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Your Ref.: Incident Number nGRL1210048391
Our Ref.: 12621862-NMOCD-1

REVIEWED

By Mike Buchanan at 1:33 pm, Feb 11, 2025

July 01, 2024

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
Brahamey Gathering System 8 Inch Pipeline
Centurion Pipeline, LP
Lea County, New Mexico
New Mexico Oil Conservation Division Permit 1RP-2794
Incident Number nGRL1210048391

To whom it may concern:

On behalf of Centurion Pipeline, LP (Centurion), GHD Services the 2023 Annual
Groundwater Monitoring Report (Report) for the above-referenc New Mexico Oil
Conservation Division (NMOCD). The Report summarizes activ e during 2023.

Should you have any questions or comments regarding this sub e undersigned.

Regards,

Deedee Whittington

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Project Manager

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BO/mss/1

Encl. 2023 Annual Groundwater Monitoring Report

Copy to: Stacy Boultinghouse, Centurion
Wes Harris, Landowner

Review of the 2023
Annual Groundwater
Monitoring for
Brahamey Gathering
System 8 inch Pipeline:
Satisfactory and
accepted for record.
1. At least eight (8)
consecutive quarterly
groundwater samples
have been
demonstrated below
WQCC human health
standards in Title 20
NMAC.
2 This report is
approved for record;
the soil boring plan is in
review to demonstrate
remediation of
groundwater
contaminants in the
vadose zone, before
closure of the incident
can be issued.

Blair Owen

Blair Owen
Project Director

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2023 Annual Groundwater Monitoring and Abatement Completion Report

**Brahaney Gathering System 8-Inch
Pipeline**

Lea County, New Mexico

NMOCD 1RP-2794

Incident Number nGRL1210048391

Centurion Pipeline, LP

July 01, 2024

➔ **The Power of Commitment**

Contents

1.	Introduction	3
1.1	Background	3
1.2	Geology and Hydrogeology	3
2.	Groundwater Monitoring	4
2.1	Monitoring Well Gauging	4
2.2	Groundwater Sampling	4
2.3	Quality Assurance/Quality Control	4
2.4	Analytical Results	4
3.	Summary and Recommendations	5
3.1	Summary	5
3.2	Recommendations	5
4.	Scope and limitations	5

Table index

Table 1	Summary of Groundwater Elevation Data
Table 2	Summary of Groundwater Field Parameters
Table 3	Summary of Groundwater Analytical Results

Figure index

Figure 1	Site Location Map
Figure 2	Site Details Map
Figure 3	Potentiometric Surface Map (March 2023)
Figure 4	Potentiometric Surface Map (September 2023)
Figure 5	Potentiometric Surface Map (December 2023)
Figure 6	COC Concentration Map (2023)

Appendices

Appendix A	2023 Laboratory Analytical Reports
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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 Centurion Pipeline, LP (Centurion) Brahaney Gathering System (Site). The Site is located approximately seventeen miles southeast of Tatum, Lea County, New Mexico (**Figure 1**). Geographic coordinates for the Site are 33.31364° North and 103.11004° West. The Site is located in Section 4, Township 13 South, and Range 38 East. The property on which the Site is located is owned by Wes Harris. The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under remediation permit number 1RP-2794 and is associated with incident number nGRL1210048391.

1.1 Background

The Site has been in active assessment and remediation since 2011, when two releases were discovered the Brahaney Gathering System 8-inch steel transmission pipeline (Pipeline). A total of six groundwater monitoring wells have been installed at the Site between 2011 and 2013. **Figure 2** shows the well locations and other pertinent Site features.

In February 2011, approximately 20 barrels (bbls) of sweet crude oil was released from the Pipeline due to internal corrosion. The pipeline was immediately shut-in and excavated for inspection. Approximately 300-linear feet of Pipeline was replaced on February 12, 2011. No crude oil was reportedly recovered during emergency response activities. Initial remediation and assessment activities were conducted by B&H Environmental Services. Approximately 4,130-cubic yards of spill-impacted soil was excavated from the Site, of which; 225-cubic yards were transported to Centurion Wasson Station for berm construction and 834-cubic yards were transported to Gandy's Landfarm in New Mexico. The remaining 3,200-cubic yards of impacted soil was blended on-Site, with clean backfill material from a nearby borrow pit and utilized as backfill. The excavated area was returned to natural grade and restoration was completed on June 24, 2011. Following backfilling activities, two permanent groundwater monitoring wells (MW-1 and MW-2) were installed in the vicinity of the release to evaluate potential impacts to groundwater.

On September 25, 2011, approximately 4-5 bbls of sweet crude oil was reportedly released from the Pipeline, due to internal corrosion. The Pipeline was immediately shut-in and repaired. An approximate 160 square foot (sq ft) area of crude oil affected soil near the release point was excavated, sampled, and transported off-Site to the Gandy Marly Landfill on September 28, 2011. The excavation was backfilled with soil purchased from the landowner to a depth of five feet below ground surface (bgs). A 20-mil liner was subsequently installed and then backfilled to surface. Between January 30 and February 6, 2013, four groundwater monitoring wells (MW-3 through MW-6) were installed in the vicinity of the release to evaluate potential impacts to groundwater. Periodic groundwater monitoring has been conducted at the Site since 2013.

The quarterly groundwater monitoring performed in 2023 are discussed in this report.

1.2 Geology and Hydrogeology

The Site is located on the Northwestern Shelf of the Permian Basin between the Matador Arch and Pedernal Uplift and is underlain by the Ogallala formation which is Pliocene to Middle Miocene in age. The Ogallala formation consists of poorly consolidated silt, sand, gravel and petrocalcic soils, and ranges from zero to 500 feet thick. Its base lies unconformably on the Triassic Dockum group which is divided into the Santa Rosa sandstone and Chinle formation. Rocks of Cretaceous age were deposited in Lea County but have been almost entirely removed by erosion (Nicholson and Clebsch, 1961).

According to the New Mexico Water Resources Assessment 2001 Plate 3, the regional groundwater gradient in the area is to the southeast and shifts to the southwest towards the Pecos River when transitioning from east to west into the Lower Pecos Valley from the Southern High Plains. The depth to groundwater at the Site ranges from approximately 98 to 105 feet bgs.

2. Groundwater Monitoring

GHD performed monitoring events in March, September, and December 2023. The sampling program included gauging and collecting groundwater samples from monitoring wells MW-1 through MW-6.

2.1 Monitoring Well Gauging

GHD personnel measured the depth to groundwater in monitoring wells MW-1 through MW-6 using an electronic oil/water interface probe (IP). Light non-aqueous phase liquid (LNAPL) has never been detected in monitoring wells at the Site. 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**.

In 2023, John West Surveying company surveyed the well casing to allow a groundwater gradient to be calculated for the Site. Groundwater potentiometric surface maps for the March, September, and December 2023 monitoring events are presented as **Figures 3 through 5**. The groundwater gradient was calculated at 0.006 ft/ft in March, September, and December 2023.

2.2 Groundwater Sampling

Following gauging during each 2023 monitoring event, GHD personnel utilized a bladder pump 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. After purging, groundwater quality field parameters of temperature, pH, oxidation reduction potential, and conductivity were collected with a field-calibrated multi-parameter groundwater quality meter to confirm stabilization of the groundwater prior to the collection of groundwater samples. A summary of groundwater field parameters is presented in **Table 2**.

Following purging and confirmation of groundwater stabilization, groundwater samples were collected and 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 benzene, toluene, ethylbenzene, and xylenes (BTEX) via the United States Environmental Protection Agency (US EPA) SW-846 Method 8260B, total petroleum hydrocarbons (TPH) (GRO/DRO) via US EPA SW-846 Method 8015D, and chloride via US 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 New Mexico Water Quality Control Commission (NMWQCC) mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater quality standards have been set for the protection of human health, domestic water supply, and irrigation use.

The groundwater analytical results for 2023 are summarized in **Table 3**, and the corresponding laboratory analytical reports are included in Appendix A. A COC concentration map is presented as **Figure 6**. A summary of analytical results for 2023 is provided below.

- BTEX or TPH was not detected at concentrations above laboratory detection limits in the groundwater samples collected from monitor wells MW-1 through MW-6 during 2023.

- Concentrations of chloride were detected in all groundwater samples collected from monitor wells MW-1 through MW-6 during 2023; however, the 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.

- LNAPL was not detected in any of the on-Site monitoring wells during 2023.
- Concentrations of BTEX, TPH, and chlorides are not present in groundwater at the Site above laboratory detection limits and/or applicable NMWQCC standards.

3.2 Recommendations

On behalf of Centurion, GHD is requesting closure for the groundwater portion of this incident (NMOCD 1RP-2794, Incident Number nGRL1210048391) based on the following.

- BTEX concentrations have been below NMWQCC standards for ten consecutive quarters in all monitoring wells at the Site (MW-1 through MW-6).
- The Site is located in a remote area, whereby the only human presence at the Site would be related to subgrade pipeline repair, or other similar oil field tasks.
- The Site currently meets the standards and requirements set forth in 19.15.30.9 NMAC for abatement completion for the groundwater portion of this incident.
- A solid-matrix work plan for a one-time sampling of the vadose zone will be prepared for approval to close the soil portion of this incident with the NMOCD.

4. Scope and limitations

This report has been prepared by GHD for Centurion Pipeline, LP and may only be used and relied on by Centurion Pipeline, LP for the purpose agreed between GHD and Centurion Pipeline, LP.

GHD otherwise disclaims responsibility to any person other than Centurion Pipeline, LP 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.

**Summary of Groundwater Elevation Data
Brahamey Gathering System 8 Inch
Lea County, New Mexico
Centurion Pipeline, LP
NMOCD 1RP-2794**

Monitoring Well ID	Measurement Date	Top of Casing Elevation (ft AMSL)	Total Depth (ft below TOC)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-1	8/27/2021	3844.76	105.76	99.52	3745.24
	12/27/2021		105.76	99.73	3745.03
	4/28/2022		105.76	99.94	3744.82
	6/30/2022		105.76	100.03	3744.73
	8/25/2022		105.76	100.16	3744.60
	11/11/2022		105.76	100.34	3744.42
	3/17/2023		105.76	100.56	3744.20
	9/29/2023		105.76	101.19	3743.57
	12/18/2023		105.76	101.35	3743.41
MW-2	8/27/2021	3849.76	122.02	103.11	3746.65
	12/27/2021		122.02	103.35	3746.41
	4/28/2022		122.02	103.56	3746.20
	6/30/2022		122.02	103.66	3746.10
	8/25/2022		122.02	103.81	3745.95
	11/11/2022		122.02	103.98	3745.78
	3/17/2023		122.02	104.20	3745.56
	9/29/2023		122.02	104.78	3744.98
	12/18/2023		122.02	104.92	3744.84
MW-3	8/27/2021	3845.74	107.45	96.96	3748.78
	12/27/2021		107.45	97.25	3748.49
	4/28/2022		107.45	97.46	3748.28
	6/30/2022		107.45	97.56	3748.18
	8/25/2022		107.45	97.70	3748.04
	11/11/2022		107.45	97.73	3748.01
	3/17/2023		107.45	98.13	3747.61
	9/29/2023		107.45	98.66	3747.08
	12/18/2023		107.45	98.76	3746.98
MW-4	8/27/2021	3846.43	104.05	96.98	3749.45
	12/27/2021		104.05	97.60	3748.83
	4/28/2022		104.05	97.84	3748.59
	6/30/2022		104.05	97.93	3748.50
	8/25/2022		104.05	98.06	3748.37
	11/11/2022		104.05	98.25	3748.18
	3/17/2023		104.05	98.48	3747.95
	9/29/2023		104.05	99.02	3747.41
	12/18/2023		104.05	99.09	3747.34

**Summary of Groundwater Elevation Data
Brahamey Gathering System 8 Inch
Lea County, New Mexico
Centurion Pipeline, LP
NMOCD 1RP-2794**

Monitoring Well ID	Measurement Date	Top of Casing Elevation (ft AMSL)	Total Depth (ft below TOC)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft AMSL)
MW-5	8/27/2021	3845.96	102.86	97.35	3748.61
	12/27/2021		102.86	97.22	3748.74
	4/28/2022		102.86	97.44	3748.52
	6/30/2022		102.86	97.54	3748.42
	8/25/2022		102.86	97.68	3748.28
	11/11/2022		102.86	97.80	3748.16
	3/17/2023		102.86	98.10	3747.86
	9/29/2023		102.86	98.62	3747.34
	12/18/2023		102.86	98.72	3747.24
MW-6	8/27/2021	3848.40	101.61	99.22	3749.18
	12/27/2021		101.61	99.48	3748.92
	4/28/2022		101.61	99.70	3748.70
	6/29/2022		101.61	99.80	3748.60
	8/25/2022		101.61	99.96	3748.44
	11/11/2022		101.61	100.00	3748.40
	3/17/2023		101.61	100.37	3748.03
	9/29/2023		101.61	100.90	3747.50
	12/18/2023		101.61	101.00	3747.40

Notes:

- 1) ft AMSL - feet above mean sea level
- 2) TOC - top of casing

**Summary of Groundwater Monitoring Field Parameters
Brahamey Gathering System 8 Inch
Lea County, New Mexico
Centurion Pipeline, LP
NMOCD 1RP-2794**

Monitoring Well ID	Measurement Date	Temperature (°C)	pH	DO (mg/L)	ORP (mV)	Conductivity (µS/cm)
MW-1	8/27/2021	26.99	7.15	6.65	119	784
	12/27/2021	19.20	7.48	4.17	33.8	874
	4/28/2022	23.31	7.42	4.55	139	767
	6/30/2022	22.05	7.31	3.37	142	842
	8/25/2022	25.45	5.32	3.26	236	848
	11/11/2022	19.75	7.43	--	285	828
	3/17/2023	16.63	7.04	3.18	160	734
MW-2	8/27/2021	27.54	7.47	6.27	95.0	701
	12/27/2021	18.40	7.73	5.38	37.2	735
	4/28/2022	20.49	7.70	5.90	151	656
	6/30/2022	22.69	7.60	4.59	139	721
	8/25/2022	24.14	5.13	3.89	276	711
	11/11/2022	17.67	7.46	4.15	296	728
	3/17/2023	15.32	7.25	6.36	172	615
MW-3	8/27/2021	24.05	7.40	4.97	113	760
	12/27/2021	18.60	7.73	5.26	35.0	789
	4/28/2022	25.55	7.65	4.81	132	695
	6/30/2022	24.81	7.57	3.73	142	774
	8/25/2022	24.26	5.08	3.73	268	763
	11/11/2022	20.95	7.96	0.68	274	752
	3/17/2023	17.31	7.23	5.83	163	659
MW-4	8/27/2021	23.80	7.46	5.90	107	753
	12/27/2021	18.40	7.73	5.24	35.9	807
	4/28/2022	25.76	7.61	1.88	131	723
	6/30/2022	26.63	7.54	4.03	148	812
	8/25/2022	25.67	4.99	4.06	278	803
	11/11/2022	20.95	7.44	4.38	301	815
	3/17/2023	18.29	7.12	6.17	176	694
MW-5	8/27/2021	27.53	7.50	5.73	108	749
	12/27/2021	18.90	7.78	4.90	31.6	769
	4/28/2022	26.68	7.54	4.73	138	671
	6/30/2022	24.28	7.62	4.09	153	753
	8/25/2022	25.27	5.16	3.87	272	751
	11/11/2022	21.12	7.56	4.15	306	750
	3/17/2023	18.64	7.25	5.86	177	640
MW-6	8/27/2021	29.50	7.43	4.82	111	743
	12/27/2021	18.10	7.70	5.34	38.0	844
	4/28/2022	30.35	7.21	3.61	159	719
	6/30/2022	27.88	7.58	2.39	161	818
	8/25/2022	28.30	4.86	3.43	288	800
	11/11/2022	19.05	7.48	5.52	315	827
	3/17/2023	18.13	7.26	7.51	178	692

Notes:

°C - degrees Celsius

µS/cm - microsiemens per centimeter

mg/L - milligrams per liter

"--" - not measured

mV - millivolts

DO - dissolved oxygen

ORP - oxidation reduction potential

**Summary of Groundwater Analytical Results
Brahamey Gathering System 8 Inch
Lea County, New Mexico
Centurion Pipeline, LP
NMOCD 1RP-2794**

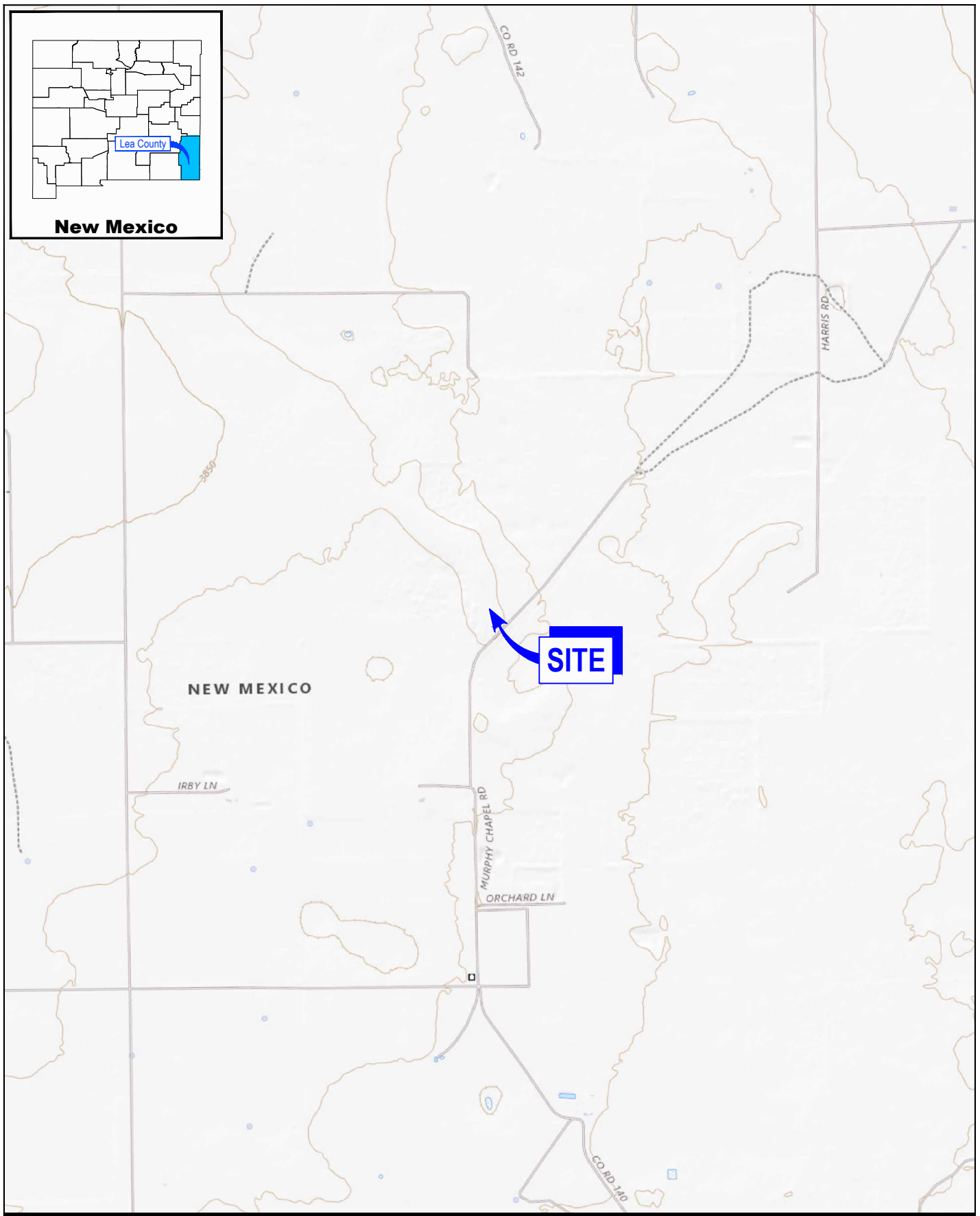
Monitoring Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylene	TPH GRO	TPH DRO	TPH ORO	Chloride	TDS	Sulfate
NMWQCC Groundwater Quality Standards		0.005	1.00	0.70	0.62	ne	ne	ne	250	1,000	600
MW-1	8/16/2016	0.002	0.00007	0.0003	<0.0001	<1.00	<1.00	<1.00	64.0	--	--
	5/10/2017	<0.005	0.005	0.005	--	--	--	--	58.8	--	--
	12/28/2017	--	0.005	0.005	<0.005	--	--	--	57.0	--	--
	3/22/2018	--	0.005	0.005	<0.005	--	--	--	56.8	--	--
	6/27/2018	--	0.00019	0.0005	<0.0005	--	--	--	55.3	--	--
	12/12/2018	--	0.00019	0.0005	<0.0005	--	--	--	57.1	--	--
	4/16/2019	--	0.000146	0.000146	<0.000192	--	--	--	61.0	--	--
	8/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	<0.100	<0.100	55.7	544	108
	12/27/2021	<0.001	<0.001	<0.001	0.000655 J	<0.100	0.102	0.306	59.3	538	110
	4/28/2022	<0.001	<0.001	<0.001	<0.005	<1.00	<1.00	<0.100	60.9	567	115
	6/30/2022	<0.001	<0.001	<0.001	<0.005	<0.0314	<0.0222	<1.00	61.2	540	110
	8/27/2022	<0.002	0.0017	<0.003	<0.003	<0.0100	<0.021	<0.021	60.7	620	105
	11/11/2022	<0.002	<0.002	<0.003	<0.003	<0.0100	0.310	<0.021	59.4	534	113
	3/17/2023	<0.002	<0.002	<0.003	<0.003	<0.0100	<0.021	<0.021	60.7	640	120
	9/29/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	56.8	--	--
	12/19/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	59.8	--	--
MW-2	8/16/2016	<0.00008	0.00007	0.00006	<0.0001	<1.00	<1.00	<1.00	60.0	--	--
	5/10/2017	<0.005	0.005	0.005	--	--	--	--	56.3	--	--
	12/28/2017	<0.005	0.005	0.005	<0.005	--	--	--	92.7	--	--
	3/22/2018	<0.005	<0.005	<0.005	<0.005	--	--	--	52.4	--	--
	6/27/2018	<0.000185	<0.00019	<0.0005	<0.0005	--	--	--	52.1	--	--
	12/12/2018	<0.000185	<0.00019	<0.0005	<0.0005	--	--	--	53.4	--	--
	4/16/2019	<0.000214	<0.000146	<0.000146	<0.000192	--	--	--	57.9	--	--
	8/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	0.11	<0.100	53.5	477	110
	12/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	0.155	0.179	55.7	481	109
	4/28/2022	<0.001	<0.001	<0.001	<0.003	<0.0314	<1.00	<1.00	52.1	474	109
	6/30/2022	<0.001	<0.001	<0.001	<0.003	<0.0314	<1.00	<1.00	54.3	477	109
	8/27/2022	<0.002	<0.002	<0.003	<0.003	<0.0100	<0.021	<0.021	52.4	528	107
	11/11/2022	<0.002	<0.002	<0.003	<0.003	<0.0100	0.230	<0.021	53.8	494	113
	3/17/2023	<0.002	<0.002	<0.003	<0.003	<0.0100	0.140	0.470	56.8	572	119
	9/29/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	54.7	--	--
	12/19/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	56.8	--	--
MW-3	8/16/2016	0.035	0.004	0.033	0.016	<1.00	<1.00	<1.00	64.0	--	--
	5/10/2017	0.0156	<0.005	0.00555	--	--	--	--	56.4	--	--
	12/28/2017	<0.005	<0.005	<0.005	<0.005	--	--	--	54.8	--	--
	3/22/2018	<0.005	<0.005	<0.005	<0.005	--	--	--	55.9	--	--
	6/27/2018	0.00408	<0.00019	0.00108	<0.0005	--	--	--	66.3	--	--
	12/12/2018	0.00272	0.0028	0.00146	<0.0005	--	--	--	57.2	--	--
	4/16/2019	0.00041 J	<0.000146	0.00038 J	<0.000192	--	--	--	62.6	--	--
	8/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	<0.100	<0.100	61.2	524	111
	12/27/2021	0.000247 J	<0.001	<0.001	0.000362 J	<0.100	0.0749 J	0.199	65.3	--	119
	4/28/2022	<0.005	<0.001	<0.001	<0.003	<0.100	<1.00	<1.00	64.2	508	112
	6/30/2022	<0.005	<0.001	<0.001	<0.003	<0.0314	<0.0222	<0.0118	62.5	492	108
	8/27/2022	<0.002	<0.002	<0.003	<0.003	<0.0100	<0.021	<0.021	60.7	564	106
	11/11/2022	<0.002	<0.002	<0.003	<0.003	<0.0100	<0.020	<0.020	51.6	498	91.5
	3/17/2023	<0.002	<0.002	<0.003	<0.003	<0.0100	<0.020	<0.020	66.3	572	116
	9/29/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	63.6	--	--
	12/19/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	65.5	--	--

**Summary of Groundwater Analytical Results
Brahamey Gathering System 8 Inch
Lea County, New Mexico
Centurion Pipeline, LP
NMOCD 1RP-2794**

Monitoring Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylene	TPH GRO	TPH DRO	TPH ORO	Chloride	TDS	Sulfate
NMWQCC Groundwater Quality Standards		0.005	1.00	0.70	0.62	ne	ne	ne	250	1,000	600
MW-4	8/16/2016	0.005	0.0008	0.004	0.002	<1.00	<1.00	<1.00	64.0	--	--
	5/10/2017	0.0113	<0.005	0.00628	--	--	--	--	57.4	--	--
	12/28/2017	<0.005	<0.005	<0.005	<0.005	--	--	--	55.3	--	--
	3/22/2018	<0.005	<0.005	<0.005	<0.005	--	--	--	54.8	--	--
	6/27/2018	0.0035	0.00034	0.00235	0.00155	--	--	--	54.6	--	--
	12/12/2018	0.0042	0.0055	0.00297	0.00267	--	--	--	57.4	--	--
	4/16/2019	0.00239	0.00032 J	0.00171	0.00149	--	--	--	60.7	--	--
	8/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	<0.100	<0.100	62.6	506	112
	12/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	0.0909 J	0.25	66.3	--	109
	4/28/2022	<0.005	<0.001	<0.005	<0.005	<1.00	<1.00	<0.100	67.3	525	111
	6/30/2022	<0.005	<0.001	<0.005	<0.005	<0.0314	<1.00	0.448 B	64.8	514	109
	8/27/2022	<0.005	0.0018	<0.003	<0.003	<0.0100	<0.021	<0.021	62.5	556	106
	11/11/2022	<0.005	<0.001	<0.003	<0.005	<0.0100	<1.00	<1.00	62.5	532	110
	3/17/2023	<0.002	<0.002	<0.003	<0.003	<0.0100	<0.021	<0.021	66.4	600	115
MW-5	9/29/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	64.4	--	--
	12/19/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	66.3	--	--
	8/16/2016	0.007	0.001	0.006	0.002	<1.00	<1.00	<1.00	60.0	--	--
	5/10/2017	0.0139	<0.005	0.00753	--	--	--	--	58.3	--	--
	12/28/2017	0.00739	<0.005	<0.005	<0.005	--	--	--	81	--	--
	3/22/2018	<0.005	<0.005	<0.005	<0.005	--	--	--	57.6	--	--
	6/27/2018	0.00408	0.00038	0.00256	0.00106	--	--	--	56.6	--	--
	12/12/2018	0.002	0.0028	0.0014	<0.0005	--	--	--	60.0	--	--
	4/16/2019	0.00171	0.00021 J	0.00104	0.00087 J	--	--	--	63.2	--	--
	8/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	<0.100	<0.100	63.9	489	109
	12/27/2021	0.000444 J	0.000269 J	0.00112	0.00115 J	<0.100	0.0509 J	0.176	64.9	--	112
	4/28/2022	<0.005	0.00135	<0.005	<0.005	<1.00	<1.00	<0.100	65.0	496	110
	6/30/2022	<0.005	0.00102	<0.005	<0.005	<0.0314	<1.00	<1.00	63.6	491	109
	8/27/2022	0.002	0.0018	<0.003	<0.003	<0.0100	<0.021	<0.021	62.0	528	107
	11/11/2022	<0.005	0.0015	<0.005	0.0015	<0.0100	<0.020	<0.02	62.2	510	112
MW-6	3/17/2023	0.002	0.0012	<0.003	<0.005	0.168	<0.020	<0.02	66.2	490	117
	9/29/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	63.3	--	--
	12/19/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	65.6	--	--
	8/16/2016	0.007	0.0009	0.005	0.002	<1.00	<1.00	<1.00	60.0	--	--
	5/10/2017	<0.005	<0.005	<0.005	--	--	--	--	55.4	--	--
	12/28/2017	0.00642	<0.005	<0.005	<0.005	--	--	--	83.2	--	--
	3/22/2018	<0.005	<0.005	<0.005	<0.005	--	--	--	53.7	--	--
	6/27/2018	0.00536	0.00026	0.00212	<0.0005	--	--	--	54.1	--	--
	12/12/2018	0.00514	0.0035	0.00201	0.00176	--	--	--	56.4	--	--
	4/16/2019	0.00044 J	<0.000146	0.00021 J	<0.000192	--	--	--	60.3	--	--
	8/27/2021	<0.001	<0.001	<0.001	<0.003	<0.100	<0.100	<0.100	61.2	514	113
	12/27/2021	0.000977 J	0.00066 J	0.00196	0.00378	0.0341 J	0.118	0.211	64.6	--	109
	4/28/2022	<0.005	0.00165	<0.005	<0.005	<1.00	<1.00	<0.100	63.8	491	138
	6/30/2022	<0.005	<0.001	<0.005	<0.005	<0.0314	<1.00	0.174 B	63.4	518	110
	8/27/2022	<0.005	0.0027	<0.005	0.0019	<1.00	<0.0210	<0.021	59.8	568	104
	11/11/2022	0.0012	0.0018	<0.005	0.003	<0.100	<0.0200	<0.0201	61.6	564	111
	3/17/2023	0.0016	0.0026	<0.005	0.0033	0.198	<0.0210	<0.021	66.1	512	115
	9/29/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	63.3	--	--
	12/19/2023	<0.0010	<0.0010	<0.0010	<0.0030	<0.0500	<0.0500	--	65.6	--	--

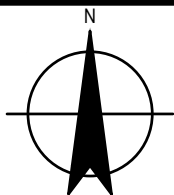
Notes:

- 1) Analytical results are presented in milligrams per liter (mg/L).
- 2) NMWQCC = New Mexico Water Quality Control Commission
- 3) ne - not established
- 4) -- = not analyzed
- 5) < - Analyte was not detected at or above the laboratory reporting limit.
- 6) J = Concentration is less than the quantitation limit and is an estimated value.
- 7) B - The same analyte is found in the associated blank.
- 8) Shaded/bolded results exceed their respective NMWQCC groundwater quality standard.
- 9) Analytical data from 2016 to 2022 was supplied by Apex TITAN, Inc.
- 10) TPH - total petroleum hydrocarbons, GRO - gasoline range organics, DRO - diesel range organics, TDS - total dissolved solids



0 1000 2000 ft
1" = 2000 ft

Coordinate System:
NAD 1983 State Plane-
New Mexico East (US Feet)



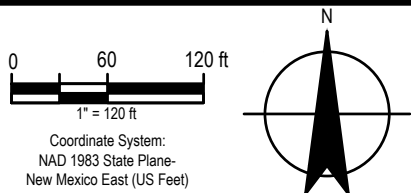
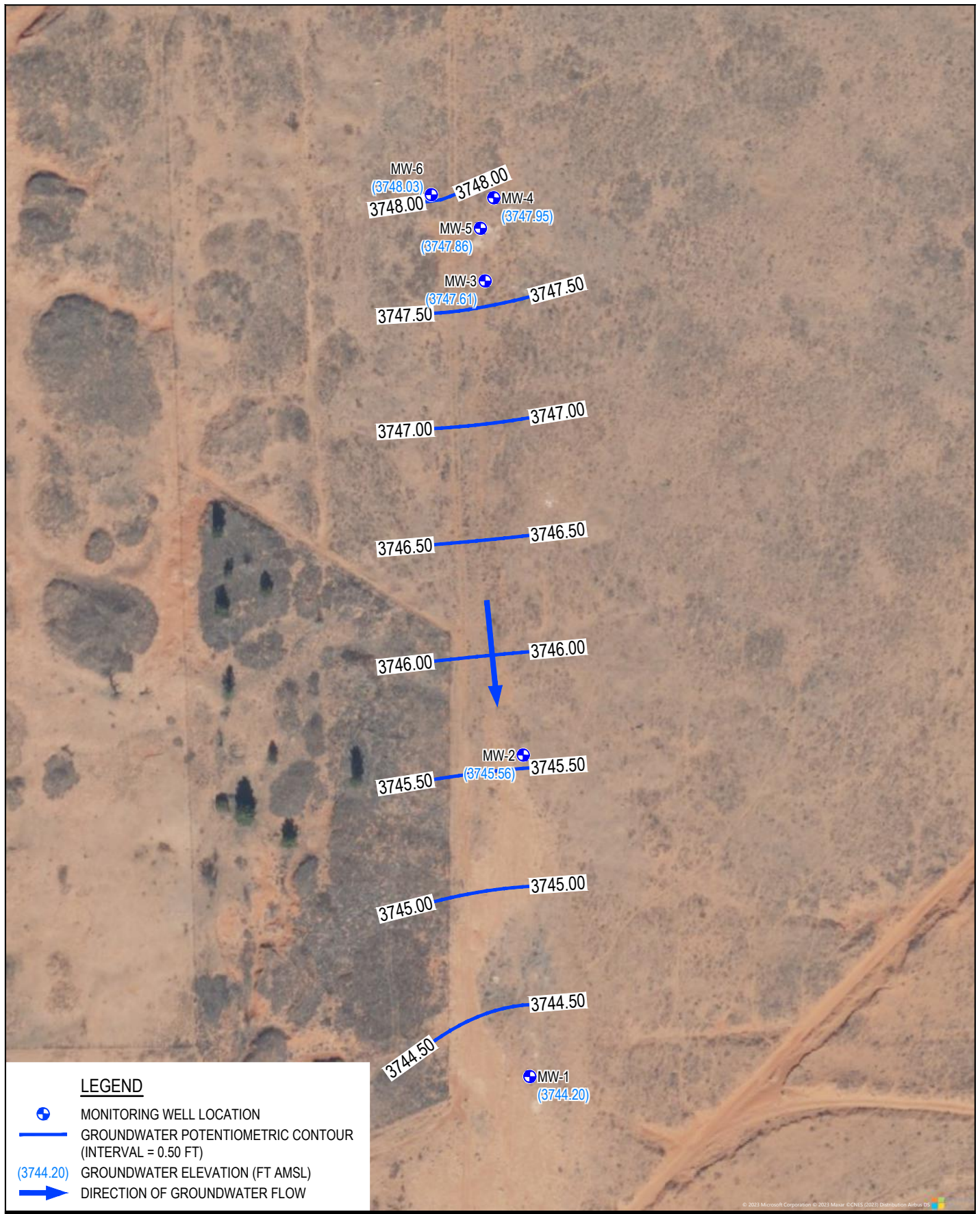
CENTURION PIPELINE, LP
LEA COUNTY, NEW MEXICO
BRAHANEY GATHERING SYSTEM 8 INCH PIPELINE
NMOCD 1RP-2794

SITE LOCATION MAP

Project No. 12621862
Date April 2024

FIGURE 1

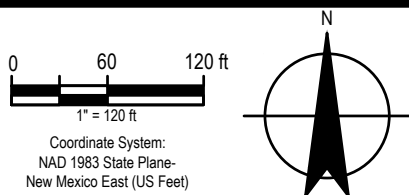
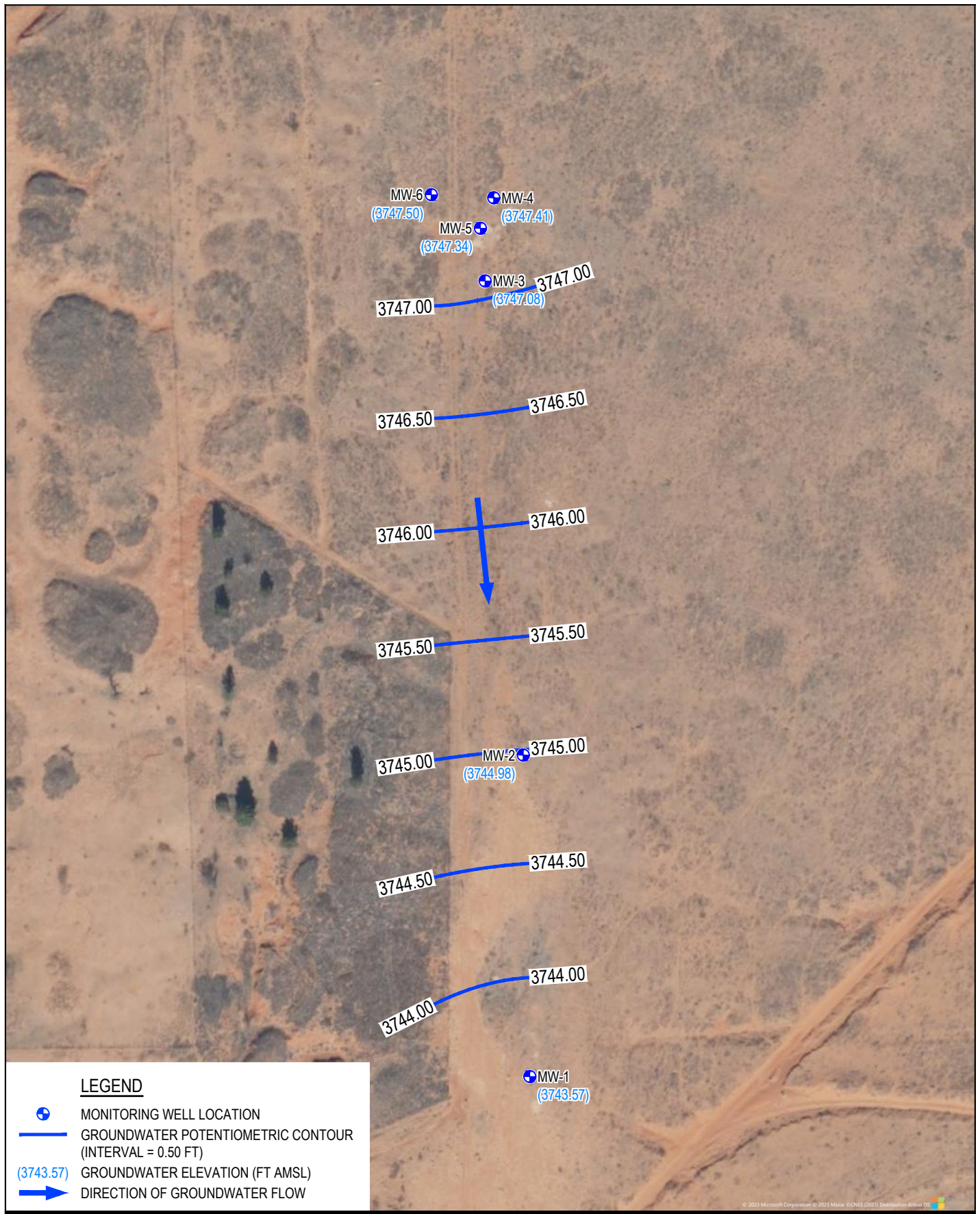




CENTURION PIPELINE, LP
LEA COUNTY, NEW MEXICO
BRAHANEY GATHERING SYSTEM 8 INCH PIPELINE
NMOCD 1RP-2794

POTENTIOMETRIC SURFACE MAP (MARCH 2023)

FIGURE 3

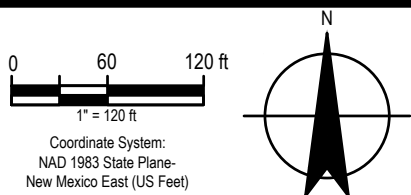
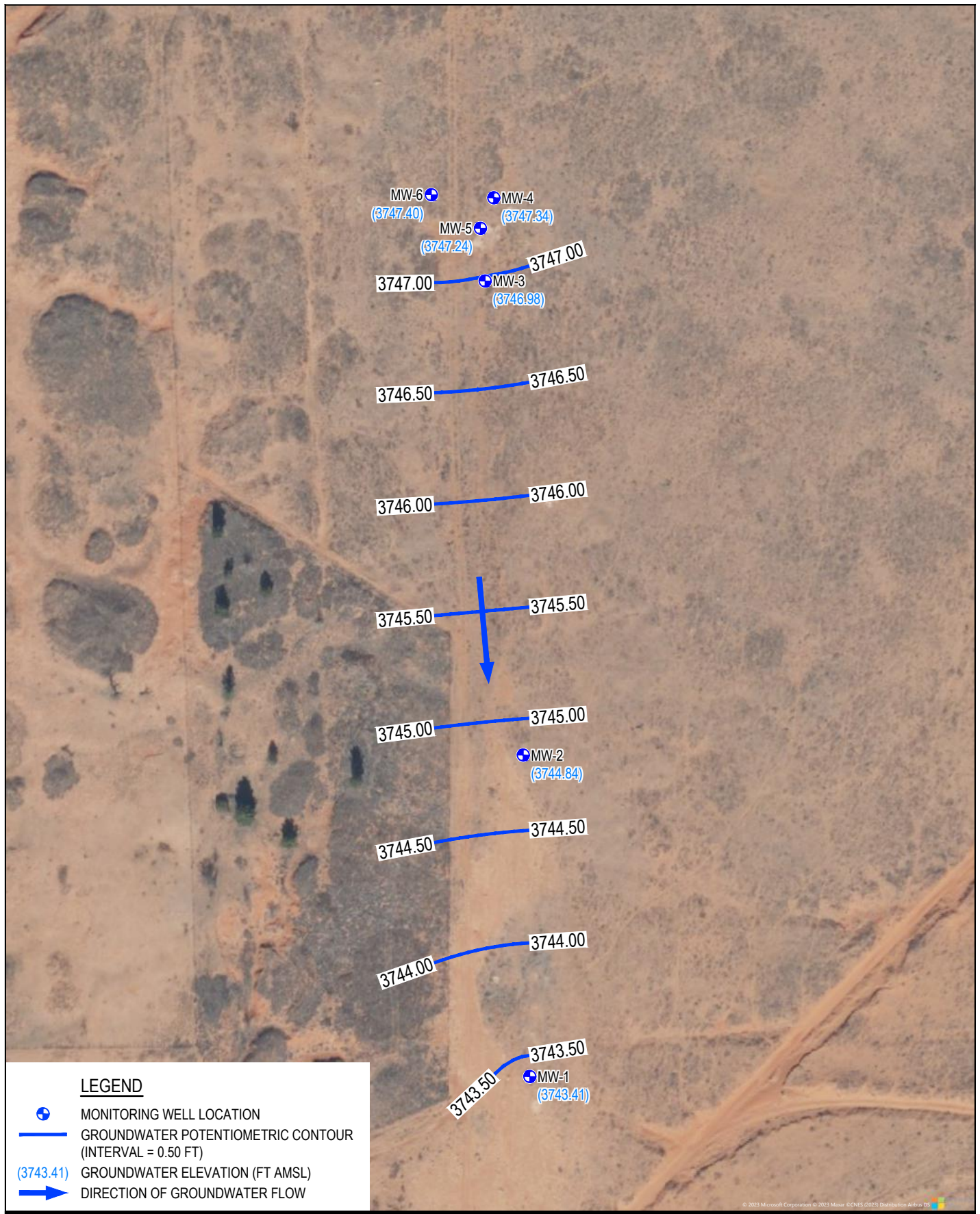


CENTURION PIPELINE, LP
LEA COUNTY, NEW MEXICO
BRAHANEY GATHERING SYSTEM 8 INCH PIPELINE
NMOCD 1RP-2794

**POTENTIOMETRIC SURFACE MAP
(SEPTEMBER 2023)**

Project No. 12621862
Date April 2024

FIGURE 4

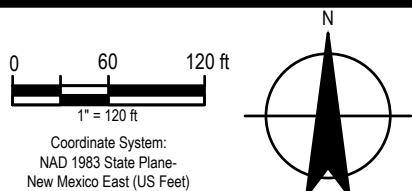
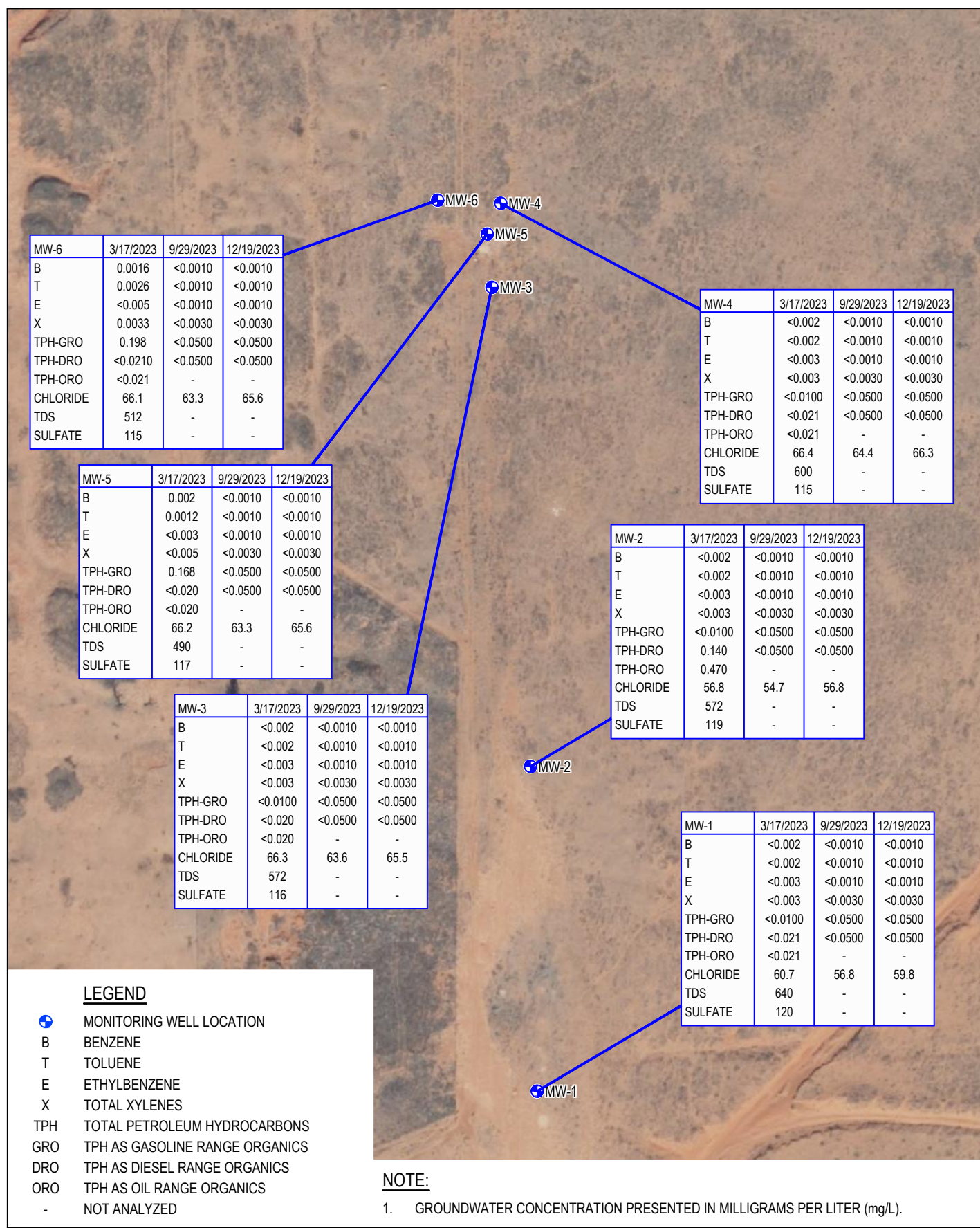


CENTURION PIPELINE, LP
LEA COUNTY, NEW MEXICO
BRAHANEY GATHERING SYSTEM 8 INCH PIPELINE
NMOCD 1RP-2794

POTENTIOMETRIC SURFACE MAP
(DECEMBER 2023)

Project No. 12621862
Date April 2024

FIGURE 5



CENTURION PIPELINE, LP
LEA COUNTY, NEW MEXICO
BRAHANEY GATHERING SYSTEM 8 INCH PIPELINE
NMOCD 1RP-2794

COC CONCENTRATIONS IN
GROUNDWATER MAP (2023)

Project No. 12621862
Date April 2024

FIGURE 6

Appendices

Appendix A

2023 Laboratory Analytical Reports



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

October 16, 2023

Chris Knight
GHD
11451 Katy Fwy
Suite 400
Houston, TX 77079

Work Order: **HS23100136**

Laboratory Results for: **12621862 - ET Brahaney Gathering System**

Dear Chris Knight,

ALS Environmental received 4 sample(s) on Oct 03, 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: DAYNA.FISHER

James Guin

ALS Houston, US

Date: 16-Oct-23

Client:

Project:

Work Order:

GHD
12621862 - ET Brahaney Gathering System
HS23100136

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23100136-01	MW-1-20230929	Groundwater		29-Sep-2023 11:50	03-Oct-2023 09:45	☐
HS23100136-02	MW-3-20230929	Groundwater		29-Sep-2023 15:00	03-Oct-2023 09:45	☐
HS23100136-03	MW-5-20230929	Groundwater		29-Sep-2023 17:10	03-Oct-2023 09:45	☐
HS23100136-04	Trip Blank	Water	CG071023-962	29-Sep-2023 00:00	03-Oct-2023 09:45	☒

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Work Order: HS23100136

CASE NARRATIVE

GC Semivolatiles by Method SW8015M**Batch ID: 201496**

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

GC Volatile Organics by Method SW8015**Batch ID: R448485****Sample ID: LCSD-231006**

- The RPD between the LCS and LCSD was outside of the control limit.

GC Volatiles by Method SW8015**Batch ID: R448485****Sample ID: MW-1-20230929 (HS23100136-01)**

- Surrogate failed outside control limits high. Sample is ND.

Sample ID: MW-3-20230929 (HS23100136-02)

- Surrogate failed outside control limits high. Sample is ND.

Sample ID: MW-5-20230929 (HS23100136-03)

- Surrogate failed outside control limits high. Sample is ND.

GCMS Volatiles by Method SW8260**Batch ID: R448226**

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

Batch ID: R448200

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

WetChemistry by Method E300**Batch ID: R449122****Sample ID: HS23100598-02MSD**

- MSD is for an unrelated sample (Chloride)

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-1-20230929
Collection Date: 29-Sep-2023 11:50

ANALYTICAL REPORT

WorkOrder:HS23100136
Lab ID:HS23100136-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
Benzene	< 0.0010		0.0010	mg/L	1	04-Oct-2023 17:59
Ethylbenzene	< 0.0010		0.0010	mg/L	1	04-Oct-2023 17:59
Toluene	< 0.0010		0.0010	mg/L	1	04-Oct-2023 17:59
Xylenes, Total	< 0.0030		0.0030	mg/L	1	04-Oct-2023 17:59
Surr: 1,2-Dichloroethane-d4	95.2		70-126	%REC	1	04-Oct-2023 17:59
Surr: 4-Bromofluorobenzene	98.2		77-113	%REC	1	04-Oct-2023 17:59
Surr: Dibromofluoromethane	99.0		77-123	%REC	1	04-Oct-2023 17:59
Surr: Toluene-d8	91.3		82-127	%REC	1	04-Oct-2023 17:59
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: TS		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	06-Oct-2023 20:33
Surr: 4-Bromofluorobenzene	129	S	70-123	%REC	1	06-Oct-2023 20:33
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 05-Oct-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	08-Oct-2023 11:21
Surr: 2-Fluorobiphenyl	113		60-135	%REC	1	08-Oct-2023 11:21
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	56.8		0.500	mg/L	1	14-Oct-2023 09:39

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

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-3-20230929
Collection Date: 29-Sep-2023 15:00

ANALYTICAL REPORT

WorkOrder:HS23100136
Lab ID:HS23100136-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
Benzene	< 0.0010		0.0010	mg/L	1	05-Oct-2023 04:05
Ethylbenzene	< 0.0010		0.0010	mg/L	1	05-Oct-2023 04:05
Toluene	< 0.0010		0.0010	mg/L	1	05-Oct-2023 04:05
Xylenes, Total	< 0.0030		0.0030	mg/L	1	05-Oct-2023 04:05
Surr: 1,2-Dichloroethane-d4	107		70-126	%REC	1	05-Oct-2023 04:05
Surr: 4-Bromofluorobenzene	97.7		77-113	%REC	1	05-Oct-2023 04:05
Surr: Dibromofluoromethane	109		77-123	%REC	1	05-Oct-2023 04:05
Surr: Toluene-d8	95.1		82-127	%REC	1	05-Oct-2023 04:05
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: TS		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	06-Oct-2023 20:47
Surr: 4-Bromofluorobenzene	127	S	70-123	%REC	1	06-Oct-2023 20:47
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 05-Oct-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	08-Oct-2023 11:44
Surr: 2-Fluorobiphenyl	87.5		60-135	%REC	1	08-Oct-2023 11:44
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	63.6		0.500	mg/L	1	14-Oct-2023 09:44

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

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-5-20230929
Collection Date: 29-Sep-2023 17:10

ANALYTICAL REPORT

WorkOrder:HS23100136
Lab ID:HS23100136-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
Benzene	< 0.0010		0.0010	mg/L	1	05-Oct-2023 04:28
Ethylbenzene	< 0.0010		0.0010	mg/L	1	05-Oct-2023 04:28
Toluene	< 0.0010		0.0010	mg/L	1	05-Oct-2023 04:28
Xylenes, Total	< 0.0030		0.0030	mg/L	1	05-Oct-2023 04:28
Surr: 1,2-Dichloroethane-d4	112		70-126	%REC	1	05-Oct-2023 04:28
Surr: 4-Bromofluorobenzene	96.4		77-113	%REC	1	05-Oct-2023 04:28
Surr: Dibromofluoromethane	116		77-123	%REC	1	05-Oct-2023 04:28
Surr: Toluene-d8	95.1		82-127	%REC	1	05-Oct-2023 04:28
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: TS		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	06-Oct-2023 21:00
Surr: 4-Bromofluorobenzene	132	S	70-123	%REC	1	06-Oct-2023 21:00
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 05-Oct-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	08-Oct-2023 12:54
Surr: 2-Fluorobiphenyl	93.5		60-135	%REC	1	08-Oct-2023 12:54
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	63.3		0.500	mg/L	1	14-Oct-2023 09:50

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

Weight / Prep Log

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

Batch ID: 201496	Start Date: 05 Oct 2023 10:30	End Date: 05 Oct 2023 10:30
Method: AQPREP: 3510C TPH	Prep Code: 8015WPR_LL	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23100136-01		1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS23100136-02		1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS23100136-03		1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 201496 (0)		Test Name : DIESEL RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS23100136-01	MW-1-20230929	29 Sep 2023 11:50		05 Oct 2023 10:30	08 Oct 2023 11:21	1
HS23100136-02	MW-3-20230929	29 Sep 2023 15:00		05 Oct 2023 10:30	08 Oct 2023 11:44	1
HS23100136-03	MW-5-20230929	29 Sep 2023 17:10		05 Oct 2023 10:30	08 Oct 2023 12:54	1
Batch ID: R448200 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Groundwater	
HS23100136-01	MW-1-20230929	29 Sep 2023 11:50			04 Oct 2023 17:59	1
Batch ID: R448226 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Groundwater	
HS23100136-02	MW-3-20230929	29 Sep 2023 15:00			05 Oct 2023 04:05	1
HS23100136-03	MW-5-20230929	29 Sep 2023 17:10			05 Oct 2023 04:28	1
Batch ID: R448485 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS23100136-01	MW-1-20230929	29 Sep 2023 11:50			06 Oct 2023 20:33	1
HS23100136-02	MW-3-20230929	29 Sep 2023 15:00			06 Oct 2023 20:47	1
HS23100136-03	MW-5-20230929	29 Sep 2023 17:10			06 Oct 2023 21:00	1
Batch ID: R449122 (0)		Test Name : ANIONS BY E300.0, REV 2.1, 1993			Matrix: Groundwater	
HS23100136-01	MW-1-20230929	29 Sep 2023 11:50			14 Oct 2023 09:39	1
HS23100136-02	MW-3-20230929	29 Sep 2023 15:00			14 Oct 2023 09:44	1
HS23100136-03	MW-5-20230929	29 Sep 2023 17:10			14 Oct 2023 09:50	1

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: 201496 (0)		Instrument: FID23		Method: DIESEL RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-201496	Units: mg/L		Analysis Date: 08-Oct-2023 10:11						
Client ID:	Run ID: FID23_448884		SeqNo: 7603710		PrepDate: 05-Oct-2023		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	< 0.0500	0.0500								
Surr: 2-Fluorobiphenyl	0.07776	0.00500	0.1	0	77.8	60 - 135				
LCS	Sample ID: LCS-201496	Units: mg/L		Analysis Date: 08-Oct-2023 10:34						
Client ID:	Run ID: FID23_448884		SeqNo: 7603711		PrepDate: 05-Oct-2023		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.9672	0.0500	1	0	96.7	70 - 130				
Surr: 2-Fluorobiphenyl	0.09589	0.00500	0.1	0	95.9	60 - 135				
LCSD	Sample ID: LCSD-201496	Units: mg/L		Analysis Date: 08-Oct-2023 10:58						
Client ID:	Run ID: FID23_448884		SeqNo: 7603712		PrepDate: 05-Oct-2023		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	1.125	0.0500	1	0	113	70 - 130	0.9672	15.1	20	
Surr: 2-Fluorobiphenyl	0.1101	0.00500	0.1	0	110	60 - 135	0.09589	13.8	20	
The following samples were analyzed in this batch:										
HS23100136-01		HS23100136-02		HS23100136-03						

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: R448485 (0)		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-231006	Units: mg/L		Analysis Date: 06-Oct-2023 20:06						
Client ID:	Run ID: FID-20_448485	SeqNo: 7593941		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	< 0.0500	0.0500								
Surr: 4-Bromofluorobenzene	0.1207	0.00500	0.1	0	121	70 - 121				
LCS	Sample ID: LCS-231006	Units: mg/L		Analysis Date: 06-Oct-2023 19:39						
Client ID:	Run ID: FID-20_448485	SeqNo: 7593939		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.196	0.0500	1	0	120	76 - 124				
Surr: 4-Bromofluorobenzene	0.1088	0.00500	0.1	0	109	52 - 138				
LCSD	Sample ID: LCSD-231006	Units: mg/L		Analysis Date: 06-Oct-2023 19:52						
Client ID:	Run ID: FID-20_448485	SeqNo: 7593940		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9669	0.0500	1	0	96.7	76 - 124	1.196	21.2	20	R
Surr: 4-Bromofluorobenzene	0.09715	0.00500	0.1	0	97.2	52 - 138	0.1088	11.3	20	
The following samples were analyzed in this batch:										
HS23100136-01		HS23100136-02		HS23100136-03						

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: R448200 (0)		Instrument: VOA7		Method: LOW LEVEL VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKW-231004	Units: ug/L		Analysis Date: 04-Oct-2023 10:06					
Client ID:	Run ID: VOA7_448200	SeqNo: 7586192		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	< 1.0	1.0							
Ethylbenzene	< 1.0	1.0							
Toluene	< 1.0	1.0							
Xylenes, Total	< 3.0	3.0							
Surr: 1,2-Dichloroethane-d4	48.88	1.0	50	0	97.8	70 - 123			
Surr: 4-Bromofluorobenzene	49.22	1.0	50	0	98.4	77 - 113			
Surr: Dibromofluoromethane	50.03	1.0	50	0	100	73 - 126			
Surr: Toluene-d8	46.23	1.0	50	0	92.5	81 - 120			

LCS	Sample ID: VLCSW-231004	Units: ug/L		Analysis Date: 04-Oct-2023 09:25					
Client ID:	Run ID: VOA7_448200	SeqNo: 7586191		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	19.27	1.0	20	0	96.3	74 - 120			
Ethylbenzene	19.11	1.0	20	0	95.6	77 - 117			
Toluene	18.24	1.0	20	0	91.2	77 - 118			
Xylenes, Total	55.98	3.0	60	0	93.3	75 - 122			
Surr: 1,2-Dichloroethane-d4	50.29	1.0	50	0	101	70 - 123			
Surr: 4-Bromofluorobenzene	50.36	1.0	50	0	101	77 - 113			
Surr: Dibromofluoromethane	51.38	1.0	50	0	103	73 - 126			
Surr: Toluene-d8	46.89	1.0	50	0	93.8	81 - 120			

MS	Sample ID: HS23091890-17MS	Units: ug/L		Analysis Date: 04-Oct-2023 12:30					
Client ID:	Run ID: VOA7_448200	SeqNo: 7586199		PrepDate:		DF: 50			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	905.2	50	1000	0	90.5	70 - 127			
Ethylbenzene	892	50	1000	0	89.2	70 - 124			
Toluene	852.7	50	1000	0	85.3	70 - 123			
Xylenes, Total	2629	150	3000	0	87.6	70 - 130			
Surr: 1,2-Dichloroethane-d4	2572	50	2500	0	103	70 - 126			
Surr: 4-Bromofluorobenzene	2532	50	2500	0	101	77 - 113			
Surr: Dibromofluoromethane	2609	50	2500	0	104	77 - 123			
Surr: Toluene-d8	2372	50	2500	0	94.9	82 - 127			

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: R448200 (0)		Instrument: VOA7		Method: LOW LEVEL VOLATILES BY SW8260C					
MSD		Sample ID: HS23091890-17MSD		Units: ug/L		Analysis Date: 04-Oct-2023 12:51			
Client ID:		Run ID: VOA7_448200		SeqNo: 7586200		PrepDate:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	870.6	50	1000	0	87.1	70 - 127	905.2	3.9	20
Ethylbenzene	853.7	50	1000	0	85.4	70 - 124	892	4.39	20
Toluene	807.1	50	1000	0	80.7	70 - 123	852.7	5.49	20
Xylenes, Total	2494	150	3000	0	83.1	70 - 130	2629	5.3	20
Surr: 1,2-Dichloroethane-d4	2545	50	2500	0	102	70 - 126	2572	1.04	20
Surr: 4-Bromofluorobenzene	2563	50	2500	0	103	77 - 113	2532	1.2	20
Surr: Dibromofluoromethane	2565	50	2500	0	103	77 - 123	2609	1.71	20
Surr: Toluene-d8	2374	50	2500	0	94.9	82 - 127	2372	0.0755	20

The following samples were analyzed in this batch: HS23100136-01

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: R448226 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKW-231004	Units: ug/L		Analysis Date: 05-Oct-2023 00:17					
Client ID:	Run ID: VOA4_448226	SeqNo: 7587018		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	< 1.0	1.0							
Ethylbenzene	< 1.0	1.0							
Toluene	< 1.0	1.0							
Xylenes, Total	< 3.0	3.0							
Surr: 1,2-Dichloroethane-d4	57.14	1.0	50	0	114	70 - 123			
Surr: 4-Bromofluorobenzene	48.79	1.0	50	0	97.6	77 - 113			
Surr: Dibromofluoromethane	56.31	1.0	50	0	113	73 - 126			
Surr: Toluene-d8	48.45	1.0	50	0	96.9	81 - 120			

LCS	Sample ID: VLCSW-231004	Units: ug/L		Analysis Date: 04-Oct-2023 23:32					
Client ID:	Run ID: VOA4_448226	SeqNo: 7587017		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	17.84	1.0	20	0	89.2	74 - 120			
Ethylbenzene	17.85	1.0	20	0	89.2	77 - 117			
Toluene	17.65	1.0	20	0	88.2	77 - 118			
Xylenes, Total	56.39	3.0	60	0	94.0	75 - 122			
Surr: 1,2-Dichloroethane-d4	51.77	1.0	50	0	104	70 - 123			
Surr: 4-Bromofluorobenzene	52.01	1.0	50	0	104	77 - 113			
Surr: Dibromofluoromethane	50.5	1.0	50	0	101	73 - 126			
Surr: Toluene-d8	50.81	1.0	50	0	102	81 - 120			

MS	Sample ID: HS23100177-03MS	Units: ug/L		Analysis Date: 05-Oct-2023 03:19					
Client ID:	Run ID: VOA4_448226	SeqNo: 7587025		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	17.69	1.0	20	0	88.4	70 - 127			
Ethylbenzene	17.55	1.0	20	0	87.8	70 - 124			
Toluene	17.06	1.0	20	0	85.3	70 - 123			
Xylenes, Total	53.92	3.0	60	0	89.9	70 - 130			
Surr: 1,2-Dichloroethane-d4	51.63	1.0	50	0	103	70 - 126			
Surr: 4-Bromofluorobenzene	51.03	1.0	50	0	102	77 - 113			
Surr: Dibromofluoromethane	50.48	1.0	50	0	101	77 - 123			
Surr: Toluene-d8	50.49	1.0	50	0	101	82 - 127			

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: R448226 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS23100177-03MSD	Units: ug/L		Analysis Date: 05-Oct-2023 11:07						
Client ID:	Run ID: VOA4_448226		SeqNo: 7587122		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.22	1.0	20	0	86.1	70 - 127	17.69	2.64	20	
Ethylbenzene	17.76	1.0	20	0	88.8	70 - 124	17.55	1.19	20	
Toluene	17.71	1.0	20	0	88.6	70 - 123	17.06	3.78	20	
Xylenes, Total	55.03	3.0	60	0	91.7	70 - 130	53.92	2.04	20	
Surr: 1,2-Dichloroethane-d4	47.82	1.0	50	0	95.6	70 - 126	51.63	7.65	20	
Surr: 4-Bromofluorobenzene	49.9	1.0	50	0	99.8	77 - 113	51.03	2.26	20	
Surr: Dibromofluoromethane	47.75	1.0	50	0	95.5	77 - 123	50.48	5.56	20	
Surr: Toluene-d8	52.45	1.0	50	0	105	82 - 127	50.49	3.8	20	
The following samples were analyzed in this batch:										
HS23100136-02 HS23100136-03										

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

QC BATCH REPORT

Batch ID: R449122 (0)		Instrument: ICS-Integrion		Method: ANIONS BY E300.0, REV 2.1, 1993					
MBLK	Sample ID: MBLK	Units: mg/L		Analysis Date: 14-Oct-2023 07:25					
Client ID:	Run ID: ICS-Integrion_449122		SeqNo: 7609517		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	< 0.500	0.500							
LCS	Sample ID: LCS	Units: mg/L		Analysis Date: 14-Oct-2023 07:37					
Client ID:	Run ID: ICS-Integrion_449122		SeqNo: 7609518		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	19.24	0.500	20	0	96.2	90 - 110			
MS	Sample ID: HS23100598-02MS	Units: mg/L		Analysis Date: 14-Oct-2023 08:06					
Client ID:	Run ID: ICS-Integrion_449122		SeqNo: 7609523		PrepDate:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	166.2	2.50	50	123.9	84.5	80 - 120			
MS	Sample ID: HS23100598-01MS	Units: mg/L		Analysis Date: 14-Oct-2023 07:48					
Client ID:	Run ID: ICS-Integrion_449122		SeqNo: 7609520		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	9.774	0.500	10	0	97.7	80 - 120			
MSD	Sample ID: HS23100598-02MSD	Units: mg/L		Analysis Date: 14-Oct-2023 08:12					
Client ID:	Run ID: ICS-Integrion_449122		SeqNo: 7609524		PrepDate:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	163.7	2.50	50	123.9	79.6	80 - 120	166.2	1.49	20 S
MSD	Sample ID: HS23100598-01MSD	Units: mg/L		Analysis Date: 14-Oct-2023 07:54					
Client ID:	Run ID: ICS-Integrion_449122		SeqNo: 7609521		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	9.806	0.500	10	0	98.1	80 - 120	9.774	0.327	20
The following samples were analyzed in this batch:									
HS23100136-01		HS23100136-02		HS23100136-03					

ALS Houston, US

Date: 16-Oct-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23100136

**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 Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

ALS Houston, US

Date: 16-Oct-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: 16-Oct-23

Sample Receipt Checklist

Work Order ID: HS23100136

Date/Time Received: 03-Oct-2023 09:45

Client Name: GHDHouston

Received by: Paresh M. Giga

Completed By: /S/ Belinda Gomez	03-Oct-2023 18:05	Reviewed by: /S/ James Guin	04-Oct-2023 16:35
eSignature	Date/Time	eSignature	Date/Time

Matrices: WCarrier 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:307317
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):	2.9uc/2.8c ir31		
Cooler(s)/Kit(s):	51703		
Date/Time sample(s) sent to storage:	10/3/23 1806		
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:	TB received not listed on coc.		

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:

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

Chain of Custody Form

Page ____ of ____

COC ID: 307317

Houston, TX
+1 281 530 5656Middletown, PA
+1 717 944 5541Spring City, PA
+1 610 948 4903Salt Lake City, UT
+1 801 266 7700South Charleston, WV
+1 304 356 3168York, PA
+1 717 505 5280

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	E-19002-GL-26050008 Stacy Boul	Project Name	12621862 - ET Brahaney Gathering	A	8260_LL_W (8260 BTEX)											
Work Order		Project Number	12621862	B	8015_GRO_W (8015 TPH-GRO)											
Company Name	GHD	Bill To Company	Energy Transfer	C	8015M_DRO_W											
Send Report To	Chris Knight	Invoice Attn	Stacy Boultinghouse	D	300_W (300 Chloride)											
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	Christopher.Knight@ghd.com	e-Mail Address	Stacy.Boultinghouse@energytransfer.co													

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F
1	MW-1-20230929	09/29/23	1150	GW	8	8	✓	✓	✓	✓		
2	MW-3-20230929	09/29/23	1500	GW	8	8	✓	✓	✓	✓		
3	MW-5-20230929	09/29/23	1710	GW	8	8	✓	✓	✓	✓		
4												
5												
6												
7												
8												
9												
10												

Sampler(s) Please Print & Sign <i>Elizabeth Fain</i>		Shipment Method <i>FedEx Cooler</i>		Required Turnaround Time: (Check Box) ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour				Results Due Date:			
Relinquished by: <i>Elizabeth Fain</i>		Date: 10/02/23	Time: 1300	Received by: <i>[Signature]</i>		Notes: 12621862 - ET Brahaney Gathering System					
Relinquished by:		Date:	Time:	Received by (Laboratory): <i>[Signature]</i>		Cooler ID <i>51703</i>	Cooler Temp. <i>2.9°</i>	QC Package: (Check One Box Below)			
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory): <i>[Signature]</i>		☒ Level II Std QC		☐ TRRP Checklist			
						☐ Level III Std QC/Raw Date		☐ TRRP Level IV			
						☐ Level IV SW64B/CLP					
						☐ Other					

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

HS23100136

GHD
12621862 - ET Brahaney Gathering System

Hold

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.

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	51703	STUDY SEAL Name: <u>Eliza</u> Company: <u>Cal</u>	Seal Broken By: <u>SM</u> Date: <u>10/03/23</u>

51703

OCT 03 2023



51703

ORIGIN ID: SGRA (505) 934-0902
 SIMON KOZIK
 GHD
 324 W. MAIN ST. SUITE 108

ARTESIA, NM 88210
 UNITED STATES US

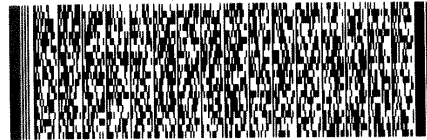
SHIP DATE: 15SEP23
 ACTWGT: 1.00 LB MAN
 CAD: 0221247/CAFE3751
 DIMS: 26x14x14 IN

TO SHIPPING DEPT
 ALS LABORATORY GROUP
 10450 STANCLIFF RD
 SUITE 210
 HOUSTON TX 77099

(281) 530-5656

REF: 12621862 - ET - BRAHANEY = BO 95566 - JG

RMA: ||| ||| |||



FedEx Express



FedEx

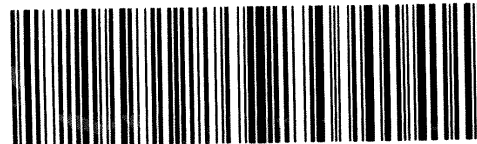
TRK# 6862 6796 5981

TUE - 03 OCT 10:30A
PRIORITY OVERNIGHT

XA SGRA

77099

TX-US IAH





10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
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December 27, 2023

Chris Knight
GHD
11451 Katy Fwy
Suite 400
Houston, TX 77079

Work Order: **HS23121484**

Laboratory Results for: **12621862 - ET Brahaney Gathering System**

Dear Chris Knight,

ALS Environmental received 5 sample(s) on Dec 21, 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: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Work Order: HS23121484

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23121484-01	MW-1-20231219	Groundwater		19-Dec-2023 10:30	21-Dec-2023 12:05	☐
HS23121484-02	MW-3-20231219	Groundwater		19-Dec-2023 11:25	21-Dec-2023 12:05	☐
HS23121484-03	MW-4-20231219	Groundwater		19-Dec-2023 12:15	21-Dec-2023 12:05	☐
HS23121484-04	MW-5-20231219	Groundwater		19-Dec-2023 14:20	21-Dec-2023 12:05	☐
HS23121484-05	Trip Blank	Water		19-Dec-2023 00:00	21-Dec-2023 12:05	☒

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Work Order: HS23121484

CASE NARRATIVE

GC Semivolatiles by Method SW8015M**Batch ID: 205167**

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

GC Volatiles by Method SW8015**Batch ID: R455172**

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

GCMS Volatiles by Method SW8260**Batch ID: R455168****Sample ID: HS23121481-04MS**

- MS and MSD are for an unrelated sample

WetChemistry by Method E300**Batch ID: R455066****Sample ID: MW-1-20231219 (HS23121484-01MS)**

- The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. (Chloride)
-

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-1-20231219
Collection Date: 19-Dec-2023 10:30

ANALYTICAL REPORT

WorkOrder:HS23121484
Lab ID:HS23121484-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT		
Benzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 00:53
Ethylbenzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 00:53
Toluene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 00:53
Xylenes, Total	< 0.0030		0.0030	mg/L	1	23-Dec-2023 00:53
Surr: 1,2-Dichloroethane-d4	91.1		70-126	%REC	1	23-Dec-2023 00:53
Surr: 4-Bromofluorobenzene	99.7		77-113	%REC	1	23-Dec-2023 00:53
Surr: Dibromofluoromethane	80.2		77-123	%REC	1	23-Dec-2023 00:53
Surr: Toluene-d8	101		82-127	%REC	1	23-Dec-2023 00:53
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: PJM		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	26-Dec-2023 15:21
Surr: 4-Bromofluorobenzene	90.4		70-123	%REC	1	26-Dec-2023 15:21
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 22-Dec-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	23-Dec-2023 22:09
Surr: 2-Fluorobiphenyl	68.4		60-135	%REC	1	23-Dec-2023 22:09
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	59.6		0.500	mg/L	1	23-Dec-2023 12:35

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

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-3-20231219
Collection Date: 19-Dec-2023 11:25

ANALYTICAL REPORT

WorkOrder:HS23121484
Lab ID:HS23121484-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT		
Benzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:15
Ethylbenzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:15
Toluene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:15
Xylenes, Total	< 0.0030		0.0030	mg/L	1	23-Dec-2023 01:15
Surr: 1,2-Dichloroethane-d4	86.8		70-126	%REC	1	23-Dec-2023 01:15
Surr: 4-Bromofluorobenzene	97.2		77-113	%REC	1	23-Dec-2023 01:15
Surr: Dibromofluoromethane	80.6		77-123	%REC	1	23-Dec-2023 01:15
Surr: Toluene-d8	99.0		82-127	%REC	1	23-Dec-2023 01:15
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: PJM		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	26-Dec-2023 15:35
Surr: 4-Bromofluorobenzene	92.0		70-123	%REC	1	26-Dec-2023 15:35
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 22-Dec-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	23-Dec-2023 20:36
Surr: 2-Fluorobiphenyl	62.2		60-135	%REC	1	23-Dec-2023 20:36
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	65.5		0.500	mg/L	1	23-Dec-2023 12:53

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

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-4-20231219
Collection Date: 19-Dec-2023 12:15

ANALYTICAL REPORT

WorkOrder:HS23121484
Lab ID:HS23121484-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT		
Benzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:37
Ethylbenzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:37
Toluene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:37
Xylenes, Total	< 0.0030		0.0030	mg/L	1	23-Dec-2023 01:37
Surr: 1,2-Dichloroethane-d4	91.3		70-126	%REC	1	23-Dec-2023 01:37
Surr: 4-Bromofluorobenzene	99.3		77-113	%REC	1	23-Dec-2023 01:37
Surr: Dibromofluoromethane	82.9		77-123	%REC	1	23-Dec-2023 01:37
Surr: Toluene-d8	102		82-127	%REC	1	23-Dec-2023 01:37
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: PJM		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	26-Dec-2023 15:49
Surr: 4-Bromofluorobenzene	92.5		70-123	%REC	1	26-Dec-2023 15:49
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 22-Dec-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	23-Dec-2023 20:59
Surr: 2-Fluorobiphenyl	61.1		60-135	%REC	1	23-Dec-2023 20:59
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	66.3		0.500	mg/L	1	23-Dec-2023 13:28

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

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Sample ID: MW-5-20231219
Collection Date: 19-Dec-2023 14:20

ANALYTICAL REPORT

WorkOrder:HS23121484
Lab ID:HS23121484-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT		
Benzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 02:00
Ethylbenzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 02:00
Toluene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 02:00
Xylenes, Total	< 0.0030		0.0030	mg/L	1	23-Dec-2023 02:00
Surr: 1,2-Dichloroethane-d4	87.3		70-126	%REC	1	23-Dec-2023 02:00
Surr: 4-Bromofluorobenzene	101		77-113	%REC	1	23-Dec-2023 02:00
Surr: Dibromofluoromethane	81.9		77-123	%REC	1	23-Dec-2023 02:00
Surr: Toluene-d8	104		82-127	%REC	1	23-Dec-2023 02:00
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: PJM		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	26-Dec-2023 16:02
Surr: 4-Bromofluorobenzene	91.2		70-123	%REC	1	26-Dec-2023 16:02
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 22-Dec-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	23-Dec-2023 21:22
Surr: 2-Fluorobiphenyl	69.8		60-135	%REC	1	23-Dec-2023 21:22
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	65.6		0.500	mg/L	1	23-Dec-2023 13:33

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

Weight / Prep Log

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

Batch ID: 205167	Start Date: 22 Dec 2023 11:22	End Date: 22 Dec 2023 11:22
Method: AQPREP: 3510C TPH	Prep Code: 8015WPR_LL	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23121484-01	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS23121484-02	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS23121484-03	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS23121484-04	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 205167 (0)		Test Name : DIESEL RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS23121484-01	MW-1-20231219	19 Dec 2023 10:30		22 Dec 2023 11:22	23 Dec 2023 22:09	1
HS23121484-02	MW-3-20231219	19 Dec 2023 11:25		22 Dec 2023 11:22	23 Dec 2023 20:36	1
HS23121484-03	MW-4-20231219	19 Dec 2023 12:15		22 Dec 2023 11:22	23 Dec 2023 20:59	1
HS23121484-04	MW-5-20231219	19 Dec 2023 14:20		22 Dec 2023 11:22	23 Dec 2023 21:22	1
Batch ID: R455066 (0)		Test Name : ANIONS BY E300.0, REV 2.1, 1993			Matrix: Groundwater	
HS23121484-01	MW-1-20231219	19 Dec 2023 10:30			23 Dec 2023 12:35	1
HS23121484-02	MW-3-20231219	19 Dec 2023 11:25			23 Dec 2023 12:53	1
HS23121484-03	MW-4-20231219	19 Dec 2023 12:15			23 Dec 2023 13:28	1
HS23121484-04	MW-5-20231219	19 Dec 2023 14:20			23 Dec 2023 13:33	1
Batch ID: R455168 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Groundwater	
HS23121484-01	MW-1-20231219	19 Dec 2023 10:30			23 Dec 2023 00:53	1
HS23121484-02	MW-3-20231219	19 Dec 2023 11:25			23 Dec 2023 01:15	1
HS23121484-03	MW-4-20231219	19 Dec 2023 12:15			23 Dec 2023 01:37	1
HS23121484-04	MW-5-20231219	19 Dec 2023 14:20			23 Dec 2023 02:00	1
Batch ID: R455172 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS23121484-01	MW-1-20231219	19 Dec 2023 10:30			26 Dec 2023 15:21	1
HS23121484-02	MW-3-20231219	19 Dec 2023 11:25			26 Dec 2023 15:35	1
HS23121484-03	MW-4-20231219	19 Dec 2023 12:15			26 Dec 2023 15:49	1
HS23121484-04	MW-5-20231219	19 Dec 2023 14:20			26 Dec 2023 16:02	1

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

QC BATCH REPORT

Batch ID: 205167 (0)		Instrument: FID23		Method: DIESEL RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-205167	Units: mg/L		Analysis Date: 23-Dec-2023 20:36						
Client ID:	Run ID: FID23_455227		SeqNo: 7752146		PrepDate: 22-Dec-2023		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	< 0.0500	0.0500								
Surr: 2-Fluorobiphenyl	0.08071	0.00500	0.1	0	80.7	60 - 135				
LCS	Sample ID: LCS-205167	Units: mg/L		Analysis Date: 23-Dec-2023 20:59						
Client ID:	Run ID: FID23_455227		SeqNo: 7752147		PrepDate: 22-Dec-2023		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.7745	0.0500	1	0	77.4	70 - 130				
Surr: 2-Fluorobiphenyl	0.08268	0.00500	0.1	0	82.7	60 - 135				
LCSD	Sample ID: LCSD-205167	Units: mg/L		Analysis Date: 23-Dec-2023 21:22						
Client ID:	Run ID: FID23_455227		SeqNo: 7752148		PrepDate: 22-Dec-2023		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.7636	0.0500	1	0	76.4	70 - 130	0.7745	1.42	20	
Surr: 2-Fluorobiphenyl	0.07679	0.00500	0.1	0	76.8	60 - 135	0.08268	7.38	20	
The following samples were analyzed in this batch:										
HS23121484-01		HS23121484-02		HS23121484-03		HS23121484-04				

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

QC BATCH REPORT

Batch ID: R455172 (0)		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-231221	Units: mg/L		Analysis Date: 26-Dec-2023 14:12						
Client ID:	Run ID: FID-20_455172		SeqNo: 7751035		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	< 0.0500	0.0500								
Surr: 4-Bromofluorobenzene	0.09315	0.00500	0.1	0	93.1	70 - 121				
LCS	Sample ID: LCS-231226	Units: mg/L		Analysis Date: 26-Dec-2023 13:45						
Client ID:	Run ID: FID-20_455172		SeqNo: 7751033		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.009	0.0500	1	0	101	76 - 124				
Surr: 4-Bromofluorobenzene	0.1091	0.00500	0.1	0	109	52 - 138				
LCSD	Sample ID: LCSD-231226	Units: mg/L		Analysis Date: 26-Dec-2023 13:58						
Client ID:	Run ID: FID-20_455172		SeqNo: 7751034		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.06	0.0500	1	0	106	76 - 124	1.009	4.94	20	
Surr: 4-Bromofluorobenzene	0.117	0.00500	0.1	0	117	52 - 138	0.1091	6.98	20	
The following samples were analyzed in this batch:										
HS23121484-01		HS23121484-02		HS23121484-03		HS23121484-04				

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

QC BATCH REPORT

Batch ID: R455168 (0)		Instrument: VOA12		Method: LOW LEVEL VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKW-231222	Units: ug/L		Analysis Date: 22-Dec-2023 21:09					
Client ID:	Run ID: VOA12_455168	SeqNo: 7750994		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	< 1.0	1.0							
Ethylbenzene	< 1.0	1.0							
Toluene	< 1.0	1.0							
Xylenes, Total	< 3.0	3.0							
Surr: 1,2-Dichloroethane-d4	44.37	1.0	50	0	88.7	70 - 123			
Surr: 4-Bromofluorobenzene	51.31	1.0	50	0	103	77 - 113			
Surr: Dibromofluoromethane	41.93	1.0	50	0	83.9	73 - 126			
Surr: Toluene-d8	51.51	1.0	50	0	103	81 - 120			

LCS	Sample ID: VLCSW-231222	Units: ug/L		Analysis Date: 22-Dec-2023 20:24					
Client ID:	Run ID: VOA12_455168	SeqNo: 7750993		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	17.62	1.0	20	0	88.1	74 - 120			
Ethylbenzene	18.56	1.0	20	0	92.8	77 - 117			
Toluene	20.91	1.0	20	0	105	77 - 118			
Xylenes, Total	54.37	3.0	60	0	90.6	75 - 122			
Surr: 1,2-Dichloroethane-d4	44.03	1.0	50	0	88.1	70 - 123			
Surr: 4-Bromofluorobenzene	50.83	1.0	50	0	102	77 - 113			
Surr: Dibromofluoromethane	43.44	1.0	50	0	86.9	73 - 126			
Surr: Toluene-d8	50.76	1.0	50	0	102	81 - 120			

MS	Sample ID: HS23121481-04MS	Units: ug/L		Analysis Date: 23-Dec-2023 00:08					
Client ID:	Run ID: VOA12_455168	SeqNo: 7751002		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	2438	1.0	20	2485	-235	70 - 127			SEO
Ethylbenzene	236.8	1.0	20	219.9	84.5	70 - 124			EO
Toluene	44.6	1.0	20	18.75	129	70 - 123			S
Xylenes, Total	121.8	3.0	60	51.45	117	70 - 130			
Surr: 1,2-Dichloroethane-d4	44.67	1.0	50	0	89.3	70 - 126			
Surr: 4-Bromofluorobenzene	50.92	1.0	50	0	102	77 - 113			
Surr: Dibromofluoromethane	41.5	1.0	50	0	83.0	77 - 123			
Surr: Toluene-d8	51.33	1.0	50	0	103	82 - 127			

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

QC BATCH REPORT

Batch ID: R455168 (0)		Instrument: VOA12		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS23121481-04MSD	Units: ug/L		Analysis Date: 23-Dec-2023 00:31						
Client ID:	Run ID: VOA12_455168		SeqNo: 7751003		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2417	1.0	20	2485	-342	70 - 127	2438	0.879	20	SEO
Ethylbenzene	241.4	1.0	20	219.9	108	70 - 124	236.8	1.95	20	EO
Toluene	47.25	1.0	20	18.75	142	70 - 123	44.6	5.77	20	S
Xylenes, Total	126	3.0	60	51.45	124	70 - 130	121.8	3.41	20	
Surr: 1,2-Dichloroethane-d4	43.73	1.0	50	0	87.5	70 - 126	44.67	2.14	20	
Surr: 4-Bromofluorobenzene	51.16	1.0	50	0	102	77 - 113	50.92	0.471	20	
Surr: Dibromofluoromethane	41.42	1.0	50	0	82.8	77 - 123	41.5	0.212	20	
Surr: Toluene-d8	50.29	1.0	50	0	101	82 - 127	51.33	2.05	20	
The following samples were analyzed in this batch:										
HS23121484-01		HS23121484-02		HS23121484-03		HS23121484-04				

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

QC BATCH REPORT

Batch ID: R455066 (0)		Instrument: ICS-Integrion		Method: ANIONS BY E300.0, REV 2.1, 1993					
MBLK	Sample ID: MBLK	Units: mg/L		Analysis Date: 23-Dec-2023 10:14					
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748291		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	< 0.500	0.500							
LCS	Sample ID: LCS	Units: mg/L		Analysis Date: 23-Dec-2023 10:20					
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748292		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	20.03	0.500	20	0	100	90 - 110			
MS	Sample ID: HS23121487-01MS	Units: mg/L		Analysis Date: 23-Dec-2023 12:18					
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748306		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	65.79	0.500	10	56.85	89.4	80 - 120			O
MS	Sample ID: HS23121484-01MS	Units: mg/L		Analysis Date: 23-Dec-2023 12:41					
Client ID: MW-1-20231219	Run ID: ICS-Integrion_455066		SeqNo: 7748310		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	67.53	0.500	10	59.61	79.1	80 - 120			SO
MSD	Sample ID: HS23121487-01MSD	Units: mg/L		Analysis Date: 23-Dec-2023 12:23					
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748307		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	65.91	0.500	10	56.85	90.6	80 - 120	65.79	0.179	20 O
MSD	Sample ID: HS23121484-01MSD	Units: mg/L		Analysis Date: 23-Dec-2023 12:47					
Client ID: MW-1-20231219	Run ID: ICS-Integrion_455066		SeqNo: 7748311		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Chloride	67.33	0.500	10	59.61	77.2	80 - 120	67.53	0.289	20 SO
The following samples were analyzed in this batch:									
HS23121484-01		HS23121484-02		HS23121484-03		HS23121484-04			

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121484

**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 Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

ALS Houston, US

Date: 27-Dec-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	T104704231-23-32	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US

Date: 27-Dec-23

Sample Receipt Checklist

Work Order ID: HS23121484

Date/Time Received: 21-Dec-2023 12:05

Client Name: GHDHouston

Received by: Malcolm Burleson

Completed By: /S/ Malcolm Burleson	22-Dec-2023 08:58	Reviewed by: /S/ James Guin	27-Dec-2023 08:52
eSignature	Date/Time	eSignature	Date/Time

Matrices: WCarrier 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:304507
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):	2.5UC 2.4C IR31		
Cooler(s)/Kit(s):	BLACK		
Date/Time sample(s) sent to storage:	12.21.2023		
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 5336Everett, WA
+1 425 356 2600Fort Collins, CO
+1 970 490 1511Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 304507

Houston, TX
+1 281 530 5656Middletown, PA
+1 717 944 5541Spring City, PA
+1 610 948 4903Salt Lake City, UT
+1 801 266 7700South Charleston, WV
+1 304 356 3168York, PA
+1 717 505 5280

Customer Information		Project Information		Parameter/Method Request for Analysis																
Purchase Order	E-19002-GL-26050008 Stacy Boul	Project Name	12621862 - ET Brahaney Gathering	A	8260_LL_W(8260 BTEX)															
Work Order		Project Number	12621862	B	8015_GRO_W(8015 TPH-GRO)															
Company Name	GHD	Bill To Company	Energy Transfer	C	8015M_DRO_W															
Send Report To	Chris Knight	Invoice Attn	Stacy Boultinghouse	D	300_W(300 Chloride)															
Address	11451 Katy Fwy	Address	P.O. Box 132400	E	HS23121484 GHD 12621862 - ET Brahaney Gathering System 															
	Suite 400			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	Christopher.Knight@ghd.com	e-Mail Address	Stacy.Boultinghouse@energytransfer.com	J	Hold															

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1-20231219	12/19/23	1030	GW	8	8											
2	MW-3-20231219	↓	1125	GW	8	8											
3	MW-4-20231219		1215	GW	8	8											
4	MW-5-20231219		1420	GW	8	8											
5	trip blank			TB	8	2											
6	temp blank			TB	8	1											
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:	
Elizabeth Fain		Sample cooler FedEx		☒ STD 10 Wk. Days ☐ 5 Wk. Days ☐ 2Wk. Days ☐ 24 Hour					
Relinquished by:	Date:	Time:	Received by:	Notes: 12621862 - ET Brahaney Gathering System					
Elizabeth Fain	12/20/23	0950							
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID: 50659					
				Cooler Temp: 12.31					
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	QC Package: (Check One Box Below) ☒ Level II Std. OC ☐ Level III Std. OC/Raw Data ☐ Level IV SWAB/CLP ☐ Other:					
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035				TPRP Checklist TPRP Level IV					

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.

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 ALS 10450 Stancliff Rd., Suite 110 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: <i>SM</i>
	Date: <i>12/20/23</i>	Time: <i>0950</i>	Date: <i>12/21/23</i>
	Name: <i>Elizabeth Fain</i>		
	Company: <i>CHD</i>		

Black DEC 21 2023

 Must Deliver Next Business Day Time and Temperature Sensitive!		Part # 15908-434 MNYE 1607 12.21
ORIGIN ID: SGRA (505) 934-0902 SIMON KOZIK GHD 6121 INDIAN SCHOOL ROAD SUITE 200 ALBUQUERQUE, NM 87110 UNITED STATES US		SHIP DATE: 12 ACTWGT: 1.00 CAD: 0221247 DIMS: 26x14x
TO SAMPLE RECEIVING ALS LABORATORY GROUP 10450 STANCLIFF ROAD SUITE 210 HOUSTON TX 77099 (281) 530-6666 REF: 12621862 - ET - BRAHANERY = BO 97622 - JG RMA: 		12:00 1607 12.21 917 B03 12/25/23
 		
FedEx TRK# 6862 6800 1607 0221		THU - 21 DEC 12:00 PRIORITY OVERNIGHT
AB SGRA		77099 TX-US IAH
		12/20
#4795404 12/20 58314/28E4/9AEB		



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

December 27, 2023

Chris Knight
GHD
11451 Katy Fwy
Suite 400
Houston, TX 77079

Work Order: **HS23121487**

Laboratory Results for: **12621862 - ET Brahaney Gathering System**

Dear Chris Knight,

ALS Environmental received 3 sample(s) on Dec 21, 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: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Work Order: HS23121487

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23121487-01	MW-2-20231219	Groundwater		19-Dec-2023 16:15	21-Dec-2023 12:05	☐
HS23121487-02	DUP-01-20231219	Groundwater		19-Dec-2023 00:00	21-Dec-2023 12:05	☐
HS23121487-03	Trip Blank	Water	CG-111123-246	19-Dec-2023 00:00	21-Dec-2023 12:05	☒

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
Work Order: HS23121487

CASE NARRATIVE

GC Semivolatiles by Method SW8015M**Batch ID: 205167**

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

GC Volatiles by Method SW8015**Batch ID: R455172**

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

GCMS Volatiles by Method SW8260**Batch ID: R455046**

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

WetChemistry by Method E300**Batch ID: R455066****Sample ID: HS23121484-01MS**

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

ALS Houston, US

Date: 27-Dec-23

Client: GHD
 Project: 12621862 - ET Brahaney Gathering System
 Sample ID: MW-2-20231219
 Collection Date: 19-Dec-2023 16:15

ANALYTICAL REPORT

WorkOrder:HS23121487
 Lab ID:HS23121487-01
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
Benzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:13
Ethylbenzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:13
Toluene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:13
Xylenes, Total	< 0.0030		0.0030	mg/L	1	23-Dec-2023 01:13
Surr: 1,2-Dichloroethane-d4	104		70-126	%REC	1	23-Dec-2023 01:13
Surr: 4-Bromofluorobenzene	110		77-113	%REC	1	23-Dec-2023 01:13
Surr: Dibromofluoromethane	102		77-123	%REC	1	23-Dec-2023 01:13
Surr: Toluene-d8	92.4		82-127	%REC	1	23-Dec-2023 01:13
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: PJM		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	26-Dec-2023 14:53
Surr: 4-Bromofluorobenzene	95.9		70-123	%REC	1	26-Dec-2023 14:53
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 22-Dec-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	23-Dec-2023 21:45
Surr: 2-Fluorobiphenyl	75.7		60-135	%REC	1	23-Dec-2023 21:45
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	56.8		0.500	mg/L	1	23-Dec-2023 12:12

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

ALS Houston, US

Date: 27-Dec-23

Client: GHD
 Project: 12621862 - ET Brahaney Gathering System
 Sample ID: DUP-01-20231219
 Collection Date: 19-Dec-2023 00:00

ANALYTICAL REPORT

WorkOrder:HS23121487
 Lab ID:HS23121487-02
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
Benzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:35
Ethylbenzene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:35
Toluene	< 0.0010		0.0010	mg/L	1	23-Dec-2023 01:35
Xylenes, Total	< 0.0030		0.0030	mg/L	1	23-Dec-2023 01:35
Surr: 1,2-Dichloroethane-d4	101		70-126	%REC	1	23-Dec-2023 01:35
Surr: 4-Bromofluorobenzene	104		77-113	%REC	1	23-Dec-2023 01:35
Surr: Dibromofluoromethane	100		77-123	%REC	1	23-Dec-2023 01:35
Surr: Toluene-d8	93.0		82-127	%REC	1	23-Dec-2023 01:35
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: PJM		
Gasoline Range Organics	< 0.0500		0.0500	mg/L	1	26-Dec-2023 15:07
Surr: 4-Bromofluorobenzene	92.9		70-123	%REC	1	26-Dec-2023 15:07
DIESEL RANGE ORGANICS BY SW8015C		Method:SW8015M		Prep:SW3510C / 22-Dec-2023 Analyst: SAM		
DRO (>C10 - C28)	< 0.0500		0.0500	mg/L	1	23-Dec-2023 22:09
Surr: 2-Fluorobiphenyl	66.6		60-135	%REC	1	23-Dec-2023 22:09
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH		
Chloride	65.9		0.500	mg/L	1	23-Dec-2023 12:29

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

Weight / Prep Log

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

Batch ID: 205167	Start Date: 22 Dec 2023 11:22	End Date: 22 Dec 2023 11:22
Method: AQPREP: 3510C TPH	Prep Code: 8015WPR_LL	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23121487-01	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS23121487-02	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 205167 (0)		Test Name : DIESEL RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS23121487-01	MW-2-20231219	19 Dec 2023 16:15		22 Dec 2023 11:22	23 Dec 2023 21:45	1
HS23121487-02	DUP-01-20231219	19 Dec 2023 00:00		22 Dec 2023 11:22	23 Dec 2023 22:09	1
Batch ID: R455046 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Groundwater	
HS23121487-01	MW-2-20231219	19 Dec 2023 16:15			23 Dec 2023 01:13	1
HS23121487-02	DUP-01-20231219	19 Dec 2023 00:00			23 Dec 2023 01:35	1
Batch ID: R455066 (0)		Test Name : ANIONS BY E300.0, REV 2.1, 1993			Matrix: Groundwater	
HS23121487-01	MW-2-20231219	19 Dec 2023 16:15			23 Dec 2023 12:12	1
HS23121487-02	DUP-01-20231219	19 Dec 2023 00:00			23 Dec 2023 12:29	1
Batch ID: R455172 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS23121487-01	MW-2-20231219	19 Dec 2023 16:15			26 Dec 2023 14:53	1
HS23121487-02	DUP-01-20231219	19 Dec 2023 00:00			26 Dec 2023 15:07	1

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

QC BATCH REPORT

Batch ID: 205167 (0)		Instrument: FID23		Method: DIESEL RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-205167	Units: mg/L		Analysis Date: 23-Dec-2023 20:36						
Client ID:	Run ID: FID23_455227	SeqNo: 7752146		PrepDate: 22-Dec-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	< 0.0500	0.0500								
Surr: 2-Fluorobiphenyl	0.08071	0.00500	0.1	0	80.7	60 - 135				
LCS	Sample ID: LCS-205167	Units: mg/L		Analysis Date: 23-Dec-2023 20:59						
Client ID:	Run ID: FID23_455227	SeqNo: 7752147		PrepDate: 22-Dec-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.7745	0.0500	1	0	77.4	70 - 130				
Surr: 2-Fluorobiphenyl	0.08268	0.00500	0.1	0	82.7	60 - 135				
LCSD	Sample ID: LCSD-205167	Units: mg/L		Analysis Date: 23-Dec-2023 21:22						
Client ID:	Run ID: FID23_455227	SeqNo: 7752148		PrepDate: 22-Dec-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.7636	0.0500	1	0	76.4	70 - 130	0.7745	1.42	20	
Surr: 2-Fluorobiphenyl	0.07679	0.00500	0.1	0	76.8	60 - 135	0.08268	7.38	20	
The following samples were analyzed in this batch:										
HS23121487-01 HS23121487-02										

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

QC BATCH REPORT

Batch ID: R455172 (0)		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-231221	Units: mg/L		Analysis Date: 26-Dec-2023 14:12						
Client ID:	Run ID: FID-20_455172	SeqNo: 7751035		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	< 0.0500	0.0500								
Surr: 4-Bromofluorobenzene	0.09315	0.00500	0.1	0	93.1	70 - 121				
LCS	Sample ID: LCS-231226	Units: mg/L		Analysis Date: 26-Dec-2023 13:45						
Client ID:	Run ID: FID-20_455172	SeqNo: 7751033		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.009	0.0500	1	0	101	76 - 124				
Surr: 4-Bromofluorobenzene	0.1091	0.00500	0.1	0	109	52 - 138				
LCSD	Sample ID: LCSD-231226	Units: mg/L		Analysis Date: 26-Dec-2023 13:58						
Client ID:	Run ID: FID-20_455172	SeqNo: 7751034		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.06	0.0500	1	0	106	76 - 124	1.009	4.94	20	
Surr: 4-Bromofluorobenzene	0.117	0.00500	0.1	0	117	52 - 138	0.1091	6.98	20	
The following samples were analyzed in this batch:										
HS23121487-01 HS23121487-02										

ALS Houston, US

Date: 27-Dec-23

Client: GHD
 Project: 12621862 - ET Brahaney Gathering System
 WorkOrder: HS23121487

QC BATCH REPORT

Batch ID: R455046 (0)		Instrument: VOA7		Method: LOW LEVEL VOLATILES BY SW8260C					
MBLK	Sample ID: VBLKW-231222	Units: ug/L		Analysis Date: 22-Dec-2023 21:33					
Client ID:	Run ID: VOA7_455046	SeqNo: 7747854		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	< 1.0	1.0							
Ethylbenzene	< 1.0	1.0							
Toluene	< 1.0	1.0							
Xylenes, Total	< 3.0	3.0							
Surr: 1,2-Dichloroethane-d4	47.56	1.0	50	0	95.1	70 - 123			
Surr: 4-Bromofluorobenzene	53.37	1.0	50	0	107	77 - 113			
Surr: Dibromofluoromethane	48.91	1.0	50	0	97.8	73 - 126			
Surr: Toluene-d8	46.13	1.0	50	0	92.3	81 - 120			

LCS	Sample ID: VLCSW-231222	Units: ug/L		Analysis Date: 22-Dec-2023 20:27					
Client ID:	Run ID: VOA7_455046	SeqNo: 7747852		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	19.58	1.0	20	0	97.9	74 - 120			
Ethylbenzene	18.76	1.0	20	0	93.8	77 - 117			
Toluene	18.05	1.0	20	0	90.3	77 - 118			
Xylenes, Total	56.07	3.0	60	0	93.5	75 - 122			
Surr: 1,2-Dichloroethane-d4	52.01	1.0	50	0	104	70 - 123			
Surr: 4-Bromofluorobenzene	52.74	1.0	50	0	105	77 - 113			
Surr: Dibromofluoromethane	57.8	1.0	50	0	116	73 - 126			
Surr: Toluene-d8	48.14	1.0	50	0	96.3	81 - 120			

LCSD	Sample ID: VLCSDW-231222	Units: ug/L		Analysis Date: 22-Dec-2023 20:49					
Client ID:	Run ID: VOA7_455046	SeqNo: 7747853		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	19.61	1.0	20	0	98.0	74 - 120	19.58	0.123	20
Ethylbenzene	18.34	1.0	20	0	91.7	77 - 117	18.76	2.26	20
Toluene	17.73	1.0	20	0	88.6	77 - 118	18.05	1.83	20
Xylenes, Total	55.42	3.0	60	0	92.4	75 - 122	56.07	1.16	20
Surr: 1,2-Dichloroethane-d4	50.41	1.0	50	0	101	70 - 123	52.01	3.12	20
Surr: 4-Bromofluorobenzene	50.79	1.0	50	0	102	77 - 113	52.74	3.77	20
Surr: Dibromofluoromethane	55.98	1.0	50	0	112	73 - 126	57.8	3.21	20
Surr: Toluene-d8	48.48	1.0	50	0	97.0	81 - 120	48.14	0.692	20

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

QC BATCH REPORT

Batch ID: R455046 (0)		Instrument: VOA7		Method: LOW LEVEL VOLATILES BY SW8260C					
MS		Sample ID: HS23120956-02MS		Units: ug/L		Analysis Date: 23-Dec-2023 05:24			
Client ID:		Run ID: VOA7_455046		SeqNo: 7747875		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	18.02	1.0	20	0.3681	88.2	70 - 127			
Ethylbenzene	17.3	1.0	20	0	86.5	70 - 124			
Toluene	16.7	1.0	20	0	83.5	70 - 123			
Xylenes, Total	52.04	3.0	60	0	86.7	70 - 130			
Surr: 1,2-Dichloroethane-d4	51.11	1.0	50	0	102	70 - 126			
Surr: 4-Bromofluorobenzene	51.83	1.0	50	0	104	77 - 113			
Surr: Dibromofluoromethane	55.76	1.0	50	0	112	77 - 123			
Surr: Toluene-d8	48.31	1.0	50	0	96.6	82 - 127			

MSD		Sample ID: HS23120956-02MSD		Units: ug/L		Analysis Date: 23-Dec-2023 05:46			
Client ID:		Run ID: VOA7_455046		SeqNo: 7747876		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	17.6	1.0	20	0.3681	86.1	70 - 127	18.02	2.35	20
Ethylbenzene	16.72	1.0	20	0	83.6	70 - 124	17.3	3.39	20
Toluene	16.39	1.0	20	0	81.9	70 - 123	16.7	1.9	20
Xylenes, Total	48.98	3.0	60	0	81.6	70 - 130	52.04	6.05	20
Surr: 1,2-Dichloroethane-d4	53.99	1.0	50	0	108	70 - 126	51.11	5.47	20
Surr: 4-Bromofluorobenzene	52.47	1.0	50	0	105	77 - 113	51.83	1.23	20
Surr: Dibromofluoromethane	54.76	1.0	50	0	110	77 - 123	55.76	1.81	20
Surr: Toluene-d8	46.98	1.0	50	0	94.0	82 - 127	48.31	2.8	20

The following samples were analyzed in this batch: HS23121487-01 HS23121487-02

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

QC BATCH REPORT

Batch ID: R455066 (0)		Instrument: ICS-Integrion		Method: ANIONS BY E300.0, REV 2.1, 1993						
MBLK	Sample ID: MBLK	Units: mg/L		Analysis Date: 23-Dec-2023 10:14						
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748291		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	< 0.500	0.500								
LCS	Sample ID: LCS	Units: mg/L		Analysis Date: 23-Dec-2023 10:20						
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748292		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.03	0.500	20	0	100	90 - 110				
MS	Sample ID: HS23121487-01MS	Units: mg/L		Analysis Date: 23-Dec-2023 12:18						
Client ID: MW-2-20231219	Run ID: ICS-Integrion_455066		SeqNo: 7748306		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	65.79	0.500	10	56.85	89.4	80 - 120				O
MS	Sample ID: HS23121484-01MS	Units: mg/L		Analysis Date: 23-Dec-2023 12:41						
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748310		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	67.53	0.500	10	59.61	79.1	80 - 120				SO
MSD	Sample ID: HS23121487-01MSD	Units: mg/L		Analysis Date: 23-Dec-2023 12:23						
Client ID: MW-2-20231219	Run ID: ICS-Integrion_455066		SeqNo: 7748307		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	65.91	0.500	10	56.85	90.6	80 - 120	65.79	0.179	20	O
MSD	Sample ID: HS23121484-01MSD	Units: mg/L		Analysis Date: 23-Dec-2023 12:47						
Client ID:	Run ID: ICS-Integrion_455066		SeqNo: 7748311		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	67.33	0.500	10	59.61	77.2	80 - 120	67.53	0.289	20	SO
The following samples were analyzed in this batch:										
			HS23121487-01 HS23121487-02							

ALS Houston, US

Date: 27-Dec-23

Client: GHD
Project: 12621862 - ET Brahaney Gathering System
WorkOrder: HS23121487

**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 Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

ALS Houston, US

Date: 27-Dec-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	T104704231-23-32	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US

Date: 27-Dec-23

Sample Receipt Checklist

Work Order ID: HS23121487

Date/Time Received: 21-Dec-2023 12:05

Client Name: GHDHouston

Received by: Malcolm Burleson

Completed By: /S/ Malcolm Burleson	22-Dec-2023 08:58	Reviewed by: /S/ Nieka Carson	22-Dec-2023 15:27
eSignature	Date/Time	eSignature	Date/Time

Matrices: WCarrier 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:304508
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):	2.2UC 2.1C IR31		
Cooler(s)/Kit(s):	50692		
Date/Time sample(s) sent to storage:	12.21.2023		
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 5336Everett, WA
+1 425 356 2600Fort Collins, CO
+1 970 490 1511Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 304508

Houston, TX
+1 281 530 5656Middletown, PA
+1 717 944 5541Spring City, PA
+1 610 948 4903Salt Lake City, UT
+1 801 266 7700South Charleston, WV
+1 304 356 3168York, PA
+1 717 505 5280

ALS Project Manager: ALS Work Order #: HS23121487

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	E-19002-GL-26050008 Stacy Boul	Project Name	12621862 - ET Brahaney Gathering	A	8260_LL_W (8260 BTEX)											
Work Order		Project Number	12621862	B	8015_GRO_W (8015 TPH-GRO)											
Company Name	GHD	Bill To Company	Energy Transfer	C	8015M_DRO_W											
Send Report To	Chris Knight	Invoice Attn	Stacy Boultinghouse	D	300_W (300 Chloride)											
Address	11451 Katy Fwy	Address	P.O Box 132400	E	HS23121487 GHD 12621862 - ET Brahaney Gathering System 											
	Suite 400			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	Christopher.Knight@ghd.com	e-Mail Address	Stacy.Boultinghouse@energytransfer.com	J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-2-20231219	12/19/23	1615	GW	8	8											
2	DUP-01-20231219	12/19/23		GW	8	8											
3	trip blank	12/19/23		TB	8	2											
4	temp blank	12/19/23		TB	8	1											
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:	
Elizabeth Fain		Sample cooler FedEx		☒ STD 10 Wk. Days ☐ 5 Wk. Days ☐ 2 Wk. Days ☐ 24 Hour					
Relinquished by:	Date:	Time:	Received by:	Notes: 12621862 - ET Brahaney Gathering System					
Elizabeth Fain	12/20/23	0950							
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)			
			CA 12-21-23 1205	50693	2.2°	☒ Level II Std. QC ☐ TRRP Checklist			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	50693	2.2°	☐ Level III Std. QC/Pair Date ☐ TRRP Level IV			
				1221		☐ Level IV SW/45CLP			
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035				Other: _____					

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.

CUP-0.1

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 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5666 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: <i>SM</i>
	Date: <i>12/20/23</i>	Time: <i>0950</i>	Date: <i>12/21/23</i>
	Name: <i>Elizabeth Fain</i>		
	Company: <i>CHP</i>		

50692 DEC 21 2023

**Must Deliver Next Business Day
Time and Temperature Sensitive!**

50692

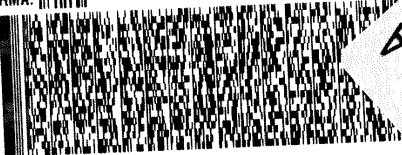
ALS

ORIGIN ID:SGRA (505) 934-0902
 SIMON KOZIK
 GPO
 6121 INDIAN SCHOOL ROAD SUITE 200
 ALBUQUERQUE, NM 87110
 UNITED STATES US

SHIP DATE: 12DEC23
 ACTWGT: 1.00 LB PAN
 CAD: 0221247/CAFE3755
 DIMS: 26x14x14 IN

TO **SAMPLE RECEIVING
 ALS LABORATORY GROUP
 10450 STANCLIFF ROAD
 SUITE 210
 HOUSTON TX 77099**

(281) 630-5666
 REF: 12621862 - ET - BRAHANERY = BO 97622 - JG

RMA: 

FedEx
 TRK# 6862 6800 1592

**THU - 21 DEC
 PRIORITY OVERNIGHT**

AB SGRA

TX - US **77099**



#4795404 12/20 583J4/28E4/9AE3



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 361053

CONDITIONS

Operator: CENTURION PIPELINE L.P. 516 Veterans Airpark Lane Midland, TX 79705	OGRID: 237722
	Action Number: 361053
	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 for Brahaney Gathering System 8 inch Pipeline: Satisfactory and accepted for record. 1. At least eight (8) consecutive quarterly groundwater samples have been demonstrated below WQCC human health standards in Title 20 NMAC. 2 This report is approved for record; the soil boring plan is in review, submitted (01.09.2025) to demonstrate remediation of groundwater contaminants in the vadose zone, before closure of the incident can be issued.	2/11/2025