM	53744
Xylenes, Total	ND	0.096		mg/Kg	1	7/19/2020 1:23:58 AM	53744
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	7/19/2020 1:23:58 AM	53744
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	7/19/2020 1:23:58 AM	53744
Surr: Dibromofluoromethane	110	70-130		%Rec	1	7/19/2020 1:23:58 AM	53744
Surr: Toluene-d8	103	70-130		%Rec	1	7/19/2020 1:23:58 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-016

Collection Date: 7/14/2020 12:55:00 PM

Client Sample ID: S-11135241-071420-CN-DP4-20'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	83	60		mg/Kg	20	7/19/2020 10:38:05 PM	53811
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/19/2020 1:52:28 AM	53744
Surr: BFB	95.2	70-130		%Rec	1	7/19/2020 1:52:28 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/17/2020 10:42:27 PM	53751
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/17/2020 10:42:27 PM	53751
Surr: DNOP	48.3	55.1-146	S	%Rec	1	7/17/2020 10:42:27 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	7/19/2020 1:52:28 AM	53744
Toluene	ND	0.047		mg/Kg	1	7/19/2020 1:52:28 AM	53744
Ethylbenzene	ND	0.047		mg/Kg	1	7/19/2020 1:52:28 AM	53744
Xylenes, Total	ND	0.094		mg/Kg	1	7/19/2020 1:52:28 AM	53744
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/19/2020 1:52:28 AM	53744
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	7/19/2020 1:52:28 AM	53744
Surr: Dibromofluoromethane	109	70-130		%Rec	1	7/19/2020 1:52:28 AM	53744
Surr: Toluene-d8	101	70-130		%Rec	1	7/19/2020 1:52:28 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-017

Collection Date: 7/14/2020 1:20:00 PM

Client Sample ID: S-11135241-071420-CN-DP5-5'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/19/2020 10:50:30 PM	53811
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/19/2020 2:21:03 AM	53744
Surr: BFB	95.9	70-130		%Rec	1	7/19/2020 2:21:03 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	10	9.5		mg/Kg	1	7/19/2020 6:33:17 AM	53751
Motor Oil Range Organics (MRO)	100	47		mg/Kg	1	7/19/2020 6:33:17 AM	53751
Surr: DNOP	80.1	55.1-146		%Rec	1	7/19/2020 6:33:17 AM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	7/19/2020 2:21:03 AM	53744
Toluene	ND	0.048		mg/Kg	1	7/19/2020 2:21:03 AM	53744
Ethylbenzene	ND	0.048		mg/Kg	1	7/19/2020 2:21:03 AM	53744
Xylenes, Total	ND	0.096		mg/Kg	1	7/19/2020 2:21:03 AM	53744
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	7/19/2020 2:21:03 AM	53744
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/19/2020 2:21:03 AM	53744
Surr: Dibromofluoromethane	110	70-130		%Rec	1	7/19/2020 2:21:03 AM	53744
Surr: Toluene-d8	100	70-130		%Rec	1	7/19/2020 2:21:03 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-018

Collection Date: 7/14/2020 1:25:00 PM

Client Sample ID: S-11135241-071420-CN-DP5-10'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 12:12:44 PM	53826
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/19/2020 2:49:39 AM	53744
Surr: BFB	95.5	70-130		%Rec	1	7/19/2020 2:49:39 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	10	9.0		mg/Kg	1	7/19/2020 6:57:23 AM	53751
Motor Oil Range Organics (MRO)	110	45		mg/Kg	1	7/19/2020 6:57:23 AM	53751
Surr: DNOP	81.4	55.1-146		%Rec	1	7/19/2020 6:57:23 AM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/19/2020 2:49:39 AM	53744
Toluene	ND	0.050		mg/Kg	1	7/19/2020 2:49:39 AM	53744
Ethylbenzene	ND	0.050		mg/Kg	1	7/19/2020 2:49:39 AM	53744
Xylenes, Total	ND	0.10		mg/Kg	1	7/19/2020 2:49:39 AM	53744
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%Rec	1	7/19/2020 2:49:39 AM	53744
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	7/19/2020 2:49:39 AM	53744
Surr: Dibromofluoromethane	111	70-130		%Rec	1	7/19/2020 2:49:39 AM	53744
Surr: Toluene-d8	100	70-130		%Rec	1	7/19/2020 2:49:39 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

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Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-019

Collection Date: 7/14/2020 1:35:00 PM

Client Sample ID: S-11135241-071420-CN-DP5-15'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 12:49:58 PM	53826
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/19/2020 3:18:17 AM	53744
Surr: BFB	97.0	70-130		%Rec	1	7/19/2020 3:18:17 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	7/17/2020 11:12:54 PM	53751
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/17/2020 11:12:54 PM	53751
Surr: DNOP	58.7	55.1-146		%Rec	1	7/17/2020 11:12:54 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/19/2020 3:18:17 AM	53744
Toluene	ND	0.050		mg/Kg	1	7/19/2020 3:18:17 AM	53744
Ethylbenzene	ND	0.050		mg/Kg	1	7/19/2020 3:18:17 AM	53744
Xylenes, Total	ND	0.099		mg/Kg	1	7/19/2020 3:18:17 AM	53744
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	7/19/2020 3:18:17 AM	53744
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	7/19/2020 3:18:17 AM	53744
Surr: Dibromofluoromethane	111	70-130		%Rec	1	7/19/2020 3:18:17 AM	53744
Surr: Toluene-d8	102	70-130		%Rec	1	7/19/2020 3:18:17 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order: 2007738

Date Reported: 7/22/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2007738

Project: 0-6-1

Lab ID: 2007738-020

Collection Date: 7/14/2020 1:45:00 PM

Client Sample ID: S-11135241-071420-CN-DP5-20'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	7/20/2020 1:02:23 PM	53826
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/19/2020 3:46:50 AM	53744
Surr: BFB	95.3	70-130		%Rec	1	7/19/2020 3:46:50 AM	53744
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/17/2020 11:23:05 PM	53751
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/17/2020 11:23:05 PM	53751
Surr: DNOP	62.3	55.1-146		%Rec	1	7/17/2020 11:23:05 PM	53751
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	7/19/2020 3:46:50 AM	53744
Toluene	ND	0.049		mg/Kg	1	7/19/2020 3:46:50 AM	53744
Ethylbenzene	ND	0.049		mg/Kg	1	7/19/2020 3:46:50 AM	53744
Xylenes, Total	ND	0.099		mg/Kg	1	7/19/2020 3:46:50 AM	53744
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	7/19/2020 3:46:50 AM	53744
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	7/19/2020 3:46:50 AM	53744
Surr: Dibromofluoromethane	113	70-130		%Rec	1	7/19/2020 3:46:50 AM	53744
Surr: Toluene-d8	97.0	70-130		%Rec	1	7/19/2020 3:46:50 AM	53744

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit		P	Sample pH Not In Range
	PQL	Practical Quantitative Limit		RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix			

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007738

22-Jul-20

Client: GHD

Project: 0-6-1

Sample ID: MB-53812	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 53812	RunNo: 70454								
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2449940 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-53812	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 53812	RunNo: 70454								
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2449941 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Sample ID: MB-53811	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 53811	RunNo: 70458								
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2450132 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-53811	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 53811	RunNo: 70458								
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2450133 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Sample ID: MB-53826	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 53826	RunNo: 70463								
Prep Date: 7/20/2020	Analysis Date: 7/20/2020	SeqNo: 2451222 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-53826	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 53826	RunNo: 70463								
Prep Date: 7/20/2020	Analysis Date: 7/20/2020	SeqNo: 2451223 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007738

22-Jul-20

Client: GHD

Project: 0-6-1

Sample ID: 2007738-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-11135241-071420-		Batch ID: 53751		RunNo: 70416						
Prep Date: 7/16/2020		Analysis Date: 7/17/2020		SeqNo: 2448386		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	62	9.7	48.26	0	128	47.4	136			
Surr: DNOP	4.7		4.826		96.5	55.1	146			

Sample ID: 2007738-001AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-11135241-071420-		Batch ID: 53751		RunNo: 70416						
Prep Date: 7/16/2020		Analysis Date: 7/17/2020		SeqNo: 2448387		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	71	9.6	48.08	0	149	47.4	136	14.7	43.4	S
Surr: DNOP	7.9		4.808		164	55.1	146	0	0	S

Sample ID: LCS-53751		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS		Batch ID: 53751		RunNo: 70416						
Prep Date: 7/16/2020		Analysis Date: 7/17/2020		SeqNo: 2448417		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	116	70	130			
Surr: DNOP	5.8		5.000		116	55.1	146			

Sample ID: MB-53751		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS		Batch ID: 53751		RunNo: 70416						
Prep Date: 7/16/2020		Analysis Date: 7/17/2020		SeqNo: 2448421			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		117	55.1	146			

Sample ID: MB-53768		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS		Batch ID: 53768		RunNo: 70449						
Prep Date: 7/16/2020		Analysis Date: 7/18/2020		SeqNo: 2450409			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		86.2	55.1	146			

Sample ID: LCS-53768		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS		Batch ID: 53768		RunNo: 70449						
Prep Date: 7/16/2020		Analysis Date: 7/18/2020		SeqNo: 2450412		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 22 of 27

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007738

22-Jul-20

Client: GHD
Project: 0-6-1

Sample ID: LCS-53768		SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS		Batch ID: 53768			RunNo: 70449						
Prep Date: 7/16/2020		Analysis Date: 7/18/2020			SeqNo: 2450412		Units: %Rec				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.1		5.000		82.6	55.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007738

22-Jul-20

Client: GHD

Project: 0-6-1

Sample ID: mb-53743	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 53743	RunNo: 70438								
Prep Date: 7/15/2020	Analysis Date: 7/17/2020	SeqNo: 2448698	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		109	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.7	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: lcs-53743	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 53743	RunNo: 70438								
Prep Date: 7/15/2020	Analysis Date: 7/17/2020	SeqNo: 2448699	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.0	80	120			
Toluene	0.89	0.050	1.000	0	89.2	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.5	80	120			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.5	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID: mb-53744	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 53744	RunNo: 70442								
Prep Date: 7/15/2020	Analysis Date: 7/18/2020	SeqNo: 2448997	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.8	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.49		0.5000		98.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007738

22-Jul-20

Client: GHD

Project: 0-6-1

Sample ID: Ics-53744	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 53744	RunNo: 70442								
Prep Date: 7/15/2020	Analysis Date: 7/18/2020	SeqNo: 2448998	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	80	120			
Toluene	0.91	0.050	1.000	0	91.3	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.9	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.6	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: 2007738-004ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S-11135241-071420-	Batch ID: 53744	RunNo: 70442								
Prep Date: 7/15/2020	Analysis Date: 7/18/2020	SeqNo: 2449000	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9930	0	104	71.1	115			
Toluene	0.98	0.050	0.9930	0	98.4	79.6	132			
Ethylbenzene	1.1	0.050	0.9930	0	108	83.8	134			
Xylenes, Total	3.2	0.099	2.979	0	109	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.52		0.4965		105	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4965		89.9	70	130			
Surr: Dibromofluoromethane	0.54		0.4965		109	70	130			
Surr: Toluene-d8	0.50		0.4965		101	70	130			

Sample ID: 2007738-004amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S-11135241-071420-	Batch ID: 53744	RunNo: 70442								
Prep Date: 7/15/2020	Analysis Date: 7/18/2020	SeqNo: 2449001	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.023	0.9200	0	107	71.1	115	5.14	20	
Toluene	0.91	0.046	0.9200	0	99.4	79.6	132	6.63	20	
Ethylbenzene	0.97	0.046	0.9200	0	105	83.8	134	10.3	20	
Xylenes, Total	3.0	0.092	2.760	0	109	82.4	132	7.54	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4600		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.43		0.4600		94.6	70	130	0	0	
Surr: Dibromofluoromethane	0.52		0.4600		114	70	130	0	0	
Surr: Toluene-d8	0.48		0.4600		103	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007738

22-Jul-20

Client: GHD**Project:** 0-6-1

Sample ID: mb-53743	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: 53743			RunNo: 70438						
Prep Date: 7/15/2020	Analysis Date: 7/17/2020			SeqNo: 2448759		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		95.8	70	130			

Sample ID: lcs-53743	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 53743			RunNo: 70438						
Prep Date: 7/15/2020	Analysis Date: 7/17/2020			SeqNo: 2448760		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	5.0	25.00	0	72.8	70	130			
Surr: BFB	460		500.0		92.0	70	130			

Sample ID: mb-53744	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: 53744			RunNo: 70442						
Prep Date: 7/15/2020	Analysis Date: 7/18/2020			SeqNo: 2449036		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.4	70	130			

Sample ID: lcs-53744	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 53744			RunNo: 70442						
Prep Date: 7/15/2020	Analysis Date: 7/18/2020			SeqNo: 2449037		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	25.00	0	75.1	70	130			
Surr: BFB	480		500.0		95.9	70	130			

Sample ID: 2007738-005ams	SampType: MS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: S-11135241-071420-	Batch ID: 53744			RunNo: 70442						
Prep Date: 7/15/2020	Analysis Date: 7/18/2020			SeqNo: 2449040		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	4.8	23.81	0	66.4	70	130			S
Surr: BFB	430		476.2		89.8	70	130			

Sample ID: 2007738-005amsd	SampType: MSD			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: S-11135241-071420-	Batch ID: 53744			RunNo: 70442						
Prep Date: 7/15/2020	Analysis Date: 7/18/2020			SeqNo: 2449041		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007738

22-Jul-20

Client: GHD

Project: 0-6-1

Sample ID: 2007738-005amsd		SampType: MSD		TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: S-11135241-071420-		Batch ID: 53744		RunNo: 70442						
Prep Date: 7/15/2020		Analysis Date: 7/18/2020		SeqNo: 2449041		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	24.75	0	64.2	70	130	0.513	20	S
Surr: BFB	460		495.0		92.1	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD

Work Order Number: 2007738

RcptNo: 1

Received By: Scott Anderson 7/15/2020 9:30:00 AM

Completed By: Juan Rojas 7/15/2020 10:31:54 AM

Reviewed By: em 7/15/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: DAD 7/15/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good				

Chain-of-Custody Record

Client:

GHD

Mailing Address:

On File

Phone #:

505-269-6088

email or Fax#

Christine.Mathews@ghd.com

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Turn-Around Time:

5 Days

☒ Standard☐ Rush

Project Name:

O-6-1

Project #:

11135241

Project Manager:

Christine Mathews

Sampler:

CW

On Ice:

☒ Yes☐ No

of Coolers:

1

Cooler Temp (including CF):

5.0 to 15.1 (°C)

Container Type and #

Preservative Type

HEAL No

2007738

Date

Time

Matrix

Sample Name

7-14-20

0935

S

S-11135241-071420-DP1-5'

7-14-20

0946

S-11135241-071420-DP1-10'

7-14-20

1000

S-11135241-071420-CN-DP1-15'

7-14-20

1020

S-11135241-071420-CN-DP1-20'

7-14-20

1055

S-11135241-071420-CN-DP2-5'

7-14-20

1110

S-11135241-071420-CN-DP2-10'

7-14-20

1120

S-11135241-071420-CN-DP2-15'

7-14-20

1125

S-11135241-071420-CN-DP2-20'

7-14-20

1145

S-11135241-071420-CN-DP3-5'

7-14-20

1150

S-11135241-071420-CN-DP3-10'

7-14-20

1200

S-11135241-071420-CN-DP3-15'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

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1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

7-14-20

1215

S-11135241-071420-CN-DP3-20'

Analysis Request

BTX / MTBE / TMBs (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

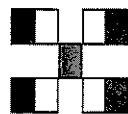
8270 (Semi-VOA)

Total Coliform (Present/Absent)

BTEX

Full Range TPH

Chloride

HALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107



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.

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District IV

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 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 22468

CONDITIONS

Operator: ETC Texas Pipeline Ltd., Limited Partnership 8111 Westchester Drive Dallas, TX 75225	OGRID:
	328923
	Action Number: 22468
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 Annual Groundwater Monitoring Report and 2021 Work Scope: Content satisfactory 1. OCD currently denies the site closure requested due to chloride and TDS levels exceeding the WQCC allowable concentrations in groundwater 2. OCD pre-approves the elimination of BTEX from any future lab analyses of the existing site wells 3. OCD pre-approves semi-annual monitor well sampling for 2022 4. OCD requires the installation of a background well (temporary or permanent) to evaluate chloride and TDS. Deadline for the installation is June 30, 2022 5. Development and sampling of the up-gradient monitor or temporary well will be analyzed initially for BTEX per US EPA Method 8260B (full suite), TDS, and chlorides 6. OCD will re-assess the site for closure upon receiving the initial monitor or temporary well lab report 7. Submit summarized activities completed and their results in a 2021 Annual Report. Submittal to OCD expected no later than March 31, 2022.	2/16/2022