1755 Wittington Place, Suite 500
Dallas, Texas 75234
United States
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**Your ref:** Incident Number nAPP2217177320
**Our ref:** 12603939-NM-1

**June 17, 2024**

Review of the 2023 Annual Groundwater Monitoring Report for Jal No. 4 Former Tank Battery: Content Satisfactory
1. Continue to conduct semi-annual groundwater monitoring events (BTEX, TDS, Chloride) in May and November as planned in report.
2. Continue to conduct quarterly LNAPL abatement events by hand-bailing at MW-1.
3. Use absorbent sock in the meantime as a way of passively removing LNAPL in-between quarterly events.
4. Submit the next annual groundwater report to OCD by June 17, 2025.

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

**2023 Annual Groundwater Monitoring Report**
**Jal No. 4 Former Tank Battery**
**ET Gathering & Processing LLC**
**Lea County, New Mexico**
**New Mexico Oil Conservation Division Remediation Case No. 1RP-1457**
**Incident Number nAPP2217177320**

To whom it may concern:

On behalf of ET Gathering & Processing LLC (ET G&P), GHD Services Inc. (GHD) is submitting the 2023 Annual Groundwater Monitoring Report (Report) for the above-referenced property (Site) to the New Mexico Oil Conservation Division (NMOCD). The Report summarizes activities performed at the Site during 2023.

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

Regards,

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Project Manager

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**Blair Owen**
Project Director

+1 561 339-3572
blair.owen@ghd.com

BO/mss/1

Encl. 2023 Annual Groundwater Monitoring Report

Copy to: Stacy Boultinghouse, Energy Transfer
Mr. Kelly Myers, Property Owner

# 2023 Annual Groundwater Monitoring Report

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

ET Gathering & Processing LLC

June 17, 2024

→ The Power of Commitment

# Contents



## Table index



## Figure index



## Appendices

# 1. Introduction

This report presents the results of groundwater monitoring activities performed during 2023 by GHD Services Inc. (GHD) at the ET Gathering & Processing LLC (ET G&P) , formerly ETC Texas Pipeline, Ltd., Jal No. 4 former tank battery (Site). The Site is located on Deep Wells Road about ½ mile west of Highway 18 and approximately 10 miles north of Jal, Lea County, New Mexico in Section 31, Township 23 South, Range 37 East. The location of the Site is shown on **Figure 1**. The property is owned by Mr. Kelly Myers. The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under remediation permit 1RP-1457 and is associated with incident number nAPP2217177320a.

## 1.1 Site Background

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

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

A total of six monitoring wells (MW-1 through MW-6) and one recovery well (RW-1) have been installed at the Site (**Figure 2**). Recovery well RW-1 was installed to recover light non-aqueous phase liquid (LNAPL), but only a sheen has ever been observed during monitoring events. However, monitoring well MW-1 has consistently had measurable LNAPL since its installation. Groundwater monitoring has been performed at the Site since February 2013 and in 2016 the monitoring switched to a semi-annual schedule.

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

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

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

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

Semi-annual groundwater monitoring and quarterly LNAPL recovery events were performed in 2023, the details and results of which are discussed in this report.

# 2. Groundwater Monitoring

GHD performed semi-annual groundwater monitoring events ate the Site in May and November 2023. The monitoring program included gauging monitoring wells MW-1 through MW-6 and recovery well RW-1 and collecting samples from MW-2 through MW-6 and RW-1. Wells where LNAPL was present were not sampled.

## 2.1 Monitoring Well Gauging

On May 30 and November 8, 2023, GHD personnel measured the depth to groundwater and LNAPL thickness, if present, in monitoring wells MW-1 through MW-6 and recovery well RW-1 using an electronic oil/water interface probe (IP). The IP was cleaned with laboratory grade soap and purified water prior to gauging each monitoring well. Depth to groundwater, LNAPL thicknesses, and calculated groundwater elevations are summarized in **Table 2**.

Based on the data collected in 2023, groundwater flow is generally east-southeast and is consistent with historical data for the Site. The groundwater gradient was calculated at 0.0017 foot per linear foot (ft/ft) in May and 0.0018 ft/ft in November. Groundwater potentiometric surface maps are presented as **Figure 3** and **Figure 4**.

## 2.2 LNAPL Presence and Recovery

GHD performed quarterly LNAPL abatement events for monitoring well MW-1 on March 7, May 30, September 14, and November 8, 2023. The abatement program included hand-bailing LNAPL using a polyethylene bailer quarterly and passively recovering LNAPL using Pig™ monitoring well skimming socks (hydrocarbon absorbent socks) between quarterly bailing events. The absorbents socks were replaced quarterly.

A measurable thickness of LNAPL was gauged in MW-1 during each quarterly event as follows: 1.67 ft. in March, 1.59 ft. in May, 1.63 ft. in September, and 1.71 ft. in November.

The used socks are stored in a sealed and labeled 55-gallon drum on a spill containment pallet on-Site. The socks recovered approximately 0.31 gallons of LNAPL and hand-bailing recovered approximately 3.26 gallons of LNAPL for a combined total of 3.58 gallons recovered in 2023. A summary of LNAPL recovery at the Site is presented in **Table 1**.

## 2.3 Groundwater Sampling

Following gauging during each 2023 semi-annual groundwater monitoring event and prior to sampling, GHD personnel utilized a bladder pump with dedicated polyethylene tubing for each well to purge a minimum of three well volumes of groundwater or until the well was dry. The monitoring and recovery wells were given time to recover and stabilize prior to collecting a groundwater sample. Groundwater quality parameters of temperature, pH, oxidation reduction potential (ORP), dissolved oxygen (DO), and conductivity were collected with a field-calibrated multi-parameter groundwater quality meter and recorded on groundwater sampling forms. A summary of field parameters is presented in **Table 3**. Monitoring well MW-1 was not sampled due to the presence of LNAPL.

Following purging and confirmation of groundwater stabilization, groundwater samples were collected from MW-2 through MW-6 and RW-1 via low-flow sampling equipment with dedicated polyethylene tubing for each well. The samples were placed in laboratory-prepared sample containers, 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 BTEX via the United States Environmental Protection Agency (US EPA) SW846 Method 8260B, chloride via US EPA Method 300.0, and total dissolved solids (TDS) via Standard Method 2540.

## 2.4 Quality Assurance/Quality Control

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

## 2.5 Analytical Results

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

The groundwater analytical results for 2023 are summarized in **Table 4**, and the corresponding laboratory analytical reports are included in **Appendix A**. A COC concentration map depicting concentrations for 2023 is presented as **Figure 5**. A summary of results is discussed below:

- BTEX was not detected at concentrations above laboratory detection limits in the groundwater samples collected from monitoring wells MW-2 through MW-6 during 2023.
- BTEX was detected in the samples collected from recovery well RW-1; however, only the concentrations of benzene exceeded the NMWQCC standard
- Concentrations of chloride were detected in all groundwater samples collected from the monitoring wells during 2023; however, the concentrations did not exceed the NMWQCC standard.
- Concentrations of TDS were detected in all groundwater samples collected from the monitoring wells 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.

- An average thickness of 1.65 ft. of LNAPL was present in monitoring well MW-1 during 2023.
- Absorbent socks and bailing were deployed as LNAPL recovery methods during 2023.
- Concentrations of benzene are present in the groundwater at the Site that exceed the NMWQCC; however, only in recovery well RW-1. The concentrations appear to be stable to decreasing.
- Concentrations of chloride are present in the groundwater; however, the concentrations did not exceed the NMWQCC standard.
- Concentrations of TDS are present in the groundwater; however, the concentrations did not exceed the NMWQCC standard.

## 3.2 Recommendations

Based on the results of the 2023 groundwater monitoring events, GHD recommends the following in 2024:

- Conduct semi-annual groundwater monitoring events in May and November 2024.
- Conduct quarterly LNAPL abatement events via hand-bailing at monitoring well MW-1.
- Between LNAPL abatement events, passively recover LNAPL via hydrocarbon absorbent socks in monitoring well MW-1, which will be replaced during each quarterly event.

# 4. Scope and Limitations

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

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

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

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

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

Table 1





**Summary of LNAPL Recovery**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well | Year | Method | LNAPL Recovered (gallons) | Impacted Groundwater Recovered (gallons) |
|---|---|---|---|---|
| MW-1 | 2015 | Skimmer Pump | 8.00 | 0.00 |
| | 2016 | Skimmer Pump | 57.00 | 108.00 |
| | 2017 | Skimmer Pump | 147.00 | 18.00 |
| | 2018 | Skimmer Pump | 92.00 | unknown |
| | 2018 | MDPE | 54.80 | 269.00 |
| | 2019 | MDPE | 153.65 | 377.00 |
| | 2020 | MDPE | 121.08 | 444.00 |
| | 2021 | Absorbent Socks and Bailing | 2.17 | 0.00 |
| | 2022 | Absorbent Socks and Bailing | 1.31 | 0.00 |
| | 2023 | Absorbent Socks and Bailing | 3.58 | 0.00 |
| | | **Total** | **640.59** | **1,216.00** |

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

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| RW-1 | 120.90 | 3,312.88 | 11/1/2013 | -- | 112.60 | -- | 3,200.28 |
| | | | 5/27/2014 | -- | 112.79 | -- | 3,200.09 |
| | | | 6/20/2014 | -- | 112.66 | -- | 3,200.22 |
| | | | 8/11/2014 | -- | 112.99 | -- | 3,199.89 |
| | | | 9/5/2014 | -- | 112.65 | -- | 3,200.23 |
| | | | 12/10/2014 | -- | 113.47 | -- | 3,199.41 |
| | | | 3/2/2015 | -- | 112.20 | -- | 3,200.68 |
| | | | 6/18/2015 | -- | 112.39 | -- | 3,200.49 |
| | | | 10/1/2015 | -- | 112.47 | -- | 3,200.41 |
| | | | 11/24/2015 | -- | 112.42 | -- | 3,200.46 |
| | | | 12/17/2015 | -- | 112.44 | -- | 3,200.44 |
| | | | 1/28/2016 | -- | 112.30 | -- | 3,200.58 |
| | | | 2/24/2016 | -- | 112.30 | -- | 3,200.58 |
| | | | 4/7/2016 | -- | 112.36 | -- | 3,200.52 |
| | | | 5/26/2016 | -- | 112.30 | -- | 3,200.58 |
| | | | 6/30/2016 | -- | 112.35 | -- | 3,200.53 |
| | | | 7/26/2016 | -- | 112.27 | -- | 3,200.61 |
| | | | 9/22/2016 | -- | 112.40 | -- | 3,200.48 |
| | | | 10/5/2016 | -- | 112.41 | -- | 3,200.47 |
| | | | 11/30/2016 | -- | 112.22 | -- | 3,200.66 |
| | | | 2/23/2017 | -- | 112.25 | -- | 3,200.63 |
| | | | 5/10/2017 | -- | 112.34 | -- | 3,200.54 |
| | | | 11/30/2017 | -- | 112.75 | -- | 3,200.13 |
| | | | 5/11/2018 | -- | 112.15 | -- | 3,200.73 |
| | | | 11/8/2018 | -- | 112.00 | -- | 3,200.88 |
| | | | 4/2/2019 | -- | 111.98 | -- | 3,200.90 |
| | | | 5/15/2019 | -- | 111.98 | -- | 3,200.90 |
| | | | 8/12/2019 | -- | 111.99 | -- | 3,200.89 |
| | | | 9/24/2019 | -- | 111.80 | -- | 3,201.08 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | -- | 118.30 | -- | 3,194.58 |
| | | | 1/16/2020 | -- | 111.99 | -- | 3,200.89 |
| | | | 3/26/2020 | -- | 112.02 | -- | 3,200.86 |
| | | | 5/13/2020 | -- | 111.86 | -- | 3,201.02 |
| | | | 9/24/2020 | -- | 112.04 | -- | 3,200.84 |
| | | | 5/3/2021 | -- | 111.93 | -- | 3,200.95 |
| | | | 10/6/2021 | -- | 112.00 | -- | 3,200.88 |
| | | | 5/26/2022 | -- | 111.90 | -- | 3,200.98 |
| | | | 11/10/2022 | -- | 111.83 | -- | 3,201.05 |
| | | | 5/30/2023 | -- | 111.98 | -- | 3,200.90 |
| | | | 11/9/2023 | -- | 111.95 | -- | 3,200.93 |

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

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

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| MW-1 | 117.70 | 3,313.54 | 5/15/2019 | 112.14 | 114.33 | 2.19 | 3,200.85 |
| | | | 6/26/2019 | 112.18 | 114.44 | 2.26 | 3,200.80 |
| | | | 8/12/2019 | 112.16 | 114.36 | 2.20 | 3,200.83 |
| | | | 9/24/2019 | 112.15 | 114.38 | 2.23 | 3,200.83 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | 112.20 | 114.35 | 2.15 | 3,200.80 |
| | | | 1/16/2020 | 112.17 | 114.35 | 2.18 | 3,200.83 |
| | | | 3/26/2020 | 112.17 | 114.34 | 2.17 | 3,200.83 |
| | | | 5/1/2020 | 112.19 | 114.29 | 2.10 | 3,200.83 |
| | | | 5/13/2020 | 112.02 | 114.13 | 2.11 | 3,200.99 |
| | | | 6/3/2020 | 112.17 | 114.10 | 1.93 | 3,200.89 |
| | | | 9/24/2020 | 112.24 | -- | -- | -- |
| | | | 9/29/2020 | 112.24 | 114.34 | 2.10 | 3,200.78 |
| | | | 12/15/2020 | 112.28 | 114.40 | 2.12 | 3,200.73 |
| | | | 1/28/2021 | 112.21 | 114.29 | 2.08 | 3,200.81 |
| | | | 3/31/2021 | 112.23 | 114.26 | 2.03 | 3,200.80 |
| | | | 4/20/2021 | 112.56 | 113.53 | 0.97 | 3,200.74 |
| | | | 5/3/2021 | 112.36 | 113.35 | 0.99 | 3,200.93 |
| | | | 6/15/2021 | 112.56 | 113.22 | 0.66 | 3,200.82 |
| | | | 9/15/2021 | 112.42 | 113.36 | 0.94 | 3,200.89 |
| | | | 10/6/2021 | 112.17 | 114.18 | 2.01 | 3,200.87 |
| | | | 5/26/2022 | 112.27 | 113.52 | 1.25 | 3,200.96 |
| | | | 11/8/2022 | instrument error | 114.49 | -- | -- |
| | | | 5/30/2023 | 112.32 | 113.91 | 1.59 | 3,200.57 |
| | | | 11/9/2023 | 112.21 | 113.92 | 1.71 | 3,200.90 |

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| MW-2 | 128.10 | 3,312.39 | 11/1/2013 | -- | 112.44 | -- | 3,199.95 |
| | | | 5/27/2014 | -- | 112.62 | -- | 3,199.77 |
| | | | 6/20/2014 | -- | 112.49 | -- | 3,199.90 |
| | | | 8/11/2014 | -- | 112.91 | -- | 3,199.48 |
| | | | 9/5/2014 | -- | 112.50 | -- | 3,199.89 |
| | | | 12/10/2014 | -- | 112.31 | -- | 3,200.08 |
| | | | 3/2/2015 | -- | 112.15 | -- | 3,200.24 |
| | | | 6/18/2015 | -- | 112.32 | -- | 3,200.07 |
| | | | 10/1/2015 | -- | 112.42 | -- | 3,199.97 |
| | | | 11/24/2015 | -- | 112.26 | -- | 3,200.13 |
| | | | 12/17/2015 | -- | 112.33 | -- | 3,200.06 |
| | | | 1/28/2016 | -- | 112.11 | -- | 3,200.28 |
| | | | 2/24/2016 | -- | 112.12 | -- | 3,200.27 |
| | | | 4/7/2016 | -- | 112.27 | -- | 3,200.12 |
| | | | 5/26/2016 | -- | 112.18 | -- | 3,200.21 |
| | | | 6/30/2016 | -- | 112.22 | -- | 3,200.17 |
| | | | 7/26/2016 | -- | 112.11 | -- | 3,200.28 |
| | | | 9/22/2016 | -- | 112.22 | -- | 3,200.17 |
| | | | 10/5/2016 | -- | 112.26 | -- | 3,200.13 |
| | | | 11/30/2016 | -- | 112.05 | -- | 3,200.34 |
| | | | 5/10/2017 | -- | 112.16 | -- | 3,200.23 |
| | | | 11/30/2017 | -- | 111.90 | -- | 3,200.49 |
| | | | 5/11/2018 | -- | 111.89 | -- | 3,200.50 |
| | | | 11/8/2018 | -- | 112.10 | -- | 3,200.29 |
| | | | 4/2/2019 | -- | 111.87 | -- | 3,200.52 |
| | | | 5/15/2019 | -- | 111.91 | -- | 3,200.48 |
| | | | 8/12/2019 | -- | 111.90 | -- | 3,200.49 |
| | | | 9/24/2019 | -- | 111.84 | -- | 3,200.55 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | -- | -- | -- | -- |
| | | | 1/16/2020 | -- | 111.90 | -- | 3,200.49 |
| | | | 3/26/2020 | -- | 111.94 | -- | 3,200.45 |
| | | | 5/13/2020 | -- | 111.76 | -- | 3,200.63 |
| | | | 9/24/2020 | -- | 111.95 | -- | 3,200.44 |
| | | | 5/3/2021 | -- | 111.90 | -- | 3,200.49 |
| | | | 10/6/2021 | -- | 111.88 | -- | 3,200.51 |
| | | | 5/26/2022 | -- | 112.23 | -- | 3,200.16 |
| | | | 11/9/2022 | -- | 111.71 | -- | 3,200.68 |
| | | | 5/30/2023 | -- | 111.90 | -- | 3,200.49 |
| | | | 11/9/2023 | -- | 111.89 | -- | 3,200.50 |

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| MW-3 | 127.20 | 3,312.78 | 11/1/2013 | -- | 112.75 | -- | 3,200.03 |
| | | | 5/27/2014 | -- | 112.90 | -- | 3,199.88 |
| | | | 6/20/2014 | -- | 112.47 | -- | 3,200.31 |
| | | | 8/11/2014 | -- | 112.90 | -- | 3,199.88 |
| | | | 9/5/2014 | -- | 112.79 | -- | 3,199.99 |
| | | | 12/10/2014 | -- | 112.60 | -- | 3,200.18 |
| | | | 3/2/2015 | -- | 112.41 | -- | 3,200.37 |
| | | | 6/18/2015 | -- | 112.58 | -- | 3,200.20 |
| | | | 10/1/2015 | -- | 112.63 | -- | 3,200.15 |
| | | | 11/24/2015 | -- | 112.54 | -- | 3,200.24 |
| | | | 12/17/2015 | -- | 112.61 | -- | 3,200.17 |
| | | | 1/28/2016 | -- | 112.39 | -- | 3,200.39 |
| | | | 2/24/2016 | -- | 112.37 | -- | 3,200.41 |
| | | | 4/7/2016 | -- | 112.54 | -- | 3,200.24 |
| | | | 5/26/2016 | -- | 112.44 | -- | 3,200.34 |
| | | | 6/30/2016 | -- | 112.47 | -- | 3,200.31 |
| | | | 7/26/2016 | -- | 112.37 | -- | 3,200.41 |
| | | | 9/22/2016 | -- | 112.49 | -- | 3,200.29 |
| | | | 10/5/2016 | -- | 112.53 | -- | 3,200.25 |
| | | | 11/30/2016 | -- | 112.32 | -- | 3,200.46 |
| | | | 5/10/2017 | -- | 112.41 | -- | 3,200.37 |
| | | | 11/30/2017 | -- | 112.21 | -- | 3,200.57 |
| | | | 5/11/2018 | -- | 112.16 | -- | 3,200.62 |
| | | | 11/8/2018 | -- | 112.95 | -- | 3,199.83 |
| | | | 4/2/2019 | -- | 112.14 | -- | 3,200.64 |
| | | | 5/15/2019 | -- | 112.19 | -- | 3,200.59 |
| | | | 8/12/2019 | -- | 112.17 | -- | 3,200.61 |
| | | | 9/24/2019 | -- | 112.05 | -- | 3,200.73 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | -- | -- | -- | -- |
| | | | 1/16/2020 | -- | 112.14 | -- | 3,200.64 |
| | | | 3/26/2020 | -- | 112.18 | -- | 3,200.60 |
| | | | 5/13/2020 | -- | 112.05 | -- | 3,200.73 |
| | | | 9/24/2020 | -- | 112.19 | -- | 3,200.59 |
| | | | 5/3/2021 | -- | 112.10 | -- | 3,200.68 |
| | | | 10/6/2021 | -- | 112.11 | -- | 3,200.67 |
| | | | 5/26/2022 | -- | 112.01 | -- | 3,200.77 |
| | | | 11/9/2022 | -- | 111.97 | -- | 3,200.81 |
| | | | 5/30/2023 | -- | 112.14 | -- | 3,200.64 |
| | | | 11/9/2023 | -- | 112.03 | -- | 3,200.75 |

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| MW-4 | 128.70 | 3,313.19 | 11/1/2013 | -- | 112.85 | -- | 3,200.34 |
| | | | 5/27/2014 | -- | 113.05 | -- | 3,200.14 |
| | | | 6/20/2014 | -- | 112.93 | -- | 3,200.26 |
| | | | 8/11/2014 | -- | 113.03 | -- | 3,200.16 |
| | | | 9/5/2014 | -- | 112.91 | -- | 3,200.28 |
| | | | 12/10/2014 | -- | 112.75 | -- | 3,200.44 |
| | | | 3/2/2015 | -- | 112.55 | -- | 3,200.64 |
| | | | 6/18/2015 | -- | 112.74 | -- | 3,200.45 |
| | | | 10/1/2015 | -- | 112.81 | -- | 3,200.38 |
| | | | 11/24/2015 | -- | 112.70 | -- | 3,200.49 |
| | | | 12/17/2015 | -- | 112.77 | -- | 3,200.42 |
| | | | 1/28/2016 | -- | 112.53 | -- | 3,200.66 |
| | | | 2/24/2016 | -- | 112.53 | -- | 3,200.66 |
| | | | 4/7/2016 | -- | 112.66 | -- | 3,200.53 |
| | | | 5/26/2016 | -- | 112.58 | -- | 3,200.61 |
| | | | 6/30/2016 | -- | 112.64 | -- | 3,200.55 |
| | | | 7/26/2016 | -- | 112.64 | -- | 3,200.55 |
| | | | 9/22/2016 | -- | 112.65 | -- | 3,200.54 |
| | | | 10/5/2016 | -- | 112.69 | -- | 3,200.50 |
| | | | 11/30/2016 | -- | 112.46 | -- | 3,200.73 |
| | | | 5/10/2017 | -- | 112.56 | -- | 3,200.63 |
| | | | 11/30/2017 | -- | 112.38 | -- | 3,200.81 |
| | | | 5/11/2018 | -- | 112.32 | -- | 3,200.87 |
| | | | 11/8/2018 | -- | 112.25 | -- | 3,200.94 |
| | | | 4/2/2019 | -- | 112.30 | -- | 3,200.89 |
| | | | 5/15/2019 | -- | 112.33 | -- | 3,200.86 |
| | | | 8/12/2019 | -- | 112.34 | -- | 3,200.85 |
| | | | 9/24/2019 | -- | 112.25 | -- | 3,200.94 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | -- | -- | -- | -- |
| | | | 1/16/2020 | -- | 112.32 | -- | 3,200.87 |
| | | | 3/26/2020 | -- | 112.34 | -- | 3,200.85 |
| | | | 5/13/2020 | -- | 112.18 | -- | 3,201.01 |
| | | | 9/24/2020 | -- | 112.36 | -- | 3,200.83 |
| | | | 5/3/2021 | -- | 112.26 | -- | 3,200.93 |
| | | | 10/6/2021 | -- | 112.27 | -- | 3,200.92 |
| | | | 5/26/2022 | -- | 112.19 | -- | 3,201.00 |
| | | | 11/9/2022 | -- | 112.12 | -- | 3,201.07 |
| | | | 5/30/2023 | -- | 112.32 | -- | 3,200.87 |
| | | | 11/9/2023 | -- | 112.22 | -- | 3,200.97 |

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| MW-5 | 127.30 | 3,314.39 | 11/1/2013 | -- | 113.85 | -- | 3,200.54 |
| | | | 5/27/2014 | -- | 114.05 | -- | 3,200.34 |
| | | | 6/20/2014 | -- | 113.94 | -- | 3,200.45 |
| | | | 8/11/2014 | -- | 114.03 | -- | 3,200.36 |
| | | | 9/5/2014 | -- | 113.94 | -- | 3,200.45 |
| | | | 12/10/2014 | -- | 113.76 | -- | 3,200.63 |
| | | | 3/2/2015 | -- | 113.58 | -- | 3,200.81 |
| | | | 6/18/2015 | -- | 113.17 | -- | 3,201.22 |
| | | | 10/1/2015 | -- | 113.79 | -- | 3,200.60 |
| | | | 11/24/2015 | -- | 113.69 | -- | 3,200.70 |
| | | | 12/17/2015 | -- | 113.72 | -- | 3,200.67 |
| | | | 1/28/2016 | -- | 113.53 | -- | 3,200.86 |
| | | | 2/24/2016 | -- | 113.51 | -- | 3,200.88 |
| | | | 4/7/2016 | -- | 113.62 | -- | 3,200.77 |
| | | | 5/26/2016 | -- | 113.56 | -- | 3,200.83 |
| | | | 6/30/2016 | -- | 113.61 | -- | 3,200.78 |
| | | | 7/26/2016 | -- | 113.52 | -- | 3,200.87 |
| | | | 9/22/2016 | -- | 113.63 | -- | 3,200.76 |
| | | | 10/5/2016 | -- | 113.66 | -- | 3,200.73 |
| | | | 11/30/2016 | -- | 113.45 | -- | 3,200.94 |
| | | | 2/23/2017 | -- | 113.42 | -- | 3,200.97 |
| | | | 5/10/2017 | -- | 113.55 | -- | 3,200.84 |
| | | | 11/30/2017 | -- | 113.36 | -- | 3,201.03 |
| | | | 5/11/2018 | -- | 113.26 | -- | 3,201.13 |
| | | | 11/8/2018 | -- | 113.32 | -- | 3,201.07 |
| | | | 4/2/2019 | -- | 113.28 | -- | 3,201.11 |
| | | | 5/15/2019 | -- | 113.30 | -- | 3,201.09 |
| | | | 8/12/2019 | -- | 113.31 | -- | 3,201.08 |
| | | | 9/24/2019 | -- | 113.30 | -- | 3,201.09 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | -- | 113.33 | -- | 3,201.06 |
| | | | 1/16/2020 | -- | 113.31 | -- | 3,201.08 |
| | | | 3/26/2020 | -- | 113.33 | -- | 3,201.06 |
| | | | 5/13/2020 | -- | 113.15 | -- | 3,201.24 |
| | | | 9/24/2020 | -- | 113.33 | -- | 3,201.06 |
| | | | 5/3/2021 | -- | 113.25 | -- | 3,201.14 |
| | | | 10/6/2021 | -- | 113.27 | -- | 3,201.12 |
| | | | 5/26/2022 | -- | 113.18 | -- | 3,201.21 |
| | | | 11/9/2022 | -- | 113.16 | -- | 3,201.23 |
| | | | 5/30/2023 | -- | 113.28 | -- | 3,201.11 |
| | | | 11/9/2023 | -- | 113.22 | -- | 3,201.17 |

**Summary of Groundwater Elevation Data**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Total Depth (ft bgs) | TOC Elevation | Date Measured | Depth to LNAPL (ft below TOC) | Depth to Water (ft below TOC) | LNAPL Thickness (ft) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|---|---|
| MW-6 | 128.00 | 3,314.39 | 11/1/2013 | -- | 113.95 | -- | 3,200.44 |
| | | | 5/27/2014 | -- | 114.12 | -- | 3,200.27 |
| | | | 6/20/2014 | -- | 114.04 | -- | 3,200.35 |
| | | | 8/11/2014 | -- | 114.10 | -- | 3,200.29 |
| | | | 9/5/2014 | -- | 114.01 | -- | 3,200.38 |
| | | | 12/10/2014 | -- | 113.82 | -- | 3,200.57 |
| | | | 3/2/2015 | -- | 113.66 | -- | 3,200.73 |
| | | | 6/18/2015 | -- | 113.81 | -- | 3,200.58 |
| | | | 10/1/2015 | -- | 113.89 | -- | 3,200.50 |
| | | | 11/24/2015 | -- | 113.77 | -- | 3,200.62 |
| | | | 12/17/2015 | -- | 113.82 | -- | 3,200.57 |
| | | | 1/28/2016 | -- | 113.63 | -- | 3,200.76 |
| | | | 2/24/2016 | -- | 113.62 | -- | 3,200.77 |
| | | | 4/7/2016 | -- | 113.72 | -- | 3,200.67 |
| | | | 5/26/2016 | -- | 113.68 | -- | 3,200.71 |
| | | | 6/30/2016 | -- | 113.71 | -- | 3,200.68 |
| | | | 7/26/2016 | -- | 113.61 | -- | 3,200.78 |
| | | | 9/22/2016 | -- | 113.73 | -- | 3,200.66 |
| | | | 10/5/2016 | -- | 113.76 | -- | 3,200.63 |
| | | | 11/30/2016 | -- | 113.55 | -- | 3,200.84 |
| | | | 2/23/2017 | -- | 114.49 | -- | 3,199.90 |
| | | | 5/10/2017 | -- | 113.66 | -- | 3,200.73 |
| | | | 11/30/2017 | -- | 113.55 | -- | 3,200.84 |
| | | | 5/11/2018 | -- | 113.45 | -- | 3,200.94 |
| | | | 11/8/2018 | -- | 113.42 | -- | 3,200.97 |
| | | | 4/2/2019 | -- | 113.39 | -- | 3,201.00 |
| | | | 5/15/2019 | -- | 113.41 | -- | 3,200.98 |
| | | | 8/12/2019 | -- | 113.40 | -- | 3,200.99 |
| | | | 9/24/2019 | -- | 113.40 | -- | 3,200.99 |
| | | | 11/11/2019 | Electronic Field Data Lost | | | |
| | | | 12/3/2019 | -- | 113.42 | -- | 3,200.97 |
| | | | 1/16/2020 | -- | 113.42 | -- | 3,200.97 |
| | | | 3/26/2020 | -- | 113.43 | -- | 3,200.96 |
| | | | 5/13/2020 | -- | 113.26 | -- | 3,201.13 |
| | | | 9/24/2020 | -- | 113.43 | -- | 3,200.96 |
| | | | 5/3/2021 | -- | 113.34 | -- | 3,201.05 |
| | | | 10/6/2021 | -- | 113.35 | -- | 3,201.04 |
| | | | 5/26/2022 | -- | 113.16 | -- | 3,201.23 |
| | | | 11/9/2022 | -- | 113.27 | -- | 3,201.12 |
| | | | 5/30/2023 | -- | 113.43 | -- | 3,200.96 |
| | | | 11/9/2023 | -- | 113.37 | -- | 3,201.02 |

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

Table 3



**Summary of Groundwater Quality Field Parameters**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Date | Temperature (°C) | pH | Conductivity (µS/cm) | DO (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| RW-1 | 10/1/2015 | 22.23 | 6.79 | 1,070 | 7.87 | -159.90 |
| | 4/7/2016 | 21.20 | 7.17 | 1,260 | 0.08 | -149.80 |
| | 10/5/2016 | 23.43 | 7.21 | 1,340 | 2.71 | -177.00 |
| | 5/10/2017 | 20.08 | 6.88 | 1,080 | 0.31 | -170.80 |
| | 11/30/2017 | 19.55 | 8.14 | 1,500 | 2.39 | -168.00 |
| | 5/11/2018 | -- | 7.09 | 1,140 | -- | -258.50 |
| | 11/8/2018 | 18.96 | 7.10 | 1,790 | 1.03 | -149.20 |
| | 5/15/2019 | 19.55 | 6.50 | 1,530 | 1.84 | -140.30 |
| | 5/13/2020 | 21.40 | 6.95 | 1,780 | 0.95 | -163.00 |
| | 9/24/2020 | 21.03 | 7.12 | 2,070 | 0.14 | -117.20 |
| | 5/4/2021 | 22.17 | 7.09 | 91,000 | 0.39 | -79.80 |
| | 10/6/2021 | 21.73 | 7.03 | 903.10 | 0.01 | -191.40 |
| | 5/26/2022 | 23.43 | 6.73 | 873.43 | 1.86 | 36.60 |
| | 11/8/2022 | 24.22 | 6.54 | 1,040 | 3.58 | 141.60 |
| | 5/30/2023 | 23.26 | 6.37 | 0.39 | -45.65 | 931.90 |
| | 11/8/2023 | 25.34 | 4.17 | 2.02 | 132.00 | 839.53 |
| | | | | | | |
| MW-1 | Not sampled since October 2013 due to presence of LNAPL. | | | | | |
| | | | | | | |
| MW-2 | 6/20/2014 | -- | -- | -- | -- | -- |
| | 9/23/2014 | -- | -- | -- | -- | -- |
| | 12/10/2014 | 22.30 | 7.33 | 825.00 | 6.80 | 7.33 |
| | 3/2/2015 | -- | -- | -- | -- | -- |
| | 6/16/2015 | 24.00 | 7.23 | 913.00 | 913.00 | 88.20 |
| | 10/1/2015 | 21.12 | 7.13 | 947.00 | 7.47 | 112.20 |
| | 4/7/2016 | 21.10 | 7.23 | 930.00 | 6.51 | 99.30 |
| | 10/5/2016 | 23.14 | 7.01 | 1,050 | 6.68 | 215.00 |
| | 5/10/2017 | 20.13 | 6.93 | 1,010 | 7.11 | -20.30 |
| | 11/30/2017 | 19.45 | 7.59 | 1,280 | 4.08 | -48.90 |
| | 5/11/2018 | -- | 6.74 | 955.00 | -- | -95.80 |
| | 11/8/2018 | 17.94 | 7.30 | 974.00 | -- | -32.00 |
| | 5/15/2019 | 18.54 | 6.88 | 841.00 | 5.11 | -38.90 |
| | 11/11/2019 | Electronic Field Data Lost | | | | |
| | 5/13/2020 | 19.90 | 6.96 | 1,000 | 4.11 | 69.20 |
| | 9/24/2020 | 21.98 | 7.19 | 947.30 | 5.14 | 76.90 |
| | 5/4/2021 | 22.00 | 7.29 | 45,500 | 2.50 | 29.80 |
| | 10/6/2021 | 21.55 | 7.39 | 553.40 | 3.02 | 33.50 |
| | 5/26/2022 | 23.70 | 7.01 | 762.59 | 2.36 | 199.10 |
| | 11/8/2022 | 23.03 | 6.70 | 984.68 | 2.68 | 270.90 |
| | 5/30/2023 | 27.87 | 7.27 | 6.48 | 129.52 | 833.36 |
| | 11/8/2023 | 24.97 | 6.74 | 6.83 | 224.80 | 835.71 |
| | | | | | | |
| MW-3 | 6/20/2014 | -- | -- | -- | -- | -- |
| | 9/23/2014 | -- | -- | -- | -- | -- |
| | 12/10/2014 | 22.50 | 6.86 | 1,170 | 0.20 | -105.20 |
| | 3/2/2015 | -- | -- | -- | -- | -- |
| | 6/16/2015 | 24.90 | 7.26 | 1,070 | 0.10 | -190.90 |
| | 10/1/2015 | 21.67 | 6.90 | 1,010 | 1.27 | -48.70 |
| | 4/11/2016 | 21.50 | 7.15 | 890.00 | 1.40 | 9.10 |
| | 10/5/2016 | 23.56 | 7.07 | 968.00 | 3.39 | 47.00 |
| | 5/10/2017 | 20.76 | 7.12 | 787.00 | 1.67 | -115.80 |
| | 11/30/2017 | 20.01 | 7.68 | 1,030 | 1.82 | -135.10 |
| | 5/11/2018 | -- | 6.64 | 927.00 | -- | -160.00 |
| | 11/8/2018 | 18.12 | 6.95 | 1,200 | -- | -64.10 |
| | 5/15/2019 | 19.06 | 6.50 | 932.00 | 3.97 | -89.80 |
| | 11/11/2019 | Electronic Field Data Lost | | | | |
| | 5/13/2020 | 21.20 | 7.05 | 1,100 | 0.80 | -13.00 |
| | 9/24/2020 | 22.41 | 6.98 | 1,060 | 1.54 | -53.90 |
| | 5/4/2021 | 21.88 | 6.99 | 53,300 | 0.13 | -42.20 |
| | 10/6/2021 | 22.16 | 7.29 | 517.00 | 1.41 | -95.70 |
| | 5/26/2022 | 24.14 | 7.59 | 610.79 | 0.22 | 96.70 |
| | 11/8/2022 | 21.93 | 6.97 | 767.61 | 0.27 | 178.10 |
| | 5/30/2023 | 24.83 | 7.11 | 3.26 | 31.42 | 820.78 |
| | 11/8/2023 | 27.39 | 5.75 | 4.27 | 130.60 | 859.63 |

Table 3



**Summary of Groundwater Quality Field Parameters**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Date | Temperature (°C) | pH | Conductivity (µS/cm) | DO (mg/L) | ORP (mV) |
|---|---|---|---|---|---|---|
| MW-4 | 6/20/2014 | -- | -- | -- | -- | -- |
| | 9/22/2014 | -- | -- | -- | -- | -- |
| | 12/10/2014 | 21.40 | 7.18 | 810.00 | 6.04 | 7.18 |
| | 3/3/2015 | 22.00 | 7.13 | 892.00 | 6.60 | 7.13 |
| | 6/16/2015 | 23.70 | 7.32 | 844.00 | 7.26 | 7.32 |
| | 10/1/2015 | 20.79 | 7.13 | 842.00 | 6.91 | 96.30 |
| | 4/7/2016 | 20.90 | 7.18 | 850.00 | 5.54 | 69.50 |
| | 10/5/2016 | 22.93 | 7.10 | 985.00 | 6.50 | 223.00 |
| | 5/10/2017 | 19.94 | 7.24 | 846.00 | 6.36 | -71.10 |
| | 11/30/2017 | 18.97 | 7.49 | 1,090 | 2.76 | -40.90 |
| | 5/11/2018 | -- | 6.75 | 759.00 | -- | -131.70 |
| | 11/8/2018 | 17.87 | 7.29 | 805.00 | -- | -50.60 |
| | 5/15/2019 | 18.64 | 6.91 | 677.00 | 6.63 | -3.10 |
| | 11/11/2019 | Electronic Field Data Lost | | | | |
| | 5/13/2020 | 20.30 | 7.29 | 710.00 | 4.15 | 60.30 |
| | 9/24/2020 | 21.66 | 7.46 | 658.90 | 6.16 | 68.70 |
| | 5/4/2021 | 21.55 | 7.52 | 33,300 | 5.97 | 33.90 |
| | 10/6/2021 | 21.15 | 7.71 | 394.40 | 6.22 | 30.10 |
| | 5/26/2022 | 23.18 | 8.16 | 498.80 | 7.09 | 190.20 |
| | 11/8/2022 | 22.30 | 7.25 | 601.44 | 6.54 | 278.60 |
| | 5/30/2023 | 25.85 | 7.27 | 6.97 | 129.33 | 600.08 |
| | 11/8/2023 | 23.51 | 6.64 | 8.33 | 193.40 | 665.62 |
| | | | | | | |
| MW-5 | 6/20/2014 | -- | -- | -- | -- | -- |
| | 9/22/2014 | -- | -- | -- | -- | -- |
| | 12/10/2014 | 23.00 | 6.79 | 1,490 | 0.16 | -123.50 |
| | 3/3/2015 | 22.20 | 6.79 | 1,690 | 0.21 | -70.30 |
| | 6/16/2015 | 23.40 | 7.02 | 1,200 | 0.17 | -90.20 |
| | 10/1/2015 | 21.18 | 7.03 | 1,140 | 1.34 | -113.70 |
| | 4/7/2016 | 21.20 | 7.44 | 890.00 | 0.49 | -73.00 |
| | 10/5/2016 | 23.16 | 7.36 | 979.00 | 3.62 | -69.00 |
| | 5/10/2017 | 19.97 | 7.23 | 835.00 | 2.20 | -13.30 |
| | 11/30/2017 | 19.29 | 7.65 | 1,610 | 2.48 | -152.90 |
| | 5/11/2018 | -- | 7.09 | 1,140 | -- | -88.50 |
| | 11/8/2018 | 18.30 | 7.14 | 1,060 | 2.20 | -63.80 |
| | 5/15/2019 | 19.11 | 6.88 | 801.00 | 5.84 | -61.20 |
| | 11/11/2019 | Electronic Field Data Lost | | | | |
| | 5/13/2020 | 20.70 | 7.16 | 850.00 | 0.89 | 20.90 |
| | 9/24/2020 | 21.90 | 7.34 | 807.50 | 1.33 | -31.40 |
| | 5/4/2021 | 22.45 | 7.51 | 37,700 | 0.27 | -31.10 |
| | 10/6/2021 | 22.00 | 7.57 | 487.40 | 0.86 | -61.80 |
| | 5/26/2022 | 23.21 | 7.44 | 620.05 | 0.44 | 126.30 |
| | 11/8/2022 | 23.18 | 6.91 | 913.20 | 0.88 | 194.90 |
| | 5/30/2023 | 23.12 | 5.58 | 0.12 | 131.54 | 1,357 |
| | 11/8/2023 | 26.52 | 6.44 | 6.36 | 141.70 | 1,718 |
| | | | | | | |
| MW-6 | 6/20/2014 | -- | -- | -- | -- | -- |
| | 9/22/2014 | -- | -- | -- | -- | -- |
| | 12/10/2014 | 23.00 | 7.13 | 655.00 | 4.23 | 7.13 |
| | 3/3/2015 | 23.80 | 7.17 | 709.00 | 5.48 | 7.17 |
| | 6/16/2015 | 24.40 | 7.23 | 697.00 | 4.92 | 7.23 |
| | 10/1/2015 | 21.29 | 7.02 | 708.00 | 6.29 | 52.90 |
| | 4/7/2016 | 21.90 | 7.15 | 660.00 | 3.39 | 71.00 |
| | 10/5/2016 | 23.35 | 7.25 | 753.00 | 4.87 | 142.00 |
| | 5/10/2017 | 20.60 | 7.08 | 656.00 | 4.01 | -93.80 |
| | 11/30/2017 | 19.58 | 7.87 | 911.00 | 3.62 | -97.40 |
| | 5/11/2018 | -- | 6.91 | 835.00 | -- | -65.10 |
| | 11/8/2018 | 17.99 | 7.29 | 882.00 | 3.92 | -58.40 |
| | 5/15/2019 | 19.10 | 6.71 | 806.00 | 3.22 | -44.90 |
| | 11/11/2019 | Electronic Field Data Lost | | | | |
| | 5/13/2020 | 21.10 | 6.85 | 1,070 | 1.15 | -14.00 |
| | 9/24/2020 | 22.09 | 7.06 | 891.40 | 0.94 | -0.20 |
| | 5/4/2021 | 23.03 | 7.24 | 41,100 | 0.32 | 10.60 |
| | 10/6/2021 | 21.73 | 7.03 | 903.10 | 0.01 | -191.40 |
| | 5/26/2022 | 23.84 | 7.00 | 792.63 | 0.30 | 132.20 |
| | 11/8/2022 | 24.38 | 6.66 | 990.44 | 0.49 | 248.30 |
| | 5/30/2023 | 27.99 | 6.13 | 0.43 | 114.11 | 954.61 |
| | 11/8/2023 | 25.78 | 6.09 | 6.53 | 179.10 | 886.71 |

Notes:
ºC - degrees Celsius.
µS/cm - microsiemens per centimeter
mg/L - milligrams per liter.
-- = not measured or not recorded.
mV - millivolts.
DO - dissolved oxygen.
ORP - oxidation reduction potential.

Table 4



**Summary of Groundwater Analytical Results**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Sample Date | Benzene | Toluene | Ethylbenzene | Xylenes | Chloride | TDS |
|---|---|---|---|---|---|---|---|
| NMWQCC Groundwater Quality Standards | | 0.01 | 1.00 | 0.70 | 0.62 | 250 | 1,000 |
| RW-1 | 10/1/2015 | **1.00** | 0.470 | 0.0260 | 0.200 | **320** | **1,110** |
| | 4/7/2016 | **0.12** | 0.110 | 0.0120 | 0.110 | **290** | **1,070** |
| | 10/5/2016 | **0.57** | 0.0200 | 0.00990 | 0.0930 | 200 | 950 |
| | 5/10/2017 | **0.15** | 0.0250 | 0.0110 | 0.0350 | 180 | 920 |
| | 11/30/2017 | **0.0076** | 0.00690 | 0.00180 | 0.00990 | 140 | 610 |
| | 5/11/2018 | **1.30** | 0.390 | 0.0250 | 0.530 | 100 | 540 |
| | 11/8/2018 | **0.360** | 0.0130 | 0.00670 | 0.0300 | **250** | 910 |
| | 5/15/2019 | **1.50** | 0.0770 | 0.0270 | 0.140 | **280** | 980 |
| | 11/11/2019 | **0.680** | 0.0720 | 0.0210 | 0.110 | **250** | 940 |
| | 5/13/2020 | **1.50** | 0.100 | 0.00500 | 0.160 | **360** | **1,030** |
| | 9/24/2020 | **0.540** | 0.0590 | 0.0280 | 0.0410 | **500** | **1,460** |
| | 5/4/2021 | **0.860** | <0.00500 | 0.0270 | 0.0150 | **310** | **1,150** |
| | 10/6/2021 | **1.30** | 0.200 | 0.0490 | 0.170 | 240 | 940 |
| | 5/26/2022 | **0.025** | <0.00100 | <0.00100 | <0.00150 | 140 | 606 |
| | 11/9/2022 | **1.10** | 0.330 | 0.0250 | 0.250 | 120 | 660 |
| | 5/30/2023 | **0.8** | 0.1 | 0.018 | 0.15 | 128 | 578 |
| | 11/8/2023 | **0.38** | 0.06 | 0.016 | 0.033 | 90.8 | 460 |
| | | | | | | | |
| MW-1 | 2/24/2013 | **4.91** | **6.21** | **0.798** | **2.24** | 57.1 | 650 |
| | 10/1/2015 | Not Sampled - LNAPL | | | | | |
| | 4/7/2016 | Not Sampled - LNAPL | | | | | |
| | 10/5/2016 | Not Sampled - LNAPL | | | | | |
| | 5/10/2017 | Not Sampled - LNAPL | | | | | |
| | 11/30/2017 | Not Sampled - LNAPL | | | | | |
| | 5/11/2018 | Not Sampled - LNAPL | | | | | |
| | 11/8/2018 | Not Sampled - LNAPL | | | | | |
| | 5/15/2019 | Not Sampled - LNAPL | | | | | |
| | 11/11/2019 | Not Sampled - LNAPL | | | | | |
| | 5/13/2020 | Not Sampled - LNAPL | | | | | |
| | 9/24/2020 | Not Sampled - LNAPL | | | | | |
| | 5/4/2021 | Not Sampled - LNAPL | | | | | |
| | 10/6/2021 | Not Sampled - LNAPL | | | | | |
| | 5/26/2022 | Not Sampled - LNAPL | | | | | |
| | 11/9/2022 | Not Sampled - LNAPL | | | | | |
| | 5/30/2023 | Not Sampled - LNAPL | | | | | |
| | 11/8/2023 | Not Sampled - LNAPL | | | | | |
| | | | | | | | |
| MW-2 | 6/20/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | -- | -- |
| | 9/23/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | -- | -- |
| | 12/10/2014 | <0.000190 | <0.000180 | <0.000160 | <0.000510 | -- | -- |
| | 3/2/2015 | <0.000190 | <0.000180 | <0.000160 | <0.000510 | -- | -- |
| | 6/16/2015 | <0.000190 | <0.000180 | <0.000160 | <0.000510 | -- | -- |
| | 10/1/2015 | <0.00200 | <0.00200 | <0.00200 | <0.00300 | 65 | 690 |
| | 4/7/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 60 | 910 |
| | 10/5/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 57 | 680 |
| | 5/10/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 62 | 685 |
| | 11/30/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 33 | 465 |
| | 5/11/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 59 | 632 |
| | 11/8/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 61 | 720 |
| | 5/15/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 62 | 612 |
| | 11/11/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 62 | 656 |
| | 5/13/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 65 | 640 |
| | 9/24/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 70 | 650 |
| | 5/4/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 61 | 604 |
| | 10/6/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 61 | 610 |
| | 5/26/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 64 | 626 |
| | 11/10/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 61 | 637 |
| | 5/30/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 64.4 | 536 |
| | 11/8/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 59.2 | 546 |

**Summary of Groundwater Analytical Results**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Sample Date | Benzene | Toluene | Ethylbenzene | Xylenes | Chloride | TDS |
|---|---|---|---|---|---|---|---|
| MW-3 | 6/20/2014 | <0.00100 | <0.00100 | <0.00100 | 0.0398 | -- | -- |
| | 9/23/2014 | <0.00100 | <0.00100 | <0.00100 | 0.204 | -- | -- |
| | 12/10/2014 | 0.000660 | 0.000350 J | 0.000180 J | 0.0120 | -- | -- |
| | 3/2/2015 | 0.000700 J | 0.000670 J | 0.000290 J | 0.0231 J | -- | -- |
| | 6/16/2015 | 0.000673 | <0.000180 | <0.000160 | 0.00282 | -- | -- |
| | 10/1/2015 | <0.00200 | <0.00200 | <0.00200 | <0.00300 | 120 | 920 |
| | 4/11/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 79 | 530 |
| | 10/5/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 64 | 580 |
| | 5/10/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 50 | 630 |
| | 11/30/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 49 | 640 |
| | 5/11/2018 | <0.00100 | <0.00100 | <0.00100 | 0.00750 | 72 | 602 |
| | 11/8/2018 | <0.00100 | <0.00100 | <0.00100 | 0.0200 | 100 | 790 |
| | 5/15/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 92 | 700 |
| | 11/11/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 75 | 665 |
| | 5/13/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 88 | 650 |
| | 9/24/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 88 | 682 |
| | 5/4/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 63 | 652 |
| | 10/6/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 50 | 535 |
| | 5/26/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 52 | 506 |
| | 11/9/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 49 | 494 |
| | 5/30/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 68.0 | 550 |
| | 11/8/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 50.7 | 654 |
| | | | | | | | |
| MW-4 | 6/20/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | -- | -- |
| | 9/22/2014 | <0.00100 | <0.00100 | <0.00100 | 0.00310 | -- | -- |
| | 12/10/2014 | <0.000190 | 0.000200 J | <0.000160 | <0.000510 | -- | -- |
| | 3/3/2015 | <0.000190 | <0.000180 | <0.000160 | <0.000510 | 70 | 560 |
| | 6/16/2015 | <0.000190 | 0.000197 J | <0.000160 | <0.000510 | -- | -- |
| | 10/1/2015 | <0.00200 | <0.00200 | <0.00200 | <0.00300 | 69 | 560 |
| | 4/7/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 71 | 680 |
| | 10/5/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 79 | 600 |
| | 5/10/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 71 | 620 |
| | 11/30/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 63 | 510 |
| | 5/11/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 60 | 526 |
| | 11/8/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 56 | 520 |
| | 5/15/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 55 | 500 |
| | 11/11/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 52 | 482 |
| | 5/13/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 50 | 464 |
| | 9/24/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 52 | 502 |
| | 5/4/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 44 | 445 |
| | 10/6/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 42 | 390 |
| | 5/26/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 43 | 422 |
| | 11/9/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 41 | 420 |
| | 5/30/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 48.5 | 400 |
| | 11/8/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 48.2 | 234 |

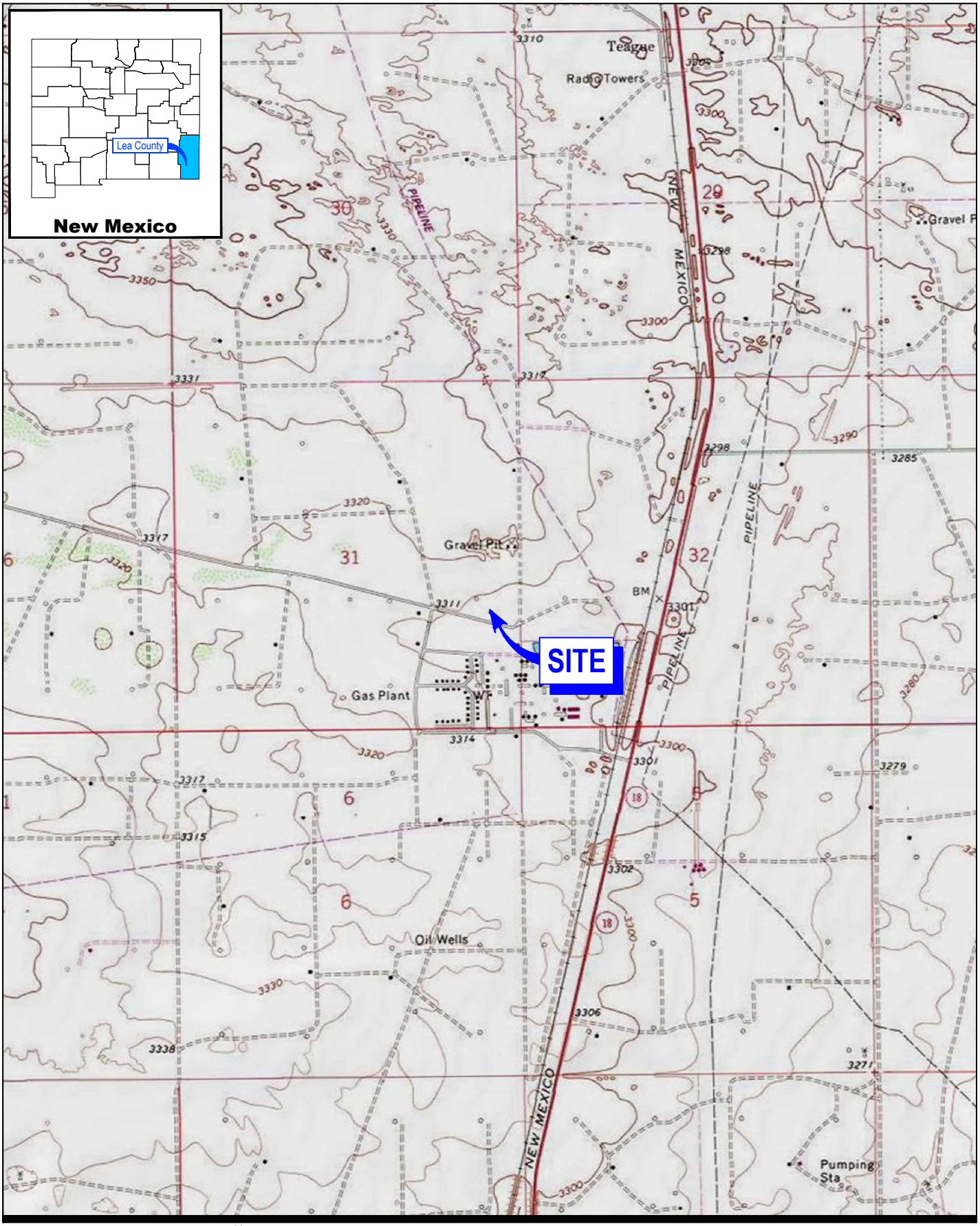
Table 4



**Summary of Groundwater Analytical Results**
**Jal No. 4 Former Tank Battery**
**Lea County, New Mexico**
**ET Gathering & Processing LLC**
**NMOCD 1RP-1457**

| Well ID | Sample Date | Benzene | Toluene | Ethylbenzene | Xylenes | Chloride | TDS |
|---|---|---|---|---|---|---|---|
| MW-5 | 6/20/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | -- | -- |
| | 9/22/2014 | <0.00100 | <0.00100 | <0.00100 | 0.00140 | -- | -- |
| | 12/10/2014 | **0.0160** | 0.000190 J | 0.000200 J | 0.000860 J | -- | -- |
| | 3/3/2015 | 0.00430 | <0.000180 | <0.000160 | 0.000750 J | 230 | 930 |
| | 6/16/2015 | 0.000503 | 0.000262 J | <0.0001600 | 0.000521 J | -- | -- |
| | 10/1/2015 | 0.00370 | <0.00100 | <0.00100 | <0.00150 | 140 | 355 |
| | 4/7/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 95 | 615 |
| | 10/5/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 70 | 516 |
| | 5/10/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 81 | 486 |
| | 11/30/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 120 | 650 |
| | 5/11/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 170 | 712 |
| | 11/8/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 130 | 585 |
| | 5/15/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 150 | 644 |
| | 11/11/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 130 | 628 |
| | 5/13/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 78 | 532 |
| | 9/24/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 87 | 495 |
| | 5/4/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 67 | 462 |
| | 10/6/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 77 | 512 |
| | 5/26/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 82 | 486 |
| | 11/9/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 110 | 578 |
| | 5/30/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 235 | 900 |
| | 11/8/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 214 | 944 |
| | | | | | | | |
| MW-6 | 6/20/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | -- | -- |
| | 9/22/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | -- | -- |
| | 12/10/2014 | <0.000190 | 0.00200 J | <0.000160 | <0.000510 | -- | -- |
| | 3/3/2015 | <0.000190 | <0.000180 | <0.000160 | <0.000510 | 56 | 430 |
| | 6/16/2015 | <0.000190 | 0.000229 J | <0.000160 | <0.000510 | -- | -- |
| | 10/1/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 68 | 520 |
| | 4/7/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 58 | 476 |
| | 10/5/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 52 | 460 |
| | 5/10/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 59 | 464 |
| | 11/30/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 63 | 444 |
| | 5/11/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 51 | 320 |
| | 11/8/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 100 | 550 |
| | 5/15/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 88 | 576 |
| | 11/11/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 84 | 620 |
| | 5/13/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 95 | 644 |
| | 9/24/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 92 | 598 |
| | 5/4/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 72 | 533 |
| | 10/6/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 72 | 522 |
| | 5/26/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 110 | 608 |
| | 11/9/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 100 | 660 |
| | 5/30/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 91.3 | 580 |
| | 11/8/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 78.1 | 518 |

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




0 1000 2000 ft

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

N

GHD

**ET GATHERING & PROCESSING LLC**
**LEA COUNTY, NEW MEXICO**
**JAL NO. 4 FORMER TANK BATTERY**
**NMOCD 1RP-1457**

Project No. **12603939**
Date **January 2024**

**SITE LOCATION MAP**

**FIGURE 1**

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603939\Digital_Design\ACAD\Figures\RPT002\12603939-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 15 January 2024 3:32 PM

Data Source: USGS 7.5 Minute quad "Rattlesnake Canyon and JAL NW, New Mexico"
Lat/Long: 32.258541° North, 103.195023° West


GHD

**ET GATHERING & PROCESSING LLC**
**LEA COUNTY, NEW MEXICO**
**JAL NO. 4 FORMER TANK BATTERY**
**NMOCD 1RP-1457**

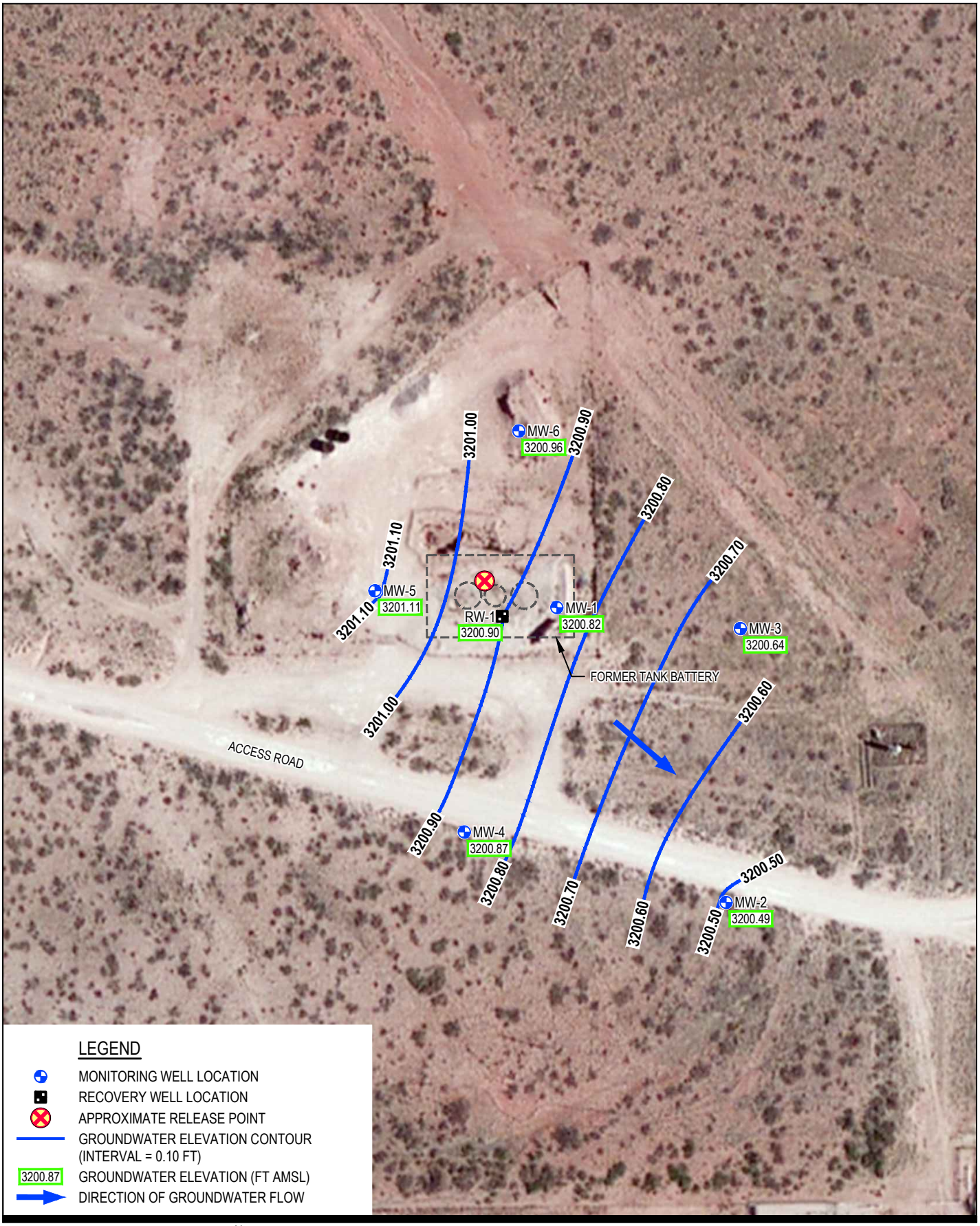
Project No. **12603939**
Date **December 2023**

**SITE DETAILS MAP**

**FIGURE 2**

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603939\Digital_Design\ACAD\Figures\RPT002\12603939-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 04 December 2023 10:41 AM

Data Source: USDA FSA Imagery, May 10, 2014
Lat/Long: 32.258541° North, 103.195023° West




0 50 100 ft

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

N

GHD

**ET GATHERING & PROCESSING LLC**
**LEA COUNTY, NEW MEXICO**
**JAL NO. 4 FORMER TANK BATTERY**
**NMOCD 1RP-1457**

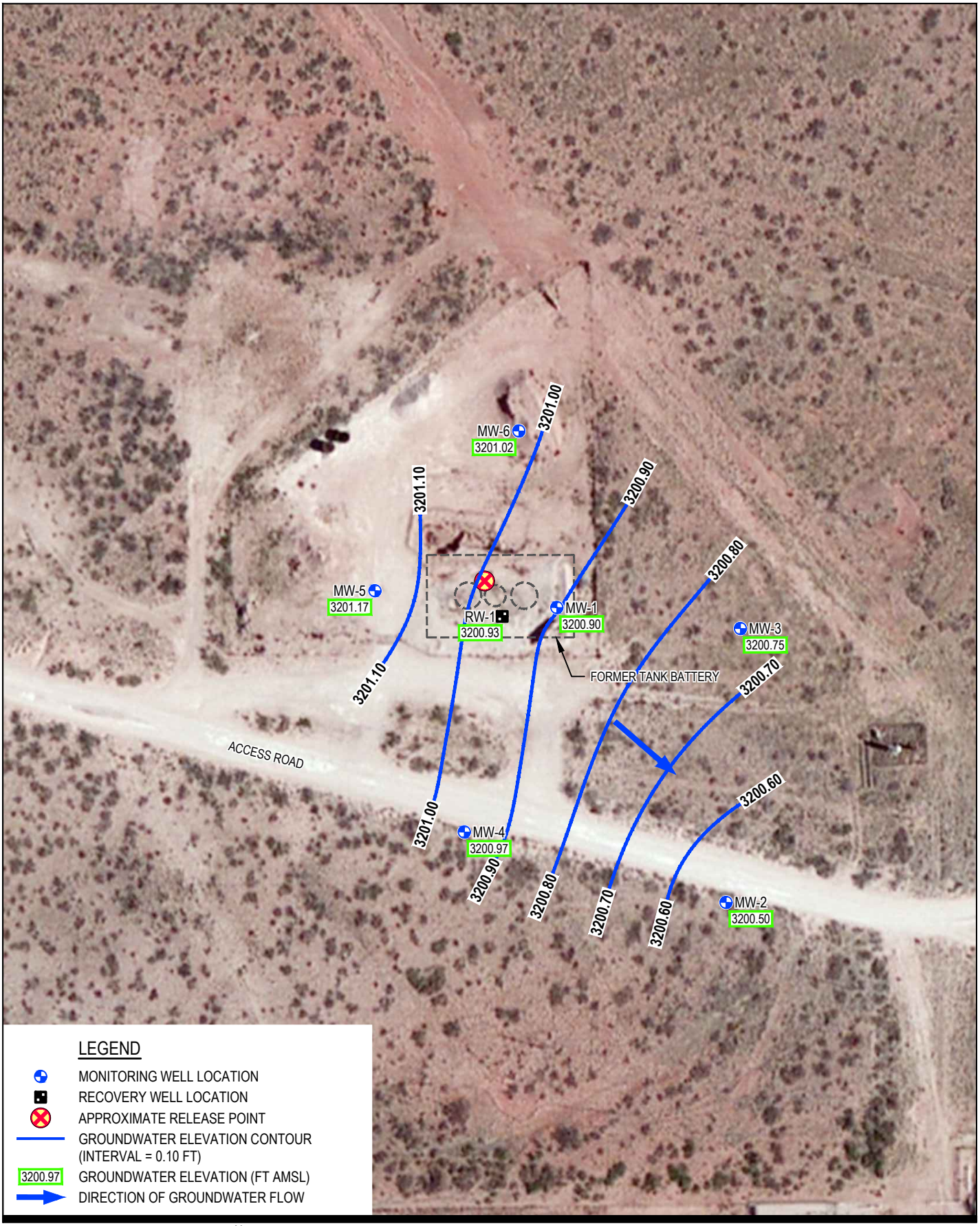
**POTENTIOMETRIC SURFACE MAP (MAY 2023)**

Project No. **12603939**
Date **December 2023**

**FIGURE 3**

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603939\Digital_Design\ACAD\Figures\RPT002\12603939-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 04 December 2023 1:09 PM

Data Source: USDA FSA Imagery, May 10, 2014
Lat/Long: 32.258541° North, 103.195023° West




ET GATHERING & PROCESSING LLC
LEA COUNTY, NEW MEXICO
JAL NO. 4 FORMER TANK BATTERY
NMOCD 1RP-1457

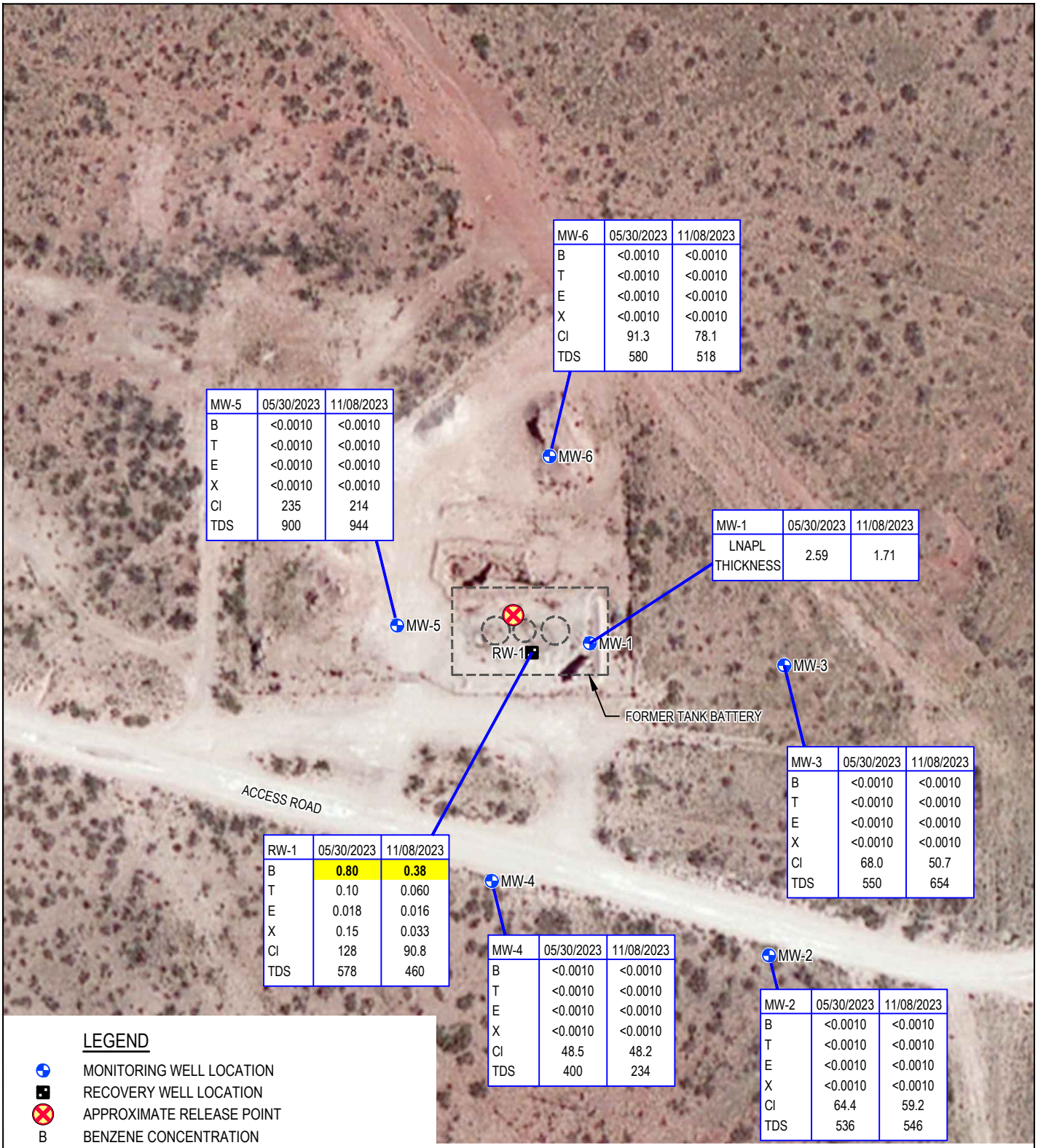
**POTENTIOMETRIC SURFACE MAP (NOVEMBER 2023)**

Project No. **12603939**
Date **December 2023**

**FIGURE 4**

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603939\Digital_Design\ACAD\Figures\RPT002\12603939-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 04 December 2023 10:40 AM

Data Source: USDA FSA Imagery, May 10, 2014
Lat/Long: 32.258541° North, 103.195023° West




| MW-6 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| B | <0.0010 | <0.0010 |
| T | <0.0010 | <0.0010 |
| E | <0.0010 | <0.0010 |
| X | <0.0010 | <0.0010 |
| Cl | 91.3 | 78.1 |
| TDS | 580 | 518 |

| MW-5 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| B | <0.0010 | <0.0010 |
| T | <0.0010 | <0.0010 |
| E | <0.0010 | <0.0010 |
| X | <0.0010 | <0.0010 |
| Cl | 235 | 214 |
| TDS | 900 | 944 |

| MW-1 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| LNAPL THICKNESS | 2.59 | 1.71 |

| RW-1 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| B | **0.80** | **0.38** |
| T | 0.10 | 0.060 |
| E | 0.018 | 0.016 |
| X | 0.15 | 0.033 |
| Cl | 128 | 90.8 |
| TDS | 578 | 460 |

| MW-3 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| B | <0.0010 | <0.0010 |
| T | <0.0010 | <0.0010 |
| E | <0.0010 | <0.0010 |
| X | <0.0010 | <0.0010 |
| Cl | 68.0 | 50.7 |
| TDS | 550 | 654 |

| MW-4 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| B | <0.0010 | <0.0010 |
| T | <0.0010 | <0.0010 |
| E | <0.0010 | <0.0010 |
| X | <0.0010 | <0.0010 |
| Cl | 48.5 | 48.2 |
| TDS | 400 | 234 |

| MW-2 | 05/30/2023 | 11/08/2023 |
|---|---|---|
| B | <0.0010 | <0.0010 |
| T | <0.0010 | <0.0010 |
| E | <0.0010 | <0.0010 |
| X | <0.0010 | <0.0010 |
| Cl | 64.4 | 59.2 |
| TDS | 536 | 546 |

## LEGEND

| | |
|---|---|
| ⊕ | MONITORING WELL LOCATION |
| ■ | RECOVERY WELL LOCATION |
| ⊗ | APPROXIMATE RELEASE POINT |
| B | BENZENE CONCENTRATION |
| T | TOLUENE CONCENTRATION |
| E | ETHYLBENZENE CONCENTRATION |
| X | XYLENES CONCENTRATION |
| Cl | CHLORIDE CONCENTRATION |
| TDS | TOTAL DISSOLVED SOLIDS CONCENTRATION |
| LNAPL | LIGHT NON-AQUEOUS PHASE LIQUIDS |

## NOTES:

1. GROUNDWATER CONCENTRATION PRESENTED IN MILLIGRAMS PER LITER (mg/L).
2. LNAPL THICKNESS PRESENTED IN FEET (ft).
3. SHADED CELLS INDICATE EXCEEDANCE OF THE RESPECTIVE NMWQCC STANDARD.
4. GROUNDWATER SAMPLES WERE NOT COLLECTED FROM MW-1 DUE TO THE PRESENCE OF LNAPL.

0 50 100 ft

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

N

GHD

**ET GATHERING & PROCESSING LLC**
**LEA COUNTY, NEW MEXICO**
**JAL NO. 4 FORMER TANK BATTERY**
**NMOCD 1RP-1457**

# COC CONCENTRATIONS IN GROUNDWATER AND LNAPL THICKNESS MAP (2023)

Project No. **12603939**
Date **December 2023**

# FIGURE 5

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603939\Digital_Design\ACAD\Figures\RPT002\12603939-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 04 December 2023 1:08 PM

Data Source: USDA FSA Imagery, May 10, 2014
Lat/Long: 32.258541° North, 103.195023° West

# Appendices

# Appendix A

## Laboratory Analytical Reports

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

June 14, 2023

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

Work Order: **HS23060089**

Laboratory Results for: **12603939 - Jal No. 4**

Dear Blair Owen,

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

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

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

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

Sincerely,

**Generated By: DAYNA.FISHER**
James Guin

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**Work Order:** HS23060089

## SAMPLE SUMMARY

| Lab Samp ID | Client Sample ID | Matrix | TagNo | Collection Date | Date Received | Hold |
|---|---|---|---|---|---|---|
| HS23060089-01 | 12603939-TB-01 | Water | | 30-May-2023 00:00 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-02 | MW-3-20230530 | Groundwater | | 30-May-2023 12:30 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-03 | MW-2-20230530 | Groundwater | | 30-May-2023 14:20 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-04 | MW-4-20230530 | Groundwater | | 30-May-2023 15:20 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-05 | MW-5-20230530 | Groundwater | | 30-May-2023 17:40 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-06 | MW-6-20230530 | Groundwater | | 30-May-2023 18:30 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-07 | RW-1-20230530 | Groundwater | | 30-May-2023 19:30 | 01-Jun-2023 09:40 | ☐ |
| HS23060089-08 | DUP01 | Groundwater | | 30-May-2023 00:00 | 01-Jun-2023 09:40 | ☐ |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD **CASE NARRATIVE**
**Project:** 12603939 - Jal No. 4
**Work Order:** HS23060089

## Work Order Comments

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

## GCMS Volatiles by Method SW8260

### Batch ID: R436988,R436993,R437000,R437175

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

## WetChemistry by Method E300

### Batch ID: R437780

**Sample ID: MW-2-20230530 (HS23060089-03MS)**

- 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)

**Sample ID: MW-4-20230530 (HS23060089-04MS)**

- 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)

## WetChemistry by Method M2540C

### Batch ID: R437167,R437168

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: 12603939-TB-01
Collection Date: 30-May-2023 00:00

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-01
Matrix:Water

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | **Method:SW8260** | | | | | Analyst: FT |
| Benzene | | U | 0.0010 | mg/L | 1 | 03-Jun-2023 01:28 |
| Ethylbenzene | | U | 0.0010 | mg/L | 1 | 03-Jun-2023 01:28 |
| Toluene | | U | 0.0010 | mg/L | 1 | 03-Jun-2023 01:28 |
| Xylenes, Total | | U | 0.0010 | mg/L | 1 | 03-Jun-2023 01:28 |
| *Surr: 1,2-Dichloroethane-d4* | *115* | | *70-126* | *%REC* | *1* | *03-Jun-2023 01:28* |
| *Surr: 4-Bromofluorobenzene* | *98.1* | | *77-113* | *%REC* | *1* | *03-Jun-2023 01:28* |
| *Surr: Dibromofluoromethane* | *104* | | *77-123* | *%REC* | *1* | *03-Jun-2023 01:28* |
| *Surr: Toluene-d8* | *101* | | *82-127* | *%REC* | *1* | *03-Jun-2023 01:28* |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-3-20230530
Collection Date: 30-May-2023 12:30

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-02
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: FT |
| Benzene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 04:16 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 04:16 |
| Toluene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 04:16 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 04:16 |
| *Surr: 1,2-Dichloroethane-d4* | *111* | | *70-126* | *%REC* | *1* | *03-Jun-2023 04:16* |
| *Surr: 4-Bromofluorobenzene* | *98.6* | | *77-113* | *%REC* | *1* | *03-Jun-2023 04:16* |
| *Surr: Dibromofluoromethane* | *105* | | *77-123* | *%REC* | *1* | *03-Jun-2023 04:16* |
| *Surr: Toluene-d8* | *102* | | *82-127* | *%REC* | *1* | *03-Jun-2023 04:16* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **68.0** | | **0.500** | **mg/L** | 1 | 13-Jun-2023 12:07 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **550** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:31 |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-2-20230530
Collection Date: 30-May-2023 14:20

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-03
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:09 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:09 |
| Toluene | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:09 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:09 |
| *Surr: 1,2-Dichloroethane-d4* | *97.4* | | *70-126* | *%REC* | *1* | *02-Jun-2023 19:09* |
| *Surr: 4-Bromofluorobenzene* | *95.3* | | *77-113* | *%REC* | *1* | *02-Jun-2023 19:09* |
| *Surr: Dibromofluoromethane* | *98.1* | | *77-123* | *%REC* | *1* | *02-Jun-2023 19:09* |
| *Surr: Toluene-d8* | *97.9* | | *82-127* | *%REC* | *1* | *02-Jun-2023 19:09* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **64.4** | | **0.500** | **mg/L** | 1 | 13-Jun-2023 12:13 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **536** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:31 |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-4-20230530
Collection Date: 30-May-2023 15:20

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-04
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:30 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:30 |
| Toluene | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:30 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 02-Jun-2023 19:30 |
| *Surr: 1,2-Dichloroethane-d4* | *99.0* | | *70-126* | *%REC* | *1* | *02-Jun-2023 19:30* |
| *Surr: 4-Bromofluorobenzene* | *95.1* | | *77-113* | *%REC* | *1* | *02-Jun-2023 19:30* |
| *Surr: Dibromofluoromethane* | *98.4* | | *77-123* | *%REC* | *1* | *02-Jun-2023 19:30* |
| *Surr: Toluene-d8* | *97.7* | | *82-127* | *%REC* | *1* | *02-Jun-2023 19:30* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **48.5** | | **0.500** | **mg/L** | 1 | 13-Jun-2023 12:30 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **400** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:31 |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-5-20230530
Collection Date: 30-May-2023 17:40

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-05
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | | U | 0.0010 | mg/L | 1 | 02-Jun-2023 19:52 |
| Ethylbenzene | | U | 0.0010 | mg/L | 1 | 02-Jun-2023 19:52 |
| Toluene | | U | 0.0010 | mg/L | 1 | 02-Jun-2023 19:52 |
| Xylenes, Total | | U | 0.0010 | mg/L | 1 | 02-Jun-2023 19:52 |
| *Surr: 1,2-Dichloroethane-d4* | *97.9* | | *70-126* | *%REC* | *1* | *02-Jun-2023 19:52* |
| *Surr: 4-Bromofluorobenzene* | *95.5* | | *77-113* | *%REC* | *1* | *02-Jun-2023 19:52* |
| *Surr: Dibromofluoromethane* | *98.0* | | *77-123* | *%REC* | *1* | *02-Jun-2023 19:52* |
| *Surr: Toluene-d8* | *97.1* | | *82-127* | *%REC* | *1* | *02-Jun-2023 19:52* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **235** | | **5.00** | **mg/L** | 10 | 13-Jun-2023 13:11 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **900** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:31 |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-6-20230530
Collection Date: 30-May-2023 18:30

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-06
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 18:56 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 18:56 |
| Toluene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 18:56 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 18:56 |
| *Surr: 1,2-Dichloroethane-d4* | *104* | | *70-126* | *%REC* | *1* | *03-Jun-2023 18:56* |
| *Surr: 4-Bromofluorobenzene* | *102* | | *77-113* | *%REC* | *1* | *03-Jun-2023 18:56* |
| *Surr: Dibromofluoromethane* | *102* | | *77-123* | *%REC* | *1* | *03-Jun-2023 18:56* |
| *Surr: Toluene-d8* | *95.5* | | *82-127* | *%REC* | *1* | *03-Jun-2023 18:56* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **91.3** | | **1.00** | **mg/L** | 2 | 13-Jun-2023 13:16 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **580** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:34 |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: RW-1-20230530
Collection Date: 30-May-2023 19:30

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-07
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| **Benzene** | **0.80** | | **0.010** | **mg/L** | 10 | 06-Jun-2023 18:00 |
| **Ethylbenzene** | **0.018** | | **0.0010** | **mg/L** | 1 | 03-Jun-2023 19:19 |
| **Toluene** | **0.100** | | **0.0010** | **mg/L** | 1 | 03-Jun-2023 19:19 |
| **Xylenes, Total** | **0.15** | | **0.0010** | **mg/L** | 1 | 03-Jun-2023 19:19 |
| *Surr: 1,2-Dichloroethane-d4* | *92.2* | | *70-126* | *%REC* | *1* | *03-Jun-2023 19:19* |
| *Surr: 1,2-Dichloroethane-d4* | *97.4* | | *70-126* | *%REC* | *10* | *06-Jun-2023 18:00* |
| *Surr: 4-Bromofluorobenzene* | *102* | | *77-113* | *%REC* | *1* | *03-Jun-2023 19:19* |
| *Surr: 4-Bromofluorobenzene* | *95.3* | | *77-113* | *%REC* | *10* | *06-Jun-2023 18:00* |
| *Surr: Dibromofluoromethane* | *86.6* | | *77-123* | *%REC* | *1* | *03-Jun-2023 19:19* |
| *Surr: Dibromofluoromethane* | *94.5* | | *77-123* | *%REC* | *10* | *06-Jun-2023 18:00* |
| *Surr: Toluene-d8* | *103* | | *82-127* | *%REC* | *1* | *03-Jun-2023 19:19* |
| *Surr: Toluene-d8* | *98.2* | | *82-127* | *%REC* | *10* | *06-Jun-2023 18:00* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **128** | | **1.00** | **mg/L** | 2 | 13-Jun-2023 13:22 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **578** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:34 |

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

**ALS Houston, US** Date: 14-Jun-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: DUP01
Collection Date: 30-May-2023 00:00

**ANALYTICAL REPORT**
WorkOrder:HS23060089
Lab ID:HS23060089-08
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 19:42 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 19:42 |
| Toluene | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 19:42 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 03-Jun-2023 19:42 |
| *Surr: 1,2-Dichloroethane-d4* | *108* | | *70-126* | *%REC* | *1* | *03-Jun-2023 19:42* |
| *Surr: 4-Bromofluorobenzene* | *102* | | *77-113* | *%REC* | *1* | *03-Jun-2023 19:42* |
| *Surr: Dibromofluoromethane* | *103* | | *77-123* | *%REC* | *1* | *03-Jun-2023 19:42* |
| *Surr: Toluene-d8* | *96.3* | | *82-127* | *%REC* | *1* | *03-Jun-2023 19:42* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **48.5** | | **1.00** | **mg/L** | 2 | 13-Jun-2023 13:28 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **410** | | **10.0** | **mg/L** | 1 | 05-Jun-2023 13:34 |

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

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**DATES REPORT**

| Sample ID | Client Samp ID | Collection Date | Leachate Date | Prep Date | Analysis Date | DF |
|---|---|---|---|---|---|---|
| **Batch ID:** R436988 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23060089-03 | MW-2-20230530 | 30 May 2023 14:20 | | | 02 Jun 2023 19:09 | 1 |
| HS23060089-04 | MW-4-20230530 | 30 May 2023 15:20 | | | 02 Jun 2023 19:30 | 1 |
| HS23060089-05 | MW-5-20230530 | 30 May 2023 17:40 | | | 02 Jun 2023 19:52 | 1 |
| **Batch ID:** R436993 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23060089-06 | MW-6-20230530 | 30 May 2023 18:30 | | | 03 Jun 2023 18:56 | 1 |
| HS23060089-07 | RW-1-20230530 | 30 May 2023 19:30 | | | 03 Jun 2023 19:19 | 1 |
| HS23060089-08 | DUP01 | 30 May 2023 00:00 | | | 03 Jun 2023 19:42 | 1 |
| **Batch ID:** R437000 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23060089-02 | MW-3-20230530 | 30 May 2023 12:30 | | | 03 Jun 2023 04:16 | 1 |
| **Batch ID:** R437000 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Water | |
| HS23060089-01 | 12603939-TB-01 | 30 May 2023 00:00 | | | 03 Jun 2023 01:28 | 1 |
| **Batch ID:** R437167 ( 0 ) | **Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011 | | | | **Matrix:** Groundwater | |
| HS23060089-02 | MW-3-20230530 | 30 May 2023 12:30 | | | 05 Jun 2023 13:31 | 1 |
| HS23060089-03 | MW-2-20230530 | 30 May 2023 14:20 | | | 05 Jun 2023 13:31 | 1 |
| HS23060089-04 | MW-4-20230530 | 30 May 2023 15:20 | | | 05 Jun 2023 13:31 | 1 |
| HS23060089-05 | MW-5-20230530 | 30 May 2023 17:40 | | | 05 Jun 2023 13:31 | 1 |
| **Batch ID:** R437168 ( 0 ) | **Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011 | | | | **Matrix:** Groundwater | |
| HS23060089-06 | MW-6-20230530 | 30 May 2023 18:30 | | | 05 Jun 2023 13:34 | 1 |
| HS23060089-07 | RW-1-20230530 | 30 May 2023 19:30 | | | 05 Jun 2023 13:34 | 1 |
| HS23060089-08 | DUP01 | 30 May 2023 00:00 | | | 05 Jun 2023 13:34 | 1 |
| **Batch ID:** R437175 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23060089-07 | RW-1-20230530 | 30 May 2023 19:30 | | | 06 Jun 2023 18:00 | 10 |
| **Batch ID:** R437780 ( 0 ) | **Test Name :** ANIONS BY E300.0, REV 2.1, 1993 | | | | **Matrix:** Groundwater | |
| HS23060089-02 | MW-3-20230530 | 30 May 2023 12:30 | | | 13 Jun 2023 12:07 | 1 |
| HS23060089-03 | MW-2-20230530 | 30 May 2023 14:20 | | | 13 Jun 2023 12:13 | 1 |
| HS23060089-04 | MW-4-20230530 | 30 May 2023 15:20 | | | 13 Jun 2023 12:30 | 1 |
| HS23060089-05 | MW-5-20230530 | 30 May 2023 17:40 | | | 13 Jun 2023 13:11 | 10 |
| HS23060089-06 | MW-6-20230530 | 30 May 2023 18:30 | | | 13 Jun 2023 13:16 | 2 |
| HS23060089-07 | RW-1-20230530 | 30 May 2023 19:30 | | | 13 Jun 2023 13:22 | 2 |
| HS23060089-08 | DUP01 | 30 May 2023 00:00 | | | 13 Jun 2023 13:28 | 2 |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID: R436988 ( 0 )** **Instrument: VOA7** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-230602** Units: **ug/L** Analysis Date: **02-Jun-2023 11:39**
Client ID: Run ID: **VOA7_436988** SeqNo: **7340287** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| Ethylbenzene | U | 1.0 | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | |
| Xylenes, Total | U | 1.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *48.84* | *1.0* | *50* | *0* | *97.7* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.32* | *1.0* | *50* | *0* | *94.6* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.73* | *1.0* | *50* | *0* | *97.5* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *48.79* | *1.0* | *50* | *0* | *97.6* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-230602** Units: **ug/L** Analysis Date: **02-Jun-2023 10:56**
Client ID: Run ID: **VOA7_436988** SeqNo: **7340285** 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 | 74 - 120 | | | | |
| Ethylbenzene | 18.51 | 1.0 | 20 | 0 | 92.6 | 77 - 117 | | | | |
| Toluene | 17.8 | 1.0 | 20 | 0 | 89.0 | 77 - 118 | | | | |
| Xylenes, Total | 54.35 | 1.0 | 60 | 0 | 90.6 | 75 - 122 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *50.16* | *1.0* | *50* | *0* | *100* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *49.13* | *1.0* | *50* | *0* | *98.3* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.81* | *1.0* | *50* | *0* | *97.6* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *48.58* | *1.0* | *50* | *0* | *97.2* | *81 - 120* | | | | |

**MS** Sample ID: **HS23060094-04MS** Units: **ug/L** Analysis Date: **02-Jun-2023 14:52**
Client ID: Run ID: **VOA7_436988** SeqNo: **7340296** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.28 | 1.0 | 20 | 0 | 86.4 | 70 - 127 | | | | |
| Ethylbenzene | 18.13 | 1.0 | 20 | 0 | 90.6 | 70 - 124 | | | | |
| Toluene | 17.69 | 1.0 | 20 | 0 | 88.5 | 70 - 123 | | | | |
| Xylenes, Total | 54.25 | 1.0 | 60 | 0 | 90.4 | 70 - 130 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *50.48* | *1.0* | *50* | *0* | *101* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.82* | *1.0* | *50* | *0* | *95.6* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.88* | *1.0* | *50* | *0* | *97.8* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *48.68* | *1.0* | *50* | *0* | *97.4* | *82 - 127* | | | | |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID:** R436988 ( 0 ) **Instrument:** VOA7 **Method:** LOW LEVEL VOLATILES BY SW8260C

**MSD** Sample ID: **HS23060094-04MSD** Units: **ug/L** Analysis Date: **02-Jun-2023 15:13**
Client ID: Run ID: **VOA7_436988** SeqNo: **7340297** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 16.56 | 1.0 | 20 | 0 | 82.8 | 70 - 127 | 17.28 | 4.26 | 20 | |
| Ethylbenzene | 17.48 | 1.0 | 20 | 0 | 87.4 | 70 - 124 | 18.13 | 3.62 | 20 | |
| Toluene | 17.06 | 1.0 | 20 | 0 | 85.3 | 70 - 123 | 17.69 | 3.64 | 20 | |
| Xylenes, Total | 52.36 | 1.0 | 60 | 0 | 87.3 | 70 - 130 | 54.25 | 3.55 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *49.38* | *1.0* | *50* | *0* | *98.8* | *70 - 126* | *50.48* | *2.19* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *49.27* | *1.0* | *50* | *0* | *98.5* | *77 - 113* | *47.82* | *2.97* | *20* | |
| *Surr: Dibromofluoromethane* | *49.03* | *1.0* | *50* | *0* | *98.1* | *77 - 123* | *48.88* | *0.307* | *20* | |
| *Surr: Toluene-d8* | *48.88* | *1.0* | *50* | *0* | *97.8* | *82 - 127* | *48.68* | *0.401* | *20* | |

**The following samples were analyzed in this batch:** HS23060089-03 HS23060089-04 HS23060089-05

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID: R436993 ( 0 )** **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-230603** Units: **ug/L** Analysis Date: **03-Jun-2023 11:20**
Client ID: Run ID: **VOA4_436993** SeqNo: **7340462** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| Ethylbenzene | U | 1.0 | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | |
| Xylenes, Total | U | 1.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *55.29* | *1.0* | *50* | *0* | *111* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *50.43* | *1.0* | *50* | *0* | *101* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *53.68* | *1.0* | *50* | *0* | *107* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *47.49* | *1.0* | *50* | *0* | *95.0* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-230603** Units: **ug/L** Analysis Date: **03-Jun-2023 10:34**
Client ID: Run ID: **VOA4_436993** SeqNo: **7340460** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 18.7 | 1.0 | 20 | 0 | 93.5 | 74 - 120 | | | | |
| Ethylbenzene | 20.03 | 1.0 | 20 | 0 | 100 | 77 - 117 | | | | |
| Toluene | 18.49 | 1.0 | 20 | 0 | 92.5 | 77 - 118 | | | | |
| Xylenes, Total | 58.83 | 1.0 | 60 | 0 | 98.0 | 75 - 122 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *48.58* | *1.0* | *50* | *0* | *97.2* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *51.56* | *1.0* | *50* | *0* | *103* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *46.9* | *1.0* | *50* | *0* | *93.8* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *50.31* | *1.0* | *50* | *0* | *101* | *81 - 120* | | | | |

**MS** Sample ID: **HS23060143-01MS** Units: **ug/L** Analysis Date: **03-Jun-2023 13:37**
Client ID: Run ID: **VOA4_436993** SeqNo: **7340468** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.21 | 1.0 | 20 | 0 | 86.0 | 70 - 127 | | | | |
| Ethylbenzene | 18.04 | 1.0 | 20 | 0 | 90.2 | 70 - 124 | | | | |
| Toluene | 16.75 | 1.0 | 20 | 0 | 83.7 | 70 - 123 | | | | |
| Xylenes, Total | 53.7 | 1.0 | 60 | 0 | 89.5 | 70 - 130 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *48.3* | *1.0* | *50* | *0* | *96.6* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *50.43* | *1.0* | *50* | *0* | *101* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *46.25* | *1.0* | *50* | *0* | *92.5* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *50.01* | *1.0* | *50* | *0* | *100* | *82 - 127* | | | | |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID:** R436993 ( 0 ) **Instrument:** VOA4 **Method:** LOW LEVEL VOLATILES BY SW8260C

**MSD** Sample ID: **HS23060143-01MSD** Units: **ug/L** Analysis Date: **03-Jun-2023 14:00**
Client ID: Run ID: **VOA4_436993** SeqNo: **7340469** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | RPD %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.97 | 1.0 | 20 | 0 | 89.9 | 70 - 127 | 17.21 | 4.35 | 20 | |
| Ethylbenzene | 18.14 | 1.0 | 20 | 0 | 90.7 | 70 - 124 | 18.04 | 0.548 | 20 | |
| Toluene | 16.62 | 1.0 | 20 | 0 | 83.1 | 70 - 123 | 16.75 | 0.807 | 20 | |
| Xylenes, Total | 54.26 | 1.0 | 60 | 0 | 90.4 | 70 - 130 | 53.7 | 1.03 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *50.46* | *1.0* | *50* | *0* | *101* | *70 - 126* | *48.3* | *4.36* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *51.84* | *1.0* | *50* | *0* | *104* | *77 - 113* | *50.43* | *2.76* | *20* | |
| *Surr: Dibromofluoromethane* | *48.84* | *1.0* | *50* | *0* | *97.7* | *77 - 123* | *46.25* | *5.44* | *20* | |
| *Surr: Toluene-d8* | *49.14* | *1.0* | *50* | *0* | *98.3* | *82 - 127* | *50.01* | *1.76* | *20* | |

**The following samples were analyzed in this batch:** HS23060089-06 HS23060089-07 HS23060089-08

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID: R437000 ( 0 )** **Instrument: VOA11** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-230602** Units: **ug/L** Analysis Date: **03-Jun-2023 00:25**
Client ID: Run ID: **VOA11_437000** SeqNo: **7340699** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| Ethylbenzene | U | 1.0 | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | |
| Xylenes, Total | U | 1.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *54.5* | *1.0* | *50* | *0* | *109* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *48.35* | *1.0* | *50* | *0* | *96.7* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *51.26* | *1.0* | *50* | *0* | *103* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *50.72* | *1.0* | *50* | *0* | *101* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-230602** Units: **ug/L** Analysis Date: **02-Jun-2023 23:43**
Client ID: Run ID: **VOA11_437000** SeqNo: **7340698** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.99 | 1.0 | 20 | 0 | 90.0 | 74 - 120 | | | | |
| Ethylbenzene | 16.93 | 1.0 | 20 | 0 | 84.7 | 77 - 117 | | | | |
| Toluene | 18 | 1.0 | 20 | 0 | 90.0 | 77 - 118 | | | | |
| Xylenes, Total | 53.95 | 1.0 | 60 | 0 | 89.9 | 75 - 122 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *55.7* | *1.0* | *50* | *0* | *111* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *50.68* | *1.0* | *50* | *0* | *101* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *51.47* | *1.0* | *50* | *0* | *103* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *50.47* | *1.0* | *50* | *0* | *101* | *81 - 120* | | | | |

**MS** Sample ID: **HS23060087-02MS** Units: **ug/L** Analysis Date: **03-Jun-2023 02:10**
Client ID: Run ID: **VOA11_437000** SeqNo: **7340704** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 20.14 | 1.0 | 20 | 0 | 101 | 70 - 127 | | | | |
| Ethylbenzene | 18.69 | 1.0 | 20 | 0 | 93.4 | 70 - 124 | | | | |
| Toluene | 19.34 | 1.0 | 20 | 0 | 96.7 | 70 - 123 | | | | |
| Xylenes, Total | 59.96 | 1.0 | 60 | 0 | 99.9 | 70 - 130 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *54.47* | *1.0* | *50* | *0* | *109* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *48.95* | *1.0* | *50* | *0* | *97.9* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *52.59* | *1.0* | *50* | *0* | *105* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *50.01* | *1.0* | *50* | *0* | *100* | *82 - 127* | | | | |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID:** R437000 ( 0 ) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

**MSD** Sample ID: **HS23060087-02MSD** Units: **ug/L** Analysis Date: **03-Jun-2023 02:31**
Client ID: Run ID: **VOA11_437000** SeqNo: **7340705** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 19.07 | 1.0 | 20 | 0 | 95.4 | 70 - 127 | 20.14 | 5.46 | 20 | |
| Ethylbenzene | 18.73 | 1.0 | 20 | 0 | 93.7 | 70 - 124 | 18.69 | 0.254 | 20 | |
| Toluene | 18.67 | 1.0 | 20 | 0 | 93.4 | 70 - 123 | 19.34 | 3.51 | 20 | |
| Xylenes, Total | 57.61 | 1.0 | 60 | 0 | 96.0 | 70 - 130 | 59.96 | 4 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *53.09* | *1.0* | *50* | *0* | *106* | *70 - 126* | *54.47* | *2.57* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *50.5* | *1.0* | *50* | *0* | *101* | *77 - 113* | *48.95* | *3.11* | *20* | |
| *Surr: Dibromofluoromethane* | *49.93* | *1.0* | *50* | *0* | *99.9* | *77 - 123* | *52.59* | *5.2* | *20* | |
| *Surr: Toluene-d8* | *50.66* | *1.0* | *50* | *0* | *101* | *82 - 127* | *50.01* | *1.3* | *20* | |

**The following samples were analyzed in this batch:** HS23060089-01 HS23060089-02

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID: R437175 ( 0 )** **Instrument: VOA7** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-230606** Units: **ug/L** Analysis Date: **06-Jun-2023 10:27**
Client ID: Run ID: **VOA7_437175** SeqNo: **7344743** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *48.78* | *1.0* | *50* | *0* | *97.6* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.31* | *1.0* | *50* | *0* | *94.6* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.34* | *1.0* | *50* | *0* | *96.7* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *48.74* | *1.0* | *50* | *0* | *97.5* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-230606** Units: **ug/L** Analysis Date: **06-Jun-2023 09:45**
Client ID: Run ID: **VOA7_437175** SeqNo: **7344741** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 17.91 | 1.0 | 20 | 0 | 89.6 | 74 - 120 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *50.26* | *1.0* | *50* | *0* | *101* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *48.97* | *1.0* | *50* | *0* | *97.9* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *49.52* | *1.0* | *50* | *0* | *99.0* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *48.81* | *1.0* | *50* | *0* | *97.6* | *81 - 120* | | | | |

**MS** Sample ID: **HS23060153-03MS** Units: **ug/L** Analysis Date: **06-Jun-2023 11:35**
Client ID: Run ID: **VOA7_437175** SeqNo: **7344746** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 15.65 | 1.0 | 20 | 0 | 78.3 | 70 - 127 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *48.39* | *1.0* | *50* | *0* | *96.8* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.52* | *1.0* | *50* | *0* | *95.0* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.83* | *1.0* | *50* | *0* | *97.7* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *48.36* | *1.0* | *50* | *0* | *96.7* | *82 - 127* | | | | |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID:** R437175 ( 0 ) **Instrument:** VOA7 **Method:** LOW LEVEL VOLATILES BY SW8260C

**MSD** Sample ID: **HS23060153-03MSD** Units: **ug/L** Analysis Date: **06-Jun-2023 11:56**
Client ID: Run ID: **VOA7_437175** SeqNo: **7344747** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 15.11 | 1.0 | 20 | 0 | 75.6 | 70 - 127 | 15.65 | 3.49 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *49.35* | *1.0* | *50* | *0* | *98.7* | *70 - 126* | *48.39* | *1.96* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *48.24* | *1.0* | *50* | *0* | *96.5* | *77 - 113* | *47.52* | *1.51* | *20* | |
| *Surr: Dibromofluoromethane* | *48.41* | *1.0* | *50* | *0* | *96.8* | *77 - 123* | *48.83* | *0.866* | *20* | |
| *Surr: Toluene-d8* | *48.61* | *1.0* | *50* | *0* | *97.2* | *82 - 127* | *48.36* | *0.513* | *20* | |

**The following samples were analyzed in this batch:** HS23060089-07

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID:** R437167 ( 0 ) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

**MBLK** Sample ID: **WBLK-06052023** Units: **mg/L** Analysis Date: **05-Jun-2023 13:31**
Client ID: Run ID: **Balance1_437167** SeqNo: **7344504** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | U | 10.0 | | | | | | | | |

**LCS** Sample ID: **LCS-06052023** Units: **mg/L** Analysis Date: **05-Jun-2023 13:31**
Client ID: Run ID: **Balance1_437167** SeqNo: **7344503** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 1082 | 10.0 | 1000 | 0 | 108 | 85 - 115 | | | | |

**DUP** Sample ID: **HS23060089-04DUP** Units: **mg/L** Analysis Date: **05-Jun-2023 13:31**
Client ID: **MW-4-20230530** Run ID: **Balance1_437167** SeqNo: **7344501** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 402 | 10.0 | | | | | 400 | 0.499 | 20 | |

**DUP** Sample ID: **HS23052050-01DUP** Units: **mg/L** Analysis Date: **05-Jun-2023 13:31**
Client ID: Run ID: **Balance1_437167** SeqNo: **7344490** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 976 | 10.0 | | | | | 980 | 0.409 | 20 | |

**The following samples were analyzed in this batch:** HS23060089-02 HS23060089-03 HS23060089-04 HS23060089-05

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

**Batch ID:** R437168 ( 0 ) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

**MBLK** Sample ID: **WBLK-02012023** Units: **mg/L** Analysis Date: **05-Jun-2023 13:34**
Client ID: Run ID: **Balance1_437168** SeqNo: **7344551** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | U | 10.0 | | | | | | | | |

**LCS** Sample ID: **LCS-02012023** Units: **mg/L** Analysis Date: **05-Jun-2023 13:34**
Client ID: Run ID: **Balance1_437168** SeqNo: **7344550** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 1090 | 10.0 | 1000 | 0 | 109 | 85 - 115 | | | | |

**DUP** Sample ID: **HS23060089-07DUP** Units: **mg/L** Analysis Date: **05-Jun-2023 13:34**
Client ID: **RW-1-20230530** Run ID: **Balance1_437168** SeqNo: **7344540** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 580 | 10.0 | | | | | 578 | 0.345 | 20 | |

**DUP** Sample ID: **HS23052052-02DUP** Units: **mg/L** Analysis Date: **05-Jun-2023 13:34**
Client ID: Run ID: **Balance1_437168** SeqNo: **7344535** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 1368 | 10.0 | | | | | 1364 | 0.293 | 20 | |

**The following samples were analyzed in this batch:** HS23060089-06 HS23060089-07 HS23060089-08

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23060089

**QC BATCH REPORT**

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

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

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

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

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

**MS** Sample ID: **HS23060089-04MS** Units: **mg/L** Analysis Date: **13-Jun-2023 12:36**
Client ID: **MW-4-20230530** Run ID: **ICS-Integrion_437780** SeqNo: **7360265** PrepDate: DF: **1**

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

**MS** Sample ID: **HS23060089-03MS** Units: **mg/L** Analysis Date: **13-Jun-2023 12:18**
Client ID: **MW-2-20230530** Run ID: **ICS-Integrion_437780** SeqNo: **7360262** PrepDate: DF: **1**

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

**MSD** Sample ID: **HS23060089-04MSD** Units: **mg/L** Analysis Date: **13-Jun-2023 12:42**
Client ID: **MW-4-20230530** Run ID: **ICS-Integrion_437780** SeqNo: **7360266** PrepDate: DF: **1**

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

**MSD** Sample ID: **HS23060089-03MSD** Units: **mg/L** Analysis Date: **13-Jun-2023 12:24**
Client ID: **MW-2-20230530** Run ID: **ICS-Integrion_437780** SeqNo: **7360263** PrepDate: DF: **1**

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

**The following samples were analyzed in this batch:**

| | | | |
|---|---|---|---|
| HS23060089-02 | HS23060089-03 | HS23060089-04 | HS23060089-05 |
| HS23060089-06 | HS23060089-07 | HS23060089-08 | |

**ALS Houston, US** Date: 14-Jun-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** **HS23060089**

**QUALIFIERS, ACRONYMS, UNITS**

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

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

| Unit Reported | Description |
|---|---|
| mg/L | Milligrams per Liter |

**ALS Houston, US** Date: 14-Jun-23

## CERTIFICATIONS,ACCREDITATIONS & LICENSES

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

**ALS Houston, US** Date: 14-Jun-23

## Sample Receipt Checklist

**Work Order ID:** HS23060089 **Date/Time Received:** 01-Jun-2023 09:40

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

**Completed By:** /S/ Nilesh D. Ranchod (eSignature) 01-Jun-2023 17:53 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

| | | | |
|---|---|---|---|
| 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:241359 |
| 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): | 1.7C/1.6C UC/C | IR 31 |
| Cooler(s)/Kit(s): | 47608 | |
| Date/Time sample(s) sent to storage: | 06/01/2023 18:00 | |

| | | | |
|---|---|---|---|
| Water - VOA vials have zero headspace? | Yes ☑ | No ☐ | No VOA vials submitted ☐ |
| Water - pH acceptable upon receipt? | Yes ☐ | No ☐ | N/A ☑ |
| pH adjusted? | Yes ☐ | No ☐ | N/A ☑ |
| pH adjusted by: | | | |

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

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

# Chain of Custody Form

Page _____ of _____

COC ID: 241359

**HS23060089**

GHD

12603939 - Jal No. 4



ALS Project Manager:

| Customer Information | | Project Information | | | |
|---|---|---|---|---|---|
| Purchase Order | E-19001-GL-21300132 Stacy Boul | Project Name | 12603939 - Jal No. 4 | A | 8260_LL_W (8260 BTEX) [3xVOA HCl] |
| Work Order | | Project Number | 12603939 | B | TDS_W 2540C (2540C TDS) [250ml P Neat-share] |
| Company Name | GHD | Bill To Company | Energy Transfer | C | 300_W (300 Cl) [250ml P Neat-share] |
| Send Report To | Blair Owen | Invoice Attn | Stacy Boultinghouse | D | TB 8260_LL_W (8260 BTEX) [ [3xVOA HCl] |
| Address | 11451 Katy Fwy<br>Suite 400 | Address | P.O Box 132400 | E | |
| | | | | F | |
| City/State/Zip | Houston, TX 77079 | City/State/Zip | Dallas TX 75313 | G | |
| Phone | (713) 734-3090 | Phone | | H | |
| Fax | (713) 734-3391 | Fax | | I | |
| e-Mail Address | blair.owen@ghd.com | e-Mail Address | Stacy.Boultinghouse@energytransfer.com | | |

| Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12603939-TB01- | 5/30/23 | ~~1770~~ | Water | 1,8 | 2 | | | | X | | | | | | | |
| MW-3-20230530 | 5/30/23 | ~~1420~~ 1238 | Gw | 1,8 | 5 | X | X | X | | | | | | | | |
| MW-2-20230530 | 5/30/23 | ~~1520~~ 1426 | Gw | 1,8 | 5 | X | X | X | | | | | | | | |
| MW-4-20230530 | 5/30/23 | ~~1740~~ 1520 | Gw | 1,8 | 5 | X | X | X | | | | | | | | |
| MW-5-20230530 | 5/30/23 | ~~1870~~ 1740 | Gw | 1,8 | 5 | X | X | X | | | | | | | | |
| MW-6-20230530 | 5/30/23 | 1870 | Gw | 1,8 | 5 | X | X | X | | | | | | | | |
| RW-1-20230530 | 5/30/23 | 1930 | Gw | 1,8 | 5 | X | X | X | | | | | | | | |
| DUP01 | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

Sampler(s) Please Print & Sign: Simon Kwok Simon Kwok

Shipment Method:

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

Results Due Date:

| | Date | Time | |
|---|---|---|---|
| Relinquished by: Simon Kwok | 5/31/23 | 1000 | Received by: |
| Relinquished by: | Date: | Time: | Received by (Laboratory): 06012023 0940 |
| Logged by (Laboratory): | Date: | Time: | Checked by (Laboratory): |

Notes: ETC Jal No. 4 Lea County NM

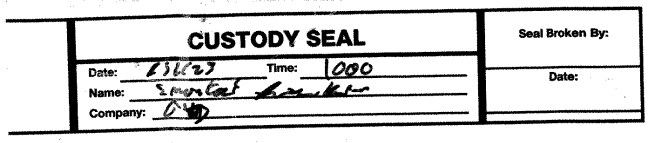
| Cooler ID | Cooler Temp. |
|---|---|
| 47608 | 1.8-3.1<br>1.7wl<br>0.1c |

QC Package: (Check One Box Below)

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

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

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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November 21, 2023

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

Work Order: **HS23110663**

Laboratory Results for: **12603939 - Jal No. 4**

Dear Blair Owen,

ALS Environmental received 8 sample(s) on Nov 09, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

**Generated By: JUMOKE.LAWAL**
James Guin

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**Work Order:** HS23110663

**SAMPLE SUMMARY**

| Lab Samp ID | Client Sample ID | Matrix | TagNo | Collection Date | Date Received | Hold |
|---|---|---|---|---|---|---|
| HS23110663-01 | 12603939-TB-01 | Water | | 08-Nov-2023 00:00 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-02 | MW-2-20231108 | Groundwater | | 08-Nov-2023 09:40 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-03 | MW-3-20231108 | Groundwater | | 08-Nov-2023 11:00 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-04 | MW-4-20231108 | Groundwater | | 08-Nov-2023 12:00 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-05 | MW-5-20231108 | Groundwater | | 08-Nov-2023 12:45 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-06 | MW-6-20231108 | Groundwater | | 08-Nov-2023 14:00 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-07 | RW-1-20231108 | Groundwater | | 08-Nov-2023 15:10 | 09-Nov-2023 09:40 | ☐ |
| HS23110663-08 | DUP-01 | Groundwater | | 08-Nov-2023 00:00 | 09-Nov-2023 09:40 | ☐ |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD **CASE NARRATIVE**
**Project:** 12603939 - Jal No. 4
**Work Order:** HS23110663

## GCMS Volatiles by Method SW8260

### Batch ID: R451750

**Sample ID: HS23110794-10MS**

- MS/MSD was performed on an unrelated sample.

### Batch ID: R451584

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

### Batch ID: R451544

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

### Batch ID: R451840

**Sample ID: HS23110788-02MS**

- MS/MSD was performed on an unrelated sample.

## WetChemistry by Method E300

### Batch ID: R452331

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

## WetChemistry by Method M2540C

### Batch ID: R451721,R451862

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: 12603939-TB-01
Collection Date: 08-Nov-2023 00:00

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-01
Matrix:Water

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | | U | 0.0010 | mg/L | 1 | 14-Nov-2023 18:16 |
| Ethylbenzene | | U | 0.0010 | mg/L | 1 | 14-Nov-2023 18:16 |
| Toluene | | U | 0.0010 | mg/L | 1 | 14-Nov-2023 18:16 |
| Xylenes, Total | | U | 0.0010 | mg/L | 1 | 14-Nov-2023 18:16 |
| *Surr: 1,2-Dichloroethane-d4* | *106* | | *70-126* | *%REC* | *1* | *14-Nov-2023 18:16* |
| *Surr: 4-Bromofluorobenzene* | *96.1* | | *77-113* | *%REC* | *1* | *14-Nov-2023 18:16* |
| *Surr: Dibromofluoromethane* | *117* | | *77-123* | *%REC* | *1* | *14-Nov-2023 18:16* |
| *Surr: Toluene-d8* | *88.3* | | *82-127* | *%REC* | *1* | *14-Nov-2023 18:16* |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-2-20231108
Collection Date: 08-Nov-2023 09:40

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-02
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: FT |
| Benzene | | U | 0.0010 | mg/L | 1 | 11-Nov-2023 03:39 |
| Ethylbenzene | | U | 0.0010 | mg/L | 1 | 11-Nov-2023 03:39 |
| Toluene | | U | 0.0010 | mg/L | 1 | 11-Nov-2023 03:39 |
| Xylenes, Total | | U | 0.0010 | mg/L | 1 | 11-Nov-2023 03:39 |
| *Surr: 1,2-Dichloroethane-d4* | *94.8* | | *70-126* | *%REC* | *1* | *11-Nov-2023 03:39* |
| *Surr: 4-Bromofluorobenzene* | *95.9* | | *77-113* | *%REC* | *1* | *11-Nov-2023 03:39* |
| *Surr: Dibromofluoromethane* | *91.9* | | *77-123* | *%REC* | *1* | *11-Nov-2023 03:39* |
| *Surr: Toluene-d8* | *98.1* | | *82-127* | *%REC* | *1* | *11-Nov-2023 03:39* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **59.2** | | **0.500** | **mg/L** | 1 | 20-Nov-2023 12:01 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **546** | | **10.0** | **mg/L** | 1 | 13-Nov-2023 13:00 |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-3-20231108
Collection Date: 08-Nov-2023 11:00

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-03
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: FT |
| Benzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:00 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:00 |
| Toluene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:00 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:00 |
| *Surr: 1,2-Dichloroethane-d4* | *97.1* | | *70-126* | *%REC* | *1* | *11-Nov-2023 04:00* |
| *Surr: 4-Bromofluorobenzene* | *97.8* | | *77-113* | *%REC* | *1* | *11-Nov-2023 04:00* |
| *Surr: Dibromofluoromethane* | *95.3* | | *77-123* | *%REC* | *1* | *11-Nov-2023 04:00* |
| *Surr: Toluene-d8* | *99.1* | | *82-127* | *%REC* | *1* | *11-Nov-2023 04:00* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **50.7** | | **0.500** | **mg/L** | 1 | 20-Nov-2023 12:18 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **654** | | **10.0** | **mg/L** | 1 | 14-Nov-2023 12:30 |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-4-20231108
Collection Date: 08-Nov-2023 12:00

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-04
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: FT |
| Benzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:22 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:22 |
| Toluene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:22 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:22 |
| *Surr: 1,2-Dichloroethane-d4* | *98.3* | | *70-126* | *%REC* | *1* | *11-Nov-2023 04:22* |
| *Surr: 4-Bromofluorobenzene* | *95.6* | | *77-113* | *%REC* | *1* | *11-Nov-2023 04:22* |
| *Surr: Dibromofluoromethane* | *97.2* | | *77-123* | *%REC* | *1* | *11-Nov-2023 04:22* |
| *Surr: Toluene-d8* | *97.1* | | *82-127* | *%REC* | *1* | *11-Nov-2023 04:22* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **48.2** | | **0.500** | **mg/L** | 1 | 20-Nov-2023 13:30 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **234** | | **10.0** | **mg/L** | 1 | 14-Nov-2023 12:30 |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-5-20231108
Collection Date: 08-Nov-2023 12:45

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-05
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: FT |
| Benzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:43 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:43 |
| Toluene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:43 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 04:43 |
| *Surr: 1,2-Dichloroethane-d4* | *101* | | *70-126* | *%REC* | *1* | *11-Nov-2023 04:43* |
| *Surr: 4-Bromofluorobenzene* | *95.2* | | *77-113* | *%REC* | *1* | *11-Nov-2023 04:43* |
| *Surr: Dibromofluoromethane* | *96.6* | | *77-123* | *%REC* | *1* | *11-Nov-2023 04:43* |
| *Surr: Toluene-d8* | *98.4* | | *82-127* | *%REC* | *1* | *11-Nov-2023 04:43* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **214** | | **2.50** | **mg/L** | 5 | 20-Nov-2023 13:36 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **944** | | **10.0** | **mg/L** | 1 | 14-Nov-2023 12:30 |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: MW-6-20231108
Collection Date: 08-Nov-2023 14:00

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-06
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| Benzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 11:44 |
| Ethylbenzene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 11:44 |
| Toluene | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 11:44 |
| Xylenes, Total | U | | 0.0010 | mg/L | 1 | 11-Nov-2023 11:44 |
| *Surr: 1,2-Dichloroethane-d4* | *104* | | *70-126* | *%REC* | *1* | *11-Nov-2023 11:44* |
| *Surr: 4-Bromofluorobenzene* | *96.0* | | *77-113* | *%REC* | *1* | *11-Nov-2023 11:44* |
| *Surr: Dibromofluoromethane* | *112* | | *77-123* | *%REC* | *1* | *11-Nov-2023 11:44* |
| *Surr: Toluene-d8* | *90.1* | | *82-127* | *%REC* | *1* | *11-Nov-2023 11:44* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **78.1** | | **2.50** | **mg/L** | 5 | 20-Nov-2023 13:42 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **518** | | **10.0** | **mg/L** | 1 | 14-Nov-2023 12:30 |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: RW-1-20231108
Collection Date: 08-Nov-2023 15:10

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-07
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| **Benzene** | **0.38** | | **0.0050** | **mg/L** | 5 | 14-Nov-2023 05:57 |
| **Ethylbenzene** | **0.016** | | **0.0010** | **mg/L** | 1 | 11-Nov-2023 12:07 |
| **Toluene** | **0.060** | | **0.0010** | **mg/L** | 1 | 11-Nov-2023 12:07 |
| **Xylenes, Total** | **0.033** | | **0.0010** | **mg/L** | 1 | 11-Nov-2023 12:07 |
| *Surr: 1,2-Dichloroethane-d4* | *109* | | *70-126* | *%REC* | *1* | *11-Nov-2023 12:07* |
| *Surr: 1,2-Dichloroethane-d4* | *113* | | *70-126* | *%REC* | *5* | *14-Nov-2023 05:57* |
| *Surr: 4-Bromofluorobenzene* | *94.9* | | *77-113* | *%REC* | *1* | *11-Nov-2023 12:07* |
| *Surr: 4-Bromofluorobenzene* | *104* | | *77-113* | *%REC* | *5* | *14-Nov-2023 05:57* |
| *Surr: Dibromofluoromethane* | *106* | | *77-123* | *%REC* | *1* | *11-Nov-2023 12:07* |
| *Surr: Dibromofluoromethane* | *119* | | *77-123* | *%REC* | *5* | *14-Nov-2023 05:57* |
| *Surr: Toluene-d8* | *96.4* | | *82-127* | *%REC* | *1* | *11-Nov-2023 12:07* |
| *Surr: Toluene-d8* | *84.8* | | *82-127* | *%REC* | *5* | *14-Nov-2023 05:57* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **90.8** | | **2.50** | **mg/L** | 5 | 20-Nov-2023 13:48 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **460** | | **10.0** | **mg/L** | 1 | 14-Nov-2023 12:30 |

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

**ALS Houston, US** Date: 21-Nov-23

Client: GHD
Project: 12603939 - Jal No. 4
Sample ID: DUP-01
Collection Date: 08-Nov-2023 00:00

**ANALYTICAL REPORT**
WorkOrder:HS23110663
Lab ID:HS23110663-08
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **LOW LEVEL VOLATILES BY SW8260C** | | **Method:SW8260** | | | | Analyst: AKP |
| **Benzene** | **0.22** | | **0.025** | **mg/L** | 25 | 14-Nov-2023 20:19 |
| **Ethylbenzene** | **0.012** | | **0.0010** | **mg/L** | 1 | 14-Nov-2023 19:54 |
| **Toluene** | **0.050** | | **0.0010** | **mg/L** | 1 | 14-Nov-2023 19:54 |
| **Xylenes, Total** | **0.024** | | **0.0010** | **mg/L** | 1 | 14-Nov-2023 19:54 |
| *Surr: 1,2-Dichloroethane-d4* | *116* | | *70-126* | *%REC* | *1* | *14-Nov-2023 19:54* |
| *Surr: 1,2-Dichloroethane-d4* | *110* | | *70-126* | *%REC* | *25* | *14-Nov-2023 20:19* |
| *Surr: 4-Bromofluorobenzene* | *98.8* | | *77-113* | *%REC* | *1* | *14-Nov-2023 19:54* |
| *Surr: 4-Bromofluorobenzene* | *97.0* | | *77-113* | *%REC* | *25* | *14-Nov-2023 20:19* |
| *Surr: Dibromofluoromethane* | *116* | | *77-123* | *%REC* | *1* | *14-Nov-2023 19:54* |
| *Surr: Dibromofluoromethane* | *119* | | *77-123* | *%REC* | *25* | *14-Nov-2023 20:19* |
| *Surr: Toluene-d8* | *92.4* | | *82-127* | *%REC* | *1* | *14-Nov-2023 19:54* |
| *Surr: Toluene-d8* | *89.6* | | *82-127* | *%REC* | *25* | *14-Nov-2023 20:19* |
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **89.8** | | **2.50** | **mg/L** | 5 | 20-Nov-2023 13:54 |
| **TOTAL DISSOLVED SOLIDS BY SM2540C -2011** | | **Method:M2540C** | | | | Analyst: DC |
| **Total Dissolved Solids (Residue, Filterable)** | **438** | | **10.0** | **mg/L** | 1 | 14-Nov-2023 12:30 |

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

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**DATES REPORT**

| Sample ID | Client Samp ID | Collection Date | Leachate Date | Prep Date | Analysis Date | DF |
|---|---|---|---|---|---|---|
| **Batch ID:** R451544 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23110663-02 | MW-2-20231108 | 08 Nov 2023 09:40 | | | 11 Nov 2023 03:39 | 1 |
| HS23110663-03 | MW-3-20231108 | 08 Nov 2023 11:00 | | | 11 Nov 2023 04:00 | 1 |
| HS23110663-04 | MW-4-20231108 | 08 Nov 2023 12:00 | | | 11 Nov 2023 04:22 | 1 |
| HS23110663-05 | MW-5-20231108 | 08 Nov 2023 12:45 | | | 11 Nov 2023 04:43 | 1 |
| **Batch ID:** R451584 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23110663-06 | MW-6-20231108 | 08 Nov 2023 14:00 | | | 11 Nov 2023 11:44 | 1 |
| HS23110663-07 | RW-1-20231108 | 08 Nov 2023 15:10 | | | 11 Nov 2023 12:07 | 1 |
| **Batch ID:** R451721 ( 0 ) | **Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011 | | | | **Matrix:** Groundwater | |
| HS23110663-02 | MW-2-20231108 | 08 Nov 2023 09:40 | | | 13 Nov 2023 13:00 | 1 |
| **Batch ID:** R451750 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23110663-07 | RW-1-20231108 | 08 Nov 2023 15:10 | | | 14 Nov 2023 05:57 | 5 |
| **Batch ID:** R451840 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Groundwater | |
| HS23110663-08 | DUP-01 | 08 Nov 2023 00:00 | | | 14 Nov 2023 20:19 | 25 |
| HS23110663-08 | DUP-01 | 08 Nov 2023 00:00 | | | 14 Nov 2023 19:54 | 1 |
| **Batch ID:** R451840 ( 0 ) | **Test Name :** LOW LEVEL VOLATILES BY SW8260C | | | | **Matrix:** Water | |
| HS23110663-01 | 12603939-TB-01 | 08 Nov 2023 00:00 | | | 14 Nov 2023 18:16 | 1 |
| **Batch ID:** R451862 ( 0 ) | **Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011 | | | | **Matrix:** Groundwater | |
| HS23110663-03 | MW-3-20231108 | 08 Nov 2023 11:00 | | | 14 Nov 2023 12:30 | 1 |
| HS23110663-04 | MW-4-20231108 | 08 Nov 2023 12:00 | | | 14 Nov 2023 12:30 | 1 |
| HS23110663-05 | MW-5-20231108 | 08 Nov 2023 12:45 | | | 14 Nov 2023 12:30 | 1 |
| HS23110663-06 | MW-6-20231108 | 08 Nov 2023 14:00 | | | 14 Nov 2023 12:30 | 1 |
| HS23110663-07 | RW-1-20231108 | 08 Nov 2023 15:10 | | | 14 Nov 2023 12:30 | 1 |
| HS23110663-08 | DUP-01 | 08 Nov 2023 00:00 | | | 14 Nov 2023 12:30 | 1 |
| **Batch ID:** R452331 ( 0 ) | **Test Name :** ANIONS BY E300.0, REV 2.1, 1993 | | | | **Matrix:** Groundwater | |
| HS23110663-02 | MW-2-20231108 | 08 Nov 2023 09:40 | | | 20 Nov 2023 12:01 | 1 |
| HS23110663-03 | MW-3-20231108 | 08 Nov 2023 11:00 | | | 20 Nov 2023 12:18 | 1 |
| HS23110663-04 | MW-4-20231108 | 08 Nov 2023 12:00 | | | 20 Nov 2023 13:30 | 1 |
| HS23110663-05 | MW-5-20231108 | 08 Nov 2023 12:45 | | | 20 Nov 2023 13:36 | 5 |
| HS23110663-06 | MW-6-20231108 | 08 Nov 2023 14:00 | | | 20 Nov 2023 13:42 | 5 |
| HS23110663-07 | RW-1-20231108 | 08 Nov 2023 15:10 | | | 20 Nov 2023 13:48 | 5 |
| HS23110663-08 | DUP-01 | 08 Nov 2023 00:00 | | | 20 Nov 2023 13:54 | 5 |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451544 ( 0 )** **Instrument: VOA12** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-231110** Units: **ug/L** Analysis Date: **10-Nov-2023 21:40**
Client ID: Run ID: **VOA12_451544** SeqNo: **7668083** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| Ethylbenzene | U | 1.0 | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | |
| Xylenes, Total | U | 3.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *49.7* | *1.0* | *50* | *0* | *99.4* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *46.53* | *1.0* | *50* | *0* | *93.1* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.29* | *1.0* | *50* | *0* | *96.6* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *49.17* | *1.0* | *50* | *0* | *98.3* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-231110** Units: **ug/L** Analysis Date: **10-Nov-2023 20:36**
Client ID: Run ID: **VOA12_451544** SeqNo: **7668082** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 19.66 | 1.0 | 20 | 0 | 98.3 | 74 - 120 | | | | |
| Ethylbenzene | 20.12 | 1.0 | 20 | 0 | 101 | 77 - 117 | | | | |
| Toluene | 20.62 | 1.0 | 20 | 0 | 103 | 77 - 118 | | | | |
| Xylenes, Total | 59.02 | 3.0 | 60 | 0 | 98.4 | 75 - 122 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *49.11* | *1.0* | *50* | *0* | *98.2* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *49.58* | *1.0* | *50* | *0* | *99.2* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *48.89* | *1.0* | *50* | *0* | *97.8* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *49.28* | *1.0* | *50* | *0* | *98.6* | *81 - 120* | | | | |

**MS** Sample ID: **HS23110663-05MS** Units: **ug/L** Analysis Date: **11-Nov-2023 05:04**
Client ID: **MW-5-20231108** Run ID: **VOA12_451544** SeqNo: **7668104** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 18.95 | 1.0 | 20 | 0 | 94.7 | 70 - 127 | | | | |
| Ethylbenzene | 19.31 | 1.0 | 20 | 0 | 96.5 | 70 - 124 | | | | |
| Toluene | 19.28 | 1.0 | 20 | 0 | 96.4 | 70 - 123 | | | | |
| Xylenes, Total | 56.71 | 3.0 | 60 | 0 | 94.5 | 70 - 130 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *46.58* | *1.0* | *50* | *0* | *93.2* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.86* | *1.0* | *50* | *0* | *95.7* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *46.7* | *1.0* | *50* | *0* | *93.4* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *48.29* | *1.0* | *50* | *0* | *96.6* | *82 - 127* | | | | |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID:** R451544 ( 0 ) **Instrument:** VOA12 **Method:** LOW LEVEL VOLATILES BY SW8260C

**MSD** Sample ID: **HS23110663-05MSD** Units: **ug/L** Analysis Date: **11-Nov-2023 05:25**
Client ID: **MW-5-20231108** Run ID: **VOA12_451544** SeqNo: **7668105** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | RPD %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 19.26 | 1.0 | 20 | 0 | 96.3 | 70 - 127 | 18.95 | 1.66 | 20 | |
| Ethylbenzene | 19.32 | 1.0 | 20 | 0 | 96.6 | 70 - 124 | 19.31 | 0.0718 | 20 | |
| Toluene | 19.78 | 1.0 | 20 | 0 | 98.9 | 70 - 123 | 19.28 | 2.6 | 20 | |
| Xylenes, Total | 58.91 | 3.0 | 60 | 0 | 98.2 | 70 - 130 | 56.71 | 3.8 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *48.96* | *1.0* | *50* | *0* | *97.9* | *70 - 126* | *46.58* | *4.99* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *47.14* | *1.0* | *50* | *0* | *94.3* | *77 - 113* | *47.86* | *1.52* | *20* | |
| *Surr: Dibromofluoromethane* | *48.67* | *1.0* | *50* | *0* | *97.3* | *77 - 123* | *46.7* | *4.13* | *20* | |
| *Surr: Toluene-d8* | *49.05* | *1.0* | *50* | *0* | *98.1* | *82 - 127* | *48.29* | *1.56* | *20* | |

**The following samples were analyzed in this batch:** HS23110663-02 HS23110663-03 HS23110663-04 HS23110663-05

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451584 ( 0 )** **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-231110** Units: **ug/L** Analysis Date: **11-Nov-2023 09:50**
Client ID: Run ID: **VOA4_451584** SeqNo: **7669400** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| Ethylbenzene | U | 1.0 | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | |
| Xylenes, Total | U | 3.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *52.67* | *1.0* | *50* | *0* | *105* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.18* | *1.0* | *50* | *0* | *94.4* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *57.03* | *1.0* | *50* | *0* | *114* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *45.13* | *1.0* | *50* | *0* | *90.3* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-231110** Units: **ug/L** Analysis Date: **11-Nov-2023 08:41**
Client ID: Run ID: **VOA4_451584** SeqNo: **7669398** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 19.28 | 1.0 | 20 | 0 | 96.4 | 74 - 120 | | | | |
| Ethylbenzene | 18.41 | 1.0 | 20 | 0 | 92.1 | 77 - 117 | | | | |
| Toluene | 17.97 | 1.0 | 20 | 0 | 89.8 | 77 - 118 | | | | |
| Xylenes, Total | 52.39 | 3.0 | 60 | 0 | 87.3 | 75 - 122 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *55.23* | *1.0* | *50* | *0* | *110* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *49.19* | *1.0* | *50* | *0* | *98.4* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *53.41* | *1.0* | *50* | *0* | *107* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *49.04* | *1.0* | *50* | *0* | *98.1* | *81 - 120* | | | | |

**LCSD** Sample ID: **VLCSDW-231110** Units: **ug/L** Analysis Date: **11-Nov-2023 09:04**
Client ID: Run ID: **VOA4_451584** SeqNo: **7669399** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 18.8 | 1.0 | 20 | 0 | 94.0 | 74 - 120 | 19.28 | 2.51 | 20 | |
| Ethylbenzene | 16.65 | 1.0 | 20 | 0 | 83.2 | 77 - 117 | 18.41 | 10.1 | 20 | |
| Toluene | 16.46 | 1.0 | 20 | 0 | 82.3 | 77 - 118 | 17.97 | 8.76 | 20 | |
| Xylenes, Total | 49.43 | 3.0 | 60 | 0 | 82.4 | 75 - 122 | 52.39 | 5.82 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *55.91* | *1.0* | *50* | *0* | *112* | *70 - 123* | *55.23* | *1.22* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *50.69* | *1.0* | *50* | *0* | *101* | *77 - 113* | *49.19* | *3.01* | *20* | |
| *Surr: Dibromofluoromethane* | *53.47* | *1.0* | *50* | *0* | *107* | *73 - 126* | *53.41* | *0.097* | *20* | |
| *Surr: Toluene-d8* | *48.42* | *1.0* | *50* | *0* | *96.8* | *81 - 120* | *49.04* | *1.28* | *20* | |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451584 ( 0 )** **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MS** Sample ID: **HS23110677-01MS** Units: **ug/L** Analysis Date: **11-Nov-2023 18:12**
Client ID: Run ID: **VOA4_451584** SeqNo: **7669421** 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 | 70 - 127 | | | | |
| Ethylbenzene | 17.81 | 1.0 | 20 | 0 | 89.0 | 70 - 124 | | | | |
| Toluene | 17.31 | 1.0 | 20 | 0.4188 | 84.4 | 70 - 123 | | | | |
| Xylenes, Total | 50.45 | 3.0 | 60 | 0 | 84.1 | 70 - 130 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *55.78* | *1.0* | *50* | *0* | *112* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *49.61* | *1.0* | *50* | *0* | *99.2* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *53.99* | *1.0* | *50* | *0* | *108* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *47.84* | *1.0* | *50* | *0* | *95.7* | *82 - 127* | | | | |

**MSD** Sample ID: **HS23110677-01MSD** Units: **ug/L** Analysis Date: **11-Nov-2023 18:34**
Client ID: Run ID: **VOA4_451584** SeqNo: **7669422** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 18.7 | 1.0 | 20 | 0 | 93.5 | 70 - 127 | 19.61 | 4.73 | 20 | |
| Ethylbenzene | 16.11 | 1.0 | 20 | 0 | 80.5 | 70 - 124 | 17.81 | 10 | 20 | |
| Toluene | 15.66 | 1.0 | 20 | 0.4188 | 76.2 | 70 - 123 | 17.31 | 9.98 | 20 | |
| Xylenes, Total | 47.4 | 3.0 | 60 | 0 | 79.0 | 70 - 130 | 50.45 | 6.25 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *60.27* | *1.0* | *50* | *0* | *121* | *70 - 126* | *55.78* | *7.73* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *48.82* | *1.0* | *50* | *0* | *97.6* | *77 - 113* | *49.61* | *1.59* | *20* | |
| *Surr: Dibromofluoromethane* | *56.62* | *1.0* | *50* | *0* | *113* | *77 - 123* | *53.99* | *4.75* | *20* | |
| *Surr: Toluene-d8* | *47.14* | *1.0* | *50* | *0* | *94.3* | *82 - 127* | *47.84* | *1.48* | *20* | |

**The following samples were analyzed in this batch:** HS23110663-06 HS23110663-07

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451750 ( 0 )** **Instrument: VOA7** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-231112** Units: **ug/L** Analysis Date: **13-Nov-2023 21:32**
Client ID: Run ID: **VOA7_451750** SeqNo: **7673089** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *56.7* | *1.0* | *50* | *0* | *113* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *51.59* | *1.0* | *50* | *0* | *103* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *56.95* | *1.0* | *50* | *0* | *114* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *43.66* | *1.0* | *50* | *0* | *87.3* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-231112** Units: **ug/L** Analysis Date: **13-Nov-2023 20:48**
Client ID: Run ID: **VOA7_451750** SeqNo: **7673088** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 21.77 | 1.0 | 20 | 0 | 109 | 74 - 120 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *41.02* | *1.0* | *50* | *0* | *82.0* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *52.64* | *1.0* | *50* | *0* | *105* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *45.26* | *1.0* | *50* | *0* | *90.5* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *43.49* | *1.0* | *50* | *0* | *87.0* | *81 - 120* | | | | |

**MS** Sample ID: **HS23110794-11MS** Units: **ug/L** Analysis Date: **14-Nov-2023 00:05**
Client ID: Run ID: **VOA7_451750** SeqNo: **7673096** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 24.08 | 1.0 | 20 | 0 | 120 | 70 - 127 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *45.92* | *1.0* | *50* | *0* | *91.8* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *53.27* | *1.0* | *50* | *0* | *107* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *45.29* | *1.0* | *50* | *0* | *90.6* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *42.73* | *1.0* | *50* | *0* | *85.5* | *82 - 127* | | | | |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451750 ( 0 )** **Instrument: VOA7** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MS** Sample ID: **HS23110794-10MS** Units: **ug/L** Analysis Date: **13-Nov-2023 23:21**
Client ID: Run ID: **VOA7_451750** SeqNo: **7673094** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 28.23 | 1.0 | 20 | 0 | 141 | 70 - 127 | | | | S |
| *Surr: 1,2-Dichloroethane-d4* | *36.84* | *1.0* | *50* | *0* | *73.7* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *51.51* | *1.0* | *50* | *0* | *103* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *40.66* | *1.0* | *50* | *0* | *81.3* | *77 - 123* | | | | |
| *Surr: Toluene-d8* | *43.61* | *1.0* | *50* | *0* | *87.2* | *82 - 127* | | | | |

**MSD** Sample ID: **HS23110794-11MSD** Units: **ug/L** Analysis Date: **14-Nov-2023 00:27**
Client ID: Run ID: **VOA7_451750** SeqNo: **7673097** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 24.06 | 1.0 | 20 | 0 | 120 | 70 - 127 | 24.08 | 0.0603 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *41.64* | *1.0* | *50* | *0* | *83.3* | *70 - 126* | *45.92* | *9.79* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *53.2* | *1.0* | *50* | *0* | *106* | *77 - 113* | *53.27* | *0.131* | *20* | |
| *Surr: Dibromofluoromethane* | *44.51* | *1.0* | *50* | *0* | *89.0* | *77 - 123* | *45.29* | *1.72* | *20* | |
| *Surr: Toluene-d8* | *42.49* | *1.0* | *50* | *0* | *85.0* | *82 - 127* | *42.73* | *0.573* | *20* | |

**MSD** Sample ID: **HS23110794-10MSD** Units: **ug/L** Analysis Date: **13-Nov-2023 23:43**
Client ID: Run ID: **VOA7_451750** SeqNo: **7673095** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 27.35 | 1.0 | 20 | 0 | 137 | 70 - 127 | 28.23 | 3.15 | 20 | S |
| *Surr: 1,2-Dichloroethane-d4* | *37.26* | *1.0* | *50* | *0* | *74.5* | *70 - 126* | *36.84* | *1.11* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *52.89* | *1.0* | *50* | *0* | *106* | *77 - 113* | *51.51* | *2.63* | *20* | |
| *Surr: Dibromofluoromethane* | *40.11* | *1.0* | *50* | *0* | *80.2* | *77 - 123* | *40.66* | *1.36* | *20* | |
| *Surr: Toluene-d8* | *43.12* | *1.0* | *50* | *0* | *86.2* | *82 - 127* | *43.61* | *1.11* | *20* | |

**The following samples were analyzed in this batch:** HS23110663-07

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451840 ( 0 )** **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MBLK** Sample ID: **VBLKW-231114** Units: **ug/L** Analysis Date: **14-Nov-2023 11:26**
Client ID: Run ID: **VOA4_451840** SeqNo: **7675101** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | U | 1.0 | | | | | | | | |
| Ethylbenzene | U | 1.0 | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | |
| Xylenes, Total | U | 3.0 | | | | | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *51.22* | *1.0* | *50* | *0* | *102* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *47.76* | *1.0* | *50* | *0* | *95.5* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *54.37* | *1.0* | *50* | *0* | *109* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *45.75* | *1.0* | *50* | *0* | *91.5* | *81 - 120* | | | | |

**LCS** Sample ID: **VLCSW-231114** Units: **ug/L** Analysis Date: **14-Nov-2023 10:40**
Client ID: Run ID: **VOA4_451840** SeqNo: **7675100** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 20.34 | 1.0 | 20 | 0 | 102 | 74 - 120 | | | | |
| Ethylbenzene | 18.27 | 1.0 | 20 | 0 | 91.3 | 77 - 117 | | | | |
| Toluene | 16.71 | 1.0 | 20 | 0 | 83.6 | 77 - 118 | | | | |
| Xylenes, Total | 53.24 | 3.0 | 60 | 0 | 88.7 | 75 - 122 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *58.38* | *1.0* | *50* | *0* | *117* | *70 - 123* | | | | |
| *Surr: 4-Bromofluorobenzene* | *49.52* | *1.0* | *50* | *0* | *99.0* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *57.08* | *1.0* | *50* | *0* | *114* | *73 - 126* | | | | |
| *Surr: Toluene-d8* | *47.59* | *1.0* | *50* | *0* | *95.2* | *81 - 120* | | | | |

**MS** Sample ID: **HS23110788-02MS** Units: **ug/L** Analysis Date: **14-Nov-2023 15:14**
Client ID: Run ID: **VOA4_451840** SeqNo: **7675111** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 22.3 | 1.0 | 20 | 0 | 111 | 70 - 127 | | | | |
| Ethylbenzene | 18.17 | 1.0 | 20 | 0 | 90.9 | 70 - 124 | | | | |
| Toluene | 16.8 | 1.0 | 20 | 0 | 84.0 | 70 - 123 | | | | |
| Xylenes, Total | 53.16 | 3.0 | 60 | 0 | 88.6 | 70 - 130 | | | | |
| *Surr: 1,2-Dichloroethane-d4* | *61.16* | *1.0* | *50* | *0* | *122* | *70 - 126* | | | | |
| *Surr: 4-Bromofluorobenzene* | *49.88* | *1.0* | *50* | *0* | *99.8* | *77 - 113* | | | | |
| *Surr: Dibromofluoromethane* | *61.84* | *1.0* | *50* | *0* | *124* | *77 - 123* | | | | S |
| *Surr: Toluene-d8* | *44.8* | *1.0* | *50* | *0* | *89.6* | *82 - 127* | | | | |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID: R451840 ( 0 )** **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

**MSD** Sample ID: **HS23110788-02MSD** Units: **ug/L** Analysis Date: **14-Nov-2023 15:37**
Client ID: Run ID: **VOA4_451840** SeqNo: **7675112** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | RPD %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 20.34 | 1.0 | 20 | 0 | 102 | 70 - 127 | 22.3 | 9.16 | 20 | |
| Ethylbenzene | 17.9 | 1.0 | 20 | 0 | 89.5 | 70 - 124 | 18.17 | 1.49 | 20 | |
| Toluene | 16.37 | 1.0 | 20 | 0 | 81.9 | 70 - 123 | 16.8 | 2.62 | 20 | |
| Xylenes, Total | 51.26 | 3.0 | 60 | 0 | 85.4 | 70 - 130 | 53.16 | 3.62 | 20 | |
| *Surr: 1,2-Dichloroethane-d4* | *58.75* | *1.0* | *50* | *0* | *117* | *70 - 126* | *61.16* | *4.03* | *20* | |
| *Surr: 4-Bromofluorobenzene* | *49.58* | *1.0* | *50* | *0* | *99.2* | *77 - 113* | *49.88* | *0.605* | *20* | |
| *Surr: Dibromofluoromethane* | *58.5* | *1.0* | *50* | *0* | *117* | *77 - 123* | *61.84* | *5.54* | *20* | |
| *Surr: Toluene-d8* | *46.79* | *1.0* | *50* | *0* | *93.6* | *82 - 127* | *44.8* | *4.35* | *20* | |

**The following samples were analyzed in this batch:** HS23110663-01 HS23110663-08

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID:** R451721 ( 0 ) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

**MBLK** Sample ID: **WMBLK-11132023** Units: **mg/L** Analysis Date: **13-Nov-2023 13:00**
Client ID: Run ID: **Balance1_451721** SeqNo: **7672560** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | U | 10.0 | | | | | | | | |

**LCS** Sample ID: **WLCS-11132023** Units: **mg/L** Analysis Date: **13-Nov-2023 13:00**
Client ID: Run ID: **Balance1_451721** SeqNo: **7672559** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 1050 | 10.0 | 1000 | 0 | 105 | 85 - 115 | | | | |

**DUP** Sample ID: **HS23110663-02DUP** Units: **mg/L** Analysis Date: **13-Nov-2023 13:00**
Client ID: **MW-2-20231108** Run ID: **Balance1_451721** SeqNo: **7672548** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 546 | 10.0 | | | | | 546 | 0 | 20 | |

**The following samples were analyzed in this batch:** HS23110663-02

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

**Batch ID:** R451862 ( 0 ) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

**MBLK** Sample ID: **WMBLK-11142023** Units: **mg/L** Analysis Date: **14-Nov-2023 12:30**
Client ID: Run ID: **Balance1_451862** SeqNo: **7675501** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | U | 10.0 | | | | | | | | |

**LCS** Sample ID: **WLCS-11142023** Units: **mg/L** Analysis Date: **14-Nov-2023 12:30**
Client ID: Run ID: **Balance1_451862** SeqNo: **7675500** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 1068 | 10.0 | 1000 | 0 | 107 | 85 - 115 | | | | |

**DUP** Sample ID: **HS23110792-02DUP** Units: **mg/L** Analysis Date: **14-Nov-2023 12:30**
Client ID: Run ID: **Balance1_451862** SeqNo: **7675498** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 386 | 10.0 | | | | | 384 | 0.519 | 20 | |

**DUP** Sample ID: **HS23110677-01DUP** Units: **mg/L** Analysis Date: **14-Nov-2023 12:30**
Client ID: Run ID: **Balance1_451862** SeqNo: **7675485** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (Residue, Filterable) | 15460 | 10.0 | | | | | 15440 | 0.129 | 20 | |

**The following samples were analyzed in this batch:** HS23110663-03 HS23110663-04 HS23110663-05 HS23110663-06 HS23110663-07 HS23110663-08

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** HS23110663

**QC BATCH REPORT**

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

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

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

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

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

**MS** Sample ID: **HS23110663-03MS** Units: **mg/L** Analysis Date: **20-Nov-2023 12:24**
Client ID: **MW-3-20231108** Run ID: **ICS-Integrion_452331** SeqNo: **7685867** PrepDate: DF: **1**

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

**MS** Sample ID: **HS23110663-02MS** Units: **mg/L** Analysis Date: **20-Nov-2023 12:06**
Client ID: **MW-2-20231108** Run ID: **ICS-Integrion_452331** SeqNo: **7685864** PrepDate: DF: **1**

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

**MSD** Sample ID: **HS23110663-03MSD** Units: **mg/L** Analysis Date: **20-Nov-2023 12:30**
Client ID: **MW-3-20231108** Run ID: **ICS-Integrion_452331** SeqNo: **7685868** PrepDate: DF: **1**

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

**MSD** Sample ID: **HS23110663-02MSD** Units: **mg/L** Analysis Date: **20-Nov-2023 12:12**
Client ID: **MW-2-20231108** Run ID: **ICS-Integrion_452331** SeqNo: **7685865** PrepDate: DF: **1**

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

**The following samples were analyzed in this batch:**

| | | | |
|---|---|---|---|
| HS23110663-02 | HS23110663-03 | HS23110663-04 | HS23110663-05 |
| HS23110663-06 | HS23110663-07 | HS23110663-08 | |

**ALS Houston, US** Date: 21-Nov-23

**Client:** GHD
**Project:** 12603939 - Jal No. 4
**WorkOrder:** **HS23110663**

**QUALIFIERS, ACRONYMS, UNITS**

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

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

| Unit Reported | Description |
|---|---|
| mg/L | Milligrams per Liter |

## CERTIFICATIONS,ACCREDITATIONS & LICENSES

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

**ALS Houston, US** Date: 21-Nov-23

## Sample Receipt Checklist

**Work Order ID:** HS23110663 **Date/Time Received:** 09-Nov-2023 09:40
**Client Name:** GHDHouston **Received by:** Malcolm Burleson

**Completed By:** /S/ Corey Grandits (eSignature) 09-Nov-2023 20:27 (Date/Time) **Reviewed by:** /S/ James Guin (eSignature) 10-Nov-2023 09:23 (Date/Time)

Matrices: W Carrier name: FedEx

| | | | |
|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on shipping container/cooler? | Yes ☑ | No ☐ | Not Present ☐ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☑ |
| VOA/TX1005/TX1006 Solids in hermetically sealed vials? | Yes ☐ | No ☐ | Not Present ☑ |
| Chain of custody present? | Yes ☑ | No ☐ | 1 Page(s) |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | COC IDs:307588 |
| Samplers name present on COC? | Yes ☑ | No ☐ | |
| Chain of custody agrees with sample labels? | Yes ☐ | No ☑ | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Container/Temp Blank temperature in compliance? | Yes ☑ | No ☐ | |
| Temperature(s)/Thermometer(s): | 3.2UC/3.1C | IR31 | |
| Cooler(s)/Kit(s): | 51739 | | |
| Date/Time sample(s) sent to storage: | 11/9/23 | | |
| Water - VOA vials have zero headspace? | Yes ☑ | No ☐ | No VOA vials submitted ☐ |
| Water - pH acceptable upon receipt? | Yes ☑ | No ☐ | N/A ☐ |
| pH adjusted? | Yes ☐ | No ☑ | N/A ☐ |
| pH adjusted by: | | | |

Login Notes: RW-1-20231108 collection time logged in from container labels.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

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

# Chain of Custody Form

Page 1 of 1

COC ID: 307588

| ALS Project Manager: | | ALS Work Order #: | |
|---|---|---|---|

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | |
|---|---|---|---|---|---|
| Purchase Order | E-19001-GL-21300132 Stacy Boul | Project Name | 12603939 - Jal No. 4 | A | 8260_LL_W (8260 BTEX) [3xVOA HCl] |
| Work Order | | Project Number | 12603939 | B | TDS_W 2540C (2540C TDS) [250ml P Neat-share] |
| Company Name | GHD | Bill To Company | Energy Transfer | C | 300_W (300 Cl) [250ml P Neat-share] |
| Send Report To | Blair Owen | Invoice Attn | Stacy Boultinghouse | D | TB 8260_LL_W (8260 BTEX) [ (3xVOA HCl] |
| Address | 11451 Katy Fwy<br>Suite 400 | Address | P.O Box 132400 | E | |
| | | | | F | |
| City/State/Zip | Houston, TX 77079 | City/State/Zip | Dallas TX 75313 | G | |
| Phone | (713) 734-3090 | Phone | | H | |
| Fax | (713) 734-3391 | Fax | | I | |
| e-Mail Address | blair.owen@ghd.com | e-Mail Address | Stacy.Boultinghouse@energytransfer.com | J | |

**HS23110663**
GHD
12603939 - Jal No. 4

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12603939-TB01- | | | Water | 1,8 | 2 | | | | X | | | | | | | |
| 2 | MW-2-20231108 | 11/8 | 9:40 | GW | 1,8 | 4 | X | X | X | | | | | | | | |
| 3 | MW-3-20231108 | 11/8 | 11:00 | GW | 1,8 | 4 | X | X | X | | | | | | | | |
| 4 | MW-4-20231108 | 11/8 | 12:00 | GW | 1,8 | 4 | X | X | X | | | | | | | | |
| 5 | MW-5-20231108 | 11/8 | 12:45 | GW | 1,8 | 4 | X | X | X | | | | | | | | |
| 6 | MW-6-20231108 | 11/8 | 14:00 | GW | 1,6 | 4 | X | X | X | | | | | | | | |
| 7 | RW-1-20231108 | 11/8 | | GW | 1,8 | 4 | X | X | X | | | | | | | | |
| 8 | DUP-01 | 11/8 | | GW | 1,8 | 4 | X | X | X | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

Sampler(s) Please Print & Sign: Hunter Johnson

Shipment Method: Fedex

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

Results Due Date:

| Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|
| Hunter Johnson | 11/8 | 15:35 | |
| Relinquished by: | Date: | Time: | Received by (Laboratory): 11092023 0940 |
| Logged by (Laboratory): | Date: | Time: | Checked by (Laboratory): |

Notes: ETC Jal No. 4 Lea County NM

| Cooler ID | Cooler Temp. |
|---|---|
| 51739 | 1R-31<br>3.2WG<br>-0.1C |

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

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

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

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

51739

CUSTODY SEAL
Date: Time:
Name:
Company:

Seal Broken By:
Date: 11/09/23

51739 NOV 09 2023

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

51739

CUSTODY SEAL
Date: 11/6 Time: 15:35
Name: JHD
Company: Hunter Johnson

Seal Broken By:
Date: 11/09/23

Part # 158469-434 MTW EXP 01/24 **

51739

ORIGIN ID:SGRA (505) 934-0902
SIMON KOZIK
GHD
6121 INDIAN SCHOOL ROAD

ALBUQUERQUE, NM 87110
UNITED STATES US

SHIP DATE: 02NOV23
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3755
DIMS: 14x11x10 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: 12603939 – JAL NO 4 = BO 96782/3 – *JG

RMA:

FedEx Express

FedEx
TRK# 0221 6862 6798 4597

THU – 09 NOV 10:30A
PRIORITY OVERNIGH

AB SGRA

77099
TX-US IAH

EXP 05/24

**District I**
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
**District II**
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 355028

## CONDITIONS

| | |
|---|---|
| Operator:<br>ETC Texas Pipeline, Ltd.<br>8111 Westchester Drive<br>Dallas, TX 75225 | OGRID:<br>371183 |
| | Action Number:<br>355028 |
| | Action Type:<br>[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| michael.buchanan | Review of the 2023 Annual Groundwater Monitoring Report for Jal No. 4 Former Tank Battery: Content Satisfactory 1. Continue to conduct semi-annual groundwater monitoring events (BTEX, TDS, Chloride) in May and November as planned in report. 2. Continue to conduct quarterly LNAPL abatement events by hand-bailing at MW-1. 3. Use absorbent sock in the meantime as a way of passively removing LNAPL in-between quarterly events. 4. Submit the next annual groundwater report to OCD by June 17, 2025. | 7/15/2024 |