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REVIEWED
By Mike Buchanan at 1:24 pm, Jul 02, 2024

Your ref: Incident Number nGRL09054362954
Our ref: 12603933-NMOCD-1

June 13, 2024

Review of the 2023 Annual Groundwater Monitoring Report for MF-16 Pipeline Release submitted on behalf of GHD: content satisfactory.
1. Proceed to install four (4) additional monitoring wells as proposed in the 2nd half of 2024. A postponement was necessary due to an agreement needed with the landowner.
2. Continue to sample on a semi-annual basis and return to a quarterly schedule when chloride is demonstrated to be below the human health standards in the WQCC.
3. Submit the 2024 annual report to OCD via online permitting by April 1, 2025.

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

2023 Annual Groundwater Monitoring Report
MF-16 Pipeline Release
ET Gathering & Processing LLC
Lea County, New Mexico
New Mexico Oil Conservation Division Remediation Case 1RP-2073
Incident Number nGRL0905436295

To whom it may concern:

On behalf of ET Gathering & Processing LLC (ET G&P) formerly ETC Texas Pipeline, Ltd. (ETC), GHD Services Inc. (GHD) is submitting the 2023 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 2023.

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

Regards,

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Project Manager

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NR/mss/1

Encl. 2023 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

2023 Annual Groundwater Monitoring Report

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

ET Gathering & Processing LLC

June 13, 2024

→ The Power of Commitment

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1. Introduction

This report presents the results of groundwater monitoring activities performed during 2023 by GHD Services Inc. (GHD) at the ET Gathering & Processing LLC (ET G&P), formerly ETC Texas Pipeline, Ltd., 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, **Figure 2**), 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 2009 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 any of 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. NMOCD requested the installation of 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, one in each

side gradient area, and one down gradient (southeast) of the plume. Due to delays in getting an executed access agreement with the landowner, drilling for these wells was temporarily postponed and rescheduled for the second half of 2024.

Semi-annual groundwater monitoring continued in 2023, the details and results of which are discussed in this report.

2. Groundwater Monitoring

GHD performed semi-annual groundwater monitoring events at the Site in May and November 2023. The monitoring program included monitoring well gauging and collecting groundwater samples from MW-1 through MW-7.

2.1 Monitoring Well Gauging

On May 29 and November 7, 2023, 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 2023, 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 November. Groundwater potentiometric surface maps are presented as **Figure 3** and **Figure 4**.

2.2 Groundwater Sampling

Following the gauging during each 2023 event and 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 monitoring 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**.

Following purging and confirmation of groundwater stabilization, groundwater samples were collected from MW-1 through MW-6 via dedicated polyethylene bailers. The samples were placed in laboratory-prepared sample containers, labeled, packed in a cooler with ice, and transported under chain-of-custody documentation to ALS Life Sciences Division, Environmental laboratory in Houston, Texas. All samples were analyzed for chloride via Environmental Protection Agency (EPA) Method 300.0.

MW-7 was gauged dry during both groundwater monitoring events and an insufficient amount of groundwater rebounded in the well; therefore a sample could not be collected. This has been a consistent scenario since 2020.

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 2023 are summarized in **Table 3** and the corresponding laboratory analytical reports are included in **Appendix B**. A chloride concentration map depicting concentrations for 2023 is presented as **Figure 5**. A summary of results is discussed below.

– Concentrations of chloride were detected in all six monitoring wells during both monitoring events; however, only the concentrations detected in monitoring wells MW-1, MW-4, MW-5, and MW-6 exceeded the NMWQCC standards.

3. Summary and Recommendations

3.1 Summary

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

– Concentrations of chloride are present in the groundwater at the Site that exceed of the NMWQCC standards.
– Concentrations of chloride appear to be stable or slightly increasing.
– Chloride impacts in groundwater at the Site do not appear to be delineated to the south, east, or west.
– NMOCD requested ET G&P install a minimum of four groundwater monitor wells around the Site. These proposed locations are shown on **Figure 6.**

3.2 Recommendations

Based on the results of the 2023 groundwater monitoring events and directive from NMOCD in May 2023, GHD recommends the following.

– Continue semi-annual groundwater monitoring for chloride in all monitoring wells at the Site.
– Install four groundwater monitoring wells (MW-8 through MW-11) to further delineate the chloride impacts in groundwater.

4. Scope and Limitations

This report has been prepared by GHD for ET Gathering & Processing LLC and may only be used and relied on by ET Gathering & Processing LLC for the purpose agreed between GHD and ET Gathering & Processing LLC.

GHD otherwise disclaims responsibility to any person other than ET Gathering & Processing LLC arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

Table 1

Summary of Groundwater Elevation Data
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

Monitor Well ID	Date Measured	Top of Casing (TOC) Elevation	Total Well Depth (ft below TOC)	Depth to Water (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-1	2/28/2013	3,425.53	48	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
	1/20/2015	3,425.40		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
	5/29/2023			37.47	3,387.93
	11/7/2023			37.56	3,387.84
MW-2	5/9/2013	3,426.07	43	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
	1/20/2015	3,425.98		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
	5/29/2023			37.55	3,388.43
	11/7/2023			37.63	3,388.35
MW-3	5/9/2013	3,425.16	44	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
	1/20/2015	3,425.06		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	3,389.10
	5/29/2023			36.96	3,388.10
	11/7/2023			37.04	3,388.02

Table 1

Summary of Groundwater Elevation Data
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

Monitor Well ID	Date Measured	Top of Casing (TOC) Elevation	Total Well Depth (ft below TOC)	Depth to Water (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-4	5/9/2013	3,424.91	49	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
	1/20/2015	3,424.81		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	3,388.75
	5/29/2023			37.28	3,387.53
	11/7/2023			37.36	3,387.45
MW-5	1/20/2015	3,423.44	49	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	3,389.61
	5/29/2023			36.40	3,387.04
	11/7/2023			36.51	3,386.93
MW-6	12/18/2015	3,423.78	43	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	3,389.51
	5/29/2023			36.47	3,387.31
	11/7/2023			36.59	3,387.19

Table 1

Summary of Groundwater Elevation Data
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

Monitor Well ID	Date Measured	Top of Casing (TOC) Elevation	Total Well Depth (ft below TOC)	Depth to Water (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-7	12/18/2015	3,421.42	38	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
	5/29/2023			37.52	3,383.90
	11/7/2023			37.62	3,383.80

Notes:
1) ft = feet.
2) AMSL = above mean sea level.
3) Light non-aqueous phase liquids have never been observed in the monitoring wells.
4) Monitoring wells were resurveyed in 2015.

Table 2

Summary of Groundwater Field Parameters
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

Sample ID	Date	Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Conductivity (mS/cm)
MW-1	7/15/2014	27.10	6.90	0.85	32.70	1,700.00
	10/30/2014	22.20	7.10	6.40	69.30	1,615.00
	1/20/2015	15.30	7.56	25.80	143.90	1,636.00
	4/16/2015	22.50	6.99	2.70	91.00	1,821.00
	12/18/2015	19.95	6.85	4.20	-13.10	3,385.00
	5/31/2016	20.90	6.99	2.14	-69.80	3,760.00
	12/8/2016	19.51	6.84	6.82	-222.90	3,146.00
	5/8/2017	20.27	7.45	1.60	-151.00	3,833.00
	11/14/2017	18.90	7.45	1.35	-51.80	3,567.00
	5/9/2018	19.92	6.95	--	-147.10	2,721.00
	11/7/2018	18.28	7.29	--	-120.40	2,692.00
	3/27/2019	18.88	6.88	2.80	-82.70	5,907.00
	9/18/2019	18.71	6.55	--	-129.30	--
	4/22/2020	20.90	7.67	2.03	-66.90	2,160.00
	11/18/2020	21.50	7.22	1.70	-19.50	2,324.00
	5/5/2021	21.83	7.37	0.58	-41.20	123,259.00
	11/23/2021	21.02	7.13	0.96	-36.40	2,620.00
	5/25/2022	21.26	7.24	1.18	166.80	22.16
	10/13/2022	20.90	7.46	2.06	149.90	2,320.00
	5/29/2023	21.95	6.85	1.78	128.32	4,029.29
	11/7/2023	22.93	8.18	2.54	--	1,705.96
MW-2	7/15/2014	22.60	7.04	6.61	27.80	1,356.00
	10/30/2014	21.80	7.84	75.60	75.50	1,510.00
	1/20/2015	14.90	7.73	24.30	162.30	1,437.00
	4/16/2015	22.00	7.30	16.30	112.20	1,435.00
	12/18/2015	19.49	7.47	2.11	-150.00	1,543.00
	5/31/2016	20.50	7.14	1.70	60.50	1,290.00
	12/8/2016	19.04	7.19	2.67	-114.70	1,301.00
	5/8/2017	19.82	6.85	1.07	-68.40	1,345.00
	11/14/2017	18.57	7.45	1.07	-2.50	1,682.00
	5/9/2018	19.50	6.92	--	-62.00	1,475.00
	11/7/2018	17.96	7.14	--	-45.90	1,523.00
	3/27/2019	18.92	6.78	2.61	-11.20	2,878.00
	9/18/2019	18.23	6.45	--	-130.20	--
	4/22/2020	20.20	7.56	0.54	-36.30	1,440.00
	11/18/2020	20.88	7.21	1.20	59.90	1,475.00
	5/5/2021	21.30	7.45	0.98	30.20	65,185.00
	11/23/2021	20.30	7.28	1.63	9.10	1,303.00
	5/25/2022	21.00	7.36	1.83	197.50	1,084.00
	10/13/2022	20.39	7.62	2.07	167.30	1,238.00
	5/29/2023	21.83	7.27	1.51	127.84	1,208.80
	11/7/2023	21.18	7.77	2.30	--	1,242.98
MW-3	7/15/2014	22.60	7.02	3.58	25.80	1,832.00
	10/30/2014	22.50	7.25	20.30	65.30	1,600.00
	1/20/2015	16.80	7.54	18.60	150.50	1,823.00
	4/16/2015	23.50	7.15	10.00	119.30	1,714.00
	12/18/2015	19.59	7.43	2.90	-101.60	2,266.00
	5/31/2016	20.70	6.84	1.80	60.50	1,840.00
	12/8/2016	19.03	7.21	1.78	-115.20	1,734.00
	5/8/2017	19.49	6.19	1.58	-26.70	1,695.00
	11/14/2017	18.12	7.57	1.63	18.40	2,102.00
	5/9/2018	18.99	7.11	--	-52.00	1,675.00
	11/7/2018	17.80	7.37	--	-45.10	1,703.00
	3/27/2019	18.13	7.01	2.91	-4.30	3,098.00
	9/18/2019	17.92	6.70	--	-127.20	--
	4/22/2020	19.80	7.66	3.50	68.80	1,570.00
	11/18/2020	20.44	7.30	1.83	93.00	1,567.00
	5/6/2021	20.65	7.62	1.41	58.80	68,198.00
	11/23/2021	20.44	7.41	1.31	11.90	1,397.00
	5/25/2022	20.93	7.39	1.50	198.60	1,184.00
	10/13/2022	20.15	7.59	1.58	168.10	1,408.00
	5/29/2023	21.54	7.34	0.79	121.79	1,320.96
	11/7/2023	22.65	8.20	3.28	--	1,245.03

Table 2

Summary of Groundwater Field Parameters
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

Sample ID	Date	Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Conductivity (mS/cm)
MW-4	7/15/2014	22.80	6.93	3.70	65.20	7,308.00
	10/30/2014	22.40	6.94	2.80	76.10	3,010.00
	1/20/2015	19.10	7.34	14.70	160.30	8,275.00
	4/16/2015	21.70	6.92	3.30	98.10	3,080.00
	12/18/2015	19.79	7.06	2.31	-123.20	6,557.00
	5/31/2016	20.60	6.93	1.58	-50.30	5,590.00
	12/8/2016	19.07	7.10	2.80	-209.30	5,923.00
	5/8/2017	19.68	6.75	0.86	-139.30	7,987.00
	11/14/2017	18.59	7.36	1.71	0.10	6,485.00
	5/9/2018	19.31	6.98	--	-100.91	4,500.00
	11/7/2018	18.13	7.04	--	-66.70	7,469.00
	3/27/2019	18.72	6.69	2.56	-32.90	12,210.00
	9/18/2019	18.41	6.55	--	-121.60	--
	12/6/2019	20.21	7.19	2.68	-312.20	4,386.00
	4/22/2020	20.40	7.54	0.42	2.30	4,620.00
	11/18/2020	21.21	7.07	1.01	89.00	4,360.00
	5/6/2021	21.26	7.32	0.34	31.00	203,720.00
	11/23/2021	21.06	7.01	1.04	15.70	4,853.00
	5/25/2022	21.50	6.99	1.35	207.00	3,490.00
	10/13/2022	20.71	7.07	1.30	182.00	4,937.00
	5/29/2023	21.37	6.94	1.47	135.03	4,182.35
	11/7/2023	21.30	7.75	3.24	--	3,105.30
MW-5	1/20/2015	20.10	7.31	10.00	148.90	6,888.00
	4/16/2015	21.40	6.98	5.70	90.50	6,405.00
	12/18/2015	19.06	7.10	3.37	-134.10	6,631.00
	5/31/2016	19.90	6.94	1.88	76.70	5,760.00
	12/8/2016	18.78	7.13	1.96	-79.40	5,690.00
	5/8/2017	19.05	6.70	1.41	-86.70	6,303.00
	11/14/2017	17.82	7.20	2.04	37.90	7,041.00
	5/9/2018	17.99	6.85	--	-100.20	4,629.00
	11/7/2018	17.10	7.08	--	-55.60	6,934.00
	3/27/2019	17.98	6.75	3.69	-16.00	11,522.00
	9/18/2019	17.62	6.46	--	-120.10	--
	12/6/2019	19.23	7.11	1.88	-331.40	5,638.00
	4/22/2020	19.90	7.54	0.91	89.40	5,610.00
	11/18/2020	20.30	7.00	0.80	116.00	5,450.00
	5/6/2021	20.89	7.22	0.20	43.00	229,595.00
	11/23/2021	20.41	6.98	1.37	28.80	4,709.00
	5/25/2022	21.10	6.94	1.35	204.00	3,969.00
	10/13/2022	20.13	7.09	1.85	190.80	4,332.00
	5/29/2023	20.85	8.84	1.51	141.12	4,261.28
	11/7/2023	21.78	7.67	3.40	--	3,598.59
MW-6	12/18/2015	18.79	7.18	6.64	-112.20	4,958.00
	6/1/2016	20.50	6.84	1.51	93.80	4,750.00
	12/8/2016	19.05	7.20	6.02	-64.30	4,620.00
	5/8/2017	19.44	7.10	1.90	-142.30	4,658.00
	11/14/2017	18.19	6.98	1.37	28.70	5,574.00
	5/9/2018	19.72	7.12	--	-64.80	4,622.00
	11/7/2018	17.09	7.01	--	-47.40	4,979.00
	3/27/2019	18.51	6.74	3.02	-10.80	8,556.00
	9/18/2019	18.09	6.45	--	-124.30	--
	12/6/2019	19.51	7.10	2.08	-308.70	4,784.00
	4/22/2020	20.30	7.67	0.91	115.00	4,750.00
	11/18/2020	20.77	7.05	0.80	55.00	5,375.00
	5/6/2021	21.11	7.26	0.20	50.90	240,842.00
	11/23/2021	20.57	6.98	1.36	31.00	5,025.00
	5/25/2022	21.43	7.08	0.87	222.70	4,333.00
	10/13/2022	20.15	7.08	2.22	199.80	4,940.00
	5/29/2023	20.93	6.83	2.18	139.54	4,903.61
	11/7/2023	23.36	7.55	5.63	--	4,391.66

Table 2

Summary of Groundwater Field Parameters
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

Sample ID	Date	Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Conductivity (mS/cm)
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	6.13	-5.80	2,659.00
	5/8/2017	19.93	7.27	--	-56.90	2,758.00
	11/14/2017	Insufficient volume to collect parameters				
	5/9/2018	19.35	7.30	--	-40.21	3,021.00
	11/7/2018	14.92	7.48	--	-26.10	107.00
	3/27/2019	18.23	7.14	8.12	52.60	5,957.00
	9/18/2019	18.08	7.62	--	-86.30	--
	4/22/2020	20.30	8.29	6.85	157.70	3,410.00
	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				
	5/29/2023	Insufficient volume to collect parameters				
	11/7/2023	Insufficient volume to collect parameters				

Notes:
1) °C = degrees Celsius.
2) mg/L = milligrams per liter.
3) mV = millivolts.
4) mS/cm = microsiemens per centimeter.

Table 3

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
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	250.00
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**
	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**
	5/29/2023	--	--	--	--	**671**
	11/7/2023	--	--	--	--	**630**
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
	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
	5/29/2023	--	--	--	--	173
	11/7/2023	--	--	--	--	168

Table 3

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
NMOCD 1RP-2073

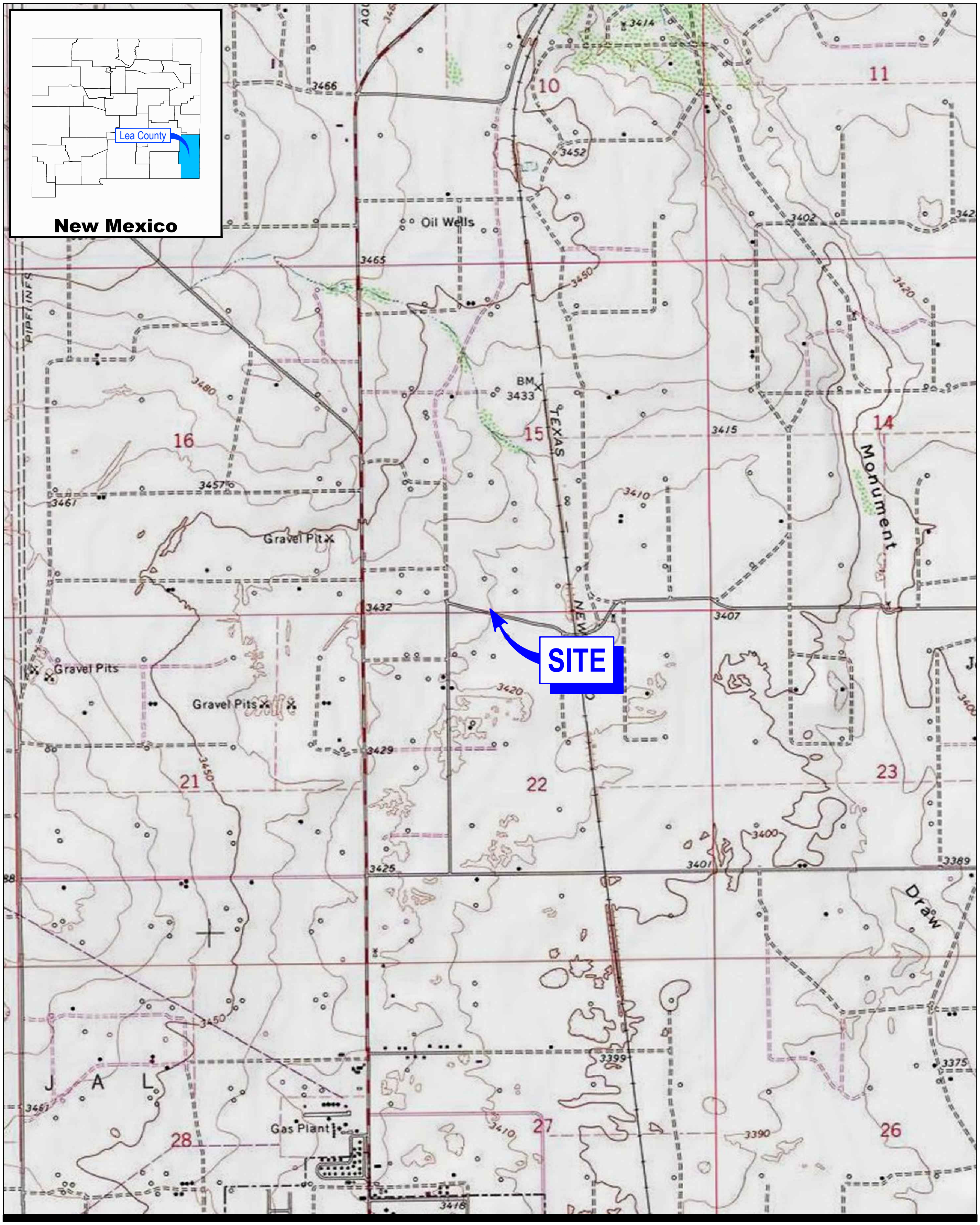
Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
NMWQCC Groundwater Quality Standards		0.01	1.00	0.70	0.62	250.00
MW-3	5/9/2013	<0.00100	<0.00200	<0.00100	<0.00200	**392**
	9/3/2013	<0.00100	<0.00200	<0.00100	<0.00200	191
	2/28/2014	<0.00100	<0.00200	<0.00100	<0.00100	**424**
	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
	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
	5/29/2023	--	--	--	--	193
	11/7/2023	--	--	--	--	213
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**
	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**
	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**
	5/29/2023	--	--	--	--	**1,030**
	11/7/2023	--	--	--	--	**1,220**

Table 3

Summary of Groundwater Analytical Results
MF 16-Inch Pipeline
Lea County, New Mexico
ET Gathering Processing LLC
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	250.00
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**
	12/8/2016	--	--	--	--	**2,000**
	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**
	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**
	5/29/2023	--	--	--	--	**1,360**
	11/7/2023	--	--	--	--	**1,310**
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**
	5/29/2023	--	--	--	--	**1,680**
	11/7/2023	--	--	--	--	**1,480**
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) TDS = total dissolved solids.
4) < - Analyte was not detected at or above the laboratory reported detection limit.
5) -- = not analyzed.
6) Bolded/shaded results exceed their respective NMWQCC standards.



0 1000 2000 ft

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

N

ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE
NMOCD 1RP-2073

Project No. 12603933
Date January 2024

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT002\12603933-GHD-00-00-RPT-EN-D101_DL-002.dwg

Data Source: USGS 7.5 Minute Quad "Eunice and Eunice NE, New Mexico"
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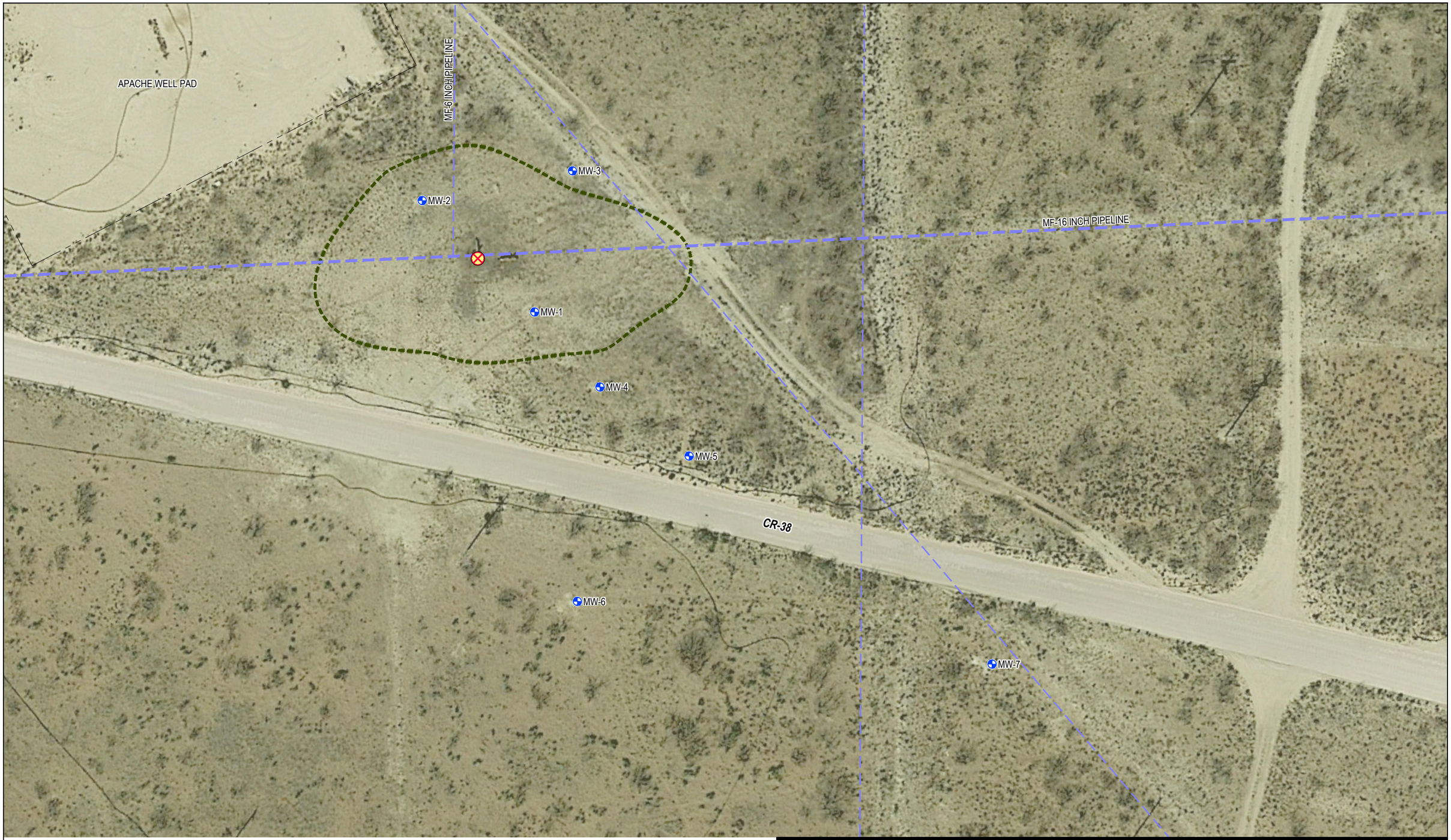

LEGEND

- 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

ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE
NMOCD 1RP-2073

SITE DETAILS MAP

Project No. **12603933**
Date **January 2024**

FIGURE 2

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT002\12603933-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 12 January 2024 1:40 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 = 0.75 ft)
- 3387.31 ELEVATION OF GROUNDWATER (FT AMSL)
- DIRECTION OF GROUNDWATER FLOW

0 25 50 ft

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

N

GHD

ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE
NMOCD 1RP-2073

POTENTIOMETRIC SURFACE MAP (MAY 2023)

Project No. **12603933**
Date **January 2024**

FIGURE 3

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT002\12603933-GHD-00-00-RPT-EN-D101_DL-002.dwg
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Data Source: Image © 2023 Google - Imagery Date: February 20, 2019
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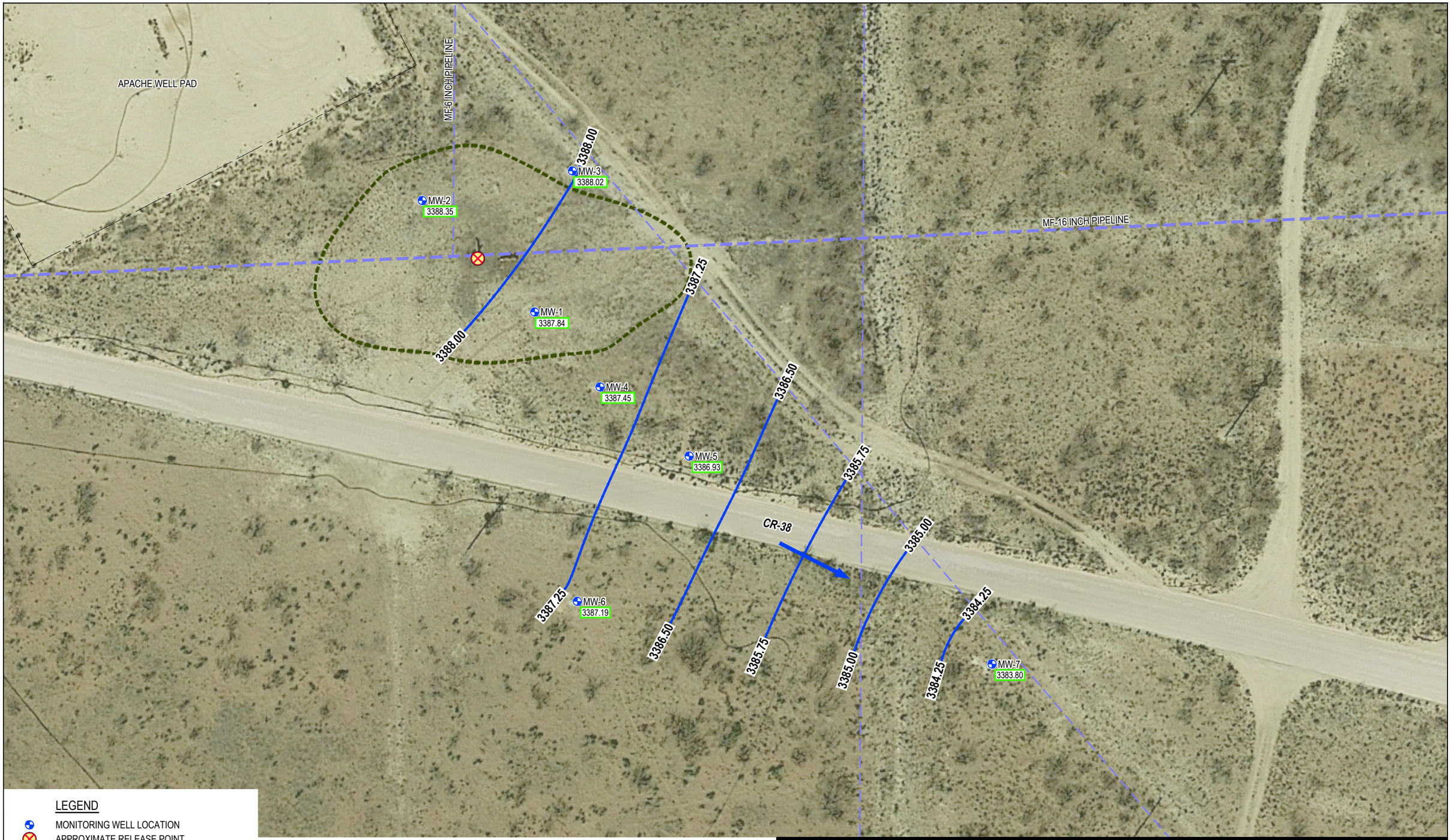


LEGEND

- MONITORING WELL LOCATION
- APPROXIMATE RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 0.75 ft)
- 3387.19 ELEVATION OF GROUNDWATER (FT AMSL)
- DIRECTION OF GROUNDWATER FLOW

0 25 50 ft

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

N

GHD

ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE
NMOCD 1RP-2073

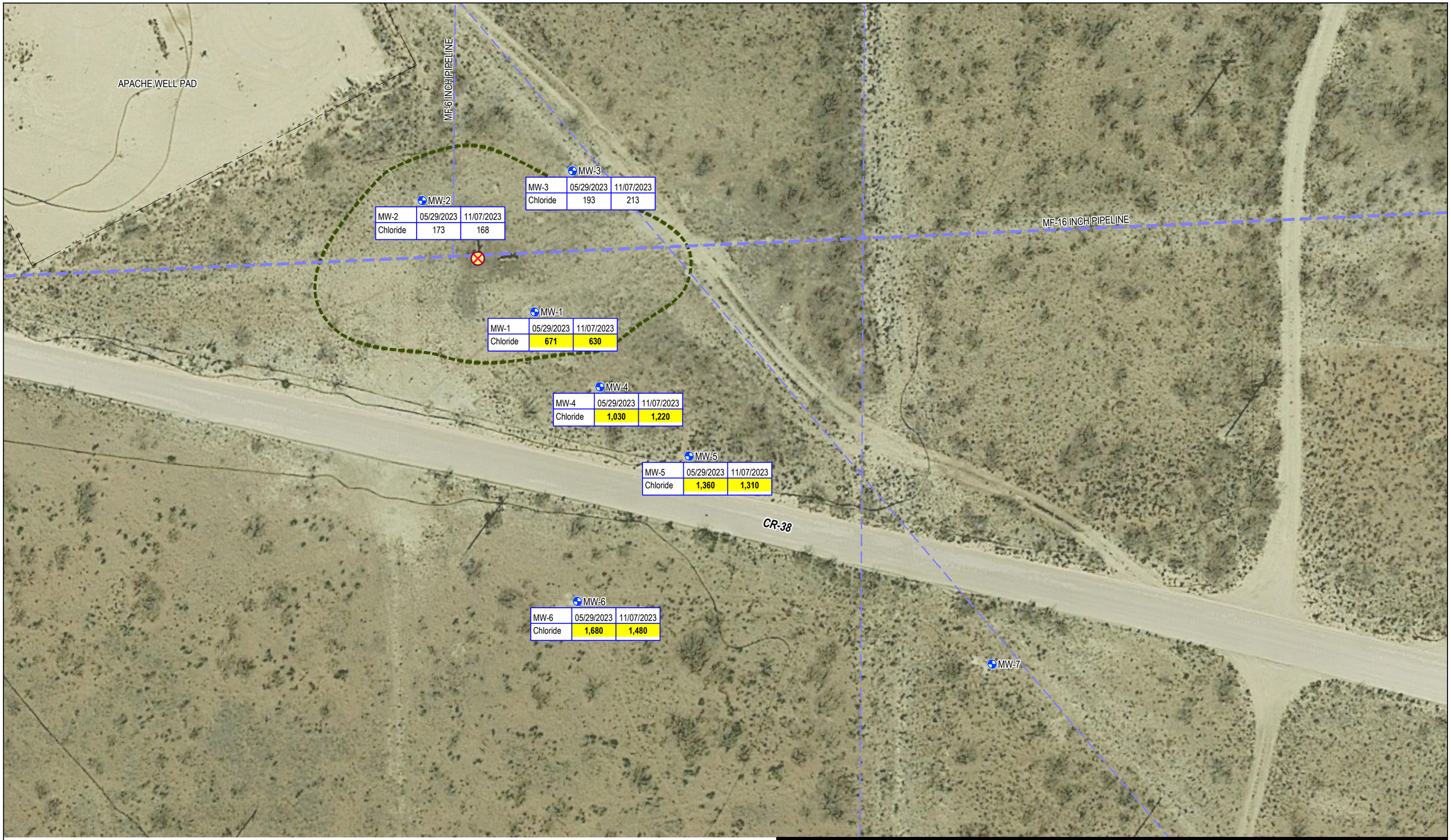
POTENTIOMETRIC SURFACE MAP (NOVEMBER 2023)

Project No. **12603933**
Date **January 2024**

FIGURE 4

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT002\12603933-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 12 January 2024 1:37 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

NOTES:

1. GROUNDWATER CONCENTRATION PRESENTED IN MILLIGRAMS PER LITER (mg/L).
2. SHADED CELLS INDICATE EXCEEDANCE OF THE RESPECTIVE NMWQCC STANDARD.
3. MW-7 WAS NOT SAMPLED DUE TO AN INSUFFICIENT AMOUNT OF GROUNDWATER.

0 25 50 ft

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

N

GHD

ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE
NMOCD 1RP-2073

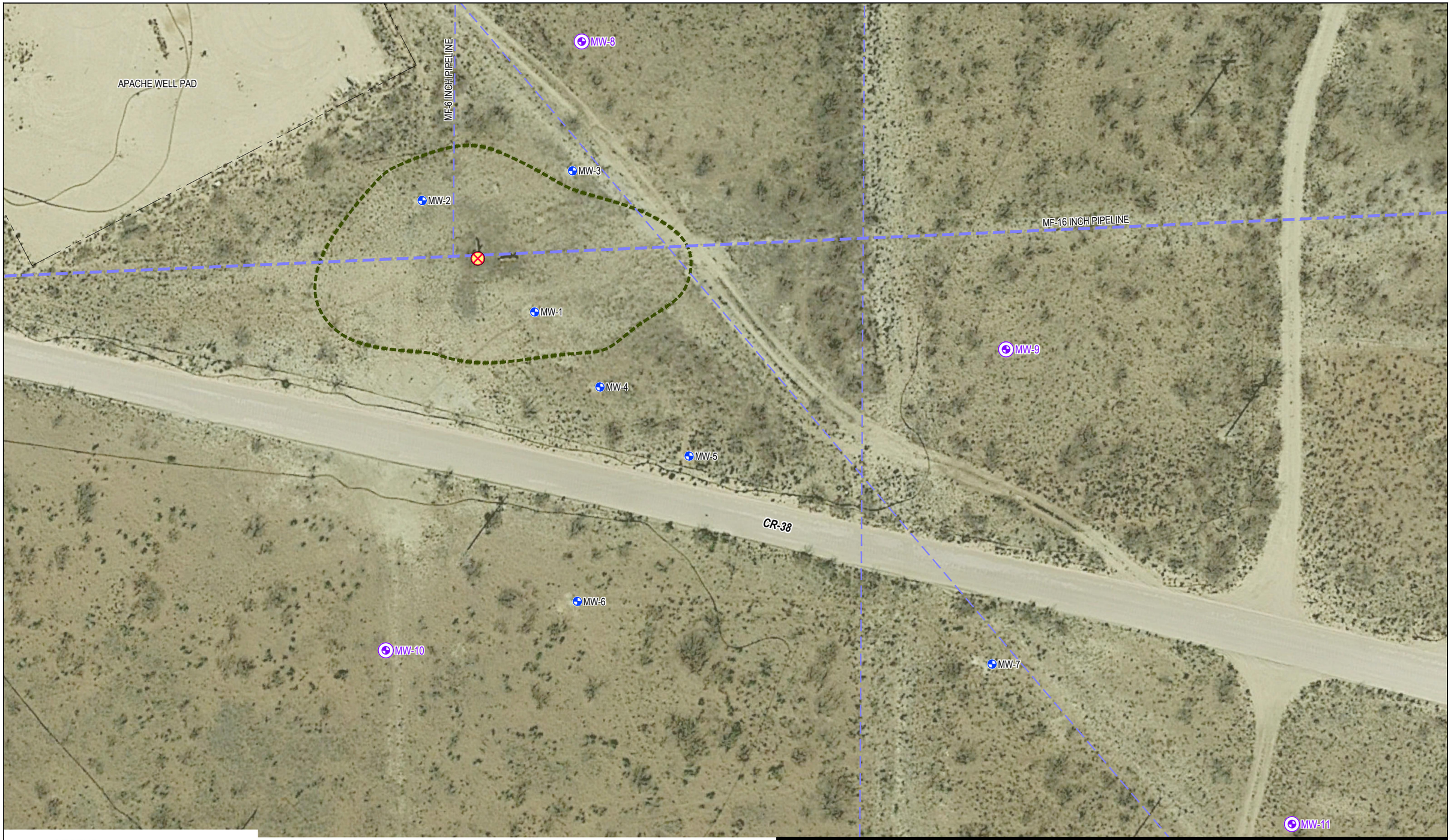
CHLORIDE CONCENTRATIONS IN GROUNDWATER MAP (2023)

Project No. **12603933**
Date **June 2024**

FIGURE 5

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT002\12603933-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 13 June 2024 10:25 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

ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
MF-16 INCH PIPELINE
NMOCD 1RP-2073

PROPOSED MONITORING WELL LOCATION MAP

Project No. **12603933**
Date **March 2024**

FIGURE 6

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603933\Digital_Design\ACAD\Figures\RPT002\12603933-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 04 March 2024 11:26 AM

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

Appendices

Appendix A

Excerpt from NMOCD Response to 2021 Annual Groundwater Monitoring Report

REVIEWED
By Nelson Velez at 7:49 am, May 24, 2023

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

Appendix B

Laboratory Analytical Reports

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

June 16, 2023

Blair Owen
GHD
11451 Katy Fwy
Suite 400
Houston, TX 77079

Work Order: **HS23060072**

Laboratory Results for: **12630933 - MF-16 2023**

Dear Blair Owen,

ALS Environmental received 8 sample(s) on Jun 01, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Work Order: HS23060072

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23060072-01	MW-2-20230529	GW		29-May-2023 17:30	01-Jun-2023 12:20	☐
HS23060072-02	MW-3-20230529	GW		29-May-2023 17:40	01-Jun-2023 12:20	☐
HS23060072-03	MW-1-20230529	GW		29-May-2023 17:55	01-Jun-2023 12:20	☐
HS23060072-04	MW-4-20230529	GW		29-May-2023 18:20	01-Jun-2023 12:20	☐
HS23060072-05	MW-5-20230529	GW		29-May-2023 18:40	01-Jun-2023 12:20	☐
HS23060072-06	MW-6-20230529	GW		29-May-2023 19:00	01-Jun-2023 12:20	☐
HS23060072-07	Dup 01	GW		29-May-2023 00:00	01-Jun-2023 12:20	☐
HS23060072-08	.	GW		29-May-2023 00:00	01-Jun-2023 12:20	☑

ALS Houston, US Date: 16-Jun-23

Client: GHD **CASE NARRATIVE**
Project: 12630933 - MF-16 2023
Work Order: HS23060072

Work Order Comments

- Due to an unexpected power outage in the area surrounding the laboratory, sample storage requirements were outside of temperature range for approximately 24 hours. As of 2:00 pm, Monday June 12th all temperatures have been verified within specification.

WetChemistry by Method E300

Batch ID: R437780

Sample ID: HS23060089-03MS

- MS and MSD are for an unrelated sample (Chloride)

Sample ID: HS23060089-04MS

- MS and MSD are for an unrelated sample (Chloride)

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-2-20230529
Collection Date: 29-May-2023 17:30

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-01
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**173**		**2.50**	**mg/L**	5	13-Jun-2023 13:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-3-20230529
Collection Date: 29-May-2023 17:40

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-02
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**193**		**2.50**	**mg/L**	5	13-Jun-2023 13:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-1-20230529
Collection Date: 29-May-2023 17:55

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-03
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**671**		**10.0**	**mg/L**	20	13-Jun-2023 13:46

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-4-20230529
Collection Date: 29-May-2023 18:20

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-04
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,030**		**10.0**	**mg/L**	20	13-Jun-2023 13:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-5-20230529
Collection Date: 29-May-2023 18:40

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-05
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,360**		**10.0**	**mg/L**	20	13-Jun-2023 13:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-6-20230529
Collection Date: 29-May-2023 19:00

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-06
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,680**		**25.0**	**mg/L**	50	13-Jun-2023 14:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: Dup 01
Collection Date: 29-May-2023 00:00

ANALYTICAL REPORT
WorkOrder:HS23060072
Lab ID:HS23060072-07
Matrix:GW

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,720**		**25.0**	**mg/L**	50	13-Jun-2023 14:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
WorkOrder: HS23060072

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R437780 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** GW	
HS23060072-01	MW-2-20230529	29 May 2023 17:30			13 Jun 2023 13:34	5
HS23060072-02	MW-3-20230529	29 May 2023 17:40			13 Jun 2023 13:40	5
HS23060072-03	MW-1-20230529	29 May 2023 17:55			13 Jun 2023 13:46	20
HS23060072-04	MW-4-20230529	29 May 2023 18:20			13 Jun 2023 13:51	20
HS23060072-05	MW-5-20230529	29 May 2023 18:40			13 Jun 2023 13:57	20
HS23060072-06	MW-6-20230529	29 May 2023 19:00			13 Jun 2023 14:03	50
HS23060072-07	Dup 01	29 May 2023 00:00			13 Jun 2023 14:32	50

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
WorkOrder: HS23060072

QC BATCH REPORT

Batch ID: R437780 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **13-Jun-2023 11:17**
Client ID: Run ID: **ICS-Integrion_437780** SeqNo: **7360257** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **13-Jun-2023 11:23**
Client ID: Run ID: **ICS-Integrion_437780** SeqNo: **7360258** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	21.2	0.500	20	0	106	90 - 110				

MS Sample ID: **HS23060089-04MS** Units: **mg/L** Analysis Date: **13-Jun-2023 12:36**
Client ID: Run ID: **ICS-Integrion_437780** SeqNo: **7360265** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	56.41	0.500	10	48.48	79.3	80 - 120				SO

MS Sample ID: **HS23060089-03MS** Units: **mg/L** Analysis Date: **13-Jun-2023 12:18**
Client ID: Run ID: **ICS-Integrion_437780** SeqNo: **7360262** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	71.39	0.500	10	64.37	70.2	80 - 120				SO

MSD Sample ID: **HS23060089-04MSD** Units: **mg/L** Analysis Date: **13-Jun-2023 12:42**
Client ID: Run ID: **ICS-Integrion_437780** SeqNo: **7360266** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	56.34	0.500	10	48.48	78.5	80 - 120	56.41	0.133	20	SO

MSD Sample ID: **HS23060089-03MSD** Units: **mg/L** Analysis Date: **13-Jun-2023 12:24**
Client ID: Run ID: **ICS-Integrion_437780** SeqNo: **7360263** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	70.92	0.500	10	64.37	65.5	80 - 120	71.39	0.658	20	SO

The following samples were analyzed in this batch:

HS23060072-01	HS23060072-02	HS23060072-03	HS23060072-04
HS23060072-05	HS23060072-06	HS23060072-07	

ALS Houston, US Date: 16-Jun-23

Client: GHD
Project: 12630933 - MF-16 2023
WorkOrder: **HS23060072**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-37	30-Jun-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2023	31-Dec-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US Date: 16-Jun-23

Sample Receipt Checklist

Work Order ID: HS23060072 **Date/Time Received:** 01-Jun-2023 12:20

Client Name: GHDHouston **Received by:** Malcolm Burleson

Completed By:	/S/ Malcolm Burleson	01-Jun-2023 16:37	**Reviewed by:**	/S/ James Guin	15-Jun-2023 19:18
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **water** Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:241368
Samplers name present on COC?	Yes ☐	No ☑	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	0.7uc 0.6c	ir31	
Cooler(s)/Kit(s):	47321		
Date/Time sample(s) sent to storage:	06012023		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes: One extra container received not marked on COC and the container label is blank. Logged in bottle with no analysis.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Form

Page _____ of _____

COC ID: 241368

HS23060072

GHD

12630933 - MF-16 2023

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	E-19001-GL-21300127 Stacy Boul	Project Name	12630933 - MF-16 2023	A	300_W (300 Cl) [120ml P Neat]
Work Order		Project Number	12630933	B	
Company Name	GHD	Bill To Company	Energy Transfer	C	
Send Report To	Blair Owen	Invoice Attn	Stacy Boultinghouse	D	
Address	11451 Katy Fwy Suite 400	Address	P.O Box 132400	E F	
City/State/Zip	Houston, TX 77079	City/State/Zip	Dallas TX 75313	G	
Phone	(713) 734-3090	Phone		H	
Fax	(713) 734-3391	Fax		I	
e-Mail Address	blair.owen@ghd.com	e-Mail Address	Stacy.Boultinghouse@energytransfer.com		

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-2-20230529	5/29/23	1730	GW	8	1	X										
2	MW-3-20230529	5/29/23	1740	GW	8	1	X										
3	MW-1-20230529	5/29/23	1755	GW	8	1	X										
4	MW-4-20230529	5/29/23	1820	GW	8	1	X										
5	MW-5-20230529	5/29/23	1840	GW	8	1	X										
6	MW-6-20230529	5/29/23	1900	GW	8	1	X										
7	~~MW-7-20230529~~	~~5/29/23~~				1	X										
8	DUP01	—	—	GW	8	1	X										
9																	
10																	

Sampler(s) Please Print & Sign

Shipment Method

Required Turnaround Time: (Check Box) ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other _____

Results Due Date:

Relinquished by:	Date: 5/29/23	Time: 1000	Received by:	Notes: ETC MF-16 Lea County NM	
Relinquished by:	Date: 5/30/23	Time:	Received by (Laboratory): 06/1/2023 1220	Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	47321	IR3 0.7 -0.1

QC Package: (Check One Box Below)

- ☒ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other
- ☐ TRRP Checklist
- ☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

November 21, 2023

Blair Owen
GHD
11451 Katy Fwy
Suite 400
Houston, TX 77079

Work Order: **HS23110643**

Laboratory Results for: **12630933 - MF-16 2023**

Dear Blair Owen,

ALS Environmental received 7 sample(s) on Nov 09, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Work Order: HS23110643

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23110643-01	MW-1-20231107	Groundwater		07-Nov-2023 14:25	09-Nov-2023 09:40	☐
HS23110643-02	MW-2-20231107	Groundwater		07-Nov-2023 14:30	09-Nov-2023 09:40	☐
HS23110643-03	MW-3-20231107	Groundwater		07-Nov-2023 14:50	09-Nov-2023 09:40	☐
HS23110643-04	MW-4-20231107	Groundwater		07-Nov-2023 14:55	09-Nov-2023 09:40	☐
HS23110643-05	MW-5-20231107	Groundwater		07-Nov-2023 15:05	09-Nov-2023 09:40	☐
HS23110643-06	MW-6-20231107	Groundwater		07-Nov-2023 15:15	09-Nov-2023 09:40	☐
HS23110643-07	DUP-01	Groundwater		07-Nov-2023 00:00	09-Nov-2023 09:40	☐

ALS Houston, US Date: 21-Nov-23

Client: GHD **CASE NARRATIVE**
Project: 12630933 - MF-16 2023
Work Order: HS23110643

WetChemistry by Method E300

Batch ID: R452331

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-1-20231107
Collection Date: 07-Nov-2023 14:25

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**630**		**5.00**	**mg/L**	10	20-Nov-2023 11:25

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-2-20231107
Collection Date: 07-Nov-2023 14:30

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**168**		**2.50**	**mg/L**	5	20-Nov-2023 11:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-3-20231107
Collection Date: 07-Nov-2023 14:50

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**213**		**2.50**	**mg/L**	5	20-Nov-2023 12:36

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-4-20231107
Collection Date: 07-Nov-2023 14:55

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,220**		**25.0**	**mg/L**	50	20-Nov-2023 12:42

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-5-20231107
Collection Date: 07-Nov-2023 15:05

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,310**		**25.0**	**mg/L**	50	20-Nov-2023 12:48

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: MW-6-20231107
Collection Date: 07-Nov-2023 15:15

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,480**		**25.0**	**mg/L**	50	20-Nov-2023 12:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
Sample ID: DUP-01
Collection Date: 07-Nov-2023 00:00

ANALYTICAL REPORT
WorkOrder:HS23110643
Lab ID:HS23110643-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**1,590**		**25.0**	**mg/L**	50	20-Nov-2023 13:24

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
WorkOrder: HS23110643

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R452331 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Groundwater	
HS23110643-01	MW-1-20231107	07 Nov 2023 14:25			20 Nov 2023 11:25	10
HS23110643-02	MW-2-20231107	07 Nov 2023 14:30			20 Nov 2023 11:31	5
HS23110643-03	MW-3-20231107	07 Nov 2023 14:50			20 Nov 2023 12:36	5
HS23110643-04	MW-4-20231107	07 Nov 2023 14:55			20 Nov 2023 12:42	50
HS23110643-05	MW-5-20231107	07 Nov 2023 15:05			20 Nov 2023 12:48	50
HS23110643-06	MW-6-20231107	07 Nov 2023 15:15			20 Nov 2023 12:54	50
HS23110643-07	DUP-01	07 Nov 2023 00:00			20 Nov 2023 13:24	50

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
WorkOrder: HS23110643

QC BATCH REPORT

Batch ID: R452331 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **20-Nov-2023 09:56**
Client ID: Run ID: **ICS-Integrion_452331** SeqNo: **7685851** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **20-Nov-2023 10:07**
Client ID: Run ID: **ICS-Integrion_452331** SeqNo: **7685852** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.52	0.500	20	0	103	90 - 110				

MS Sample ID: **HS23110663-03MS** Units: **mg/L** Analysis Date: **20-Nov-2023 12:24**
Client ID: Run ID: **ICS-Integrion_452331** SeqNo: **7685867** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	60.61	0.500	10	50.74	98.7	80 - 120				O

MS Sample ID: **HS23110663-02MS** Units: **mg/L** Analysis Date: **20-Nov-2023 12:06**
Client ID: Run ID: **ICS-Integrion_452331** SeqNo: **7685864** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	69.05	0.500	10	59.22	98.4	80 - 120				O

MSD Sample ID: **HS23110663-03MSD** Units: **mg/L** Analysis Date: **20-Nov-2023 12:30**
Client ID: Run ID: **ICS-Integrion_452331** SeqNo: **7685868** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	60.56	0.500	10	50.74	98.2	80 - 120	60.61	0.0759	20	O

MSD Sample ID: **HS23110663-02MSD** Units: **mg/L** Analysis Date: **20-Nov-2023 12:12**
Client ID: Run ID: **ICS-Integrion_452331** SeqNo: **7685865** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	69.2	0.500	10	59.22	99.8	80 - 120	69.05	0.21	20	O

The following samples were analyzed in this batch:

HS23110643-01	HS23110643-02	HS23110643-03	HS23110643-04
HS23110643-05	HS23110643-06	HS23110643-07	

ALS Houston, US Date: 21-Nov-23

Client: GHD
Project: 12630933 - MF-16 2023
WorkOrder: **HS23110643**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

ALS Houston, US Date: 21-Nov-23

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2023-140	31-Aug-2024
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 21-Nov-23

Sample Receipt Checklist

Work Order ID: HS23110643 **Date/Time Received:** 09-Nov-2023 09:40

Client Name: GHDHouston **Received by:** Malcolm Burleson

Completed By: /S/ Corey Grandits (eSignature) 09-Nov-2023 18:03 (Date/Time) **Reviewed by:** /S/ James Guin (eSignature) 10-Nov-2023 08:27 (Date/Time)

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:307589
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.2UC/3.1C	IR31	
Cooler(s)/Kit(s):	47676		
Date/Time sample(s) sent to storage:	11/9/23		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
Spring City, PA +1 610 948 4903
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
York, PA +1 717 505 5280

Chain of Custody Form

Page 1 of 1

COC ID: 307589

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	E-19001-GL-21300127 Stacy Boul	Project Name	12630933 - MF-16 2023	A	300_W (300 Cl) [120ml P Neat]
Work Order		Project Number	12630933	B	
Company Name	GHD	Bill To Company	Energy Transfer	C	
Send Report To	Blair Owen	Invoice Attn	Stacy Boultinghouse	D	
Address	11451 Katy Fwy Suite 400	Address	P.O Box 132400	E F	
City/State/Zip	Houston, TX 77079	City/State/Zip	Dallas TX 75313	G	
Phone	(713) 734-3090	Phone		H	
Fax	(713) 734-3391	Fax		I	
e-Mail Address	blair.owen@ghd.com	e-Mail Address	Stacy.Boultinghouse@energytransfer.com	J	

HS23110643
GHD
12630933 - MF-16 2023

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	[illegible]			GW	8	1	X										
2	MW-1-20231107	11/7	14:25	GW	8	1	X										
3	MW-2-20231107	11/7	14:30	GW	8	1	X										
4	MW-3-20231107	11/7	14:50	GW	8	1	X										
5	MW-4-20231107	11/7	14:55	GW	8	1	X										
6	MW-5-20231107	11/7	15:05	GW	8	1	X										
7	MW-6-20231107	11/7	15:15	GW	8	1	X										
8	DUP-01	11/7		GW	8	1	X										
9																	
10																	

Sampler(s) Please Print & Sign: Hunter Johnson

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) [X] STD 10 Wk Days [ ] 5 Wk Days [ ] 2 Wk Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Hunter Johnson	11/7	16:25	
Relinquished by:	Date:	Time:	Received by (Laboratory): 11092023 0940
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

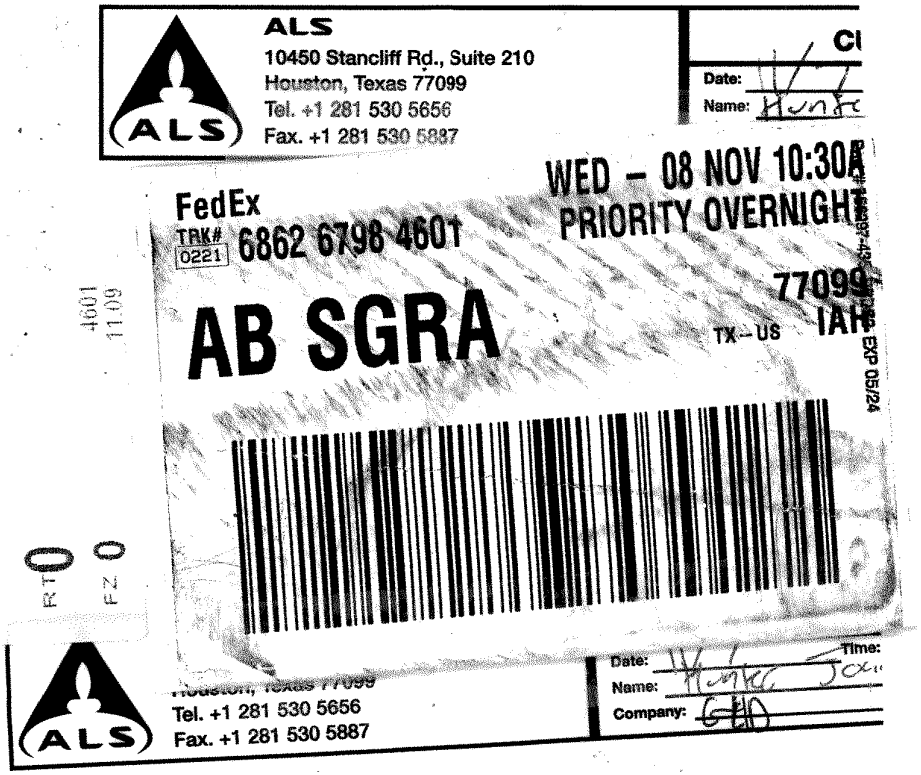
Notes: ETC MF-16 Lea County NM

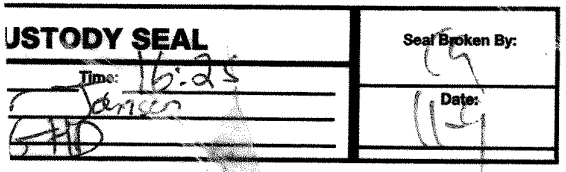
Cooler ID	Cooler Temp.
47676	2.2 3.1 3.2 -0.1

QC Package: (Check One Box Below)
[X] Level II Std QC
[ ] Level III Std QC/Raw Data
[ ] Level IV SW846/CLP
[ ] Other
[ ] TRRP Checklist
[ ] TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.





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 354095

CONDITIONS

Operator: ETC Texas Pipeline, Ltd. 8111 Westchester Drive Dallas, TX 75225	OGRID: 371183
	Action Number: 354095
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for MF-16 Pipeline Release submitted on behalf of GHD: content satisfactory. 1. Proceed to install four (4) additional monitoring wells as proposed in the 2nd half of 2024. A postponement was necessary due to an agreement needed with the landowner. 2. Continue to sample on a semi-annual basis and return to a quarterly schedule when chloride is demonstrated to be below the human health standards in the WQCC. 3. Submit the 2024 annual report to OCD via online permitting by April 1, 2025.	7/2/2024