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REVIEWED

By Mike Buchanan at 3:52 pm, Sep 21, 2023

Your Ref.: 1RP-1457
Our Ref.: 12603939-Velez-1

August 10, 2023

Mr. Nelson Velez
State of New Mexico
Energy, Minerals, and Natural Resources Department
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

2022 Annual Groundwater Monitoring Report
Jal No. 4 Former Tank Battery
Lea County, New Mexico
New Mexico Oil Conservation Division Remediation Case No. 1RP-1457
Incident Number nAPP2217177320

Dear Mr. Velez:

On behalf of ETC Texas Pipeline, Ltd. (ETC), GHD Services Inc. (GHD) is submitting the 2022 Annual Groundwater Monitoring Report (Report) for the above-referenced property (Site) to the New Mexico Oil Conservation Division (NMOCD). The Report summarizes activities performed at the Site during 2022 in accordance with the NMOCD's recommendations in response to the 2021 Annual Groundwater Monitoring Report.

Should you have any questions or comments regarding this submittal, please don't hesitate to contact GHD at (214) 231-8301.

Regards,

GHD



Blair Owen
Project Manager

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J.T. Murrey
Project Director

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BO/jlf/1

Copy to: Stacy Boultinghouse, Energy Transfer
Kelly Myers, Deep Wells Ranch, LLC (property owner)

Review of the 2022 Annual Groundwater Monitoring Report for Jal No. 4 Former Tank Battery: **Content Satisfactory**

1. Continue to conduct groundwater monitoring on a semi-annual basis
2. Deploy an absorbent sock in MW-1, inspect quarterly and replace as necessary.
3. Submit the 2023 Annual Groundwater Report by April 1, 2024.
4. Continue to take gauging readings for LNAPL as necessary and prescribed in this report.



2022 Annual Groundwater Monitoring Report

**Jal No. 4 Former Tank Battery
Lea County, New Mexico
NMOCD 1RP-1457
Incident Number nAPP2217177320**

ETC Texas Pipeline, Ltd.

August 10, 2023

→ **The Power of Commitment**

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1. Introduction

This report presents the results of groundwater monitoring activities performed during 2022 by GHD Services Inc. (GHD) at the ETC Texas Pipeline, Ltd. (ETC), Jal No. 4 former tank battery (Site). The Site is located on Deep Wells Road about ½ mile west of Highway 18 and approximately 10 miles north of Jal, Lea County, New Mexico in Section 31, Township 23 South, Range 37 East (**Figure 1**). The property is owned by Mr. Kelly Myers and the Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under the remediation permit number 1RP-1457 (associated with incident number nAPP2217177320).

1.1 Background

The Site is currently vacant land, but was formerly developed with a tank battery that included aboveground storage tanks (ASTs) that stored natural gas condensate (condensate) and produced water. In April 2007, a release from a 410-barrel (bbl) AST tank was discovered by the previous operator of the Site, Southern Union Gas Services, Ltd. Approximately 140 bbls of condensate and 140 bbls of produced water were estimated to have been released in an approximately 2,772 square foot area. Based on the released products, the primary constituents of concern (COCs) at the Site include benzene, toluene, ethylbenzene, and xylenes (BTEX) and chloride.

Approximately 7,500 cubic yards of soil were excavated from the release area during November 2012 and January 2013. A liner was placed in the bottom of the excavation, at approximately 15 feet below ground surface (ft bgs), to minimize further vertical migration of the constituents left in place.

A total of six monitor wells (MW-1 through MW-6) and one recovery well (RW-1) have been installed at the Site. Recovery well RW-1 was installed to recover light non-aqueous phase liquid (LNAPL), but only a sheen has ever been observed during monitoring events. However, monitor well MW-1 has consistently had measurable LNAPL since its installation. Groundwater monitoring has been performed at the Site since February 2013 and in 2016 the monitoring switched to a semiannual schedule.

In March 2015, a baildown test was conducted at the Site to estimate LNAPL transmissivity in conjunction with a PIANO (n-paraffin, iso-paraffin, aromatics, naphthalenes, and olefins) analysis on LNAPL collected from monitor well MW-1. The bail-down test returned estimated LNAPL transmissivity for the Site of 0.34 feet per day for monitor well MW-1. This transmissivity value falls in the de minimis recoverability range for LNAPL recommended by the Interstate Technology and Regulatory Council, it appears the LNAPL plume at the Site is stable and further migration of LNAPL is unlikely. Results of the PIANO analysis show that carbon range indicators for the sample ranged from C4 to C26. The primary indicators ranged from C6 to C10. LNAPL falling within this range is typically gasoline or light condensate. Details of both the baildown test and PIANO analysis are discussed in detail in the 2015 Annual Groundwater Monitoring Report for the Site.

In November 2015, a solar controlled, compressed air powered, QED in-well skimmer pump was installed to recover LNAPL from monitor well MW-1. This skimmer operated at the Site in monitor well MW-1 until November 2018 and recovered approximately 304 gallons of LNAPL during its operation. The skimmer was removed due to low recovery and frequent maintenance due to Site conditions.

Mobile dual phase extraction (MDPE) events were performed at the Site in 2018, 2019, and 2020 recovering a total of 332 gallons of LNAPL. Details of the MDPE events are discussed in previous groundwater monitoring reports prepared for the Site.

Currently, absorbent socks are being placed in monitor well MW-1 and are replaced on a quarterly basis. GHD assumes 10 ounces of LNAPL is recovered per absorbent sock. During the absorbent sock replacement, recovered LNAPL is also bailed via a disposable polyethylene bailer. Approximately 0.25 gallons of LNAPL is recovered during each bailing event. A summary of LNAPL recovery at the Site is presented in **Table 1**.

Semi-annual groundwater monitoring events were performed in 2022 and are discussed in this report.

2. Groundwater Monitoring

GHD performed monitoring events on May 26 and November 10, 2022. The monitoring program including groundwater gauging and collecting groundwater samples from the monitoring and recovery wells, bailing LNAPL from monitor well MW-1, and replacing absorbent socks in monitor well MW-1. Wells where LNAPL was present were not sampled.

2.1 Monitoring Well Gauging

On May 26 and November 10, 2022, GHD personnel measured the depth to groundwater and LNAPL thickness, if present, in monitor wells MW-1 through MW-6 and recovery well RW-1 using an electronic oil/water interface probe (IP). The IP was cleaned with laboratory grade soap and purified water prior to gauging each monitoring well. Depth to groundwater, LNAPL thickness, and calculated groundwater elevations are summarized in **Table 2**.

Based on the data collected in 2022, groundwater flow is generally east-southeast and is consistent with historical data for the Site. The groundwater gradient was calculated at 0.0029 foot per linear foot (ft/ft) for May and 0.0015 ft/ft in November. Due to a malfunction with the IP during the November 2022, an accurate depth to product could not be determined; therefore, the elevation data for monitor well MW-1 was not utilized in generating the November potentiometric surface map. Groundwater potentiometric surface maps are presented as **Figure 3** and **Figure 4**.

2.2 LNAPL Presence and Recovery

In May 2022, 1.25 ft of LNAPL was present in monitor well MW-1 and in November 2022 there was an instrument error and LNAPL could not be measured; however, LNAPL was present in the well based on residual product observed on the IP. In March, May, September, and November 2022, one New Pig™ monitoring well skimming sock was replaced in monitor well MW-1. The used socks were stored in a sealed and labeled 55-gallon drum on a spill containment pallet on-Site. The socks recovered approximately 0.31 gallons of LNAPL, and bailing recovered approximately 1 gallon of LNAPL for a combined total of 1.31 gallons recovered in 2022. A summary of LNAPL recovery at the Site is presented in **Table 1**.

2.3 Groundwater Sampling

Following gauging during each 2022 event, GHD personnel utilized a bladder pump with dedicated polyethylene tubing for each well to purge a minimum of three well volumes of groundwater or until the well was dry. Monitor well MW-1 was not sampled due to the presence of LNAPL. The wells were given time to recover and stabilize prior to collecting a groundwater sample. Purge water generated during gauging and sampling events was poured onto the former well pad at the Site and allowed to evaporate. Groundwater quality parameters of temperature, pH, oxidation reduction potential, and conductivity were collected with a field-calibrated multi-parameter groundwater quality meter and recorded on groundwater sampling forms. A summary of field parameters is presented in **Table 3**.

Groundwater samples were collected, placed in laboratory-prepared sample containers, packed in a cooler with ice, and transported under chain-of-custody documentation to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX via the United States Environmental Protection Agency (EPA) Method 8260, chloride via EPA Method 300.0, and total dissolved solids (TDS) via Standard Method 2540.

2.4 Quality Assurance/Quality Control

During each groundwater monitoring event, a field duplicate was collected as a Quality Assurance/Quality Control (QA/QC) sample and subsequently submitted for laboratory analysis. A trip blank was also submitted as a QA/QC sample for each groundwater monitoring event.

2.5 Analytical Results

The New Mexico Water Quality Control Commission (NMWQCC) mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater quality standards have been set for the protection of human health, domestic water supply, and irrigation use.

The groundwater analytical results for 2022 are summarized in **Table 4**, and the corresponding laboratory analytical reports are included in **Appendix A**. A COC concentration map is presented as **Figure 5**. A summary of detected concentrations that exceeded their respective NMWQCC standard is discussed below:

- BTEX was not detected at concentrations above laboratory detection limits in the groundwater samples collected from monitor wells MW-2 through MW-6 during 2022.
- Benzene was detected at concentrations that exceeded its NMWQCC standard in both of the groundwater samples collected from recovery well RW-1. Toluene, ethylbenzene, and xylenes were also detected in the November 2022 sample from recovery well RW-1; however, the concentrations did not exceed their NMWQCC standards.
- Concentrations of chloride and TDS were detected in all groundwater samples collected from the monitoring wells during 2022; however, the concentrations did not exceed their NMWQCC standards.

3. Summary and Recommendations

3.1 Summary

The following summarizes the information and data presented in this report.

- 1.25 ft of LNAPL were observed in monitor well MW-1 during the May 2022 monitoring event.
- LNAPL was present in monitor well MW-1 during the November 2022 monitoring event; however, the thickness could not be measured due to instrument error.
- Absorbent socks and bailing were deployed as LNAPL recovery methods during 2022.
- Concentrations of BTEX, chloride, and TDS were not detected above laboratory reporting limits or NMWQCC standards in any groundwater samples collected during 2022, except for benzene in recovery well RW-1.

3.2 Recommendations

Based on the results of the 2022 groundwater monitoring events, GHD recommends the following.

- Conduct semi-annual groundwater monitoring events in May and November 2023.
- Conduct quarterly gauging events to monitor depth to water and LNAPL thickness in monitor well MW-1.
- Actively recover LNAPL via bailing from monitor well MW-1, as best as possible during quarterly gauging events.
- Between bailing events, passively recover LNAPL via hydrocarbon absorbent socks in monitor well MW-1, which will be replaced during each quarterly event.

Table 1

**Summary of LNAPL Recovery
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well	Year	Method	LNAPL Recovered (gallons)	Impacted Groundwater Recovered (gallons)
MW-1	2015	Skimmer Pump	8.00	0.00
	2016	Skimmer Pump	57.00	108.00
	2017	Skimmer Pump	147.00	18.00
	2018	Skimmer Pump	92.00	unknown
	2018	MDPE	54.80	269.00
	2019	MDPE	153.65	377.00
	2020	MDPE	121.08	444.00
	2021	Absorbent Socks and Bailing	2.17	0.00
	2022	Absorbent Socks and Bailing	1.31	0.00
Total			637.01	1,216.00

Notes:

- 1) LNAPL - light non-aqueous phase liquids.
- 2) MDPE - mobile dual phase extraction.
- 3) GHD assumes 10 ounces of LNAPL recovered per absorbent sock, which is replaced quarterly.
- 4) Approximately 0.25 gallons of LNAPL is recovered during each quarterly bailing event.

Table 2

**Summary of Groundwater Elevation Data
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
RW-1	120.90	3,312.88	11/1/2013	--	112.60	--	3,200.28
			5/27/2014	--	112.79	--	3,200.09
			6/20/2014	--	112.66	--	3,200.22
			8/11/2014	--	112.99	--	3,199.89
			9/5/2014	--	112.65	--	3,200.23
			12/10/2014	--	113.47	--	3,199.41
			3/2/2015	--	112.20	--	3,200.68
			6/18/2015	--	112.39	--	3,200.49
			10/1/2015	--	112.47	--	3,200.41
			11/24/2015	--	112.42	--	3,200.46
			12/17/2015	--	112.44	--	3,200.44
			1/28/2016	--	112.30	--	3,200.58
			2/24/2016	--	112.30	--	3,200.58
			4/7/2016	--	112.36	--	3,200.52
			5/26/2016	--	112.30	--	3,200.58
			6/30/2016	--	112.35	--	3,200.53
			7/26/2016	--	112.27	--	3,200.61
			9/22/2016	--	112.40	--	3,200.48
			10/5/2016	--	112.41	--	3,200.47
			11/30/2016	--	112.22	--	3,200.66
			2/23/2017	--	112.25	--	3,200.63
			5/10/2017	--	112.34	--	3,200.54
			11/30/2017	--	112.75	--	3,200.13
			5/11/2018	--	112.15	--	3,200.73
			11/8/2018	--	112.00	--	3,200.88
			4/2/2019	--	111.98	--	3,200.90
			5/15/2019	--	111.98	--	3,200.90
			8/12/2019	--	111.99	--	3,200.89
			9/24/2019	--	111.80	--	3,201.08
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	--	118.30	--	3,194.58
			1/16/2020	--	111.99	--	3,200.89
			3/26/2020	--	112.02	--	3,200.86
			5/13/2020	--	111.86	--	3,201.02
			9/24/2020	--	112.04	--	3,200.84
			5/3/2021	--	111.93	--	3,200.95
			10/6/2021	--	112.00	--	3,200.88
			5/26/2022	--	111.90	--	3,200.98
			11/10/2022	--	111.83	--	3,201.05

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Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-1	117.70	3,313.54	10/31/2013	112.25	115.80	3.55	3,200.40
			11/1/2013	--	112.41	--	3,201.13
			5/27/2014	112.70	115.75	3.05	3,200.08
			6/20/2014	112.65	115.73	3.08	3,200.12
			7/10/2014	112.37	116.12	3.75	3,200.23
			7/24/2014	112.30	116.21	3.91	3,200.26
			7/28/2014	112.47	116.10	3.63	3,200.16
			8/5/2014	112.50	116.18	3.68	3,200.12
			8/11/2014	112.48	116.16	3.68	3,200.14
			8/18/2014	112.45	116.12	3.67	3,200.17
			9/5/2014	112.46	116.12	3.66	3,200.17
			12/10/2014	112.22	115.77	3.55	3,200.43
			3/2/2015	112.05	115.56	3.51	3,200.61
			6/18/2015	112.23	115.71	3.48	3,200.44
			10/1/2015	112.33	115.72	3.39	3,200.36
			11/24/2015	112.30	115.40	3.10	3,200.47
			12/17/2015	112.44	115.03	2.59	3,200.45
			1/28/2016	112.23	114.82	2.59	3,200.66
			2/24/2016	112.32	114.55	2.23	3,200.66
			4/7/2016	112.36	114.99	2.63	3,200.52
			5/26/2016	112.25	114.98	2.73	3,200.61
			6/30/2016	112.36	114.89	2.53	3,200.55
			7/26/2016	112.30	114.71	2.41	3,200.64
			8/25/2016	112.34	114.93	2.59	3,200.55
			9/22/2016	112.55	114.37	1.82	3,200.54
			10/5/2016	112.44	114.83	2.39	3,200.50
			11/30/2016	111.23	114.64	3.41	3,201.46
			2/23/2017	112.21	114.54	2.33	3,200.75
			5/10/2017	112.56	114.05	1.49	3,200.61
			5/30/2017	112.53	113.97	1.44	3,200.65
			11/30/2017	112.43	114.09	1.66	3,200.70
			12/13/2017	112.58	113.37	0.79	3,200.76
			2/27/2018	112.21	114.16	1.95	3,200.84
			3/4/2018	112.29	113.88	1.59	3,200.85
			4/16/2018	112.35	113.57	1.22	3,200.89
			5/11/2018	112.30	113.84	1.54	3,200.86
			6/6/2018	112.25	114.00	1.75	3,200.85
			8/16/2018	112.24	114.13	1.89	3,200.83
			9/24/2018	112.20	114.17	1.97	3,200.85
			11/8/2018	112.12	113.46	1.34	3,201.09
			4/2/2019	112.17	114.26	2.09	3,200.85

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**Summary of Groundwater Elevation Data
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Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-1	117.70	3,313.54	5/15/2019	112.14	114.33	2.19	3,200.85
			6/26/2019	112.18	114.44	2.26	3,200.80
			8/12/2019	112.16	114.36	2.20	3,200.83
			9/24/2019	112.15	114.38	2.23	3,200.83
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	112.20	114.35	2.15	3,200.80
			1/16/2020	112.17	114.35	2.18	3,200.83
			3/26/2020	112.17	114.34	2.17	3,200.83
			5/1/2020	112.19	114.29	2.10	3,200.83
			5/13/2020	112.02	114.13	2.11	3,200.99
			6/3/2020	112.17	114.10	1.93	3,200.89
			9/24/2020	112.24	--	--	--
			9/29/2020	112.24	114.34	2.10	3,200.78
			12/15/2020	112.28	114.40	2.12	3,200.73
			1/28/2021	112.21	114.29	2.08	3,200.81
			3/31/2021	112.23	114.26	2.03	3,200.80
			4/20/2021	112.56	113.53	0.97	3,200.74
			5/3/2021	112.36	113.35	0.99	3,200.93
			6/15/2021	112.56	113.22	0.66	3,200.82
			9/15/2021	112.42	113.36	0.94	3,200.89
			10/6/2021	112.17	114.18	2.01	3,200.87
			5/26/2022	112.27	113.52	1.25	3,200.96
			11/8/2022	instrument error	114.49	--	--

Table 2

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Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-2	128.10	3,312.39	11/1/2013	--	112.44	--	3,199.95
			5/27/2014	--	112.62	--	3,199.77
			6/20/2014	--	112.49	--	3,199.90
			8/11/2014	--	112.91	--	3,199.48
			9/5/2014	--	112.50	--	3,199.89
			12/10/2014	--	112.31	--	3,200.08
			3/2/2015	--	112.15	--	3,200.24
			6/18/2015	--	112.32	--	3,200.07
			10/1/2015	--	112.42	--	3,199.97
			11/24/2015	--	112.26	--	3,200.13
			12/17/2015	--	112.33	--	3,200.06
			1/28/2016	--	112.11	--	3,200.28
			2/24/2016	--	112.12	--	3,200.27
			4/7/2016	--	112.27	--	3,200.12
			5/26/2016	--	112.18	--	3,200.21
			6/30/2016	--	112.22	--	3,200.17
			7/26/2016	--	112.11	--	3,200.28
			9/22/2016	--	112.22	--	3,200.17
			10/5/2016	--	112.26	--	3,200.13
			11/30/2016	--	112.05	--	3,200.34
			5/10/2017	--	112.16	--	3,200.23
			11/30/2017	--	111.90	--	3,200.49
			5/11/2018	--	111.89	--	3,200.50
			11/8/2018	--	112.10	--	3,200.29
			4/2/2019	--	111.87	--	3,200.52
			5/15/2019	--	111.91	--	3,200.48
			8/12/2019	--	111.90	--	3,200.49
			9/24/2019	--	111.84	--	3,200.55
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	--	--	--	--
			1/16/2020	--	111.90	--	3,200.49
			3/26/2020	--	111.94	--	3,200.45
			5/13/2020	--	111.76	--	3,200.63
			9/24/2020	--	111.95	--	3,200.44
			5/3/2021	--	111.90	--	3,200.49
			10/6/2021	--	111.88	--	3,200.51
			5/26/2022	--	112.23	--	3,200.16
			11/9/2022	--	111.71	--	3,200.68
			11/30/2016	--		--	

Table 2

**Summary of Groundwater Elevation Data
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-3	127.20	3,312.78	11/1/2013	--	112.75	--	3,200.03
			5/27/2014	--	112.90	--	3,199.88
			6/20/2014	--	112.47	--	3,200.31
			8/11/2014	--	112.90	--	3,199.88
			9/5/2014	--	112.79	--	3,199.99
			12/10/2014	--	112.60	--	3,200.18
			3/2/2015	--	112.41	--	3,200.37
			6/18/2015	--	112.58	--	3,200.20
			10/1/2015	--	112.63	--	3,200.15
			11/24/2015	--	112.54	--	3,200.24
			12/17/2015	--	112.61	--	3,200.17
			1/28/2016	--	112.39	--	3,200.39
			2/24/2016	--	112.37	--	3,200.41
			4/7/2016	--	112.54	--	3,200.24
			5/26/2016	--	112.44	--	3,200.34
			6/30/2016	--	112.47	--	3,200.31
			7/26/2016	--	112.37	--	3,200.41
			9/22/2016	--	112.49	--	3,200.29
			10/5/2016	--	112.53	--	3,200.25
			11/30/2016	--	112.32	--	3,200.46
			5/10/2017	--	112.41	--	3,200.37
			11/30/2017	--	112.21	--	3,200.57
			5/11/2018	--	112.16	--	3,200.62
			11/8/2018	--	112.95	--	3,199.83
			4/2/2019	--	112.14	--	3,200.64
			5/15/2019	--	112.19	--	3,200.59
			8/12/2019	--	112.17	--	3,200.61
			9/24/2019	--	112.05	--	3,200.73
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	--	--	--	--
			1/16/2020	--	112.14	--	3,200.64
			3/26/2020	--	112.18	--	3,200.60
			5/13/2020	--	112.05	--	3,200.73
			9/24/2020	--	112.19	--	3,200.59
			5/3/2021	--	112.10	--	3,200.68
			10/6/2021	--	112.11	--	3,200.67
			5/26/2022	--	112.01	--	3,200.77
			11/9/2022	--	111.97	--	3,200.81

Table 2

**Summary of Groundwater Elevation Data
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-4	128.70	3,313.19	11/1/2013	--	112.85	--	3,200.34
			5/27/2014	--	113.05	--	3,200.14
			6/20/2014	--	112.93	--	3,200.26
			8/11/2014	--	113.03	--	3,200.16
			9/5/2014	--	112.91	--	3,200.28
			12/10/2014	--	112.75	--	3,200.44
			3/2/2015	--	112.55	--	3,200.64
			6/18/2015	--	112.74	--	3,200.45
			10/1/2015	--	112.81	--	3,200.38
			11/24/2015	--	112.70	--	3,200.49
			12/17/2015	--	112.77	--	3,200.42
			1/28/2016	--	112.53	--	3,200.66
			2/24/2016	--	112.53	--	3,200.66
			4/7/2016	--	112.66	--	3,200.53
			5/26/2016	--	112.58	--	3,200.61
			6/30/2016	--	112.64	--	3,200.55
			7/26/2016	--	112.64	--	3,200.55
			9/22/2016	--	112.65	--	3,200.54
			10/5/2016	--	112.69	--	3,200.50
			11/30/2016	--	112.46	--	3,200.73
			5/10/2017	--	112.56	--	3,200.63
			11/30/2017	--	112.38	--	3,200.81
			5/11/2018	--	112.32	--	3,200.87
			11/8/2018	--	112.25	--	3,200.94
			4/2/2019	--	112.30	--	3,200.89
			5/15/2019	--	112.33	--	3,200.86
			8/12/2019	--	112.34	--	3,200.85
			9/24/2019	--	112.25	--	3,200.94
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	--	--	--	--
			1/16/2020	--	112.32	--	3,200.87
			3/26/2020	--	112.34	--	3,200.85
			5/13/2020	--	112.18	--	3,201.01
			9/24/2020	--	112.36	--	3,200.83
			5/3/2021	--	112.26	--	3,200.93
			10/6/2021	--	112.27	--	3,200.92
			5/26/2022	--	112.19	--	3,201.00
			11/9/2022	--	112.12	--	3,201.07

Table 2

**Summary of Groundwater Elevation Data
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-5	127.30	3,314.39	11/1/2013	--	113.85	--	3,200.54
			5/27/2014	--	114.05	--	3,200.34
			6/20/2014	--	113.94	--	3,200.45
			8/11/2014	--	114.03	--	3,200.36
			9/5/2014	--	113.94	--	3,200.45
			12/10/2014	--	113.76	--	3,200.63
			3/2/2015	--	113.58	--	3,200.81
			6/18/2015	--	113.17	--	3,201.22
			10/1/2015	--	113.79	--	3,200.60
			11/24/2015	--	113.69	--	3,200.70
			12/17/2015	--	113.72	--	3,200.67
			1/28/2016	--	113.53	--	3,200.86
			2/24/2016	--	113.51	--	3,200.88
			4/7/2016	--	113.62	--	3,200.77
			5/26/2016	--	113.56	--	3,200.83
			6/30/2016	--	113.61	--	3,200.78
			7/26/2016	--	113.52	--	3,200.87
			9/22/2016	--	113.63	--	3,200.76
			10/5/2016	--	113.66	--	3,200.73
			11/30/2016	--	113.45	--	3,200.94
			2/23/2017	--	113.42	--	3,200.97
			5/10/2017	--	113.55	--	3,200.84
			11/30/2017	--	113.36	--	3,201.03
			5/11/2018	--	113.26	--	3,201.13
			11/8/2018	--	113.32	--	3,201.07
			4/2/2019	--	113.28	--	3,201.11
			5/15/2019	--	113.30	--	3,201.09
			8/12/2019	--	113.31	--	3,201.08
			9/24/2019	--	113.30	--	3,201.09
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	--	113.33	--	3,201.06
			1/16/2020	--	113.31	--	3,201.08
			3/26/2020	--	113.33	--	3,201.06
			5/13/2020	--	113.15	--	3,201.24
			9/24/2020	--	113.33	--	3,201.06
			5/3/2021	--	113.25	--	3,201.14
			10/6/2021	--	113.27	--	3,201.12
			5/26/2022	--	113.18	--	3,201.21
			11/9/2022	--	113.16	--	3,201.23

Table 2

**Summary of Groundwater Elevation Data
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Total Depth (ft bgs)	TOC Elevation	Date Measured	Depth to LNAPL (ft below TOC)	Depth to Water (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-6	128.00	3,314.39	11/1/2013	--	113.95	--	3,200.44
			5/27/2014	--	114.12	--	3,200.27
			6/20/2014	--	114.04	--	3,200.35
			8/11/2014	--	114.10	--	3,200.29
			9/5/2014	--	114.01	--	3,200.38
			12/10/2014	--	113.82	--	3,200.57
			3/2/2015	--	113.66	--	3,200.73
			6/18/2015	--	113.81	--	3,200.58
			10/1/2015	--	113.89	--	3,200.50
			11/24/2015	--	113.77	--	3,200.62
			12/17/2015	--	113.82	--	3,200.57
			1/28/2016	--	113.63	--	3,200.76
			2/24/2016	--	113.62	--	3,200.77
			4/7/2016	--	113.72	--	3,200.67
			5/26/2016	--	113.68	--	3,200.71
			6/30/2016	--	113.71	--	3,200.68
			7/26/2016	--	113.61	--	3,200.78
			9/22/2016	--	113.73	--	3,200.66
			10/5/2016	--	113.76	--	3,200.63
			11/30/2016	--	113.55	--	3,200.84
			2/23/2017	--	114.49	--	3,199.90
			5/10/2017	--	113.66	--	3,200.73
			11/30/2017	--	113.55	--	3,200.84
			5/11/2018	--	113.45	--	3,200.94
			11/8/2018	--	113.42	--	3,200.97
			4/2/2019	--	113.39	--	3,201.00
			5/15/2019	--	113.41	--	3,200.98
			8/12/2019	--	113.40	--	3,200.99
			9/24/2019	--	113.40	--	3,200.99
			11/11/2019	Electronic Field Data Lost			
			12/3/2019	--	113.42	--	3,200.97
			1/16/2020	--	113.42	--	3,200.97
			3/26/2020	--	113.43	--	3,200.96
			5/13/2020	--	113.26	--	3,201.13
			9/24/2020	--	113.43	--	3,200.96
			5/3/2021	--	113.34	--	3,201.05
			10/6/2021	--	113.35	--	3,201.04
			5/26/2022	--	113.16	--	3,201.23
			11/9/2022	--	113.27	--	3,201.12

Notes:

- 1) Well casing elevations from survey conducted by Asel Surveying on April 22, 2015.
- 2) ft bgs = feet below ground surface.
- 3) TOC = top of casing.
- 4) ft AMSL = feet above mean sea level.
- 5) LNAPL = light non-aqueous phase liquids.
- 6) -- = not detected.
- 7) A specific gravity value of 0.75 was used to calculate the groundwater elevation wells where LNAPL was present.

Table 3

**Summary of Groundwater Quality Field Parameters
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457**

Well ID	Date	Temperature (°C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)
RW-1	10/1/2015	22.23	6.79	1,070	7.87	-160
	4/7/2016	21.20	7.17	1,260	0.08	-150
	10/5/2016	23.43	7.21	1,340	2.71	-177
	5/10/2017	20.08	6.88	1,080	0.31	-171
	11/30/2017	19.55	8.14	1,500	2.39	-168
	5/11/2018	--	7.09	1,140	--	-259
	11/8/2018	18.96	7.10	1,790	1.03	-149
	5/15/2019	19.55	6.50	1,530	1.84	-140
	5/13/2020	21.40	6.95	1,780	0.95	-163
	9/24/2020	21.03	7.12	2,070	0.14	-117
	5/4/2021	22.17	7.09	91,000	0.39	-79.8
	10/6/2021	21.73	7.03	903	0.01	-191
MW-1	5/26/2022	23.43	6.73	873	1.86	36.6
	11/8/2022	24.22	6.54	1,040	3.58	142
Not sampled since October 2013 due to presence of LNAPL.						
MW-2	6/20/2014	--	--	--	--	--
	9/23/2014	--	--	--	--	--
	12/10/2014	22.30	7.33	825	6.80	7.33
	3/2/2015	--	--	--	--	--
	6/16/2015	24.00	7.23	913	913.00	88.2
	10/1/2015	21.12	7.13	947	7.47	112
	4/7/2016	21.10	7.23	930	6.51	99.3
	10/5/2016	23.14	7.01	1,050	6.68	215
	5/10/2017	20.13	6.93	1,010	7.11	-20.3
	11/30/2017	19.45	7.59	1,280	4.08	-48.9
	5/11/2018	--	6.74	955	--	-95.8
	11/8/2018	17.94	7.30	974	--	-32.0
	5/15/2019	18.54	6.88	841	5.11	-38.9
	11/11/2019	Electronic Field Data Lost				
	5/13/2020	19.90	6.96	1,000	4.11	69.2
	9/24/2020	21.98	7.19	947	5.14	76.9
	5/4/2021	22.00	7.29	45,500	2.50	29.8
	10/6/2021	21.55	7.39	553	3.02	33.5
	5/26/2022	23.70	7.01	763	2.36	199
	11/8/2022	23.03	6.70	985	2.68	271
MW-3	6/20/2014	--	--	--	--	--
	9/23/2014	--	--	--	--	--
	12/10/2014	22.50	6.86	1,170	0.20	-105
	3/2/2015	--	--	--	--	--
	6/16/2015	24.90	7.26	1,070	0.10	-191
	10/1/2015	21.67	6.90	1,010	1.27	-48.7
	4/11/2016	21.50	7.15	890	1.40	9.10
	10/5/2016	23.56	7.07	968	3.39	47.0
	5/10/2017	20.76	7.12	787	1.67	-116
	11/30/2017	20.01	7.68	1,030	1.82	-135
	5/11/2018	--	6.64	927	--	-160
	11/8/2018	18.12	6.95	1,200	--	-64.1
	5/15/2019	19.06	6.50	932	3.97	-89.8
	11/11/2019	Electronic Field Data Lost				
	5/13/2020	21.20	7.05	1,100	0.80	-13.0
	9/24/2020	22.41	6.98	1,060	1.54	-53.9
	5/4/2021	21.88	6.99	53,300	0.13	-42.2
	10/6/2021	22.16	7.29	517	1.41	-95.7
	5/26/2022	24.14	7.59	611	0.22	96.7
	11/8/2022	21.93	6.97	768	0.27	178

Table 3

Summary of Groundwater Quality Field Parameters
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457

Well ID	Date	Temperature (°C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)
MW-4	6/20/2014	--	--	--	--	--
	9/22/2014	--	--	--	--	--
	12/10/2014	21.40	7.18	810	6.04	7.18
	3/3/2015	22.00	7.13	892	6.60	7.13
	6/16/2015	23.70	7.32	844	7.26	7.32
	10/1/2015	20.79	7.13	842	6.91	96.3
	4/7/2016	20.90	7.18	850	5.54	69.5
	10/5/2016	22.93	7.10	985	6.50	223
	5/10/2017	19.94	7.24	846	6.36	-71.1
	11/30/2017	18.97	7.49	1,090	2.76	-40.9
	5/11/2018	--	6.75	759	--	-132
	11/8/2018	17.87	7.29	805	--	-50.6
	5/15/2019	18.64	6.91	677	6.63	-3.10
	11/11/2019	Electronic Field Data Lost				
	5/13/2020	20.30	7.29	710	4.15	60.3
	9/24/2020	21.66	7.46	659	6.16	68.7
	5/4/2021	21.55	7.52	33,300	5.97	33.9
	10/6/2021	21.15	7.71	394	6.22	30.1
	5/26/2022	23.18	8.16	499	7.09	190
	11/8/2022	22.30	7.25	601	6.54	279
MW-5	6/20/2014	--	--	--	--	--
	9/22/2014	--	--	--	--	--
	12/10/2014	23.00	6.79	1,490	0.16	-124
	3/3/2015	22.20	6.79	1,690	0.21	-70.3
	6/16/2015	23.40	7.02	1,200	0.17	-90.2
	10/1/2015	21.18	7.03	1,140	1.34	-114
	4/7/2016	21.20	7.44	890	0.49	-73.0
	10/5/2016	23.16	7.36	979	3.62	-69.0
	5/10/2017	19.97	7.23	835	2.20	-13.3
	11/30/2017	19.29	7.65	1,610	2.48	-153
	5/11/2018	--	7.09	1,140	--	-88.5
	11/8/2018	18.30	7.14	1,060	2.20	-63.8
	5/15/2019	19.11	6.88	801	5.84	-61.2
	11/11/2019	Electronic Field Data Lost				
	5/13/2020	20.70	7.16	850	0.89	20.9
	9/24/2020	21.90	7.34	808	1.33	-31.4
	5/4/2021	22.45	7.51	37,700	0.27	-31.1
	10/6/2021	22.00	7.57	487	0.86	-61.8
	5/26/2022	23.21	7.44	620	0.44	126
	11/8/2022	23.18	6.91	913	0.88	195
MW-6	6/20/2014	--	--	--	--	--
	9/22/2014	--	--	--	--	--
	12/10/2014	23.00	7.13	655	4.23	7.13
	3/3/2015	23.80	7.17	709	5.48	7.17
	6/16/2015	24.40	7.23	697	4.92	7.23
	10/1/2015	21.29	7.02	708	6.29	52.9
	4/7/2016	21.90	7.15	660	3.39	71.0
	10/5/2016	23.35	7.25	753	4.87	142
	5/10/2017	20.60	7.08	656	4.01	-93.8
	11/30/2017	19.58	7.87	911	3.62	-97.4
	5/11/2018	--	6.91	835	--	-65.1
	11/8/2018	17.99	7.29	882	3.92	-58.4
	5/15/2019	19.10	6.71	806	3.22	-44.9
	11/11/2019	Electronic Field Data Lost				
	5/13/2020	21.10	6.85	1,070	1.15	-14.0
	9/24/2020	22.09	7.06	891	0.94	-0.200
	5/4/2021	23.03	7.24	41,100	0.32	10.6
	10/6/2021	21.73	7.03	903	0.01	-191.4
	5/26/2022	23.84	7.00	793	0.30	132.2
	11/8/2022	24.38	6.66	990	0.49	248.3

Notes:

°C - degrees Celsius.

µS/cm - microsiemens per centimeter

mg/L - milligrams per liter.

-- = not measured or not recorded.

mV - millivolts.

DO - dissolved oxygen.

ORP - oxidation reduction potential.

Table 4

Summary of Groundwater Analytical Results
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloride	TDS
NMWQCC Groundwater Quality Standards		0.01	1.00	0.70	0.62	250	1,000
RW-1	10/1/2015	1.00	0.470	0.0260	0.200	320	1,110
	4/7/2016	0.12	0.110	0.0120	0.110	290	1,070
	4/7/2016 (DUP)	0.12	0.0990	0.00910	0.0800	280	1,030
	10/5/2016	0.57	0.0200	0.00990	0.0930	200	950
	10/5/2016 (DUP)	0.51	0.0230	0.0110	0.100	--	--
	5/10/2017	0.15	0.0250	0.0110	0.0350	180	920
	5/10/2017(DUP)	0.12	0.0180	0.00910	0.0240	190	810
	11/30/2017	0.008	0.00690	0.00180	0.00990	140	610
	5/11/2018	1.30	0.390	0.0250	0.530	100	540
	11/8/2018	0.360	0.0130	0.00670	0.0300	250	910
	5/15/2019	1.50	0.0770	0.0270	0.140	280	980
	11/11/2019	0.680	0.0720	0.0210	0.110	250	940
	5/13/2020	1.50	0.100	0.00500	0.160	360	1,030
	9/24/2020	0.540	0.0590	0.0280	0.0410	500	1,460
	5/4/2021	0.860	<0.00500	0.0270	0.0150	310	1,150
	10/6/2021	1.30	0.200	0.0490	0.170	240	940
	10/6/2021 (DUP)	1.30	0.200	0.0480	0.170	240	1,010
	5/26/2022	0.025	<0.00100	<0.00100	<0.00150	140	606
	11/9/2022	1.10	0.330	0.0250	0.250	120	660
MW-1	2/24/2013	4.91	6.21	0.798	2.24	57.1	650
	10/1/2015	Not Sampled - LNAPL					
	4/7/2016	Not Sampled - LNAPL					
	10/5/2016	Not Sampled - LNAPL					
	5/10/2017	Not Sampled - LNAPL					
	11/30/2017	Not Sampled - LNAPL					
	5/11/2018	Not Sampled - LNAPL					
	11/8/2018	Not Sampled - LNAPL					
	5/15/2019	Not Sampled - LNAPL					
	11/11/2019	Not Sampled - LNAPL					
	5/13/2020	Not Sampled - LNAPL					
	9/24/2020	Not Sampled - LNAPL					
	5/4/2021	Not Sampled - LNAPL					
	10/6/2021	Not Sampled - LNAPL					
	5/26/2022	Not Sampled - LNAPL					
	11/9/2022	Not Sampled - LNAPL					
MW-2	6/20/2014	<0.00100	<0.00100	<0.00100	<0.00100	--	--
	9/23/2014	<0.00100	<0.00100	<0.00100	<0.00100	--	--
	12/10/2014	<0.000190	<0.000180	<0.000160	<0.000510	--	--
	3/2/2015	<0.000190	<0.000180	<0.000160	<0.000510	--	--
	6/16/2015	<0.000190	<0.000180	<0.000160	<0.000510	--	--
	10/1/2015	<0.00200	<0.00200	<0.00200	<0.00300	65.0	690
	4/7/2016	<0.00100	<0.00100	<0.00100	<0.00150	60.0	910
	10/5/2016	<0.00100	<0.00100	<0.00100	<0.00150	57.0	680
	5/10/2017	<0.00100	<0.00100	<0.00100	<0.00150	62.0	685
	11/30/2017	<0.00100	<0.00100	<0.00100	<0.00150	33.0	465
	5/11/2018	<0.00100	<0.00100	<0.00100	<0.00150	59.0	632
	11/8/2018	<0.00100	<0.00100	<0.00100	<0.00150	61.0	720
	5/15/2019	<0.00100	<0.00100	<0.00100	<0.00150	62.0	612
	11/11/2019	<0.00100	<0.00100	<0.00100	<0.00150	62.0	656
	5/13/2020	<0.00100	<0.00100	<0.00100	<0.00150	65.0	640
	5/13/2020 (DUP)	<0.00100	<0.00100	<0.00100	<0.00150	66.0	700
	9/24/2020	<0.00100	<0.00100	<0.00100	<0.00150	70.0	650
	5/4/2021	<0.00100	<0.00100	<0.00100	<0.00150	61.0	604
	10/6/2021	<0.00100	<0.00100	<0.00100	<0.00150	61.0	610
	5/26/2022	<0.00100	<0.00100	<0.00100	<0.00150	64.0	626
	11/10/2022	<0.00100	<0.00100	<0.00100	<0.00150	61.0	637
	11/10/2022 (DUP)	<0.00100	<0.00100	<0.00100	<0.00150	60.0	632

Table 4

Summary of Groundwater Analytical Results
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloride	TDS
MW-3	6/20/2014	<0.00100	<0.00100	<0.00100	0.0398	--	--
	9/23/2014	<0.00100	<0.00100	<0.00100	0.204	--	--
	12/10/2014	0.000660	0.000350 J	0.000180 J	0.0120	--	--
	3/2/2015	0.000700 J	0.000670 J	0.000290 J	0.0231 J	--	--
	6/16/2015	0.000673	<0.000180	<0.000160	0.00282	--	--
	10/1/2015	<0.00200	<0.00200	<0.00200	<0.00300	120	200
	4/11/2016	<0.00100	<0.00100	<0.00100	<0.00150	79.0	530
	10/5/2016	<0.00100	<0.00100	<0.00100	<0.00150	64.0	580
	5/10/2017	<0.00100	<0.00100	<0.00100	<0.00150	50.0	630
	11/30/2017	<0.00100	<0.00100	<0.00100	<0.00150	49.0	640
	5/11/2018	<0.00100	<0.00100	<0.00100	0.00750	72.0	602
	11/8/2018	<0.00100	<0.00100	<0.00100	0.0200	100	790
	5/15/2019	<0.00100	<0.00100	<0.00100	<0.00150	92.0	700
	11/11/2019	<0.00100	<0.00100	<0.00100	<0.00150	75.0	665
	5/13/2020	<0.00100	<0.00100	<0.00100	<0.00150	88.0	650
	9/24/2020	<0.00100	<0.00100	<0.00100	<0.00150	88.0	682
	9/24/2020 (DUP)	<0.00100	<0.00100	<0.00100	<0.00150	90.0	694
	5/4/2021	<0.00100	<0.00100	<0.00100	<0.00150	63.0	652
	10/6/2021	<0.00100	<0.00100	<0.00100	<0.00150	50.0	535
	5/26/2022	<0.00100	<0.00100	<0.00100	<0.00150	52.0	506
	11/9/2022	<0.00100	<0.00100	<0.00100	<0.00150	49.0	494
MW-4	6/20/2014	<0.00100	<0.00100	<0.00100	<0.00100	--	--
	9/22/2014	<0.00100	<0.00100	<0.00100	0.00310	--	--
	12/10/2014	<0.000190	0.000200 J	<0.000160	<0.000510	--	--
	3/3/2015	<0.000190	<0.000180	<0.000160	<0.000510	70.0	560
	6/16/2015	<0.000190	0.000197 J	<0.000160	<0.000510	--	--
	10/1/2015	<0.00200	<0.00200	<0.00200	<0.00300	69.0	560
	4/7/2016	<0.00100	<0.00100	<0.00100	<0.00150	71.0	680
	10/5/2016	<0.00100	<0.00100	<0.00100	<0.00150	79.0	600
	5/10/2017	<0.00100	<0.00100	<0.00100	<0.00150	71.0	620
	11/30/2017	<0.00100	<0.00100	<0.00100	<0.00150	63.0	510
	5/11/2018	<0.00100	<0.00100	<0.00100	<0.00150	60.0	526
	11/8/2018	<0.00100	<0.00100	<0.00100	<0.00150	56.0	520
	11/8/2018 (DUP)	<0.00100	<0.00100	<0.00100	<0.00150	57.0	540
	5/15/2019	<0.00100	<0.00100	<0.00100	<0.00150	55.0	500
	11/11/2019	<0.00100	<0.00100	<0.00100	<0.00150	52.0	482
	5/13/2020	<0.00100	<0.00100	<0.00100	<0.00150	50.0	464
	9/24/2020	<0.00100	<0.00100	<0.00100	<0.00150	52.0	502
	5/4/2021	<0.00100	<0.00100	<0.00100	<0.00150	44.0	445
	10/6/2021	<0.00100	<0.00100	<0.00100	<0.00150	42.0	390
	5/26/2022	<0.00100	<0.00100	<0.00100	<0.00150	43.0	422
	11/9/2022	<0.00100	<0.00100	<0.00100	<0.00150	41.0	420

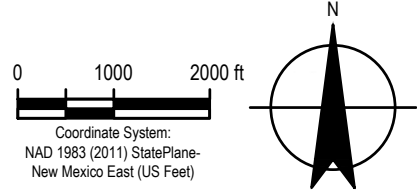
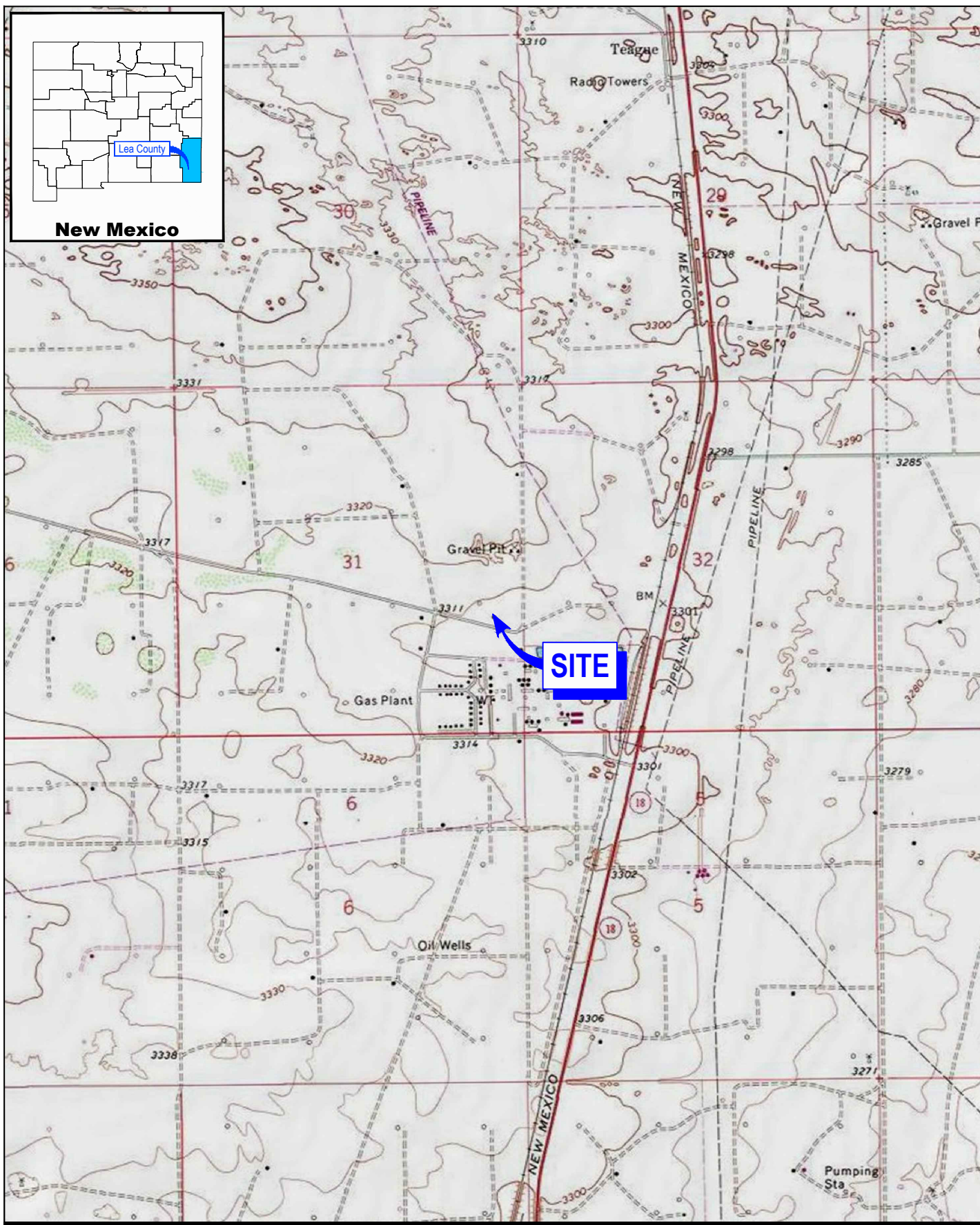
Table 4

Summary of Groundwater Analytical Results
Jal No. 4 Former Tank Battery
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
1RP-1457

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloride	TDS
MW-5	6/20/2014	<0.00100	<0.00100	<0.00100	<0.00100	--	--
	9/22/2014	<0.00100	<0.00100	<0.00100	0.00140	--	--
	12/10/2014	0.0160	0.000190 J	0.000200 J	0.000860 J	--	--
	3/3/2015	0.00430	<0.000180	<0.000160	0.000750 J	230	930
	6/16/2015	0.000503	0.000262 J	<0.0001600	0.000521 J	--	--
	10/1/2015	0.00370	<0.00100	<0.00100	<0.00150	140	355
	4/7/2016	<0.00100	<0.00100	<0.00100	<0.00150	95.0	615
	10/5/2016	<0.00100	<0.00100	<0.00100	<0.00150	70.0	516
	5/10/2017	<0.00100	<0.00100	<0.00100	<0.00150	81.0	486
	11/30/2017	<0.00100	<0.00100	<0.00100	<0.00150	120	650
	5/11/2018	<0.00100	<0.00100	<0.00100	<0.00150	170	712
	11/8/2018	<0.00100	<0.00100	<0.00100	<0.00150	130	585
	5/15/2019	<0.00100	<0.00100	<0.00100	<0.00150	150	644
	5/15/2019 (DUP)	<0.00100	<0.00100	<0.00100	<0.00150	150	650
	11/11/2019	<0.00100	<0.00100	<0.00100	<0.00150	130	628
	5/13/2020	<0.00100	<0.00100	<0.00100	<0.00150	78.0	532
	9/24/2020	<0.00100	<0.00100	<0.00100	<0.00150	87.0	495
	5/4/2021	<0.00100	<0.00100	<0.00100	<0.00150	67.0	462
	10/6/2021	<0.00100	<0.00100	<0.00100	<0.00150	77.0	512
	5/26/2022	<0.00100	<0.00100	<0.00100	<0.00150	82.0	486
	11/9/2022	<0.00100	<0.00100	<0.00100	<0.00150	110	578
MW-6	6/20/2014	<0.00100	<0.00100	<0.00100	<0.00100	--	--
	9/22/2014	<0.00100	<0.00100	<0.00100	<0.00100	--	--
	12/10/2014	<0.000190	0.00200 J	<0.000160	<0.000510	--	--
	3/3/2015	<0.000190	<0.000180	<0.000160	<0.000510	56.0	430
	6/16/2015	<0.000190	0.000229 J	<0.000160	<0.000510	--	--
	10/1/2015	<0.00100	<0.00100	<0.00100	<0.00150	68.0	520
	4/7/2016	<0.00100	<0.00100	<0.00100	<0.00150	58.0	476
	10/5/2016	<0.00100	<0.00100	<0.00100	<0.00150	52.0	460
	5/10/2017	<0.00100	<0.00100	<0.00100	<0.00150	59.0	464
	11/30/2017	<0.00100	<0.00100	<0.00100	<0.00150	63.0	444
	5/11/2018	<0.00100	<0.00100	<0.00100	<0.00150	51.0	320
	5/11/2018 (DUP)	<0.00100	<0.00100	<0.00100	<0.00150	52.0	336
	11/8/2018	<0.00100	<0.00100	<0.00100	<0.00150	100	550
	5/15/2019	<0.00100	<0.00100	<0.00100	<0.00150	88.0	576
	11/11/2019	<0.00100	<0.00100	<0.00100	<0.00150	84.0	620
	5/13/2020	<0.00100	<0.00100	<0.00100	<0.00150	95.0	644
	9/24/2020	<0.00100	<0.00100	<0.00100	<0.00150	87.0	495
	5/4/2021	<0.00100	<0.00100	<0.00100	<0.00150	72.0	533
	10/6/2021	<0.00100	<0.00100	<0.00100	<0.00150	72.0	522
	5/26/2022	<0.00100	<0.00100	<0.00100	<0.00150	110	608
	11/9/2022	<0.00100	<0.00100	<0.00100	<0.00150	100	660

Notes:

- 1) Analytical results are presented in milligrams per liter (mg/L).
- 2) TDS - total dissolved solids.
- 3) NMWQCC = New Mexico Water Quality Control Commission.
- 4) < - Analyte was not detected at or above the laboratory reporting limit.
- 5) -- = not analyzed.
- 6) Shaded/bolded results exceed their respective NMWQCC groundwater quality standard.



ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
JAL No. 4 FORMER TANK BATTERY

Project No. 12603939
Date July 2023

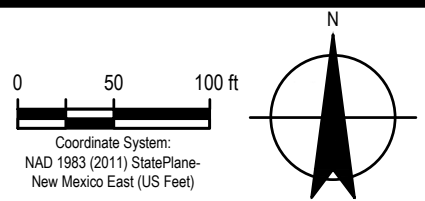
SITE LOCATION MAP

FIGURE 1



LEGEND

- MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- APPROXIMATE RELEASE POINT

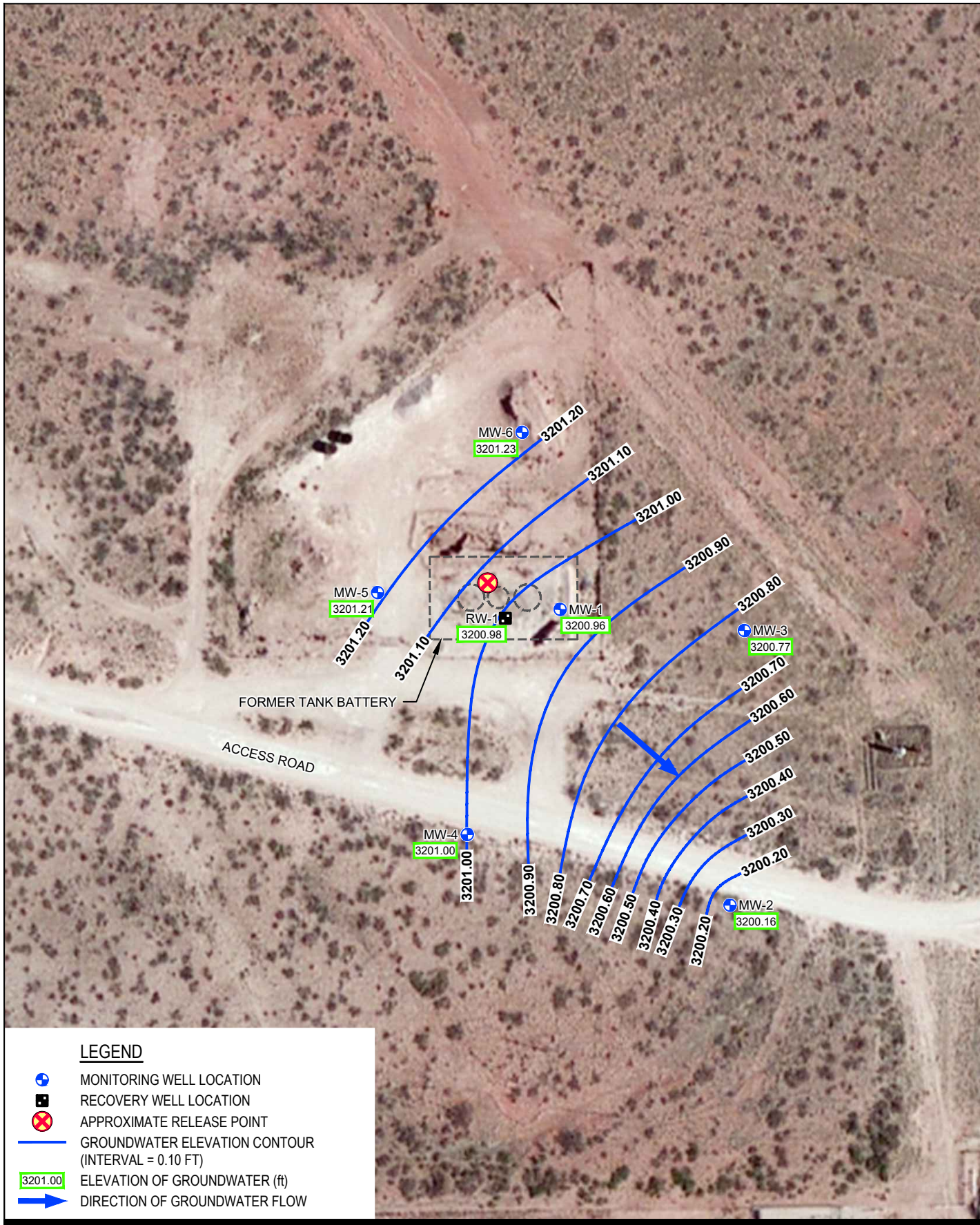


ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
JAL No. 4 FORMER TANK BATTERY

Project No. 12603939
Date July 2023

SITE DETAILS MAP

FIGURE 2



0 50 100 ft

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

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
JAL No. 4 FORMER TANK BATTERY

**GROUNDWATER POTENTIOMETRIC
SURFACE MAP - MAY 2022**

Project No. 12603939
Date July 2023

FIGURE 3

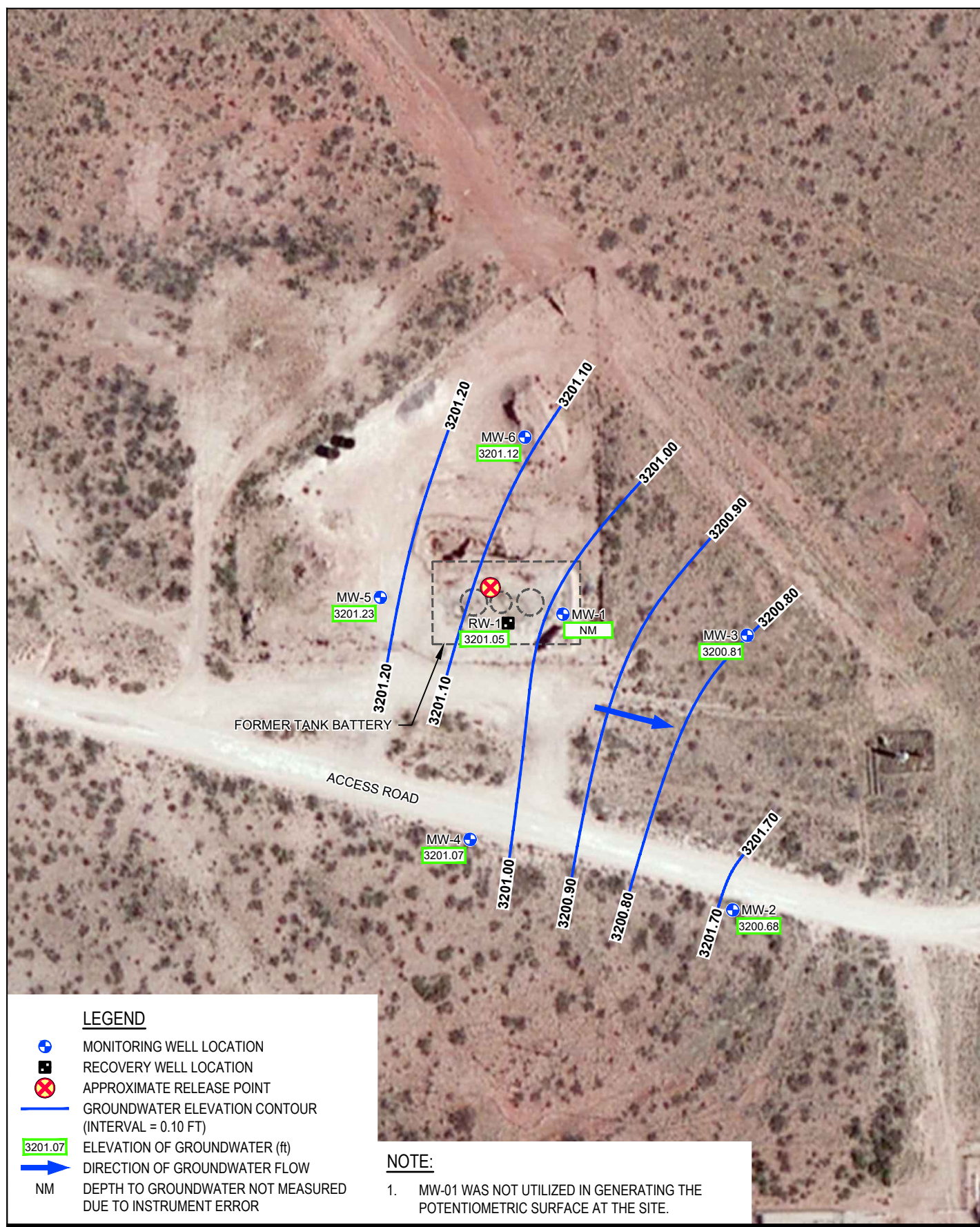
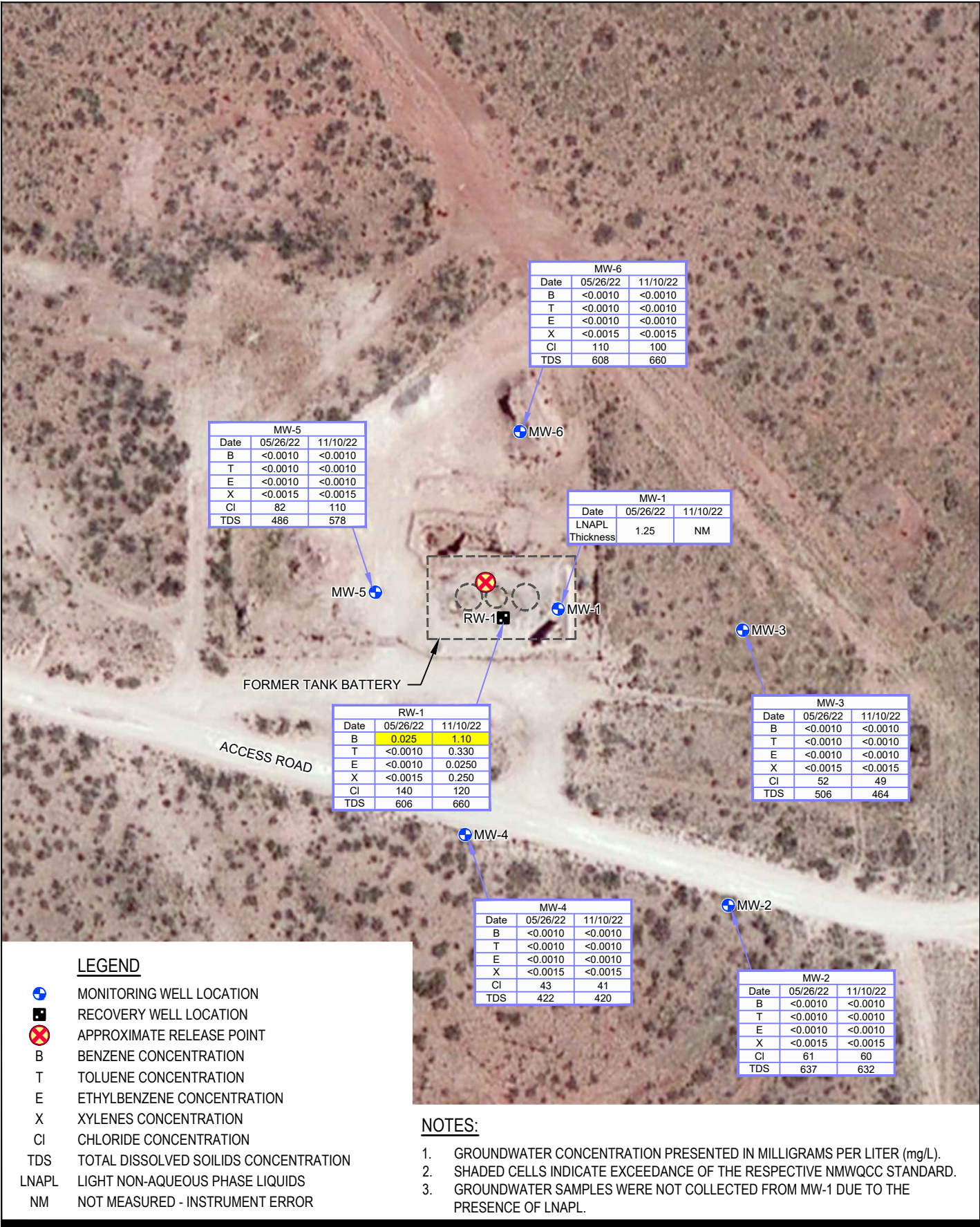


FIGURE 4



Appendices

Appendix A

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

June 06, 2022

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: Jal 4

OrderNo.: 2205D11

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 7 sample(s) on 5/28/2022 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 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: GW-12574717-052622-CN-MW

Project: Jal 4

Collection Date: 5/26/2022 2:45:00 PM

Lab ID: 2205D11-001

Matrix: AQUEOUS

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	64	5.0		mg/L	10	5/31/2022 3:59:46 PM	R88379
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	626	40.0	*D	mg/L	1	6/4/2022 11:56:00 AM	67854
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0	P	µg/L	1	5/31/2022 5:08:00 PM	R88361
Toluene	ND	1.0	P	µg/L	1	5/31/2022 5:08:00 PM	R88361
Ethylbenzene	ND	1.0	P	µg/L	1	5/31/2022 5:08:00 PM	R88361
Xylenes, Total	ND	1.5	P	µg/L	1	5/31/2022 5:08:00 PM	R88361
Surr: 1,2-Dichloroethane-d4	99.0	70-130	P	%Rec	1	5/31/2022 5:08:00 PM	R88361
Surr: 4-Bromofluorobenzene	96.8	70-130	P	%Rec	1	5/31/2022 5:08:00 PM	R88361
Surr: Dibromofluoromethane	107	70-130	P	%Rec	1	5/31/2022 5:08:00 PM	R88361
Surr: Toluene-d8	98.0	70-130	P	%Rec	1	5/31/2022 5:08:00 PM	R88361

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	Estimated value
	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 interference		

Page 1 of 11

Analytical Report

Lab Order 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: GW-12574717-052622-CN-MW

Project: Jal 4

Collection Date: 5/26/2022 3:35:00 PM

Lab ID: 2205D11-002

Matrix: AQUEOUS

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	52	5.0		mg/L	10	5/31/2022 4:25:31 PM	R88379
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	506	40.0	*D	mg/L	1	6/4/2022 11:56:00 AM	67854
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0	P	µg/L	1	5/31/2022 5:31:00 PM	R88361
Toluene	ND	1.0	P	µg/L	1	5/31/2022 5:31:00 PM	R88361
Ethylbenzene	ND	1.0	P	µg/L	1	5/31/2022 5:31:00 PM	R88361
Xylenes, Total	ND	1.5	P	µg/L	1	5/31/2022 5:31:00 PM	R88361
Surr: 1,2-Dichloroethane-d4	95.5	70-130	P	%Rec	1	5/31/2022 5:31:00 PM	R88361
Surr: 4-Bromofluorobenzene	100	70-130	P	%Rec	1	5/31/2022 5:31:00 PM	R88361
Surr: Dibromofluoromethane	105	70-130	P	%Rec	1	5/31/2022 5:31:00 PM	R88361
Surr: Toluene-d8	103	70-130	P	%Rec	1	5/31/2022 5:31:00 PM	R88361

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: GW-12574717-052622-CN-MW

Project: Jal 4

Collection Date: 5/26/2022 1:00:00 PM

Lab ID: 2205D11-003

Matrix: AQUEOUS

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	43	5.0		mg/L	10	5/31/2022 4:51:16 PM	R88379
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	422	40.0	D	mg/L	1	6/4/2022 11:56:00 AM	67854
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0	P	µg/L	1	5/31/2022 5:54:00 PM	R88361
Toluene	ND	1.0	P	µg/L	1	5/31/2022 5:54:00 PM	R88361
Ethylbenzene	ND	1.0	P	µg/L	1	5/31/2022 5:54:00 PM	R88361
Xylenes, Total	ND	1.5	P	µg/L	1	5/31/2022 5:54:00 PM	R88361
Surr: 1,2-Dichloroethane-d4	99.0	70-130	P	%Rec	1	5/31/2022 5:54:00 PM	R88361
Surr: 4-Bromofluorobenzene	97.1	70-130	P	%Rec	1	5/31/2022 5:54:00 PM	R88361
Surr: Dibromofluoromethane	106	70-130	P	%Rec	1	5/31/2022 5:54:00 PM	R88361
Surr: Toluene-d8	98.8	70-130	P	%Rec	1	5/31/2022 5:54:00 PM	R88361

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: GW-12574717-052622-CN-MW

Project: Jal 4

Collection Date: 5/26/2022 12:30:00 PM

Lab ID: 2205D11-004

Matrix: AQUEOUS

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	82	5.0		mg/L	10	5/31/2022 5:42:44 PM	R88379
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	486	40.0	D	mg/L	1	6/4/2022 11:56:00 AM	67854
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0	P	µg/L	1	5/31/2022 6:18:00 PM	R88361
Toluene	ND	1.0	P	µg/L	1	5/31/2022 6:18:00 PM	R88361
Ethylbenzene	ND	1.0	P	µg/L	1	5/31/2022 6:18:00 PM	R88361
Xylenes, Total	ND	1.5	P	µg/L	1	5/31/2022 6:18:00 PM	R88361
Surr: 1,2-Dichloroethane-d4	97.7	70-130	P	%Rec	1	5/31/2022 6:18:00 PM	R88361
Surr: 4-Bromofluorobenzene	97.0	70-130	P	%Rec	1	5/31/2022 6:18:00 PM	R88361
Surr: Dibromofluoromethane	107	70-130	P	%Rec	1	5/31/2022 6:18:00 PM	R88361
Surr: Toluene-d8	98.4	70-130	P	%Rec	1	5/31/2022 6:18:00 PM	R88361

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: GW-12574717-052622-CN-MW

Project: Jal 4

Collection Date: 5/26/2022 11:40:00 AM

Lab ID: 2205D11-005

Matrix: AQUEOUS

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	110	5.0		mg/L	10	5/31/2022 6:08:28 PM	R88379
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	608	40.0	*D	mg/L	1	6/4/2022 11:56:00 AM	67854
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0	P	µg/L	1	5/31/2022 6:41:00 PM	R88361
Toluene	ND	1.0	P	µg/L	1	5/31/2022 6:41:00 PM	R88361
Ethylbenzene	ND	1.0	P	µg/L	1	5/31/2022 6:41:00 PM	R88361
Xylenes, Total	ND	1.5	P	µg/L	1	5/31/2022 6:41:00 PM	R88361
Surr: 1,2-Dichloroethane-d4	99.0	70-130	P	%Rec	1	5/31/2022 6:41:00 PM	R88361
Surr: 4-Bromofluorobenzene	98.0	70-130	P	%Rec	1	5/31/2022 6:41:00 PM	R88361
Surr: Dibromofluoromethane	106	70-130	P	%Rec	1	5/31/2022 6:41:00 PM	R88361
Surr: Toluene-d8	99.3	70-130	P	%Rec	1	5/31/2022 6:41:00 PM	R88361

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: GW-12574717-052622-CN-RW-

Project: Jal 4

Collection Date: 5/26/2022 10:50:00 AM

Lab ID: 2205D11-006

Matrix: AQUEOUS

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	140	5.0		mg/L	10	5/31/2022 6:34:13 PM	R88379
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	606	40.0	*D	mg/L	1	6/4/2022 11:56:00 AM	67854
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	25	1.0		µg/L	1	6/1/2022 12:39:00 PM	R88380
Toluene	ND	1.0		µg/L	1	6/1/2022 12:39:00 PM	R88380
Ethylbenzene	ND	1.0		µg/L	1	6/1/2022 12:39:00 PM	R88380
Xylenes, Total	ND	1.5		µg/L	1	6/1/2022 12:39:00 PM	R88380
Surr: 1,2-Dichloroethane-d4	85.1	70-130		%Rec	1	6/1/2022 12:39:00 PM	R88380
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	6/1/2022 12:39:00 PM	R88380
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	6/1/2022 12:39:00 PM	R88380
Surr: Toluene-d8	103	70-130		%Rec	1	6/1/2022 12:39:00 PM	R88380

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2205D11

Date Reported: 6/6/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: Trip Blank

Project: Jal 4

Collection Date:

Lab ID: 2205D11-007

Matrix: TRIP BLANK

Received Date: 5/28/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: CCM
Benzene	ND	1.0		µg/L	1	5/31/2022 7:50:00 PM	R88361
Toluene	ND	1.0		µg/L	1	5/31/2022 7:50:00 PM	R88361
Ethylbenzene	ND	1.0		µg/L	1	5/31/2022 7:50:00 PM	R88361
Xylenes, Total	ND	1.5		µg/L	1	5/31/2022 7:50:00 PM	R88361
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	5/31/2022 7:50:00 PM	R88361
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	5/31/2022 7:50:00 PM	R88361
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/31/2022 7:50:00 PM	R88361
Surr: Toluene-d8	98.4	70-130		%Rec	1	5/31/2022 7:50:00 PM	R88361

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	Estimated value
	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 interference		

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2205D11
06-Jun-22

Client: GHD
Project: Jal 4

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R88379	RunNo: 88379								
Prep Date:	Analysis Date: 5/31/2022	SeqNo: 3135285		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: R88379	RunNo: 88379								
Prep Date:	Analysis Date: 5/31/2022	SeqNo: 3135286		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	95.7	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 interference

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

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

WO#: 2205D11

06-Jun-22

Client: GHD

Project: Jal 4

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R88361		RunNo: 88361							
Prep Date:	Analysis Date: 5/31/2022		SeqNo: 3134420		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.8	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: MB	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R88361		RunNo: 88361							
Prep Date:	Analysis Date: 5/31/2022		SeqNo: 3135272		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	9.3		10.00		93.3	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R88380		RunNo: 88380							
Prep Date:	Analysis Date: 6/1/2022		SeqNo: 3135791		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.2	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.0	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R88380		RunNo: 88380							
Prep Date:	Analysis Date: 6/1/2022		SeqNo: 3135836		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								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205D1106-Jun-22

Client: GHD
Project: Jal 4

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R88380			RunNo: 88380						
Prep Date:	Analysis Date: 6/1/2022			SeqNo: 3135836			Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.1	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		101	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 interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205D1106-Jun-22

Client: GHD
Project: Jal 4

Sample ID: MB-67854	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 67854	RunNo: 88467								
Prep Date: 6/2/2022	Analysis Date: 6/4/2022	SeqNo: 3138718		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-67854	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 67854	RunNo: 88467								
Prep Date: 6/2/2022	Analysis Date: 6/4/2022	SeqNo: 3138719		Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1050	20.0	1000	0	105	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 interference
- B Analyte detected in the associated Method Blank

E Estimated value

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: **2205D11**RcptNo: **1**Received By: **Cheyenne Cason** **5/28/2022 8:00:00 AM**Completed By: **Cheyenne Cason** **5/31/2022 7:29:07 AM**Reviewed By: **WPK** **5.31.22***Chad**Chad*

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 5/31/22**

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: _____

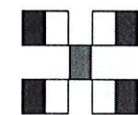
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Not Present			

Chain-of-Custody Record	Client: <u>GH7</u>	Turn-Around Time: <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>5 day</u>
	Mailing Address:	Project Name: <u>Jul-4</u>



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com





4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

email or Fax# <i>Christine, Matthews @ghd</i>	Project Manager:
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	<i>Christine Matthews</i>
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____	Sampler: <i>CM</i>
<input type="checkbox"/> EDD (Type)	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	# of Coolers: <i>1</i>

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5/26/22	1445	W	QW-12574717-052622-CN-MW-2	UN-005	Hel	2205D11
	1535		QW-12574717-052622-CN-MW-3			001
	1300		QW-12574717-052622-CN-MW-4			002
	1730		QW-12574717-052622-CN-MW-5			003
	1140		QW-12574717-052622-CN-MW-6			004
	1050	✓	QW-12574717-052622-CN-MW-1	✓	✓	005
			TRIP Blank DAD 5/31/22			006
						007

Date:	Time:	Relinquished by:	Received by:	Via:	Date:	Time:
5/24/22	1700				5/24/22	1700
5/26/22	1900				5/28/22	0800

Remarks:



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

November 22, 2022

Christine Mathews

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: Jal 4

OrderNo.: 2211748

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/12/2022 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 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: MW-4

Project: Jal 4

Collection Date: 11/9/2022 4:35:00 PM

Lab ID: 2211748-001

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	41	5.0		mg/L	10	11/18/2022 11:20:59 AM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	420	40.0	D	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 4:37:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 4:37:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 4:37:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 4:37:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%Rec	1	11/15/2022 4:37:00 PM	SL92622
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	11/15/2022 4:37:00 PM	SL92622
Surr: Dibromofluoromethane	93.8	70-130		%Rec	1	11/15/2022 4:37:00 PM	SL92622
Surr: Toluene-d8	85.5	70-130		%Rec	1	11/15/2022 4:37:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: MW-5

Project: Jal 4

Collection Date: 11/9/2022 2:00:00 PM

Lab ID: 2211748-002

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	110	5.0		mg/L	10	11/18/2022 11:46:43 AM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	578	40.0	*D	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 5:00:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 5:00:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 5:00:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 5:00:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	89.5	70-130		%Rec	1	11/15/2022 5:00:00 PM	SL92622
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	11/15/2022 5:00:00 PM	SL92622
Surr: Dibromofluoromethane	93.4	70-130		%Rec	1	11/15/2022 5:00:00 PM	SL92622
Surr: Toluene-d8	90.1	70-130		%Rec	1	11/15/2022 5:00:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: MW-6

Project: Jal 4

Collection Date: 11/9/2022 3:30:00 PM

Lab ID: 2211748-003

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	100	5.0		mg/L	10	11/18/2022 12:12:26 PM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	660	100	*D	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 5:23:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 5:23:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 5:23:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 5:23:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	89.2	70-130		%Rec	1	11/15/2022 5:23:00 PM	SL92622
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	11/15/2022 5:23:00 PM	SL92622
Surr: Dibromofluoromethane	92.2	70-130		%Rec	1	11/15/2022 5:23:00 PM	SL92622
Surr: Toluene-d8	86.5	70-130		%Rec	1	11/15/2022 5:23:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: MW-2

Project: Jal 4

Collection Date: 11/10/2022 10:00:00 AM

Lab ID: 2211748-004

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	61	5.0		mg/L	10	11/18/2022 12:38:09 PM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	637	20.0	*	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 5:45:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 5:45:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 5:45:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 5:45:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	11/15/2022 5:45:00 PM	SL92622
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	11/15/2022 5:45:00 PM	SL92622
Surr: Dibromofluoromethane	93.8	70-130		%Rec	1	11/15/2022 5:45:00 PM	SL92622
Surr: Toluene-d8	84.6	70-130		%Rec	1	11/15/2022 5:45:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: MW-3

Project: Jal 4

Collection Date: 11/10/2022 8:45:00 AM

Lab ID: 2211748-005

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	49	5.0		mg/L	10	11/18/2022 1:55:20 PM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	494	40.0	D	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 6:08:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 6:08:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 6:08:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 6:08:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	86.7	70-130		%Rec	1	11/15/2022 6:08:00 PM	SL92622
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	11/15/2022 6:08:00 PM	SL92622
Surr: Dibromofluoromethane	92.4	70-130		%Rec	1	11/15/2022 6:08:00 PM	SL92622
Surr: Toluene-d8	92.2	70-130		%Rec	1	11/15/2022 6:08:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: RW-1

Project: Jal 4

Collection Date: 11/10/2022 12:00:00 PM

Lab ID: 2211748-006

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	120	5.0		mg/L	10	11/18/2022 2:21:02 PM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	660	200	*D	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	1100	100		µg/L	100	11/15/2022 6:31:00 PM	SL92622
Toluene	330	10		µg/L	10	11/15/2022 6:54:00 PM	SL92622
Ethylbenzene	25	10		µg/L	10	11/15/2022 6:54:00 PM	SL92622
Xylenes, Total	250	15		µg/L	10	11/15/2022 6:54:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	76.4	70-130		%Rec	10	11/15/2022 6:54:00 PM	SL92622
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	10	11/15/2022 6:54:00 PM	SL92622
Surr: Dibromofluoromethane	79.9	70-130		%Rec	10	11/15/2022 6:54:00 PM	SL92622
Surr: Toluene-d8	92.5	70-130		%Rec	10	11/15/2022 6:54:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: Dup-01

Project: Jal 4

Collection Date: 11/10/2022

Lab ID: 2211748-007

Matrix: GROUNDWA

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	60	5.0		mg/L	10	11/18/2022 2:46:46 PM	R92723
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: SNS
Total Dissolved Solids	632	40.0	*D	mg/L	1	11/18/2022 9:40:00 AM	71519
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 7:17:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 7:17:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 7:17:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 7:17:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	11/15/2022 7:17:00 PM	SL92622
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	11/15/2022 7:17:00 PM	SL92622
Surr: Dibromofluoromethane	93.7	70-130		%Rec	1	11/15/2022 7:17:00 PM	SL92622
Surr: Toluene-d8	86.5	70-130		%Rec	1	11/15/2022 7:17:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2211748

Date Reported: 11/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Client Sample ID: Trip Blank

Project: Jal 4

Collection Date:

Lab ID: 2211748-008

Matrix: TRIP BLANK

Received Date: 11/12/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	ND	1.0		µg/L	1	11/15/2022 7:40:00 PM	SL92622
Toluene	ND	1.0		µg/L	1	11/15/2022 7:40:00 PM	SL92622
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 7:40:00 PM	SL92622
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 7:40:00 PM	SL92622
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%Rec	1	11/15/2022 7:40:00 PM	SL92622
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	11/15/2022 7:40:00 PM	SL92622
Surr: Dibromofluoromethane	94.7	70-130		%Rec	1	11/15/2022 7:40:00 PM	SL92622
Surr: Toluene-d8	84.9	70-130		%Rec	1	11/15/2022 7:40:00 PM	SL92622

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	Above Quantitation Range/Estimated Value
	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 standard limits. If undiluted results may be estimated.		

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

WO#: 2211748

22-Nov-22

Client: GHD**Project:** Jal 4

Sample ID: MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R92723		RunNo: 92723							
Prep Date:	Analysis Date: 11/18/2022		SeqNo: 3336909		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: R92723		RunNo: 92723							
Prep Date:	Analysis Date: 11/18/2022		SeqNo: 3336910		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	96.1	90	110			

Sample ID: 2211748-004BMS	SampType: ms		TestCode: EPA Method 300.0: Anions							
Client ID: MW-2	Batch ID: R92723		RunNo: 92723							
Prep Date:	Analysis Date: 11/18/2022		SeqNo: 3336931		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	110	5.0	50.00	60.80	95.8	82.8	107			

Sample ID: 2211748-004BMSD	SampType: msd		TestCode: EPA Method 300.0: Anions							
Client ID: MW-2	Batch ID: R92723		RunNo: 92723							
Prep Date:	Analysis Date: 11/18/2022		SeqNo: 3336932		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	110	5.0	50.00	60.80	93.5	82.8	107	1.03	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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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

WO#: 2211748

22-Nov-22

Client: GHD**Project:** Jal 4

Sample ID: 100ng lcs4		SampType: LCS			TestCode: EPA Method 8260: Volatiles Short List					
Client ID: LCSW		Batch ID: SL92622			RunNo: 92622					
Prep Date:		Analysis Date: 11/15/2022			SeqNo: 3331454		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	99.6	70	130			
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.9	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.5	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.3	70	130			
Surr: Toluene-d8	9.3		10.00		93.1	70	130			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: PBW	Batch ID: SL92622			RunNo: 92622						
Prep Date:	Analysis Date: 11/15/2022			SeqNo: 3331470		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	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.7	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	8.8		10.00		88.3	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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211748

22-Nov-22

Client: GHD

Project: Jal 4

Sample ID: MB-71519	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 71519	RunNo: 92681								
Prep Date: 11/15/2022	Analysis Date: 11/18/2022	SeqNo: 3334471	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-71519	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 71519	RunNo: 92681								
Prep Date: 11/15/2022	Analysis Date: 11/18/2022	SeqNo: 3334472	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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
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: 2211748

RcptNo: 1

Received By: Kasandra Jimena Garcia 11/12/2022 8:00:00 AM

Completed By: Cheyenne Cason 11/12/2022 8:29:14 AM

Reviewed By: *SC 11/14/22*

KH
Chad

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: *SC 11/14/22*

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	0.8	Good	Not Present			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School

Road NE, Ste 200, Albuquerque, NM 87110

Phone #: 505-269-0088

email or Fax#: Christine Mathews

QA/QC Package: 2nd. Com

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

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Jal-4

Project #:

12574717

Project Manager:

Christine Mathews

Sampler: Kris Moore, Simon Fort-K

On Ice: ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CF): 0.8-0.8 (°C)

Container Type and #

Preservative Type

HEAL No.

2211748

3 500ml Vials 3-HCC

1 500ml 806402-None

001

002

003

004

005

006

007

-008

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Relinquished by:

Lan Lopez

Date: 11/10/2022

Received by: *Christine Mathews*Via: *courier*

Date: 11/10/2022

Time: 1000

Relinquished by:

Christine Mathews

Date: 11/10/2022

Received by: *Christine Mathews*Via: *courier*

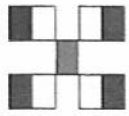
Date: 11/10/2022

Time: 1000

Remarks:

MW-6 has

particular amount in 500 mL bottle



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX / MTBE / TMBs (8021)

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

C/F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA) BTEX only

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Total D: 501 Vcd 501.05 (2540)



www.GHD.com

→ The Power of Commitment

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
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 250940

CONDITIONS

Operator: REGENCY FIELD SERVICES LLC 8111 Westchester Drive Dallas, TX 75225	OGRID:	298751
	Action Number:	250940
	Action Type:	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2022 Annual Groundwater Monitoring Report for Jal No. 4 Former Tank Battery: Content Satisfactory 1. Continue to conduct groundwater monitoring on a semi-annual basis 2. Deploy an absorbent sock in MW-1, inspect quarterly and replace as necessary. 3. Submit the 2023 Annual Groundwater Report by April 1, 2024. 4. Continue to take gauging readings for LNAPL as necessary and prescribed in this report.	9/21/2023