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REVIEWED
By Mike Buchanan at 2:41 pm, Oct 16, 2023

Your ref: New Mexico Oil Conservation Division 1RP-2073
Our ref: 12603933-LTR-Velez-1

Review of the 2022 Annual Groundwater Monitoring Report for MF-16 Pipeline release: **Content Satisfactory**
1. Continue to conduct semi-annual groundwater monitoring for 2023 to monitor chloride.
2. Install four (4) additional groundwater monitoring wells as prescribed in report.
3. Submit the 2023 Annual groundwater monitoring report on or before April 1, 2024.

October 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
MF-16 Pipeline Release
ETC Texas Pipeline, Ltd.
Lea County, New Mexico
New Mexico Oil Conservation Division Remediation Case 1RP-2073
Incident Number nGRL09054362954

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 Remediation and Groundwater Monitoring Report, which was submitted to the NMOCD in September 2022.

Should you have any questions or comments regarding this submittal, please contact the undersigned.

Regards

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BO/kdn/1

Encl: 2022 Annual Groundwater Monitoring Report

Copy to: Stacy Boultinghouse, Energy Transfer
Terry Richey, c/o Millard Deck Testamentary Trust c/o Southwest Bank Wealth & Management Trust Services

2022 Annual Groundwater Monitoring Report

MF-16 Inch Pipeline
Lea County, New Mexico
NMOCD 1RP-2073
Incident Number nGRL0905436295

ETC Texas Pipeline, Ltd

October 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) MF-16 pipeline release (Site). The Site is located at 32° 28' 19.38" North and, 103° 9' 12.6612" West, within Unit letter N, Section 15, Township 21 South, Range 37 East, approximately 2.5 miles north of Eunice, Lea County, New Mexico (**Figure 1**). The property on which the Site is located is owned by the Millard Deck Estate. The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under remediation case No. 1RP-2073 (associated with incident number nGRL0905436295)

1.1 Site Background

On January 28, 2009, Southern Union Gas Services, Ltd. (SUGS) discovered a release from the MF-16 Pipeline at the above-referenced location and subsequently reported it to the NMOCD via the Release Notification and Corrective Action Form (C-141). According to the C-141, a failure of a section of sixteen-inch low pressure pipeline resulted in the release of approximately 25 barrels (bbls) crude oil and 60 million cubic feet of natural gas. Based on the product released, it was determined that the constituents of concern (COCs) to be evaluated at the Site were benzene, toluene, ethylbenzene, total xylenes (BTEX), total petroleum hydrocarbons (TPH), and chloride.

Between February 2009 and September 2019, soil and groundwater assessments and remediation events have been conducted at the Site, excavating and disposing of impacted soils, including collecting soil samples for vertical and horizontal delineation, installing seven groundwater monitoring wells (MW-1 through MW-7), and conducting a groundwater pumping event. Details of these events can be found in previous reports prepared for this Site; however, a summary of the events and their respective results are provided below.

Initial remedial efforts were performed between February 16 and March 20, 2009, with the excavation and disposal of approximately 1,164 cubic yards of impacted soil and soil confirmation sampling. Additional soil sampling and delineation efforts were conducted in August 2007 and October 2012. Based on these soil laboratory analytical results, concentrations of benzene, total BTEX, TPH, and chloride were below the NMOCD Recommended Remedial Action Limits (RRALs).

Between February 2013 and February 2014, four monitoring wells (MW-1 through MW-4) were installed at the Site. Laboratory analyses of soil samples collected during installation of the groundwater monitoring wells indicated chloride concentrations exceeded NMOCD RRALs. Groundwater samples were analyzed for BTEX and chloride. The analytical results from the initial three groundwater monitoring events indicated that chloride concentrations in groundwater exceeded the New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standard during one or more sampling events. As a result, additional monitoring wells MW-5 through MW-7 were installed between November 2014 and November 2015. Light non-aqueous phase liquid (LNAPL) has never been observed in the monitoring wells at the Site.

Since 2013, groundwater monitoring events have been conducted at the Site and samples have been analyzed for BTEX and chloride. In 2016, BTEX was dropped from the sampling plan as concentrations were below NMWQCC standards for eight consecutive quarters. Additionally, in 2016, the sampling frequency was reduced from quarterly to semiannually as the chloride concentrations had been consistent over time.

GHD performed groundwater pumping events on August 30, 2016 and September 16 and 17, 2019 to gain knowledge of aquifer characteristics and determine if a decrease in chloride concentrations was observable following the removal of a large quantity of impacted groundwater. Groundwater samples collected after the events indicated no noticeable changes in chloride concentrations.

On May 24, 2023, NMOCD provided comments in response to the 2021 Annual Groundwater Monitoring Report for the Site. They requested ETC install a minimum of four groundwater monitor wells in the following general areas around the Site (**Appendix A**), no later than February 20, 2024: one in the up/side gradient area, on in each side gradient area, and one down gradient (southeast) of the plume.

Details and results from the 2022 groundwater monitoring events are discussed in this report.

2. Groundwater Monitoring

GHD performed semi-annual groundwater monitoring events at the Site on May 25 and October 13, 2022. The monitoring program included groundwater gauging and collecting groundwater samples from MW-1 through MW-7.

2.1 Monitoring Well Gauging

On May 25 and October 13, 2022, GHD personnel measured the depth to groundwater in the wells indicated above 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 and calculated groundwater elevations are summarized in **Table 1**.

Based on the data collected in 2022, groundwater flow is generally southeast and is consistent with historical data for the Site. The groundwater gradient was calculated at 0.014 feet per foot (ft/ft) in May and October. Groundwater potentiometric surface maps are presented as **Figure 3** and **Figure 4**.

2.2 Groundwater Sampling

Following the gauging during each 2022 event, GHD collected groundwater samples from MW-1 through MW-7. Prior to sampling, GHD personnel utilized dedicated polyethylene bailers to purge a minimum of three well volumes of groundwater or until the well was dry. The wells were given time to recover prior to collecting a groundwater sample. 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 2**

Groundwater samples were collected, placed in laboratory-prepared sample containers, packed in a cooler with ice, and shipped under Chain-of-Custody documentation to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for chloride via Environmental Protection Agency (EPA) Method 300.0.

2.3 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.

2.4 Analytical Results

The 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 NMAC (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 3** and the corresponding laboratory analytical reports are included in **Appendix B**. A chloride concentration map depicting concentrations for 2022 is presented as **Figure 5**. A summary of results is discussed below.

– Chloride was detected at concentrations that exceeded the NMWQCC standards in groundwater samples collected from the MW-1 and MW-4 through MW-7 during both sampling events in 2022.
– Chloride was detected in MW-2 and MW-3; however, the detected concentrations did not exceed the NMWQCC standard.

3. Summary and Recommendations

3.1 Summary

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

– Concentrations of chloride in exceedance of the NMWQCC standards were detected in groundwater samples collected from MW-1 and MW-4 through MW-7 in May and October.
– Chloride impacts in groundwater at the Site do not appear to be delineated to the south, east, or west.
– NMOCD requested ETC install a minimum of four groundwater monitor wells in the following general areas around the Site, no later than February 20, 2024: one in the up/side gradient area, on in each side gradient area, and one down gradient (southeast) of the plume. These proposed locations are shown on **Figure 6.**

3.2 2023 Recommendations

Based on the results of the 2022 groundwater monitoring events and directive from NMOCD, GHD recommends the following.

– Continue semi-annual groundwater monitoring to monitor concentrations of chloride in groundwater at the Site.
– Install four groundwater monitoring wells, to further delineate the chloride impacts in groundwater, no later than February 20, 2024.

Summary of Groundwater Gauging and Elevation Data
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	TOC Elevation (ft)	Total Well Depth (ft bgs)	Date Measured	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-1	3,425.53	48	2/28/2013	37.32	3,388.21
			5/9/2013	37.21	3,388.32
			9/3/2013	37.30	3,388.23
			7/15/2014	37.30	3,388.23
			10/30/2014	37.31	3,388.22
	3,425.40		1/20/2015	37.21	3,388.19
			4/16/2015	37.12	3,388.28
			12/18/2015	37.05	3,388.35
			5/31/2016	36.97	3,388.43
			12/8/2016	36.86	3,388.54
			5/8/2017	36.70	3,388.70
			11/14/2017	36.62	3,388.78
			5/9/2018	36.55	3,388.85
			11/7/2018	36.63	3,388.77
			3/27/2019	36.63	3,388.77
			9/18/2019	36.81	3,388.59
			4/22/2020	36.79	3,388.61
			11/18/2020	37.02	3,388.38
			5/5/2021	37.07	3,388.33
			11/23/2021	37.21	3,388.19
			5/25/2022	37.28	3,388.12
			10/13/2022	37.44	3,387.96
MW-2	3,426.07	43	5/9/2013	37.27	3,388.80
			9/3/2013	37.38	3,388.69
			7/15/2014	37.36	3,388.71
			10/30/2014	37.35	3,388.72
	3,425.98		1/20/2015	37.24	3,388.74
			4/16/2015	37.15	3,388.83
			12/18/2015	37.14	3,388.84
			5/31/2016	36.98	3,389.00
			12/8/2016	36.89	3,389.09
			5/8/2017	36.72	3,389.26
			11/14/2017	36.65	3,389.33
			5/9/2018	36.65	3,389.33
			11/7/2018	36.69	3,389.29
			3/27/2019	36.64	3,389.34
			9/18/2019	36.79	3,389.19
			4/22/2020	36.83	3,389.15
			11/18/2020	37.05	3,388.93
			5/5/2021	37.10	3,388.88
			11/23/2021	37.25	3,388.73
			5/25/2022	37.33	3,388.65
			10/13/2022	37.46	3,388.52
MW-3	3,425.16	44	5/9/2013	36.70	3,388.46
			9/3/2013	36.77	3,388.39
			7/15/2014	36.78	3,388.38
			10/30/2014	36.18	3,388.98
	3,425.06		1/20/2015	36.65	3,388.41
			4/16/2015	36.56	3,388.50
			12/18/2015	36.49	3,388.57
			5/31/2016	36.38	3,388.68
			12/8/2016	36.30	3,388.76
			5/8/2017	36.12	3,388.94
			11/14/2017	36.04	3,389.02
			5/9/2018	36.01	3,389.05
			11/7/2018	36.09	3,388.97
			3/27/2019	36.05	3,389.01
			9/18/2019	36.22	3,388.84
			4/22/2020	36.23	3,388.83
			11/18/2020	36.48	3,388.58
			5/5/2021	36.54	3,388.52
			11/23/2021	36.38	3,388.68
			5/25/2022	36.75	3,388.31
			10/13/2022	36.88	3,388.18

Summary of Groundwater Gauging and Elevation Data
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	TOC Elevation (ft)	Total Well Depth (ft bgs)	Date Measured	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-4	3,424.91	49	5/9/2013	37.02	3,387.89
			9/3/2013	37.10	3,387.81
			7/15/2014	37.08	3,387.83
			10/30/2014	37.16	3,387.75
	3,424.81		1/20/2015	36.99	3,387.82
			4/16/2015	36.91	3,387.90
			12/18/2015	36.88	3,387.93
			5/31/2016	36.78	3,388.03
			12/8/2018	36.70	3,388.11
			5/8/2017	36.54	3,388.27
			11/14/2017	36.47	3,388.34
			5/9/2018	36.42	3,388.39
			11/7/2018	36.49	3,388.32
			3/27/2019	36.45	3,388.36
			9/18/2019	36.67	3,388.14
			12/6/2019	36.66	3,388.15
			4/22/2020	36.61	3,388.20
			11/18/2020	36.84	3,387.97
			5/5/2021	36.89	3,387.92
			11/23/2021	37.04	3,387.77
			5/25/2022	37.08	3,387.73
			10/13/2022	37.23	3,387.58
MW-5	3,423.44	49	1/20/2015	36.12	3,387.32
			4/16/2015	36.06	3,387.38
			12/18/2015	36.03	3,387.41
			5/31/2016	35.92	3,387.52
			12/8/2016	35.83	3,387.61
			5/8/2017	35.69	3,387.75
			11/14/2017	35.64	3,387.80
			5/9/2018	35.56	3,387.88
			11/7/2018	35.63	3,387.81
			3/27/2019	35.62	3,387.82
			9/18/2019	35.88	3,387.56
			12/6/2019	35.80	3,387.64
			4/22/2020	35.77	3,387.67
			11/18/2020	35.98	3,387.46
			5/5/2021	36.03	3,387.41
			11/23/2021	36.18	3,387.26
			5/25/2022	36.22	3,387.22
			10/13/2022	36.37	3,387.07
MW-6	3,423.78	43	12/18/2015	36.14	3,387.64
			5/31/2016	36.06	3,387.72
			12/8/2016	35.99	3,387.79
			5/8/2017	35.87	3,387.91
			11/14/2017	35.81	3,387.97
			5/9/2018	35.74	3,388.04
			11/7/2018	35.78	3,388.00
			3/27/2019	35.74	3,388.04
			9/18/2019	35.89	3,387.89
			12/6/2019	35.91	3,387.87
			4/22/2020	36.83	3,386.95
			11/18/2020	36.06	3,387.72
			5/5/2021	36.10	3,387.68
			11/23/2021	36.29	3,387.49
			5/25/2022	36.22	3,387.56
			10/13/2022	36.47	3,387.31
MW-7	3,421.42	38	12/18/2015	37.10	3,384.32
			5/31/2016	37.01	3,384.41
			12/8/2016	36.95	3,384.47
			5/8/2017	36.26	3,385.16
			11/14/2017	36.74	3,384.68
			5/9/2018	36.64	3,384.78
			11/7/2018	36.78	3,384.64
			3/27/2019	36.67	3,384.75
			9/18/2019	36.89	3,384.53
			4/22/2020	36.78	3,384.64
			11/18/2020	38.07	3,383.35
			5/5/2021	37.08	3,384.34
			11/23/2021	37.30	3,384.12
			5/25/2022	37.35	3,384.07
			10/13/2022	37.60	3,383.82

Notes:
1) ft bgs = feet below ground surface
2) TOC = top of casing
3) AMSL = above mean sea level
4) LNAPL = light non-aqueous phase liquid
5) LNPAL has never been observed in the monitoring wells.

Table 2

Summary of Groundwater Field Parameters
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	Date	Field Temperature (°C)	pH	Conductivity (mS/cm)	DO (mg/L)	ORP (mV)
MW-1	7/15/2014	27.10	6.90	1,700.00	0.85	32.70
	10/30/2014	22.20	7.10	1,615.00	6.40	69.30
	1/20/2015	15.30	7.56	1,636.00	25.80	143.90
	4/16/2015	22.50	6.99	1,821.00	2.70	91.00
	12/18/2015	19.95	6.85	3,385.00	4.20	-13.10
	5/31/2016	20.90	6.99	3,760.00	2.14	-69.80
	12/8/2016	19.51	6.84	3,146.00	6.82	-222.90
	5/8/2017	20.27	7.45	3,833.00	1.60	-151.00
	11/14/2017	18.90	7.45	3,567.00	1.35	-51.80
	5/9/2018	19.92	6.95	2,721.00	--	-147.10
	11/7/2018	18.28	7.29	2,692.00	--	-120.40
	3/27/2019	18.88	6.88	5,907.00	2.80	-82.70
	9/18/2019	18.71	6.55	--	--	-129.30
	4/22/2020	20.90	7.67	2,160.00	2.03	-66.90
	11/18/2020	21.50	7.22	2,324.00	1.70	-19.50
	5/5/2021	21.83	7.37	123,259.00	0.58	-41.20
	11/23/2021	21.02	7.13	2,620.00	0.96	-36.40
	5/25/2022	21.26	7.24	22.16	1.18	166.80
	10/13/2022	20.90	7.46	2,320.00	2.06	149.90
MW-2	7/15/2014	22.60	7.04	1,356.00	6.61	27.80
	10/30/2014	21.80	7.84	1,510.00	75.60	75.50
	1/20/2015	14.90	7.73	1,437.00	24.30	162.30
	4/16/2015	22.00	7.30	1,435.00	16.30	112.20
	12/18/2015	19.49	7.47	1,543.00	2.11	-150.00
	5/31/2016	20.50	7.14	1,290.00	1.70	60.50
	12/8/2016	19.04	7.19	1,301.00	2.67	-114.70
	5/8/2017	19.82	6.85	1,345.00	1.07	-68.40
	11/14/2017	18.57	7.45	1,682.00	1.07	-2.50
	5/9/2018	19.50	6.92	1,475.00	--	-62.00
	11/7/2018	17.96	7.14	1,523.00	--	-45.90
	3/27/2019	18.92	6.78	2,878.00	2.61	-11.20
	9/18/2019	18.23	6.45	--	--	-130.20
	4/22/2020	20.20	7.56	1,440.00	0.54	-36.30
	11/18/2020	20.88	7.21	1,475.00	1.20	59.90
	5/5/2021	21.30	7.45	65,185.00	0.98	30.20
	11/23/2021	20.30	7.28	1,303.00	1.63	9.10
	5/25/2022	21.00	7.36	1,084.00	1.83	197.50
	10/13/2022	20.39	7.62	1,238.00	2.07	167.30
MW-3	7/15/2014	22.60	7.02	1,832.00	3.58	25.80
	10/30/2014	22.50	7.25	1,600.00	20.30	65.30
	1/20/2015	16.80	7.54	1,823.00	18.60	150.50
	4/16/2015	23.50	7.15	1,714.00	10.00	119.30
	12/18/2015	19.59	7.43	2,266.00	2.90	-101.60
	5/31/2016	20.70	6.84	1,840.00	1.80	60.50
	12/8/2016	19.03	7.21	1,734.00	1.78	-115.20
	5/8/2017	19.49	6.19	1,695.00	1.58	-26.70
	11/14/2017	18.12	7.57	2,102.00	1.63	18.40
	5/9/2018	18.99	7.11	1,675.00	--	-52.00
	11/7/2018	17.80	7.37	1,703.00	--	-45.10
	3/27/2019	18.13	7.01	3,098.00	2.91	-4.30
	9/18/2019	17.92	6.70	--	--	-127.20
	4/22/2020	19.80	7.66	1,570.00	3.50	68.80
	11/18/2020	20.44	7.30	1,567.00	1.83	93.00
	5/6/2021	20.65	7.62	68,198.00	1.41	58.80
	11/23/2021	20.44	7.41	1,397.00	1.31	11.90
	5/25/2022	20.93	7.39	1,184.00	1.50	198.60
	10/13/2022	20.15	7.59	1,408.00	1.58	168.10

Table 2

Summary of Groundwater Field Parameters
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	Date	Field Temperature (°C)	pH	Conductivity (mS/cm)	DO (mg/L)	ORP (mV)
MW-4	7/15/2014	22.80	6.93	7,308.00	3.70	65.20
	10/30/2014	22.40	6.94	3,010.00	2.80	76.10
	1/20/2015	19.10	7.34	8,275.00	14.70	160.30
	4/16/2015	21.70	6.92	3,080.00	3.30	98.10
	12/18/2015	19.79	7.06	6,557.00	2.31	-123.20
	5/31/2016	20.60	6.93	5,590.00	1.58	-50.30
	12/8/2016	19.07	7.10	5,923.00	2.80	-209.30
	5/8/2017	19.68	6.75	7,987.00	0.86	-139.30
	11/14/2017	18.59	7.36	6,485.00	1.71	0.10
	5/9/2018	19.31	6.98	4,500.00	--	-100.91
	11/7/2018	18.13	7.04	7,469.00	--	-66.70
	3/27/2019	18.72	6.69	12,210.00	2.56	-32.90
	9/18/2019	18.41	6.55	--	--	-121.60
	12/6/2019	20.21	7.19	4,386.00	2.68	-312.20
	4/22/2020	20.40	7.54	4,620.00	0.42	2.30
	11/18/2020	21.21	7.07	4,360.00	1.01	89.00
	5/6/2021	21.26	7.32	203,720.00	0.34	31.00
	11/23/2021	21.06	7.01	4,853.00	1.04	15.70
	5/25/2022	21.50	6.99	3,490.00	1.35	207.00
	10/13/2022	20.71	7.07	4,937.00	1.30	182.00
MW-5	1/20/2015	20.10	7.31	6,888.00	10.00	148.90
	4/16/2015	21.40	6.98	6,405.00	5.70	90.50
	12/18/2015	19.06	7.10	6,631.00	3.37	-134.10
	5/31/2016	19.90	6.94	5,760.00	1.88	76.70
	12/8/2016	18.78	7.13	5,690.00	1.96	-79.40
	5/8/2017	19.05	6.70	6,303.00	1.41	-86.70
	11/14/2017	17.82	7.20	7,041.00	2.04	37.90
	5/9/2018	17.99	6.85	4,629.00	--	-100.20
	11/7/2018	17.10	7.08	6,934.00	--	-55.60
	3/27/2019	17.98	6.75	11,522.00	3.69	-16.00
	9/18/2019	17.62	6.46	--	--	-120.10
	12/6/2019	19.23	7.11	5,638.00	1.88	-331.40
	4/22/2020	19.90	7.54	5,610.00	0.91	89.40
	11/18/2020	20.30	7.00	5,450.00	0.80	116.00
	5/6/2021	20.89	7.22	229,595.00	0.20	43.00
	11/23/2021	20.41	6.98	4,709.00	1.37	28.80
	5/25/2022	21.10	6.94	3,969.00	1.35	204.00
	10/13/2022	20.13	7.09	4,332.00	1.85	190.80
MW-6	12/18/2015	18.79	7.18	4,958.00	6.64	-112.20
	6/1/2016	20.50	6.84	4,750.00	1.51	93.80
	12/8/2016	19.05	7.20	4,620.00	6.02	-64.30
	5/8/2017	19.44	7.10	4,658.00	1.90	-142.30
	11/14/2017	18.19	6.98	5,574.00	1.37	28.70
	5/9/2018	19.72	7.12	4,622.00	--	-64.80
	11/7/2018	17.09	7.01	4,979.00	--	-47.40
	3/27/2019	18.51	6.74	8,556.00	3.02	-10.80
	9/18/2019	18.09	6.45	--	--	-124.30
	12/6/2019	19.51	7.10	4,784.00	2.08	-308.70
	4/22/2020	20.30	7.67	4,750.00	0.91	115.00
	11/18/2020	20.77	7.05	5,375.00	0.80	55.00
	5/6/2021	21.11	7.26	240,842.00	0.20	50.90
	11/23/2021	20.57	6.98	5,025.00	1.36	31.00
	5/25/2022	21.43	7.08	4,333.00	0.87	222.70
	10/13/2022	20.15	7.08	4,940.00	2.22	199.80

Table 2

Summary of Groundwater Field Parameters
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	Date	Field Temperature (°C)	pH	Conductivity (mS/cm)	DO (mg/L)	ORP (mV)
MW-7	12/18/2015	Insufficient volume to collect parameters				
	6/1/2016	Insufficient volume to collect parameters				
	12/8/2016	14.51	7.61	2,659.00	6.13	-5.80
	5/8/2017	19.93	7.27	2,758.00	--	-56.90
	11/14/2017	Insufficient volume to collect parameters				
	5/9/2018	19.35	7.30	3,021.00	--	-40.21
	11/7/2018	14.92	7.48	107.00	--	-26.10
	3/27/2019	18.23	7.14	5,957.00	8.12	52.60
	9/18/2019	18.08	7.62	--	--	-86.30
	4/22/2020	20.30	8.29	3,410.00	6.85	157.70
	11/18/2020	Insufficient volume to collect parameters				
	5/6/2021	Insufficient volume to collect parameters				
	11/23/2021	Insufficient volume to collect parameters				
	5/25/2022	Insufficient volume to collect parameters				
	10/13/2022	Insufficient volume to collect parameters				

Notes:
1) C° = degrees Celsius
2) µS/cm = microsiemens per centimeter
3) DO = dissolved oxygen
4) mg/L = milligrams per liter
5) ORP = oxygen reduction potential
6) mV = millivolts
7) -- = data not collected

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
NMWQCC Groundwater Quality Standards		**0.01**	**1.00**	**0.70**	**0.62**	**250**
MW-1	2/28/2013	<0.00100	<0.00200	<0.00100	<0.00200	**1,600**
	5/9/2013	<0.00100	<0.00200	<0.00100	<0.00200	**746**
	9/3/2013	<0.00100	<0.00200	<0.00100	<0.00200	220
	2/28/2014	<0.00100	<0.00200	<0.00100	<0.00100	**1,350**
	7/15/2014	<0.00100	<0.00200	<0.00100	<0.00100	**272**
	10/30/2014	<0.00100	<0.00100	<0.00100	<0.00100	**261**
	1/20/2015	<0.00100	<0.00100	<0.00100	<0.00100	**475**
	4/16/2015	<0.00100	<0.00100	<0.00100	<0.00100	**2,720**
	12/18/2015	<0.00100	<0.00100	<0.00100	<0.00150	**3,100**
	5/31/2016	--	--	--	--	**840**
	12/8/2016	--	--	--	--	**1,200**
	5/8/2017	--	--	--	--	**710**
	11/14/2017	--	--	--	--	**1,400**
	5/9/2018	--	--	--	--	**410**
	11/7/2018	--	--	--	--	**830**
	11/7/18 (DUP)	--	--	--	--	**520**
	3/27/2019	--	--	--	--	**590**
	9/18/2019	--	--	--	--	**670**
	4/22/2020	<0.00100	<0.00100	<0.00100	<0.00150	**630**
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	**660**
	5/5/2021	--	--	--	--	**870**
	11/23/2021	--	--	--	--	**390**
	5/25/2022	--	--	--	--	**510**
	10/13/2022	--	--	--	--	**320**
	10/13/2022 (dup)	--	--	--	--	**370**
MW-2	5/9/2013	<0.00100	<0.00200	<0.00100	<0.00200	199
	9/3/2013	<0.00100	<0.00200	<0.00100	<0.00200	211
	2/28/2014	<0.00100	<0.00200	<0.00100	<0.00100	190
	7/15/2014	<0.00100	<0.00200	<0.00100	<0.00100	165
	10/30/2014	<0.00100	<0.00100	<0.00100	<0.00100	215
	1/20/2015	<0.00100	<0.00100	<0.00100	<0.00100	152
	4/16/2015	<0.00100	<0.00100	<0.00100	<0.00100	155
	12/18/2015	<0.00100	<0.00100	<0.00100	<0.00150	180
	5/31/2016	--	--	--	--	150
	12/8/2016	--	--	--	--	190
	5/8/2017	--	--	--	--	170
	11/14/2017	--	--	--	--	170
	5/9/2018	--	--	--	--	190
	5/9/2018 (DUP)	--	--	--	--	190
	11/7/2018	--	--	--	--	200
	3/27/2019	--	--	--	--	180
	9/18/2019	--	--	--	--	170
	4/22/2020	0.00210	<0.00100	<0.00100	<0.00150	190
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	180
	5/5/2021	--	--	--	--	190
	11/23/2021	--	--	--	--	170
	5/25/2022	--	--	--	--	180
	10/13/2022	--	--	--	--	180

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
NMWQCC Groundwater Quality Standards		**0.01**	**1.00**	**0.70**	**0.62**	**250**
MW-3	5/9/2013	<0.00100	<0.00200	<0.00100	<0.00200	**392**
	9/3/2013	<0.00100	<0.00200	<0.00100	<0.00200	191
	2/28/2014	<0.00100	<0.00200	<0.00100	<0.00100	**424**
	7/15/2014	<0.00100	<0.00200	<0.00100	<0.00100	**434**
	10/30/2014	<0.00100	<0.00100	<0.00100	<0.00100	212
	1/20/2015	<0.00100	<0.00100	<0.00100	<0.00100	**488**
	4/16/2015	<0.00100	<0.00100	<0.00100	<0.00100	248
	12/18/2015	<0.00100	<0.00100	<0.00100	<0.00150	**400**
	5/31/2016	--	--	--	--	**390**
	12/8/2016	--	--	--	--	**340**
	5/8/2017	--	--	--	--	**310**
	11/14/2017	--	--	--	--	210
	5/9/2018	--	--	--	--	**260**
	11/7/2018	--	--	--	--	210
	3/27/2019	--	--	--	--	220
	3/27/2019	--	--	--	--	200
	9/18/2019	--	--	--	--	170
	4/22/2020	<0.00100	<0.00100	<0.00100	<0.00150	220
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	210
	5/6/2021	--	--	--	--	200
	11/23/2021	--	--	--	--	200
	5/25/2022	--	--	--	--	180
	10/13/2022	--	--	--	--	180
MW-4	5/9/2013	<0.00100	<0.00200	<0.00100	<0.00200	**2,710**
	9/3/2013	<0.00100	<0.00200	<0.00100	<0.00200	**610**
	2/28/2014	<0.00100	<0.00200	<0.00100	<0.00100	**2,220**
	7/15/2014	<0.00100	<0.00200	<0.00100	<0.00100	**2,100**
	10/30/2014	<0.00100	<0.00100	<0.00100	<0.00100	**1,430**
	1/20/2015	<0.00100	<0.00100	<0.00100	<0.00100	**2,390**
	4/16/2015	<0.00100	<0.00100	<0.00100	<0.00100	**1,450**
	12/18/2015	<0.00100	<0.00100	<0.00100	<0.00150	**3,500**
	12/15/2015 (DUP	<0.00100	<0.00100	<0.00100	<0.00150	**3,500**
	5/31/2016	--	--	--	--	**1,700**
	12/8/2016	--	--	--	--	**1,100**
	5/8/2017	--	--	--	--	**2,500**
	11/14/2017	--	--	--	--	**1,400**
	5/9/2018	--	--	--	--	**2,600**
	11/7/2018	--	--	--	--	**1,600**
	3/27/2019	--	--	--	--	**1,000**
	9/18/2019	--	--	--	--	**1,300**
	9/18/2019 (DUP)	--	--	--	--	**1,400**
	12/6/2019	--	--	--	--	**1,200**
	4/22/2020	0.00100	<0.00100	<0.00100	<0.00150	**2,100**
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	**1,500**
	5/6/2021	--	--	--	--	**1,500**
	11/23/2021	--	--	--	--	**960**
	5/25/2022	--	--	--	--	**1,400**
	10/13/2022	--	--	--	--	**830**

Table 3

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

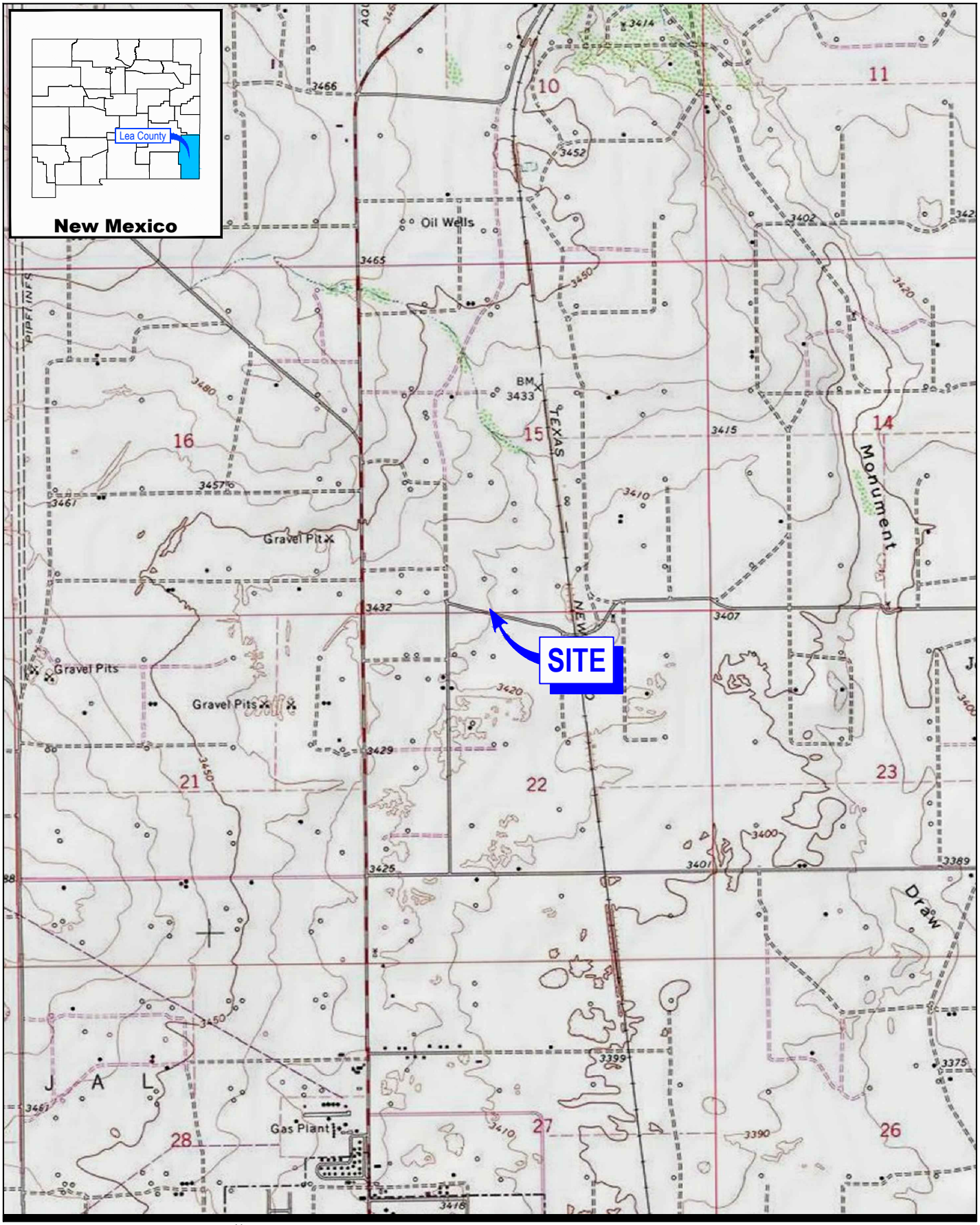
Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
NMWQCC Groundwater Quality Standards		0.01	1.00	0.70	0.62	250
MW-5	1/20/2015	<0.00100	<0.00100	<0.00100	<0.00100	1,700
	4/16/2015	<0.00100	<0.00100	<0.00100	<0.00100	1,750
	12/18/2015	<0.00100	<0.00100	<0.00100	<0.00150	1,800
	5/31/2016	--	--	--	--	2,000
	5/31/2016 (DUP)	--	--	--	--	2,200
	12/8/2016	--	--	--	--	2,000
	12/8/16 (DUP)	--	--	--	--	1,800
	5/8/2017	--	--	--	--	1,900
	11/14/2017	--	--	--	--	2,000
	5/9/2018	--	--	--	--	2,300
	11/7/2018	--	--	--	--	1,900
	3/27/2019	--	--	--	--	1,500
	9/18/2019	--	--	--	--	1,900
	12/6/2019	--	--	--	--	1,400
	12/6/2019 (DUP)	--	--	--	--	1,300
	4/22/2020	<0.00100	<0.00100	<0.00100	<0.00150	2,100
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	2,000
	5/6/2021	--	--	--	--	1,700
	11/23/2021	--	--	--	--	1,500
	5/25/2022	--	--	--	--	1,300
	10/13/2022	--	--	--	--	1,100
MW-6	1/20/2015	<0.00100	<0.00100	<0.00100	<0.00100	1,300
	6/1/2016	--	--	--	--	1,400
	12/8/2016	--	--	--	--	1,700
	5/8/2017	--	--	--	--	1,500
	11/17/2017	--	--	--	--	1,100
	5/9/2018	--	--	--	--	1,300
	11/7/2018	--	--	--	--	1,100
	3/27/2019	--	--	--	--	1,000
	9/18/2019	--	--	--	--	1,300
	12/6/2019	--	--	--	--	1,400
	4/22/2020	<0.00100	<0.00100	<0.00100	<0.00150	1,400
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	1,500
	5/6/2021	--	--	--	--	1,300
	11/23/2021	--	--	--	--	1,400
	5/25/2022	--	--	--	--	1,600
	10/13/2022	--	--	--	--	1,600

Table 3

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline Release
Lea County, New Mexico
ETC Texas Pipeline, Ltd.
NMOCD 1RP-2073

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
NMWQCC Groundwater Quality Standards		**0.01**	**1.00**	**0.70**	**0.62**	**250**
MW-7	12/18/2015	<0.00100	<0.00100	<0.00100	<0.00150	**580**
	6/1/2016	--	--	--	--	**740**
	12/8/2016	--	--	--	--	**830**
	5/8/2017	--	--	--	--	**810**
	11/14/2017	--	--	--	--	**670**
	5/9/2018	--	--	--	--	**820**
	11/7/2018	--	--	--	--	**870**
	3/27/2019	--	--	--	--	**870**
	9/18/2019	--	--	--	--	**920**
	4/22/2020	<0.00100	<0.00100	<0.00100	<0.00150	**900**
	11/18/2020	<0.00100	<0.00100	<0.00100	<0.00150	**920**
	5/6/2021	--	--	--	--	**870**
	11/23/2021	--	--	--	--	**870**
	5/25/2022	--	--	--	--	**2,400**
	10/13/2022	--	--	--	--	**970**

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



0 1000 2000 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE

Project No. **12603933**
Date **August 2023**

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT001\12603933-GHD-00-00-RPT-EN-D101_DL-001.dwg
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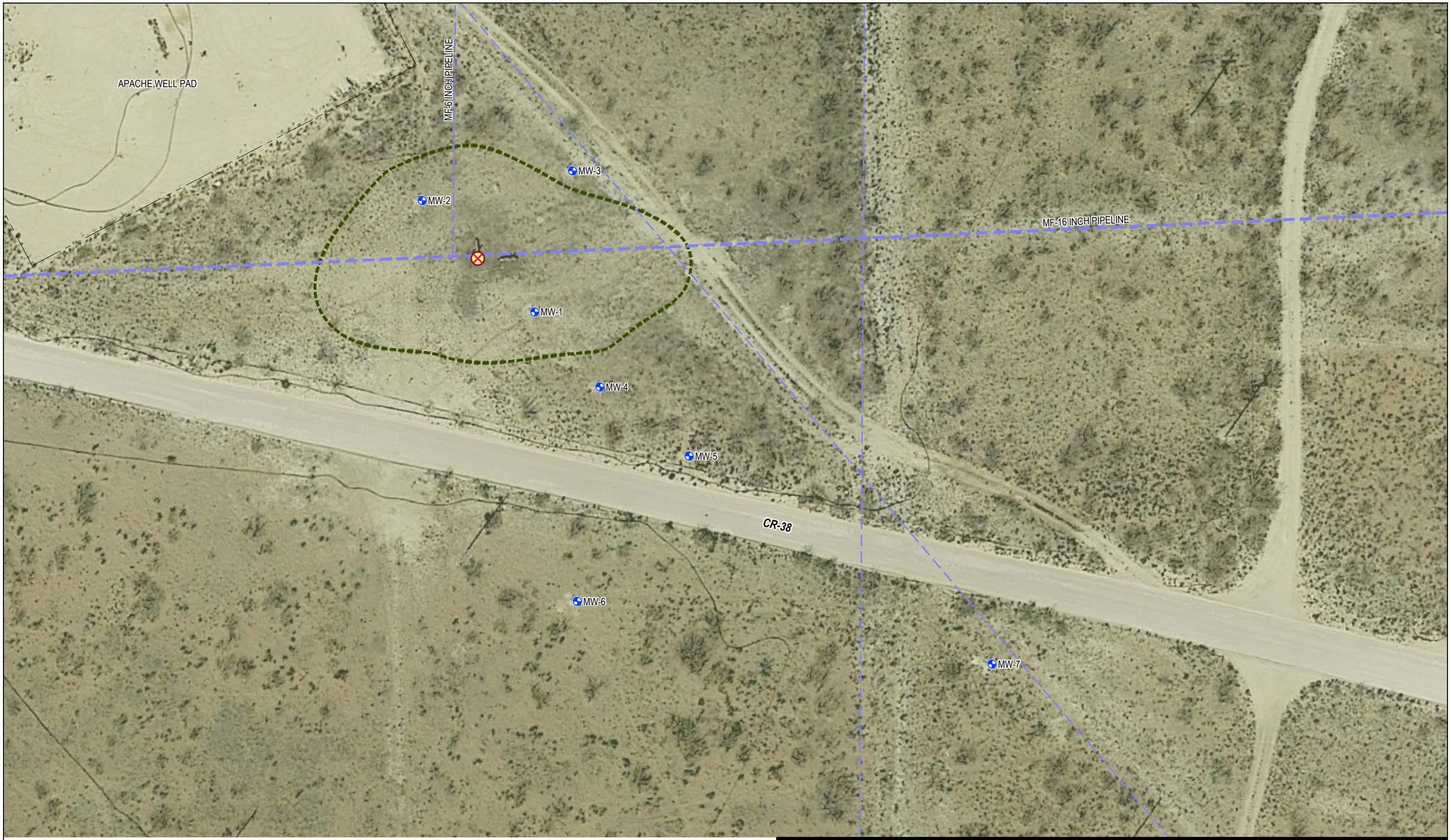
Lat/Long: 32.47205° North, 103.153517° West



LEGEND

- MONITORING WELL LOCATION
- APPROXIMATE RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS

0 25 50 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE

SITE DETAILS MAP

Project No. **12603933**
Date **August 2023**

FIGURE 2

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT001\12603933-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 17 August 2023 9:20 AM

Data Source: Image © 2023 Google - Imagery Date: February 20, 2019
Lat/Long: 32.47205° North, 103.153517° West

APACHE WELL PAD

MF-6 INCH PIPELINE

MF-16 INCH PIPELINE

CR-38

MW-1 3388.12

MW-2 3388.65

MW-3 3388.31

MW-4 3387.73

MW-5 3387.22

MW-6 3387.56

MW-7 3384.07

3388.50

3388.00

3387.50

3387.00

3386.50

3385.50

3385.00

3384.50

67.72

LEGEND

- MONITORING WELL LOCATION
- APPROXIMATE RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 0.20 ft)
- 3387.56 ELEVATION OF GROUNDWATER (ft)
- DIRECTION OF GROUNDWATER FLOW

0 25 50 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE

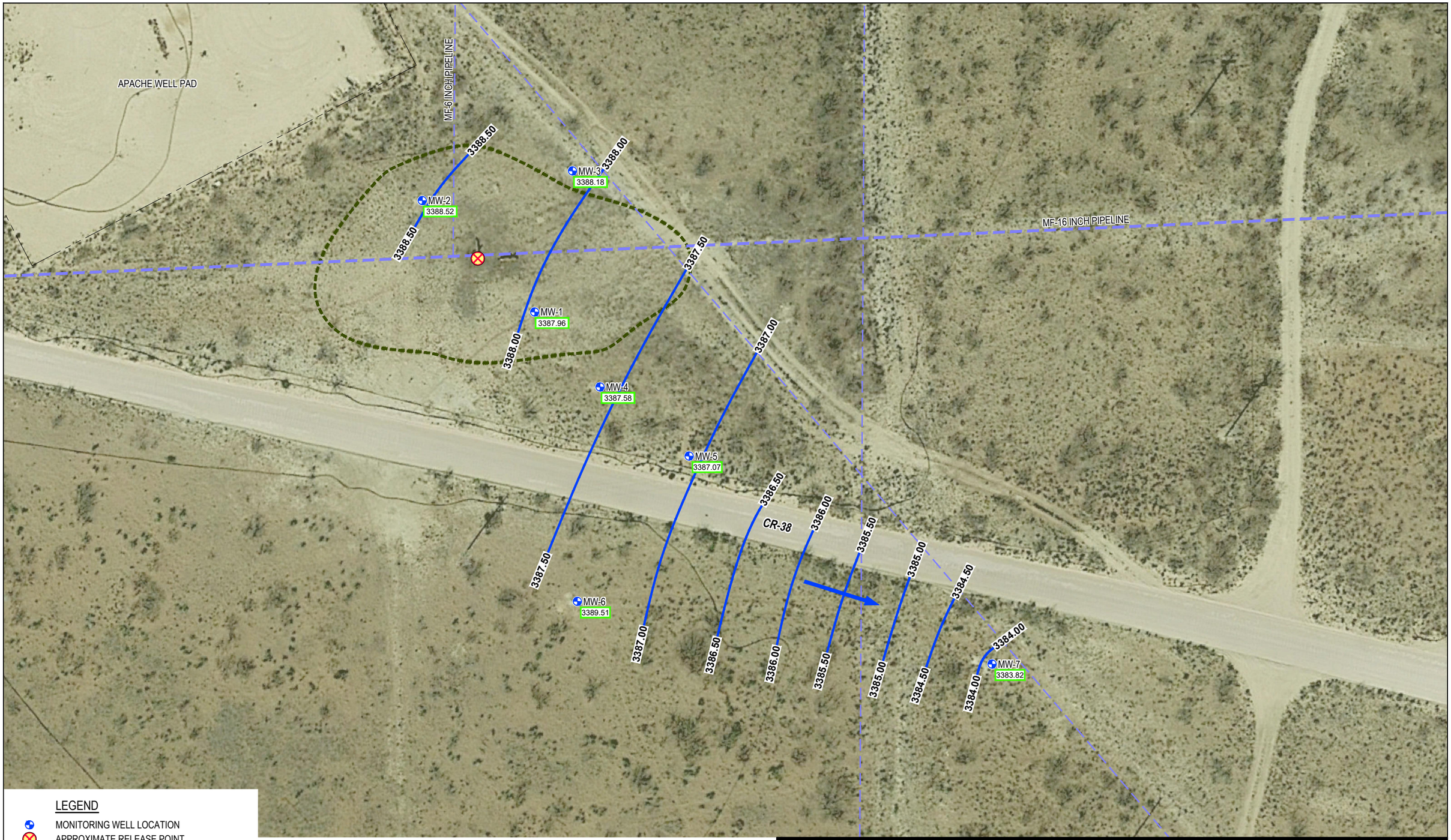
MAY 2022
POTENTIOMETRIC SURFACE MAP

Project No. **12603933**
Date **August 2023**

FIGURE 3

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT001\12603933-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 17 August 2023 9:20 AM

Data Source: Image © 2023 Google - Imagery Date: February 20, 2019
Lat/Long: 32.47205° North, 103.153517° West



LEGEND

- MONITORING WELL LOCATION
- APPROXIMATE RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 0.50 ft)
- 3389.51 ELEVATION OF GROUNDWATER (ft)
- DIRECTION OF GROUNDWATER FLOW

0 25 50 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE

OCTOBER 2022
POTENTIOMETRIC SURFACE MAP

Project No. **12603933**
Date **August 2023**

FIGURE 4

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT001\12603933-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 17 August 2023 9:20 AM

Data Source: Image © 2023 Google - Imagery Date: February 20, 2019
Lat/Long: 32.47205° North, 103.153517° West

APACHE WELL PAD

MF-6 INCH PIPELINE

MF-16 INCH PIPELINE

CR-38

MW-1

Date	Chloride
05/25/22	**510**
10/13/22	**320**

MW-2

Date	Chloride
05/25/22	180
10/13/22	180

MW-3

Date	Chloride
05/25/22	180
10/13/22	180

MW-4

Date	Chloride
05/25/22	**1,400**
10/13/22	**830**

MW-5

Date	Chloride
05/25/22	**1,300**
10/13/22	**1,100**

MW-6

Date	Chloride
05/25/22	**1,600**
10/13/22	**1,600**

MW-7

Date	Chloride
05/25/22	**2,400**
10/13/22	**970**

LEGEND

- MONITORING WELL LOCATION
- APPROXIMATE RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS

0 25 50 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE

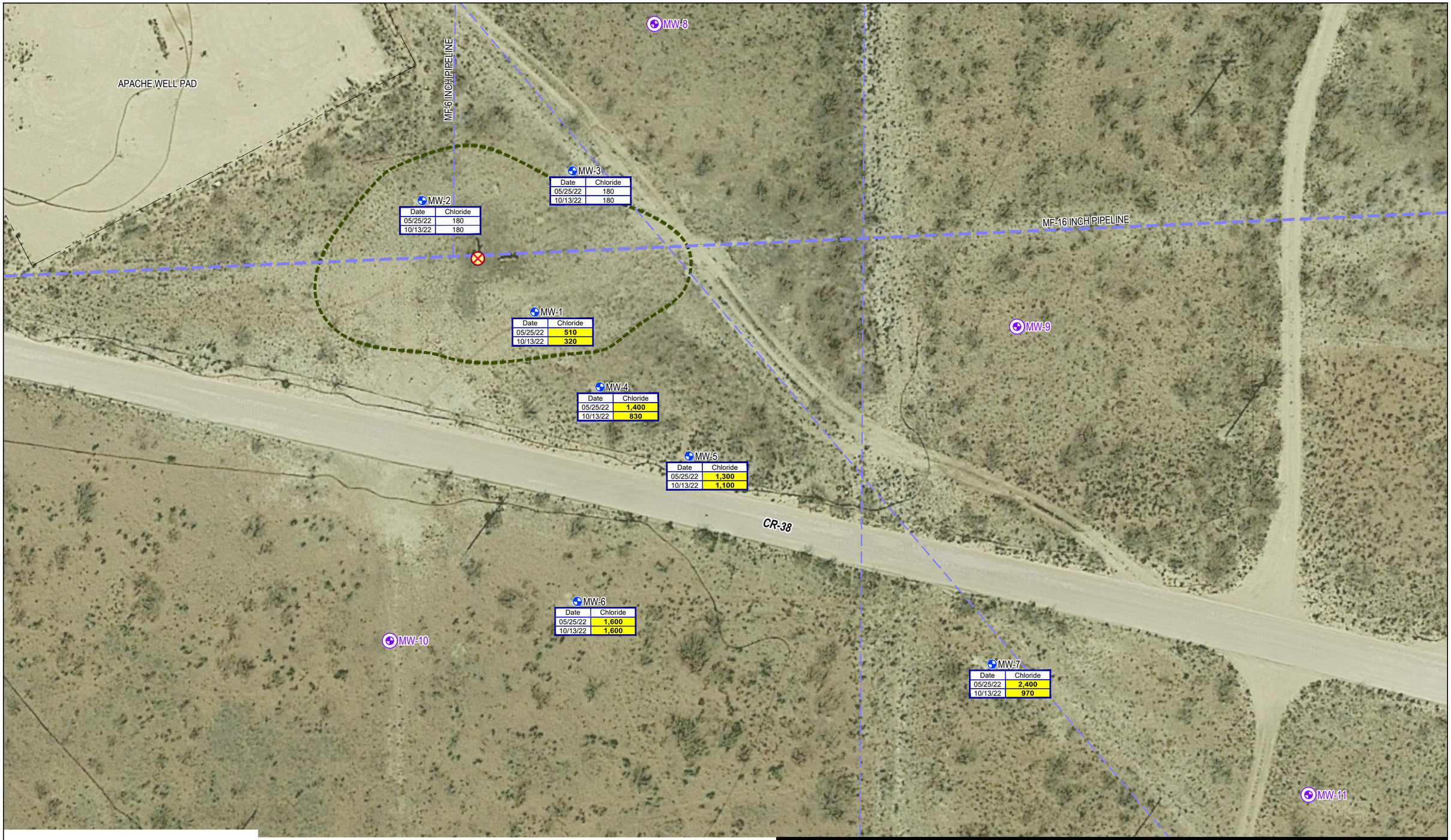
2022 CHLORIDE CONCENTRATIONS IN GROUNDWATER

Project No. **12603933**
Date **August 2023**

FIGURE 5

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT001\12603933-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 17 August 2023 9:20 AM

Data Source: Image © 2023 Google - Imagery Date: February 20, 2019
Lat/Long: 32.47205° North, 103.153517° West



LEGEND

- PROPOSED MONITORING WELL LOCATION
- MONITORING WELL LOCATION
- APPROXIMATE RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS

0 25 50 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE

PROPOSED MONITORING WELL LOCATIONS MAP

Project No. **12603933**
Date **September 2023**

FIGURE 6

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT001\12603933-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 25 September 2023 3:13 PM

Data Source: Image © 2023 Google - Imagery Date: February 20, 2019
Lat/Long: 32.47205° North, 103.153517° West

Appendices

Appendix A

Excerpts from NMOCD Response to 2021 Annual Groundwater Monitoring Report

Review of 2021 ANNUAL GROUNDWATER MONITORING REPORT: **Content satisfactory**

OCD condition of approval are as follows;

1. 1. Following receipt of this report from OCD, operator will be required to install a minimum of four (4) groundwater monitor wells in the general areas displayed within Figure 5 of the report. Locations in general are in up/side gradient area, side gradient areas (2), and in down gradient direction (southeast) by February 20, 2024.
2. Continue groundwater monitoring and sampling on a semi-annual basis for chloride.
3. Submit the Annual Groundwater Monitoring Report to the OCD no later than April 1, 2024.

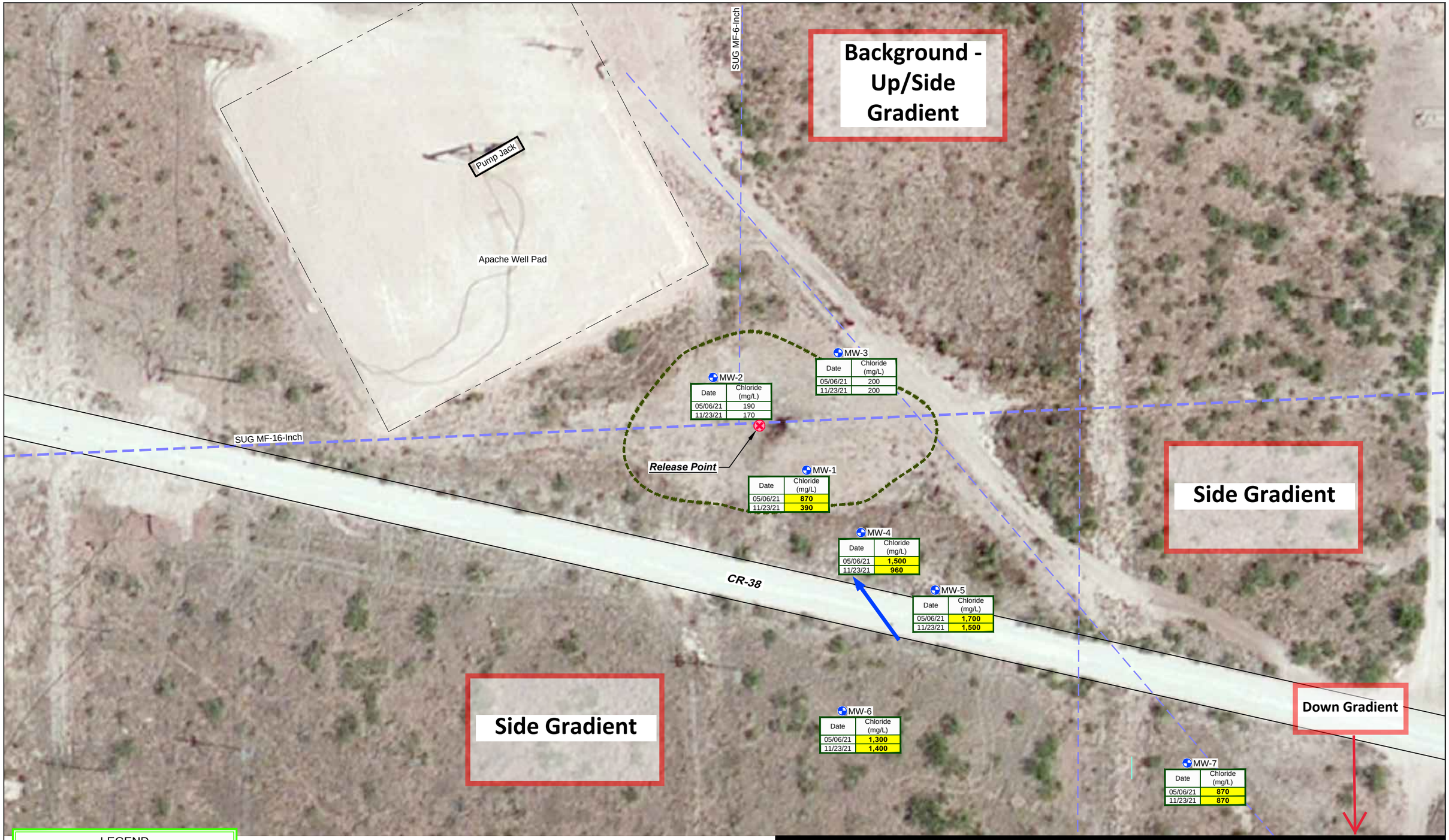
2021 Annual Groundwater Monitoring Report

MF-16 Pipeline Release
Lea County, New Mexico
1RP-2073

Energy Transfer

June 14, 2022

→ The Power of Commitment



LEGEND

- Monitoring Well Location
- Release Point
- Subsurface Pipeline
- Excavation Limits
- Direction of Groundwater Flow

NOTE:

1. Bold and highlighted values indicate a concentration over the NMWQCC standard.

0 30 60 ft

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

N

GHD

ETC TEXAS PIPELINE, LTD.
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE RELEASE

2021 CHLORIDE
CONCENTRATIONS IN GROUNDWATER

Project No. 12574708
Date February 2022

FIGURE 5

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12574708\Digital_Design\ACAD\Figures\RPT006\12574708-GHD-0000-RPT-EN-0101_DL-006.dwg
Plot Date: 25 February 2022 1:15 PM

Data Source: USDA FSA Imagery, May 10, 2014
Lat/Long: 32.47205° North, 103.153547° West

Appendix B

Laboratory Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 10, 2022

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: MF 16 OrderNo.: 2205D12

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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 10:00:00 AM
Lab ID: 2205D12-001
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	510	50	*	mg/L	100	5/31/2022 1:56:23 PM	R88385

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 Quanitative 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

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 11:00:00 AM
Lab ID: 2205D12-002
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	180	5.0		mg/L	10	5/31/2022 2:09:15 PM	R88385

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 Quanitative 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

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 12:00:00 PM
Lab ID: 2205D12-003 **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	180	50		mg/L	100	5/31/2022 3:39:15 PM	R88385

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 Quanitative 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

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 1:00:00 PM
Lab ID: 2205D12-004 **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	1400	50	*	mg/L	100	5/31/2022 4:05:00 PM	R88385

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 2:00:00 PM
Lab ID: 2205D12-005
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	1300	50	*	mg/L	100	5/31/2022 4:30:45 PM	R88385

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 3:00:00 PM
Lab ID: 2205D12-006 **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	1600	50	*	mg/L	100	5/31/2022 4:56:28 PM	R88385

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205D12**
Date Reported: **6/10/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: GW-12574708-052522-CN-MW
Project: MF 16
Collection Date: 5/25/2022 3:00:00 PM
Lab ID: 2205D12-007 **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	2400	100	*	mg/L	200	6/7/2022 11:36:12 AM	R88554

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205D12**

10-Jun-22

Client: GHD

Project: MF 16

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R88385**	RunNo: **88385**
Prep Date:	Analysis Date: **5/31/2022**	SeqNo: **3135549** 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: **R88385**	RunNo: **88385**
Prep Date:	Analysis Date: **5/31/2022**	SeqNo: **3135550** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.9	90	110			

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R88554**	RunNo: **88554**
Prep Date:	Analysis Date: **6/7/2022**	SeqNo: **3142357** 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: **R88554**	RunNo: **88554**
Prep Date:	Analysis Date: **6/7/2022**	SeqNo: **3142358** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.0	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 Quanitative 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

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: **2205D12** RcptNo: **1**

Received By: **Cheyenne Cason** **5/28/2022 8:00:00 AM** Chel

Completed By: **Cheyenne Cason** **5/31/2022 7:36:28 AM** Chel

Reviewed By: KPH 5.31.22

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° 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Not Present			

Chain-of-Custody Record

Client: EHD

Mailing Address:

Phone #:

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 5 Days

Project Name: MF-16

Project #: 12574708

Project Manager: Christine Mathews

Sampler: CM

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.9-0=2.9 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2205D12	BTEX / MTBE / TMB's (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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	300 Chloride
5-25-22	1000	W	GW-12574708-052522-CN-MW-1	1	—	001											X
	1100		GW-12574708-052522-CN-MW-2			002											X
	1200		GW-12574708-052522-CN-MW-3			003											X
	1300		GW-12574708-052522-CN-MW-4			004											X
	1400		GW-12574708-052522-CN-MW-5			005											X
	1500		GW-12574708-052522-CN-MW6			006											X
↓	1600	↓	GW-12574708-052522-CN-MW7	↓	↓	007											X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/26/22	1700				5/26/22	1700
5/27/22	1900		CHC	Courier	5/28/22	0800

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 18, 2022

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: MF 16 OrderNo.: 2210735

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/14/2022 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-1
Project: MF 16
Collection Date: 10/13/2022 9:30:00 AM
Lab ID: 2210735-001 **Matrix:** AQUEOUS **Received Date:** 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	320	50	*	mg/L	100	10/16/2022 1:53:44 PM	R91836

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 Quanitative 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

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-2
Project: MF 16
Collection Date: 10/13/2022 10:30:00 AM
Lab ID: 2210735-002 **Matrix:** AQUEOUS **Received Date:** 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	180	5.0		mg/L	10	10/16/2022 2:06:05 PM	R91836

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-3
Project: MF 16
Collection Date: 10/13/2022 11:30:00 AM
Lab ID: 2210735-003
Matrix: AQUEOUS
Received Date: 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	180	5.0		mg/L	10	10/16/2022 2:30:47 PM	R91836

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 Quanitative 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

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-4
Project: MF 16
Collection Date: 10/13/2022 12:30:00 PM
Lab ID: 2210735-004 **Matrix:** AQUEOUS **Received Date:** 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	830	50	*	mg/L	100	10/16/2022 3:07:50 PM	R91836

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 Quanitative 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

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-5
Project: MF 16
Collection Date: 10/13/2022 1:30:00 PM
Lab ID: 2210735-005 **Matrix:** AQUEOUS **Received Date:** 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	1100	50	*	mg/L	100	10/16/2022 3:57:11 PM	R91836

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 Quanitative 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

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-6
Project: MF 16
Collection Date: 10/13/2022 2:30:00 PM
Lab ID: 2210735-006 **Matrix:** AQUEOUS **Received Date:** 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	1600	50	*	mg/L	100	10/16/2022 4:21:51 PM	R91836

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: MW-7
Project: MF 16
Collection Date: 10/13/2022 3:00:00 PM
Lab ID: 2210735-007 **Matrix:** AQUEOUS **Received Date:** 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	970	50	*	mg/L	100	10/16/2022 4:46:32 PM	R91836

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 Quanitative 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

Analytical Report
Lab Order **2210735**
Date Reported: **10/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: DUP
Project: MF 16
Collection Date: 10/13/2022
Lab ID: 2210735-008
Matrix: AQUEOUS
Received Date: 10/14/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	370	50	*	mg/L	100	10/16/2022 5:11:14 PM	R91836

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 Quanitative 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#: **2210735**

18-Oct-22

Client: GHD

Project: MF 16

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R91836**	RunNo: **91836**
Prep Date:	Analysis Date: **10/16/2022**	SeqNo: **3293311** 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: **R91836**	RunNo: **91836**
Prep Date:	Analysis Date: **10/16/2022**	SeqNo: **3293312** 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	92.5	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 Quanitative 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

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: 2210735 | RcptNo: 1

Received By: **Tracy Casarrubias** 10/14/2022 7:15:00 AM

Completed By: **Tracy Casarrubias** 10/14/2022 11:35:23 AM

Reviewed By: KPG 10.14.22

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° C to 6.0°C	Yes ☐	No ☑	NA ☐
	Approved by client.		
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: CMC 10/14/22

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	12.9	Good	Yes			
2	3.1	Good	Yes			
3	2.3	Good	Yes			
4	1.4	Good	Yes			

Chain-of-Custody Record

Client: CHD

Mailing Address:

Phone #:

email or Fax#: christine.Mathews@chd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

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

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: MF-16

Project #: 125 44708

Project Manager: Christine Mathews

Sampler:

On Ice: ☑ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): See Chain (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2210735	BTEX / MTBE / TMB's (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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	EPA 300.0 Chlorides
10/13/22	9:30	W	MW-1			001											
	10:30		MW-2			002											
	11:30		MW-3			003											
	12:30		MW-4			004											
	13:30		MW-5			005											
	14:30		MW-6			006											
	15:00		MW-7			007											
		1 per sample bottle	DUP			008											
	TMC 10/14/22		~~Trip Blank~~														

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
10/13/22	1800				10/13/22	1600
10/13/22	1900			~~Courier~~	10/14/22	7:15

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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 274243

CONDITIONS

Operator: REGENCY FIELD SERVICES LLC 8111 Westchester Drive Dallas, TX 75225	OGRID: 298751
	Action Number: 274243
	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 MF-16 Pipeline release: Content Satisfactory 1. Continue to conduct semi-annual groundwater monitoring for 2023 to monitor chloride. 2. Install four (4) additional groundwater monitoring wells as prescribed in report. 3. Submit the 2023 Annual groundwater monitoring report on or before April 1, 2024.	10/16/2023