**1755 Wittington Place, Suite 500**
**Dallas, Texas 75234**
**United States**
**www.GHD.com**

**Your Ref.:** Incident Number nAPP2214000463
**Our Ref.:** 12603932-NMOCD-1

**REVIEWED**
***By Mike Buchanan at 3:22 pm, Jun 07, 2024***

**May 1, 2024**

Review of the 2023 Annual Groundwater Monitoring Report A-7 Bettis: Content Satisfactory
1. Continue semi-annual groundwater monitoring for chloride in MW-1, MW-3, MW-6, MW-7, MW-9 and MW-10
2. Continue annual groundwater monitoring in wells: MW-2, MW-4, MW-5, MW-8, and MW-11
3. BTEX may be suspended from the sampling program as at least eight (8) consecutive quarters and/or semi-annual events have demonstrated concentrations below the standards in the WQCC.
4. Proceed to install MW-12 upgradient of MW-10 as planned.
5. Submit the 2024 Annual Report by April 1 2025. Texas Pipeline, Ltd.,

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

**2023 Annual Groundwater Monitoring Report**
**A-7 Bettis**
**ET Gathering & Processing, LLC**
**Lea County, New Mexico**
**New Mexico Oil Conservation Division Nos. 1RP-9-5-2186 and 1RP-1540**
**Incident Number nAPP2214000463**

Dear Sir or Madam:

On behalf of ET Gathering & Processing, LLC (ETG&P), formerly [illegible], 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 don't hesitate to contact the undersigned.

Regards,

GHD

**Nate Reece**
Project Manager

(281) 386-7158
Nate.Reece@GHD.com

**Blair Owen**
Project Director

(561) 339-3572
Blair.Owen@GHD.com

BO/jlf/1

Encl.: 2023 Annual Groundwater Monitoring Report

Copy: Stacy Boultinghouse, Energy Transfer
Charlie Bettis, Landowner

# 2023 Annual Groundwater Monitoring Report

## A-7 Bettis
## Lea County, New Mexico
## NMOCD Nos. 1RP-9-5-2186 and 1RP-1540
## Incident No. nAPP2214000463

ET Gathering & Processing, LLC

May 1, 2024

→ The Power of Commitment

# Contents


**1. Introduction** **1**
1.1 Site Background 1
**2. Groundwater Monitoring** **2**
2.1 Monitoring Well Gauging 3
2.2 Groundwater Sampling 3
2.3 Quality Assurance/Quality Control 3
2.4 Analytical Results 3
**3. Summary and Recommendations** **4**
3.1 Summary 4
3.2 Recommendations 4
**4. Scope and Limitations** **4**


## Table index


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


## Figure index


Figure 1 Site Location Map
Figure 2 Site Details Map
Figure 3 Groundwater Potentiometric Surface Map (April 2023)
Figure 4 Groundwater Potentiometric Surface Map (October 2023)
Figure 5 COC Concentrations in Groundwater (2023)
Figure 6 Proposed Monitoring Well Location Map


## Appendices


Appendix A Laboratory Analytical Reports

# 1. Introduction

This report presents the results of groundwater monitoring activities performed during 2023 by GHD Services Inc. (GHD) at the ETC Texas Pipeline, Ltd. (ETC) A-7 Bettis Site (Site). The Site is located at 32° 28' 31.3212"North and 103° 8' 31.74" West within Unit letter L, Sections 14 and 15 (**Figure 1**). The property on which the Site is located is owned by Mr. Charlie Bettis of Eunice, New Mexico. The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under remediation case numbers 1RP-9-5-2186 and 1RP-1540 (associated with incident number nAPP2214000463).

## 1.1 Site Background

On August 22, 2007, former owner/operator Southern Union Gas Services, Ltd. (SUGS) discovered a release from a section of a 10-inch low pressure natural gas pipeline that had failed. SUGS verbally notified NMOCD regarding the release on the same day. The failure resulted in a release of a mixture of crude oil, produced water, and natural gas. The “Release Notification and Corrective Action” (Form C-141) indicated a release of approximately 200 barrels (bbls) of fluid, of which approximately 130 bbls were recovered via vacuum truck. The initial Form C-141 was submitted and approved by the NMOCD Hobbs District Office on August 31, 2007, and assigned case number 1RP-1540. On March 24, 2009, Form C-141 was resubmitted and again approved by the NMOCD Hobbs District Office and assigned the case number 1RP-9-5-2186.

Based on the product released, it was determined that the constituents of concern (COCs) to be evaluated at the Site were benzene, toluene, ethylbenzene, total xylenes (BTEX), total petroleum hydrocarbons (TPH), total dissolved solids (TDS), and chloride.

Between February 2009 and October 2023 soil and groundwater assessments and remediation events have been conducted at the Site, including the collection and analysis of surface soil samples, excavation and off-Site disposal of impacted soils, advancement of five soil borings for vertical and horizontal delineation, installation of eleven groundwater monitoring wells (MW-1 through MW-11), installation of passive oxygen release socks, and installation of an aeration windmill. Details of these events can be found in previous reports prepared for this Site; however, a summary of the events and their respective results are provided below.

Horizontal delineation of the impacted area was conducted with the collection and analysis of ten surface soil samples on February 26, 2009, which was followed by the excavation of impacted soils from March to July 2009. Additional impacted soils remained in place that could not be removed due to safety considerations. The excavation was partially backfilled and compacted with clean imported soil to 15 feet below ground surface (bgs). A 20-millimeter polyethylene liner was installed over the backfilled soil to minimize the vertical migration of contaminants left in-situ.

Five soil borings, SB-1 through SB-5, were advanced in October 2012 to assess the lateral and vertical extent of soil impacts, three of which were converted into monitoring wells (MW-1 through MW-3). Initial groundwater analytical results indicated that concentrations of BTEX, TDS, and chloride were detected in groundwater samples above the New Mexico Water Quality Control Commission (NMWQCC) standards.

Between August 2013 and December 2015, monitoring wells MW-4 through MW-11 were installed at the Site to further delineate groundwater impacts. Light non-aqueous phase liquid (LNAPL) has never been observed in any of the monitoring wells at the Site.

O-Sox™, passive oxygen release socks, were installed in monitoring wells MW-1 and MW-6 through MW-9 on July 19, 2016, and were replaced on December 9, 2016. However, the socks were swelling in the wells, resulting in difficult removal, and the use of the socks was discontinued in 2017.

To facilitate the degradation of low-level dissolved phase hydrocarbons in groundwater at the Site, GHD installed an aeration windmill in August 2019. The windmill is located between monitoring wells MW-6 and MW-8 and was set to distribute air into groundwater via tubing and air diffusion stones in monitoring wells MW-8 and MW-9. The windmill operated from August through October 2019 and March through September 2020. Analytical results from groundwater

samples collected since discontinuation of windmill operation in 2020 suggest that benzene concentrations in groundwater remain below NMWQCC standard. The windmill has not been operated since September 2020.

In the 2019 Annual Groundwater Monitoring Report submitted to the NMOCD, a revised sampling schedule was proposed for the Site, as follows:

– Continue sampling monitoring wells MW-1, MW-2, and MW-6 through MW-11 on a semi-annual basis.
– Decrease sampling for monitoring wells MW-3, MW-4, and MW-5 to an annual basis as those wells had never exceeded the NMWQCC standard for target constituents.

NMOCD approved the revised schedule on April 28, 2020, via e-mail. The revised schedule was implemented in 2021; however, monitoring well MW-2 was swapped for monitoring well MW-3 (i.e., monitoring well MW-2 sampling was reduced to semi-annual instead of monitoring well MW-3). Monitoring well MW-2 has also never exceeded the NMWQCC standard for target constituents.

On May 24, 2023, NMOCD responded to the 2021 Annual Groundwater Monitoring report prepared and submitted for the Site. Their response included further modifications to the sampling schedule, as follows:

– Terminate all sampling from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, and MW-11.
– Terminate sampling for BTEX from monitoring wells MW-1, MW-6, MW-9, and MW-10.
– Continue sampling for chloride from monitoring wells MW-1, MW-6, MW-9, and MW-10.

Additionally, NMOCD requested a monitoring well be installed up-gradient of monitoring well MW-10 to confirm the concentrations of chloride in monitoring well MW-10 “as soon as practicable.” This schedule was only partially implemented in 2023 by discontinuing the BTEX analysis in the second half of 2023. The remainder of the sampling followed the schedule approved by NMOCD approved in April 2020.

The 2022 Annual Groundwater Monitoring report prepared and submitted for the Site requested a revised sampling schedule as follows:

– Continue semi-annual groundwater monitoring for chloride in monitoring wells MW-1, MW-3, MW-6, MW-7, MW-9, and MW-10.
– Conduct annual groundwater monitoring for chloride in monitoring wells MW-2, MW-4, MW-5, MW-8, and MW-11.
– Discontinue groundwater monitoring for BTEX in all monitoring wells.

On February 12, 2024, the NMOCD approved the revised sampling schedule and again requested a well be installed upgradient of monitoring well MW-10. In 2024, this revised sampling schedule will be implemented, and a monitoring well will be installed upgradient of monitoring well MW-10.

Details of the 2023 monitoring events are presented in this report.

# 2. Groundwater Monitoring

GHD performed semi-annual groundwater monitoring events at the Site on April 27 and October 17, 2023. The monitoring program included gauging and sampling the monitoring wells as per the following schedule.

***April 27, 2023***

– Monitoring wells MW-1, MW-3, and MW-6 through MW-11.

***October 17, 2023***

– Monitoring wells MW-1 through MW-11.

## 2.1 Monitoring Well Gauging

On April 27 and October 17, 2023, GHD personnel measured the depth to groundwater in the wells indicated above using an electronic oil/water interface probe (IP). The IP was cleaned with laboratory grade soap and purified water prior to gauging each monitoring well. Depth to groundwater and calculated groundwater elevations are summarized in **Table 1**.

Based on the data collected in 2023, groundwater flow is generally southeast and is consistent with historical data for the Site. The groundwater gradient was calculated to be approximately 0.0023 foot per feet (ft/ft) in April and 0.0018 ft/ft in October. Groundwater potentiometric surface maps are presented as **Figure 3** and **Figure 4**.

## 2.2 Groundwater Sampling

Following gauging during each 2023 event, GHD personnel utilized dedicated polyethylene bailers to purge a minimum of three well volumes of groundwater or until the well was dry. Purge water generated during gauging and sampling events was poured onto the concrete well pad surfaces and allowed to evaporate. After purging, groundwater quality field parameters of temperature, pH, oxidation reduction potential, and conductivity were collected with a field-calibrated multi-parameter groundwater quality meter to confirm stabilization of the groundwater prior to the collection of groundwater samples. A summary of groundwater field parameters is presented in **Table 2**. The monitoring wells were given time to recover prior to collecting a groundwater sample.

Following purging and confirmation of groundwater stabilization, groundwater samples were collected via dedicated polyethylene bailers, placed in laboratory-prepared sample containers, labelled, packed in a cooler with ice, and transported under chain-of-custody documentation to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico in March and to ALS Life Sciences Division, Environmental laboratory in Houston, Texas. All samples collected in April 2023 were analyzed for BTEX via United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and chloride via USEPA Method 300.0. All samples collected in October 2023 were analyzed for chloride via USEPA Method 300.0.

## 2.3 Quality Assurance/Quality Control

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

## 2.4 Analytical Results

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

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

– Concentrations of BTEX were either not detected above laboratory detection limits or were detected but concentrations were not in exceedance of the NMWQCC standards.
– Chloride was detected in all groundwater samples collected from the Site; however, only the samples collected from monitoring wells MW-3, MW-7, MW-9, and MW-10 in April and from monitoring wells MW-2, MW-3, MW-7, MW-9, and MW-10 in October had concentrations that exceeded the NMWQCC standard.

# 3. Summary and Recommendations

## 3.1 Summary

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

- Concentrations of BTEX, when detected above the laboratory reporting limit, did not exceed the NMWQCC standards.
- Chloride was detected in monitoring wells MW-2, MW-3, MW-7, MW-9, and MW-10 at concentrations that exceeded the NMWQCC standard.

## 3.2 Recommendations

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

- Continue semi-annual groundwater monitoring for chloride in monitoring wells MW-1, MW-3, MW-6, MW-7, MW-9, and MW-10.
- Conduct annual groundwater monitoring for chloride in monitoring wells MW-2, MW-4, MW-5, MW-8, and MW-11.
- Discontinue groundwater monitoring for BTEX in all wells.
- Install one groundwater monitoring well (MW-12) up-gradient of monitoring well MW-10 to confirm chloride concentrations that have been detected in groundwater, the proposed well is shown on **Figure 6**.

# 4. Scope and Limitations

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

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

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

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

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

**Table 1**

**Summary of Groundwater Elevation Data**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Well Number | Date Measured | Top of Casing (TOC) Elevation | Total Depth (ft below TOC) | Depth to Water (ft below TOC) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|
| MW-1 | 2/7/2013 | 3,413.64 | 74.28 | 59.82 | 3,353.82 |
| | 5/10/2013 | | 74.28 | 59.36 | 3,354.28 |
| | 9/3/2013 | | 74.28 | 59.91 | 3,353.73 |
| | 7/30/2014 | | 74.28 | 59.19 | 3,354.45 |
| | 10/31/2014 | | 74.28 | 59.13 | 3,354.51 |
| | 1/21/2015 | | 74.28 | 58.99 | 3,354.65 |
| | 4/21/2015 | | 74.28 | 58.96 | 3,354.68 |
| | 12/21/2015 | | 74.28 | 59.04 | 3,354.60 |
| | 6/1/2016 | | 74.28 | 58.95 | 3,354.69 |
| | 12/8/2016 | | 74.28 | 58.93 | 3,354.71 |
| | 5/9/2017 | | 74.28 | 58.85 | 3,354.79 |
| | 11/15/2017 | | 74.28 | 58.95 | 3,354.69 |
| | 5/10/2018 | | 74.28 | 58.95 | 3,354.69 |
| | 5/17/2018 | | 74.28 | 59.00 | 3,354.64 |
| | 11/12/2018 | | 74.28 | 58.76 | 3,354.88 |
| | 5/14/2019 | | 74.28 | 59.22 | 3,354.42 |
| | 11/12/2019 | | 74.28 | Electronic Field Data Lost | |
| | 1/16/2020 | | 74.28 | 59.43 | 3,354.21 |
| | 3/23/2020 | | 74.28 | 59.41 | 3,354.23 |
| | 9/23/2020 | | 74.28 | 59.51 | 3,354.13 |
| | 3/30/2021 | | 74.28 | 59.62 | 3,354.02 |
| | 10/7/2021 | | 74.28 | 59.76 | 3,353.88 |
| | 4/13/2022 | | 74.28 | 59.82 | 3,353.82 |
| | 11/8/2022 | | 74.28 | 59.85 | 3,353.79 |
| | 4/27/2023 | | 69.80 | 59.82 | 3,353.82 |
| | 10/17/2023 | | 74.15 | 59.41 | 3354.23 |
| MW-2 | 2/7/2013 | 3,412.88 | 74.18 | 59.10 | 3,353.78 |
| | 5/10/2013 | | 74.18 | 58.20 | 3,354.68 |
| | 9/3/2013 | | 74.18 | 58.21 | 3,354.67 |
| | 7/30/2014 | | 74.18 | 58.02 | 3,354.86 |
| | 10/31/2014 | | 74.18 | 57.91 | 3,354.97 |
| | 1/21/2015 | | 74.18 | 57.75 | 3,355.13 |
| | 4/21/2015 | | 74.18 | 57.76 | 3,355.12 |
| | 12/21/2015 | | 74.18 | 57.84 | 3,355.04 |
| | 6/1/2016 | | 74.18 | 57.79 | 3,355.09 |
| | 12/8/2016 | | 74.18 | 57.78 | 3,355.10 |
| | 5/9/2017 | | 74.18 | 57.71 | 3,355.17 |
| | 11/15/2017 | | 74.18 | 57.75 | 3,355.13 |
| | 5/10/2018 | | 74.18 | 57.75 | 3,355.13 |
| | 5/17/2018 | | 74.18 | 57.77 | 3,355.11 |
| | 11/12/2018 | | 74.18 | 57.97 | 3,354.91 |
| | 5/14/2019 | | 74.18 | 57.97 | 3,354.91 |
| | 11/12/2019 | | 74.18 | Electronic Field Data Lost | |
| | 1/16/2020 | | 74.18 | 58.20 | 3,354.68 |
| | 3/23/2020 | | 74.18 | 58.19 | 3,354.69 |
| | 9/23/2020 | | 74.18 | 58.34 | 3,354.54 |
| | 3/30/2021 | | 74.18 | 58.43 | 3,354.45 |
| | 10/7/2021 | | 74.18 | 59.25 | 3,353.63 |
| | 4/13/2022 | | 74.18 | 69.65 | 3,343.23 |
| | 11/8/2022 | | 74.18 | 58.78 | 3,354.10 |
| | 4/27/2023 | | 74.29 | 58.78 | 3,354.10 |
| | 10/17/2023 | | 74.05 | 58.80 | 3354.08 |

**Table 1**

**Summary of Groundwater Elevation Data**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Well Number | Date Measured | Top of Casing (TOC) Elevation | Total Depth (ft below TOC) | Depth to Water (ft below TOC) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|
| MW-3 | 2/7/2013 | 3,412.96 | 74.04 | 58.49 | 3,354.47 |
| | 5/10/2013 | | 74.04 | 58.35 | 3,354.61 |
| | 9/3/2013 | | 74.04 | 58.32 | 3,354.64 |
| | 7/30/2014 | | 74.04 | 58.26 | 3,354.70 |
| | 10/31/2014 | | 74.04 | 58.19 | 3,354.77 |
| | 1/21/2015 | | 74.04 | 58.01 | 3,354.95 |
| | 4/21/2015 | | 74.04 | 58.96 | 3,354.00 |
| | 12/21/2015 | | 74.04 | 58.04 | 3,354.92 |
| | 6/1/2016 | | 74.04 | 57.93 | 3,355.03 |
| | 12/8/2016 | | 74.04 | 58.94 | 3,354.02 |
| | 5/9/2017 | | 74.04 | 57.82 | 3,355.14 |
| | 11/15/2017 | | 74.04 | 57.88 | 3,355.08 |
| | 5/10/2018 | | 74.04 | 58.82 | 3,354.14 |
| | 5/17/2019 | | 74.04 | 58.80 | 3,354.16 |
| | 11/12/2018 | | 74.04 | 58.87 | 3,354.09 |
| | 5/14/2019 | | 74.04 | 58.07 | 3,354.89 |
| | 11/12/2019 | | 74.04 | Electronic Field Data Lost | |
| | 1/16/2020 | | 74.04 | 58.28 | 3,354.68 |
| | 3/23/2020 | | 74.04 | 58.29 | 3,354.67 |
| | 9/23/2020 | | 74.04 | 58.43 | 3,354.53 |
| | 3/30/2021 | | 74.04 | 58.52 | 3,354.44 |
| | 10/7/2021 | | 74.04 | 58.73 | 3,354.23 |
| | 4/13/2022 | | 74.04 | 58.74 | 3,354.22 |
| | 11/8/2022 | | 74.04 | 58.83 | 3,354.13 |
| | 4/27/2023 | | 74.31 | 58.84 | 3,354.12 |
| | 10/17/2023 | | 75.50 | 58.83 | 3354.13 |
| MW-4 | 9/3/2013 | 3,413.15 | 72.65 | 59.18 | 3,353.97 |
| | 7/30/2014 | | 72.65 | 58.62 | 3,354.53 |
| | 10/31/2014 | | 72.65 | 58.47 | 3,354.68 |
| | 1/21/2015 | | 72.65 | 58.33 | 3,354.82 |
| | 4/21/2015 | | 72.65 | 58.31 | 3,354.84 |
| | 12/21/2015 | | 72.65 | 58.36 | 3,354.79 |
| | 6/1/2016 | | 72.65 | 58.32 | 3,354.83 |
| | 12/8/2016 | | 72.65 | 58.31 | 3,354.84 |
| | 5/9/2017 | | 72.65 | 58.25 | 3,354.90 |
| | 11/15/2017 | | 72.65 | 58.34 | 3,354.81 |
| | 5/10/2018 | | 72.65 | 58.38 | 3,354.77 |
| | 5/17/2018 | | 72.65 | 58.40 | 3,354.75 |
| | 11/12/2018 | | 72.65 | 58.51 | 3,354.64 |
| | 5/14/2019 | | 72.65 | -- | 3,354.55 |
| | 11/12/2019 | | 72.65 | Electronic Field Data Lost | |
| | 1/16/2020 | | 72.65 | 58.82 | 3,354.33 |
| | 3/23/2020 | | 72.65 | 58.81 | 3,354.34 |
| | 9/23/2020 | | 72.65 | 58.95 | 3,354.20 |
| | 3/30/2021 | | 72.65 | 65.04 | 3,348.11 |
| | 10/7/2021 | | 72.65 | 58.61 | 3,354.54 |
| | 4/13/2022 | | 72.65 | 59.24 | 3,353.91 |
| | 11/8/2022 | | 72.65 | 59.26 | 3,353.89 |
| | 4/27/2023 | | 72.57 | 59.29 | 3,353.86 |
| | 10/17/2023 | | 72.40 | 59.26 | 3353.89 |

**Summary of Groundwater Elevation Data**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Well Number | Date Measured | Top of Casing (TOC) Elevation | Total Depth (ft below TOC) | Depth to Water (ft below TOC) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|
| MW-5 | 9/3/2013 | 3,413.53 | 73.32 | 59.23 | 3,354.30 |
| | 7/30/2014 | | 73.32 | 59.14 | 3,354.39 |
| | 10/31/2014 | | 73.32 | 59.12 | 3,354.41 |
| | 1/21/2015 | | 73.32 | 58.93 | 3,354.60 |
| | 4/21/2015 | | 73.32 | 58.97 | 3,354.56 |
| | 6/1/2016 | | 73.32 | 58.90 | 3,354.63 |
| | 12/8/2016 | | 73.32 | 58.87 | 3,354.66 |
| | 5/9/2017 | | 73.32 | 58.82 | 3,354.71 |
| | 11/15/2017 | | 73.32 | 58.90 | 3,354.63 |
| | 5/10/2018 | | 73.32 | 58.92 | 3,354.61 |
| | 5/17/2018 | | 73.32 | 58.92 | 3,354.61 |
| | 11/12/2018 | | 73.32 | 58.92 | 3,354.61 |
| | 5/14/2019 | | 73.32 | 59.23 | 3,354.30 |
| | 11/12/2019 | | 73.32 | Electronic Field Data Lost | |
| | 1/16/2020 | | 73.32 | 59.40 | 3,354.13 |
| | 3/23/2020 | | 73.32 | 59.40 | 3,354.13 |
| | 9/23/2020 | | 73.32 | 59.63 | 3,353.90 |
| | 3/30/2021 | | 73.32 | 59.62 | 3,353.91 |
| | 10/7/2021 | | 73.32 | 59.73 | 3,353.80 |
| | 4/13/2022 | | 73.32 | 59.79 | 3,353.74 |
| | 11/8/2022 | | 73.32 | 59.78 | 3,353.75 |
| | 4/27/2023 | | 73.64 | 59.79 | 3,353.74 |
| | 10/17/2023 | | 73.03 | 59.74 | 3353.79 |
| MW-6 | 9/3/2013* | 3,413.30 | 69.21 | 59.10 | 3,354.20 |
| | 7/30/2014 | | 69.21 | 59.03 | 3,354.27 |
| | 10/31/2014 | | 69.21 | 59.06 | 3,354.24 |
| | 1/21/2015 | | 69.21 | 58.94 | 3,354.36 |
| | 4/21/2015 | | 69.21 | 58.95 | 3,354.35 |
| | 12/21/2015 | | 69.21 | 58.89 | 3,354.41 |
| | 6/1/2016 | | 69.21 | 58.81 | 3,354.49 |
| | 12/8/2016 | | 69.21 | 58.80 | 3,354.50 |
| | 5/9/2017 | | 69.21 | 58.74 | 3,354.56 |
| | 11/15/2017 | | 69.21 | 58.80 | 3,354.50 |
| | 5/10/2018 | | 69.21 | 58.82 | 3,354.48 |
| | 5/17/2018 | | 69.21 | 58.80 | 3,354.50 |
| | 11/12/2018 | | 69.21 | 58.82 | 3,354.48 |
| | 5/14/2019 | | 69.21 | 59.14 | 3,354.16 |
| | 11/12/2019 | | 69.21 | Electronic Field Data Lost | |
| | 1/16/2020 | | 69.21 | 59.30 | 3,354.00 |
| | 3/23/2020 | | 69.21 | 59.28 | 3,354.02 |
| | 9/23/2020 | | 69.21 | 59.40 | 3,353.90 |
| | 3/30/2021 | | 69.21 | 59.55 | 3,353.75 |
| | 10/7/2021 | | 69.21 | 58.64 | 3,354.66 |
| | 4/13/2022 | | 69.21 | 59.66 | 3,353.64 |
| | 11/8/2022 | | 69.21 | 59.64 | 3,353.66 |
| | 4/27/2023 | | 66.75 | 59.64 | 3,353.66 |
| | 10/17/2023 | | 68.63 | 59.55 | 3353.75 |

**Table 1**

**Summary of Groundwater Elevation Data**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Well Number | Date Measured | Top of Casing (TOC) Elevation | Total Depth (ft below TOC) | Depth to Water (ft below TOC) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|
| MW-7 | 9/3/2013 | 3,413.01 | 72.14 | 58.62 | 3,354.39 |
| | 7/30/2014 | | 72.14 | 58.53 | 3,354.48 |
| | 10/31/2014 | | 72.14 | 58.57 | 3,354.44 |
| | 1/21/2015 | | 72.14 | 58.44 | 3,354.57 |
| | 4/21/2015 | | 72.14 | 58.35 | 3,354.66 |
| | 12/21/2015 | | 72.14 | 58.36 | 3,354.65 |
| | 6/1/2016 | | 72.14 | 58.27 | 3,354.74 |
| | 12/8/2016 | | 72.14 | 58.27 | 3,354.74 |
| | 5/9/2017 | | 72.14 | 58.16 | 3,354.85 |
| | 11/15/2017 | | 72.14 | 58.23 | 3,354.78 |
| | 5/10/2018 | | 72.14 | 58.22 | 3,354.79 |
| | 5/17/2018 | | 72.14 | 58.12 | 3,354.89 |
| | 11/12/2018 | | 72.14 | 58.12 | 3,354.89 |
| | 5/14/2019 | | 72.14 | 58.49 | 3,354.52 |
| | 11/12/2019 | | 72.14 | Electronic Field Data Lost | |
| | 1/16/2020 | | 72.14 | 58.69 | 3,354.32 |
| | 3/23/2020 | | 72.14 | 58.66 | 3,354.35 |
| | 9/23/2020 | | 72.14 | 58.79 | 3,354.22 |
| | 3/30/2021 | | 72.14 | 58.88 | 3,354.13 |
| | 10/7/2021 | | 72.14 | 59.02 | 3,353.99 |
| | 4/13/2022 | | 72.14 | 59.07 | 3,353.94 |
| | 11/8/2022 | | 72.14 | 59.10 | 3,353.91 |
| | 4/27/2023 | | 71.25 | 59.11 | 3,353.90 |
| | 10/17/2023 | | 71.13 | 59.06 | 3353.95 |
| MW-8 | 1/21/2015 | 3,412.02 | 71.66 | 57.84 | 3,354.18 |
| | 4/21/2015 | | 71.66 | 57.75 | 3,354.27 |
| | 12/21/2015 | | 71.66 | 57.75 | 3,354.27 |
| | 6/1/2016 | | 71.66 | 57.65 | 3,354.37 |
| | 12/8/2016 | | 71.66 | 57.62 | 3,354.40 |
| | 5/9/2017 | | 71.66 | 57.65 | 3,354.37 |
| | 11/15/2017 | | 71.66 | 57.60 | 3,354.42 |
| | 5/10/2018 | | 71.66 | 57.70 | 3,354.32 |
| | 5/17/2018 | | 71.66 | 57.73 | 3,354.29 |
| | 11/12/2018 | | 71.66 | 57.63 | 3,354.39 |
| | 5/14/2019 | | 71.66 | 57.98 | 3,354.04 |
| | 11/12/2019 | | 71.66 | Electronic Field Data Lost | |
| | 1/16/2020 | | 71.66 | 58.41 | 3,353.61 |
| | 3/23/2020 | | 71.66 | 58.33 | 3,353.69 |
| | 9/23/2020 | | 71.66 | 58.45 | 3,353.57 |
| | 3/30/2021 | | 71.66 | 58.58 | 3,353.44 |
| | 10/7/2021 | | 71.66 | 58.47 | 3,353.55 |
| | 4/13/2022 | | 71.66 | 58.47 | 3,353.55 |
| | 11/8/2022 | | 71.66 | 58.41 | 3,353.61 |
| | 4/27/2023 | | 69.62 | 58.40 | 3,353.62 |
| | 10/17/2023 | | 69.54 | 58.32 | 3353.70 |

**Summary of Groundwater Elevation Data**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Well Number | Date Measured | Top of Casing (TOC) Elevation | Total Depth (ft below TOC) | Depth to Water (ft below TOC) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|
| MW-9 | 1/21/2015 | 3,412.38 | 71.34 | 58.21 | 3,354.17 |
| | 4/21/2015 | | 71.34 | 58.10 | 3,354.28 |
| | 12/21/2015 | | 71.34 | 58.10 | 3,354.28 |
| | 6/1/2016 | | 71.34 | 58.02 | 3,354.36 |
| | 12/8/2016 | | 71.34 | 58.00 | 3,354.38 |
| | 5/9/2017 | | 71.34 | 58.00 | 3,354.38 |
| | 11/15/2017 | | 71.34 | 58.08 | 3,354.30 |
| | 5/10/2018 | | 71.34 | 58.10 | 3,354.28 |
| | 5/17/2018 | | 71.34 | 58.10 | 3,354.28 |
| | 11/12/2018 | | 71.34 | 58.05 | 3,354.33 |
| | 5/14/2019 | | 71.34 | 58.45 | 3,353.93 |
| | 11/12/2019 | | 71.34 | Electronic Field Data Lost | |
| | 1/16/2020 | | 71.34 | 58.64 | 3,353.74 |
| | 3/23/2020 | | 71.34 | 58.66 | 3,353.72 |
| | 9/23/2020 | | 71.34 | 58.50 | 3,353.88 |
| | 3/30/2021 | | 71.34 | 58.90 | 3,353.48 |
| | 10/7/2021 | | 71.34 | 58.95 | 3,353.43 |
| | 4/13/2022 | | 71.34 | 58.90 | 3,353.48 |
| | 11/8/2022 | | 71.34 | 59.02 | 3,353.36 |
| | 4/27/2023 | | 69.25 | 58.82 | 3,353.56 |
| | 10/17/2023 | | 69.15 | 58.74 | 3353.64 |
| MW-10 | 12/21/2015 | 3,411.86 | 70.32 | 57.24 | 3,354.62 |
| | 6/1/2016 | | 70.32 | 57.15 | 3,354.71 |
| | 12/8/2016 | | 70.32 | 57.10 | 3,354.76 |
| | 5/9/2017 | | 70.32 | 57.01 | 3,354.85 |
| | 11/15/2017 | | 70.32 | 57.03 | 3,354.83 |
| | 5/10/2018 | | 70.32 | 57.06 | 3,354.80 |
| | 5/17/2018 | | 70.32 | 57.09 | 3,354.77 |
| | 11/12/2018 | | 70.32 | 57.00 | 3,354.86 |
| | 5/14/2019 | | 70.32 | 57.32 | 3,354.54 |
| | 11/12/2019 | | 70.32 | Electronic Field Data Lost | |
| | 1/16/2020 | | 70.32 | 57.53 | 3,354.33 |
| | 3/23/2020 | | 70.32 | 57.49 | 3,354.37 |
| | 9/23/2020 | | 70.32 | 57.70 | 3,354.16 |
| | 3/30/2021 | | 70.32 | 57.71 | 3,354.15 |
| | 10/7/2021 | | 70.32 | 57.85 | 3,354.01 |
| | 4/3/2022 | | 70.32 | 57.90 | 3,353.96 |
| | 11/8/2022 | | 70.32 | 58.07 | 3,353.79 |
| | 4/27/2023 | | 70.13 | 57.88 | 3,353.98 |
| | 10/17/2023 | | 70.02 | 57.86 | 3354.00 |

**Summary of Groundwater Elevation Data**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Well Number | Date Measured | Top of Casing (TOC) Elevation | Total Depth (ft below TOC) | Depth to Water (ft below TOC) | Groundwater Elevation (ft AMSL) |
|---|---|---|---|---|---|
| MW-11 | 12/21/2015 | 3,412.14 | 70.32 | 58.01 | 3,354.13 |
| | 6/1/2016 | | 70.32 | 57.92 | 3,354.22 |
| | 12/8/2016 | | 70.32 | 57.92 | 3,354.22 |
| | 5/9/2017 | | 70.32 | 57.86 | 3,354.28 |
| | 11/15/2017 | | 70.32 | 57.98 | 3,354.16 |
| | 5/10/2018 | | 70.32 | 58.07 | 3,354.07 |
| | 5/17/2018 | | 70.32 | 57.06 | 3,355.08 |
| | 11/12/2018 | | 70.32 | 58.03 | 3,354.11 |
| | 5/14/2019 | | 70.32 | 58.43 | 3353.71 |
| | 11/12/2019 | | 70.32 | Electronic Field Data Lost | |
| | 1/16/2020 | | 70.32 | 58.56 | 3,353.58 |
| | 3/23/2020 | | 70.32 | 58.50 | 3,353.64 |
| | 9/23/2020 | | 70.32 | 58.65 | 3,353.49 |
| | 3/30/2021 | | 70.32 | 58.80 | 3,353.34 |
| | 10/7/2021 | | 70.32 | 58.87 | 3,353.27 |
| | 4/13/2022 | | 70.32 | 58.82 | 3,353.32 |
| | 11/8/2022 | | 70.32 | 58.69 | 3,353.45 |
| | 4/27/2023 | | 70.20 | 58.68 | 3,353.46 |
| | 10/17/2023 | | 70.04 | 58.18 | 3353.96 |

Notes:

1) ft = feet.
2) AMSL = above mean sea level.
3) Light non-aqueous phase liquids have never been observed in the monitoring wells.

**Table 2**

**Summary of Groundwater Quality Field Parameters**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Date | Temperature (°C) | pH | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Conductivity (mS/cm) |
|---|---|---|---|---|---|---|
| MW-1 | 7/30/2014 | 27.00 | 6.71 | 4.1 | -128.5 | 4,435 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 8.20 | 7.76 | 28.9 | -31.6 | 2,884 |
| | 4/21/2015 | 21.00 | 6.66 | 3.6 | 3.2 | 3,785 |
| | 12/21/2015 | 19.89 | 6.89 | 3.56 | -90.7 | 3,846 |
| | 6/1/2016 | 20.4 | 6.76 | 1.71 | -123.9 | 2,940 |
| | 12/9/2016 | 19.00 | 6.37 | 5.22 | -113.7 | 2,559 |
| | 5/9/2017 | 19.39 | 6.93 | 2.05 | -146.8 | 3,018 |
| | 11/15/2017 | 18.00 | 7.17 | 2.16 | -45.3 | 4,070 |
| | 5/17/2018 | 18.87 | 6.73 | -- | -181 | 3,955 |
| | 11/12/2018 | 16.48 | 6.95 | 4.51 | -119.9 | 4,801 |
| | 5/14/2019 | 17.39 | 6.3 | 4.25 | -153.4 | 3,289 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.59 | 6.64 | 2.6 | -200 | 3,303 |
| | 9/23/2020 | 19.90 | 7.17 | 3.01 | -72.9 | 1,875 |
| | 3/30/2021 | 20.53 | 7.02 | 1.24 | -98 | 1,670 |
| | 10/7/2021 | 20.46 | 7.19 | 1.43 | -119.7 | 1,190 |
| | 4/13/2022 | 20.30 | 6.98 | 1.11 | 21.5 | 1,803 |
| | 11/8/2022 | 20.23 | 6.91 | 1.56 | 75.5 | 1,733 |
| | 4/27/2023 | 19.95 | 5.98 | 1.12 | -- | 1,597 |
| | 10/17/2023 | 20.53 | 6.94 | 2.75 | -- | 1,438 |
| MW-2 | 7/31/2014 | 24.4 | 7.05 | 21.5 | 215 | 1,509 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 12.9 | 7.4 | 23.1 | 242.3 | 1,654 |
| | 4/21/2015 | 19.3 | 6.94 | 4.1 | 322.2 | 1,648 |
| | 12/21/2015 | 19.59 | 7.31 | 3.06 | -41.4 | 1,956 |
| | 6/1/2016 | 20.1 | 6.93 | 1.93 | 37.4 | 1,650 |
| | 12/9/2016 | 18.61 | 6.97 | 1.76 | -112.7 | 1,640 |
| | 5/9/2017 | 19.06 | 6.37 | 2.72 | -58.5 | 1,676 |
| | 11/15/2017 | 17.54 | 7.39 | 2.99 | 107.6 | 1,978 |
| | 5/17/2018 | 18.51 | 6.97 | -- | -61.8 | 1,631 |
| | 11/12/2018 | 17.35 | 7.12 | 5.33 | -103 | 1,709 |
| | 5/14/2019 | 17.6 | 6.66 | 4.97 | -66.4 | 1,456 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.60 | 6.82 | 3.23 | 9.00 | 1,778 |
| | 9/23/2020 | 20.50 | 7.25 | 2.31 | 38.40 | 1,401 |
| | 10/7/2021 | 20.71 | 7.32 | 1.71 | 20.83 | 912 |
| | 11/8/2022 | 21.34 | 7.54 | 269.67 | 262.39 | 1612 |
| | 10/17/2023 | 20.10 | 7.25 | 3.50 | -- | 1719 |
| MW-3 | 7/31/2014 | 21 | 7.13 | 16.1 | 571 | 1,173 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 9.7 | 7.71 | 52.3 | 408.7 | 1,425 |
| | 4/21/2015 | 18.7 | 7.12 | 38.1 | 256.1 | 1,353 |
| | 12/21/2015 | 19.7 | 7.36 | 3.11 | -55.3 | 1,468 |
| | 11/15/2017 | 17.81 | 7.55 | 2.44 | 117.7 | 1,599 |
| | 5/17/2018 | No Parameters Collected | | | | |
| | 11/12/2018 | 15.65 | 7.34 | 4.88 | -101.1 | 1,389 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 9/23/2020 | 21.81 | 7.35 | 2.76 | 136.8 | 1,259 |
| | 3/30/2021 | 20.17 | 7.24 | 1.08 | 247 | 1,137 |
| | 10/7/2021 | 20.61 | 7.38 | 1.97 | 133.3 | 861 |
| | 4/13/2022 | 19.50 | 7.26 | 2.28 | 188.5 | 1,332 |
| | 11/8/2022 | 19.99 | 7.27 | 7.04 | 256.3 | 1,861 |
| | 4/27/2023 | 21.60 | 7.19 | 4.14 | -- | 1,554 |
| | 10/17/2023 | 19.67 | 7.23 | 6.86 | -- | 1,735 |

**Table 2**

**Summary of Groundwater Quality Field Parameters**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Date | Temperature (°C) | pH | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Conductivity (mS/cm) |
|---|---|---|---|---|---|---|
| MW-4 | 7/30/2014 | 23.60 | 6.97+C56:G6( | 34.6 | 568.3 | 1,239 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 15.00 | 7.31 | 26.6 | 525.3 | 1,393 |
| | 4/21/2015 | 19.50 | 6.97 | 18 | 463.2 | 1,420 |
| | 12/21/2015 | 19.71 | 7 | 3.01 | -47.3 | 1,620 |
| | 11/15/2017 | 17.74 | 7.25 | 2.56 | 124.5 | 1,581 |
| | 5/17/2018 | No Parameters Collected | | | | |
| | 11/12/2018 | 16.91 | 7.13 | 3.13 | -84.1 | 1,358 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 9/23/2020 | 20.66 | 7.14 | 0.88 | 24.5 | 1,163 |
| | 10/7/2021 | 20.52 | 7.27 | 0.7 | -10.5 | 795 |
| | 11/8/2022 | 20.31 | 7.02 | 1.7 | 225.6 | 1,398 |
| | 10/17/2023 | 22.00 | 7.00 | 2.5 | -- | 1,358 |
| MW-5 | 7/30/2014 | 22.7 | 6.86 | 10.1 | 55.7 | 1,213 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 15.40 | 7.31 | 22.8 | 510.3 | 1,188 |
| | 4/21/2015 | 19.90 | 6.79 | 6.3 | 283.2 | 1,323 |
| | 11/15/2017 | 17.86 | 7.11 | 1.29 | -50.3 | 1,551 |
| | 5/17/2018 | No Parameters Collected | | | | |
| | 11/12/2018 | 17.05 | 6.95 | 3.71 | -110 | 1,318 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 9/23/2020 | 20.50 | 7.00 | 0.87 | -111.7 | 1,145 |
| | 10/7/2021 | 20.49 | 7.18 | 1.06 | -96.3 | 746 |
| | 11/8/2022 | 20.94 | 6.85 | 1.03 | 132.5 | 1,323 |
| | 10/17/2023 | 20.96 | 6.79 | 2.59 | -- | 1,274 |
| MW-6 | 7/30/2014 | 24.6 | 6.67 | 2.7 | -145.4 | 4,320 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 7.3 | 8.11 | 50.3 | 108.9 | 3,479 |
| | 4/21/2015 | 20.8 | 6.6 | 2.3 | -30.9 | 4,923 |
| | 12/21/2015 | 19.56 | 6.99 | 3.14 | -106.2 | 6,450 |
| | 6/2/2016 | 20 | 6.39 | 1.25 | -93.8 | 5,290 |
| | 12/9/2016 | 18.9 | 6.99 | 1.88 | -170 | 4,387 |
| | 5/9/2017 | 19.08 | 7.92 | 4.5 | -73.8 | 4,289 |
| | 11/15/2017 | 17.72 | 7.38 | 1.01 | -73.1 | 4,347 |
| | 5/17/2018 | 18.61 | 6.19 | -- | -145.2 | 3,401 |
| | 11/12/2018 | 16.55 | 6.92 | 3.03 | -88.1 | 2,310 |
| | 5/14/2019 | 16.79 | 6.47 | 5.1 | -117.7 | 1,760 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.51 | 6.72 | 2.06 | -77 | 2,117 |
| | 7/28/2020 | 21.7 | 7.71 | 4.23 | -43.5 | 1,560 |
| | 9/23/2020 | 20.54 | 7.08 | 1.08 | -62.7 | 1,758 |
| | 3/30/2021 | 20.08 | 7.04 | 1.12 | -74.4 | 1,474 |
| | 10/7/2021 | 20.44 | 4.2 | 1.09 | -96.5 | 968 |
| | 4/13/2022 | 19.5 | 7.1 | 1.52 | 80 | 1,448 |
| | 11/8/2022 | 20.72 | 7.44 | 1.43 | 177.9 | 1,660 |
| | 4/27/2023 | 36.42 | 7.58 | 5.19 | -- | 1,551 |
| | 10/17/2023 | 23.37 | 7.24 | 3.90 | -- | 1,290 |

**Table 2**

**Summary of Groundwater Quality Field Parameters**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Date | Temperature (°C) | pH | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Conductivity (mS/cm) |
|---|---|---|---|---|---|---|
| MW-7 | 7/30/2014 | 24.1 | 7.01 | 6.5 | -106.7 | 1,412 |
| | 10/30/2014 | No Parameters Collected | | | | |
| | 1/21/2015 | 7.2 | 7.91 | 43.8 | 110.7 | 2,717 |
| | 4/21/2015 | 21.1 | 6.95 | 10 | 269.6 | 1,938 |
| | 12/21/2015 | 19.61 | 7.07 | 2.57 | -108.4 | 1,919 |
| | 6/2/2016 | 20.2 | 7.08 | 1.47 | -115.7 | 1,580 |
| | 12/9/2016 | 19.02 | 7.17 | 3.11 | 74.8 | 1,499 |
| | 5/9/2017 | 19.27 | 6.91 | 2.24 | -146.9 | 1,400 |
| | 11/15/2017 | 17.64 | 7.49 | 1.67 | -29 | 1,759 |
| | 5/17/2018 | 18.51 | 7.12 | -- | -100.2 | 1,500 |
| | 11/12/2018 | 16.85 | 7.15 | 3.73 | -70 | 1,568 |
| | 5/14/2019 | 18.06 | 6.54 | 2.98 | -98.9 | 1,350 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.52 | 6.85 | 2.41 | -53.4 | 1,622 |
| | 9/23/2020 | 20.8 | 7.19 | 1.28 | -36.9 | 1,395 |
| | 3/30/2021 | 20.24 | 7.15 | 1.67 | -59 | 1,340 |
| | 10/7/2021 | 20.5 | 7.29 | 1.72 | -81.9 | 1,012 |
| | 4/13/2022 | 19.59 | 7.17 | 2.67 | 64.6 | 1,591 |
| | 11/8/2022 | 20.48 | 6.95 | 1.86 | 141.25 | 2,042 |
| | 4/27/2023 | 20.66 | 6.98 | 2.17 | -- | 1,974 |
| | 10/17/2023 | 21.97 | 7.15 | 1.93 | -- | 2,109 |
| MW-8 | 1/21/2015 | 8.2 | 8.14 | 40.2 | 316.8 | 1202 |
| | 4/21/2015 | 20.1 | 6.93 | 10.6 | 517.3 | 1,942 |
| | 12/21/2015 | 19.14 | 7.09 | 3.68 | -55.7 | 2,144 |
| | 6/2/2016 | 19.8 | 7.08 | 1.43 | 129.5 | 1,820 |
| | 12/9/2016 | 18.54 | 7.22 | 8.28 | 463.9 | 1,889 |
| | 5/9/2017 | 18.65 | 6.92 | 6.38 | 335.3 | 1,938 |
| | 11/15/2017 | 17.53 | 7.5 | 1.89 | 20.0 | 2,348 |
| | 5/17/2018 | 18.43 | 6.97 | -- | -76.8 | 1,950 |
| | 11/12/2018 | 15.88 | 7.21 | 5.72 | -73.1 | 2,081 |
| | 5/14/2019 | 17.05 | 6.63 | 9.46 | -53.1 | 816 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.43 | 6.93 | 3.5 | -21 | 1,749 |
| | 7/28/2020 | 20.7 | 8.18 | 10.16 | -62.7 | 1,030 |
| | 9/23/2020 | 21.68 | 7.48 | 4.2 | 486.3 | 1,477 |
| | 3/30/2021 | 20.22 | 7.22 | 1.27 | -93.8 | 1,285 |
| | 10/7/2021 | 20.44 | 7.32 | 1.26 | -95.9 | 926 |
| | 4/13/2022 | 19.43 | 7.22 | 2.39 | 69.6 | 1,380 |
| | 11/8/2022 | 20.13 | 7.00 | 2.76 | 154.0 | 1,535 |
| | 4/27/2023 | 20.13 | 7.00 | 2.76 | 154.0 | 1,535 |
| | 10/17/2023 | 21.70 | 7.09 | 4.41 | -- | 1,500 |

**Table 2**

**Summary of Groundwater Quality Field Parameters**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Date | Temperature (°C) | pH | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Conductivity (mS/cm) |
|---|---|---|---|---|---|---|
| MW-9 | 1/21/2015 | 6 | 8.33 | 60.9 | 201.7 | 1,180 |
| | 4/21/2015 | 19.8 | 6.89 | 6.5 | 275.9 | 1,298 |
| | 12/21/2015 | 19.31 | 7.09 | 3.04 | -50.1 | 1,395 |
| | 6/2/2016 | 19.9 | 6.93 | 1.23 | -115 | 1,180 |
| | 12/9/2016 | 18.72 | 7.15 | 7.87 | -122.3 | 1,145 |
| | 5/9/2017 | 18.88 | 6.68 | 3.76 | -139.2 | 1,138 |
| | 11/15/2017 | 17.68 | 7.16 | 1.41 | -77.6 | 1,464 |
| | 5/17/2018 | 18.07 | 6.72 | -- | -208.2 | 1,201 |
| | 11/12/2018 | 16.81 | 7.03 | 2.95 | -144.2 | 1,220 |
| | 5/14/2019 | 17.18 | 6.59 | 3.84 | -165.9 | 1,032 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.14 | 6.85 | 2.13 | -200.0 | 1,668 |
| | 7/28/2020 | 21.4 | 7.67 | 10.2 | -87.4 | 1,670 |
| | 9/23/2020 | 20.53 | 7.43 | 1.44 | -109.0 | 1,564 |
| | 3/30/2021 | 20.21 | 7 | 1.02 | -124.3 | 1,917 |
| | 10/7/2021 | 21.25 | 7.12 | 1.12 | -137.9 | 1,378 |
| | 4/13/2022 | 20.15 | 6.87 | 1.02 | 72.1 | 2,322 |
| | 11/8/2022 | 20.22 | 6.55 | 1.74 | 112.2 | 2,576 |
| | 4/27/2023 | 20.94 | 6.75 | 1.54 | -- | 2,556 |
| | 10/17/2023 | 20.93 | 6.78 | 2.43 | -- | 2,641 |
| MW-10 | 12/21/2015 | 19.2 | 7.49 | 7.07 | -9.4 | 3,616 |
| | 6/2/2016 | 20.1 | 7.23 | 3.74 | 97.2 | 3,250 |
| | 12/9/2016 | 18.64 | 7.23 | 3.76 | 419.5 | 3,183 |
| | 5/9/2017 | 18.74 | 5.98 | 2.97 | -16.7 | 3,535 |
| | 11/15/2017 | 17.49 | 7.3 | 2.06 | 73.5 | 4,692 |
| | 5/17/2018 | 18.81 | 7.0 | - | -50.1 | 3,821 |
| | 11/12/2018 | 16.82 | 7.33 | 3.7 | -74 | 4,567 |
| | 5/14/2019 | 17.32 | 6.7 | 5.96 | -60.6 | 3,719 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.22 | 6.91 | 3.49 | 5.4 | 4,681 |
| | 9/23/2020 | 20.67 | 7.19 | 2.75 | 135.2 | 4,636 |
| | 3/30/2021 | 20.19 | 7.11 | 2.34 | 39.3 | 4,505 |
| | 10/7/2021 | 20.35 | 7.2 | 2.75 | 44.4 | 3,467 |
| | 4/13/2022 | 19.44 | 7.03 | 2.34 | 186.1 | 5,650 |
| | 11/8/2022 | 19.69 | 6.94 | 3.53 | 264.2 | 6,443 |
| | 4/27/2023 | 20.80 | 6.95 | 2.56 | -- | 6,050 |
| | 10/17/2023 | 19.57 | 6.91 | 3.28 | -- | 6,150 |

**Table 2**

**Summary of Groundwater Quality Field Parameters**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Date | Temperature (°C) | pH | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Conductivity (mS/cm) |
|---|---|---|---|---|---|---|
| MW-11 | 12/21/2015 | 18.44 | 7.41 | 6.97 | 43.2 | 1,285 |
| | 6/2/2016 | 19.8 | 7.36 | 6.51 | 385.7 | 1,120 |
| | 12/9/2016 | 18.56 | 7.34 | 6.85 | 436.6 | 1,086 |
| | 5/9/2017 | 18.82 | 7.09 | 4.94 | -60.8 | 1,121 |
| | 11/15/2017 | 17.34 | 7.42 | 3.89 | 7.5 | 1,385 |
| | 5/17/2018 | 18.04 | 7.16 | -- | -60.2 | 1,204 |
| | 11/12/2018 | 15.99 | 7.45 | 7.81 | -76.2 | 1,238 |
| | 5/14/2019 | 16.63 | 6.9 | 5.7 | -58.4 | 812 |
| | 11/12/2019 | Electronic Field Data Lost | | | | |
| | 3/23/2020 | 19.94 | 6.99 | 2.64 | -7.0 | 1,247 |
| | 7/28/2020 | 20.90 | 8.19 | 5.97 | -41.9 | 1,000 |
| | 9/23/2020 | 20.44 | 7.30 | 1.42 | -79.5 | 1,049 |
| | 3/30/2021 | 20.17 | 7.25 | 1.63 | -58.2 | 948 |
| | 10/7/2021 | 20.22 | 7.44 | 1.99 | -83.4 | 666 |
| | 4/13/2022 | 19.37 | 7.31 | 2.23 | 96.2 | 1,028 |
| | 11/8/2022 | 20.04 | 7.07 | 1.97 | 162 | 1,075 |
| | 4/27/2023 | 22.25 | 7.30 | 1.66 | -- | 1,059 |

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

**Summary of Groundwater Analytical Results**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Chloride |
|---|---|---|---|---|---|---|
| **NMWQCC Groundwater Quality Standards** | | **0.005** | **1.0** | **0.7** | **0.62** | **250** |
| MW-1 | 2/7/2013* | **0.516** | <0.00100 | 0.0688 | 0.0291 | **1,200** |
| | 5/10/2013* | **0.551** | 0.0915 | 0.146 | 0.114 | **901** |
| | 9/3/2013* | **0.00500** | -- | 0.0172 | 0.0366 | **561** |
| | 2/28/2014* | **0.395** | <0.00200 | 0.0850 | 0.0350 | **1,220** |
| | 7/30/2014 | <0.00100 | <0.00200 | <0.00100 | 0.0178 | **1,190** |
| | 10/31/2014 | **0.00500** | -- | 0.0671 | <0.00100 | **871** |
| | 1/21/2015 | **0.137** | <0.0500 | 0.111 | <0.05000 | **618** |
| | 4/21/2015 | **0.104** | <0.00100 | 0.0324 | <0.00100 | **845** |
| | 12/21/2015 | **0.00500** | -- | 0.011 | 0.00210 | **890** |
| | 6/1/2016 | **0.021** | <0.00100 | 0.00730 | <0.00150 | **850** |
| | 12/9/2016 | 0.00300 | <0.00100 | 0.00200 | <0.00150 | **600** |
| | 5/9/2017 | **0.00500** | -- | 0.00480 | <0.00150 | **650** |
| | 11/15/2017 | **0.00960** | <0.00100 | 0.00280 | <0.00150 | **700** |
| | 5/10/2018 | -- | -- | -- | -- | **490** |
| | 5/17/2018 | **0.00500** | <0.00100 | 0.00520 | <0.00150 | -- |
| | 11/12/2018 | 0.00300 | <0.00100 | 0.00160 | <0.00150 | **1,400** |
| | 5/14/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,200** |
| | 11/12/2019 | 0.00500 | -- | <0.00100 | <0.00200 | **860** |
| | 3/23/2020 | 0.00180 | <0.00100 | <0.00100 | <0.00150 | **710** |
| | 9/23/2020 | 0.00220 | <0.00100 | <0.00100 | <0.00150 | **410** |
| | 3/30/2021 | 0.00220 | <0.00100 | <0.00100 | <0.00150 | **300** |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **290** |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 230 |
| | 11/8/2022 | 0.00140 | <0.00100 | <0.00100 | <0.00150 | 210 |
| | 4/27/2023 | 0.0022 | <0.0010 | <0.0010 | <0.0015 | 190 |
| | 10/17/2023 | -- | -- | -- | -- | 215 |
| MW-2 | 2/7/2013* | <0.00100 | <0.00200 | <0.00100 | <0.00200 | 142 |
| | 5/10/2013* | <0.00100 | <0.00200 | <0.00100 | <0.00200 | 138 |
| | 9/3/2013* | 0.00500 | <0.00100 | <0.00100 | <0.00200 | 139 |
| | 2/28/2014* | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 134 |
| | 7/31/2014 | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 144 |
| | 10/31/2014 | 0.00500 | <0.00100 | <0.00100 | <0.00100 | 168 |
| | 1/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 167 |
| | 4/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 159 |
| | 12/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 170 |
| | 6/1/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 12/9/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 190 |
| | 5/9/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 190 |
| | 11/15/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 170 |
| | 5/10/2018 | -- | -- | -- | -- | 67.0 |
| | 5/17/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | -- |
| | 11/12/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 190 |
| | 5/14/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 170 |
| | 3/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 160 |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 170 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 200 |
| | 10/17/2023 | -- | -- | -- | -- | **282** |

**Summary of Groundwater Analytical Results**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Chloride |
|---|---|---|---|---|---|---|
| **NMWQCC Groundwater Quality Standards** | | **0.005** | **1.0** | **0.7** | **0.62** | **250** |
| MW-3 | 2/7/2013* | <0.00100 | <0.00200 | <0.00100 | <0.00200 | 102 |
| | 5/10/2013* | <0.00100 | <0.00200 | <0.00100 | <0.00200 | 91.3 |
| | 9/3/2013* | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 75.9 |
| | 2/28/2014* | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 95.4 |
| | 7/31/2014 | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 89.9 |
| | 10/31/2014 | 0.00460 | <0.00100 | <0.00100 | <0.00100 | 114 |
| | 1/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 111 |
| | 4/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 114 |
| | 12/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 110 |
| | 6/1/2016 | Not Sampled | | | | |
| | 12/9/2016 | Not Sampled | | | | |
| | 5/9/2017 | Not Sampled | | | | |
| | 11/15/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 130 |
| | 5/17/2018 | Not Sampled | | | | |
| | 11/12/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 130 |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 130 |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 150 |
| | 3/30/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 160 |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 200 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **280** |
| | 4/27/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0015 | **260** |
| | 10/17/2023 | -- | -- | -- | -- | **374** |
| MW-4 | 9/3/2013* | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 86.9 |
| | 2/28/2014* | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 89.7 |
| | 7/30/2014 | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 98.8 |
| | 10/31/2014 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 106 |
| | 1/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 131 |
| | 4/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 120 |
| | 12/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 120 |
| | 6/1/2016 | Not Sampled | | | | |
| | 12/9/2016 | Not Sampled | | | | |
| | 5/9/2017 | Not Sampled | | | | |
| | 11/15/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 98 |
| | 5/17/2018 | Not Sampled | | | | |
| | 11/12/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 100 |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 89 |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 100 |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 140 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 140 |
| | 10/17/2023 | -- | -- | -- | -- | 164 |

**Summary of Groundwater Analytical Results**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Chloride |
|---|---|---|---|---|---|---|
| **NMWQCC Groundwater Quality Standards** | | **0.005** | **1.0** | **0.7** | **0.62** | **250** |
| MW-5 | 9/3/2013* | 0.00200 | <0.00100 | <0.00100 | <0.00100 | 85.7 |
| | 2/28/2014* | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 87.1 |
| | 7/30/2014 | <0.00100 | <0.00200 | <0.00100 | 0.00410 | 73.4 |
| | 10/31/2014 | 0.00440 | <0.00100 | <0.00100 | 0.0145 | 77.1 |
| | 1/21/2015 | <0.00100 | <0.00100 | <0.00100 | 0.00280 | 69.9 |
| | 4/21/2015 | <0.00100 | <0.00100 | <0.00100 | 0.00970 | 73.3 |
| | 12/21/2015 | Not Sampled | | | | |
| | 6/1/2016 | Not Sampled | | | | |
| | 12/9/2016 | Not Sampled | | | | |
| | 5/9/2017 | Not Sampled | | | | |
| | 11/15/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 73 |
| | 5/17/2018 | Not Sampled | | | | |
| | 11/12/2018 | 0.00170 | <0.00100 | <0.00100 | <0.00150 | 64 |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 78 |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 86 |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 86 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 110 |
| | 10/17/2023 | -- | -- | -- | -- | 165 |
| MW-6 | 9/3/2013* | **0.469** | <0.00100 | 0.00613 | 0.03420 | **906** |
| | 2/28/2014* | **0.851** | <0.00100 | 0.0185 | 0.05900 | **1,290** |
| | 7/30/2014 | <0.00100 | <0.00200 | 0.00965 | 0.01030 | **1,010** |
| | 10/31/2014 | **0.647** | <0.05000 | <0.05000 | 0.36800 | **1,420** |
| | 1/21/2015 | **0.440** | <0.05000 | <0.05000 | <0.05000 | **429** |
| | 4/21/2015 | **0.790** | <0.05000 | <0.05000 | <0.05000 | **1,190** |
| | 12/21/2015 | **0.200** | <0.00100 | 0.00220 | 0.00340 | **1,700** |
| | 6/2/2016 | **0.0990** | <0.00100 | 0.00260 | 0.00390 | **1,500** |
| | 12/9/2016 | **0.0160** | <0.00100 | 0.00130 | 0.00150 | **1,400** |
| | 5/9/2017 | **0.0120** | <0.00100 | 0.00140 | 0.00160 | **1,100** |
| | 11/15/2017 | 0.00270 | <0.00100 | <0.00100 | <0.00150 | **1,200** |
| | 5/10/2018 | -- | -- | -- | -- | **560** |
| | 5/17/2018 | 0.00260 | <0.00100 | 0.00170 | <0.00150 | -- |
| | 11/12/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **390** |
| | 5/14/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **410** |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | **380** |
| | 3/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **360** |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **250** |
| | 3/30/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **270** |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 210 |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 4/27/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0015 | 150 |
| | 10/17/2023 | -- | -- | -- | -- | 156 |

**Summary of Groundwater Analytical Results**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Chloride |
|---|---|---|---|---|---|---|
| **NMWQCC Groundwater Quality Standards** | | **0.005** | **1.0** | **0.7** | **0.62** | **250** |
| MW-7 | 9/3/2013* | **0.0842** | <0.00100 | <0.00100 | <0.00200 | 91.0 |
| | 2/28/2014* | **0.0606** | <0.00200 | 0.00149 | <0.00100 | 88.3 |
| | 7/30/2014 | <0.00100 | <0.00200 | <0.00100 | <0.00100 | 70.6 |
| | 10/31/2014 | **0.0351** | <0.00100 | 0.00290 | 0.00660 | 72.2 |
| | 1/21/2015 | **0.0169** | <0.00100 | <0.00100 | <0.00100 | 46.6 |
| | 4/21/2015 | **0.0123** | <0.00100 | <0.00100 | <0.00100 | <25.0 |
| | 12/21/2015 | **0.0082** | <0.00100 | <0.00100 | <0.00150 | 110 |
| | 6/2/2016 | **0.0110** | <0.00100 | <0.00100 | <0.00150 | 99.0 |
| | 12/9/2016 | 0.00310 | <0.00100 | <0.00100 | <0.00150 | 94.0 |
| | 5/9/2017 | **0.00780** | <0.00100 | <0.00100 | <0.00150 | 88.0 |
| | 11/15/2017 | 0.00150 | <0.00100 | <0.00100 | <0.00150 | 96.0 |
| | 5/10/2018 | -- | -- | -- | -- | 32.0 |
| | 5/17/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | -- |
| | 11/12/2018 | 0.00110 | <0.00100 | <0.00100 | <0.00150 | 150 |
| | 5/14/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 170 |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 130 |
| | 3/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 190 |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 180 |
| | 3/30/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 200 |
| | 12/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 230 |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **280** |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **370** |
| | 4/27/2023 | 0.00056 | <0.0010 | <0.0010 | <0.0015 | **350** |
| | 10/17/2023 | -- | -- | -- | -- | **482** |
| MW-8 | 1/21/2015 | <0.00100 | <0.00100 | <0.00100 | 0.0012 | **362** |
| | 4/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00100 | 184 |
| | 12/22/2015 | **0.0220** | <0.00100 | 0.00250 | <0.00150 | 190 |
| | 6/2/2016 | **0.0510** | <0.00100 | 0.00600 | <0.00150 | 170 |
| | 12/9/2016 | **0.0110** | <0.00100 | 0.00320 | <0.00150 | 190 |
| | 5/9/2017 | **0.0580** | <0.00100 | 0.00550 | <0.00150 | 180 |
| | 11/15/2017 | **0.0210** | <0.00100 | 0.00290 | <0.00150 | 180 |
| | 5/10/2018 | -- | -- | -- | -- | 98.0 |
| | 5/17/2018 | 0.00110 | <0.00100 | <0.00100 | <0.00150 | -- |
| | 11/12/2018 | 0.00110 | <0.00100 | <0.00100 | <0.00150 | 160 |
| | 5/14/2019 | 0.00150 | <0.00100 | <0.00100 | <0.00150 | 130 |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | 100 |
| | 3/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 100 |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 100 |
| | 3/30/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 110 |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 130 |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 130 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 150 |
| | 4/27/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0015 | 130 |
| | 10/17/2023 | -- | -- | -- | -- | 159 |

**Summary of Groundwater Analytical Results**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

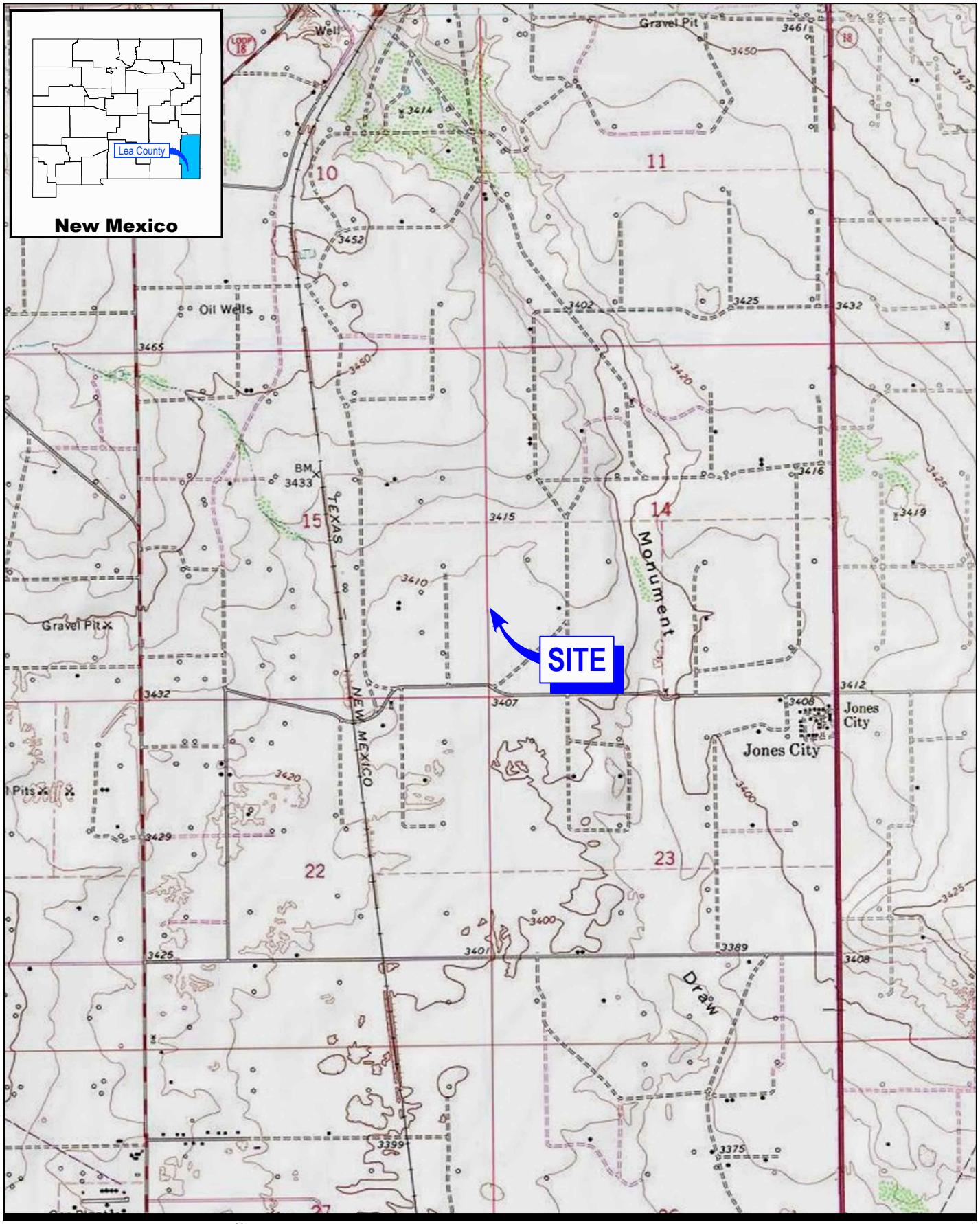
| Sample ID | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Chloride |
|---|---|---|---|---|---|---|
| **NMWQCC Groundwater Quality Standards** | | **0.005** | **1.0** | **0.7** | **0.62** | **250** |
| MW-9 | 1/21/2015 | **0.0240** | <0.00100 | <0.00100 | 0.0151 | 53.9 |
| | 4/21/2015 | **0.0305** | <0.00100 | <0.00100 | 0.0340 | 53.4 |
| | 12/22/2015 | **0.0190** | <0.00100 | <0.00100 | 0.0180 | 57.0 |
| | 6/2/2016 | **0.0510** | <0.00100 | <0.00100 | 0.0250 | 43.0 |
| | 12/9/2016 | **0.0320** | <0.00100 | <0.00100 | 0.0140 | 43.0 |
| | 5/9/2017 | **0.0780** | <0.00100 | <0.00100 | 0.0400 | 42.0 |
| | 11/15/2017 | **0.0290** | <0.00100 | <0.00100 | 0.0160 | 35.0 |
| | 5/10/2018 | -- | -- | -- | -- | 33.0 |
| | 5/17/2018 | **0.0200** | <0.00100 | <0.00100 | 0.00170 | -- |
| | 11/12/2018 | **0.00760** | <0.00100 | <0.00100 | <0.00150 | 41.0 |
| | 5/14/2019 | **0.00850** | <0.00100 | <0.00100 | <0.00150 | 80.0 |
| | 11/12/2019 | 0.00250 | <0.00100 | <0.00100 | 0.0190 | 220 |
| | 3/23/2020 | 0.00240 | <0.00100 | <0.00100 | 0.00520 | **280** |
| | 9/23/2020 | 0.00150 | <0.00100 | <0.00100 | <0.00150 | **350** |
| | 3/30/2021 | <0.00100 | <0.00100 | <0.00100 | 0.00160 | **450** |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **510** |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **710** |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **620** |
| | 4/27/2023 | 0.00032 | <0.0010 | 0.00025 | <0.0015 | **590** |
| | 10/17/2023 | -- | -- | -- | -- | **627** |
| MW-10 | 12/21/2015 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **570** |
| | 6/2/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **500** |
| | 12/9/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **580** |
| | 5/9/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **640** |
| | 11/15/2017 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **520** |
| | 5/10/2018 | -- | -- | -- | -- | **730** |
| | 5/17/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | -- |
| | 11/12/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **770** |
| | 5/14/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **810** |
| | 11/12/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00200 | **930** |
| | 3/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,100** |
| | 9/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,300** |
| | 3/30/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,300** |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,600** |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,900** |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | **1,800** |
| | 4/27/2023 | <0.0010 | <0.0010 | <0.0010 | <0.0015 | **1,800** |
| | 10/17/2023 | -- | -- | -- | -- | **2,050** |

**Table 3**

**Summary of Groundwater Analytical Results**
**ET Gathering Processing, LLC**
**A-7 Bettis Pipeline**
**Lea County, New Mexico**
**NMOCD Nos. 1RP 9 5 2186 and 1RP 1540**

| Sample ID | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Chloride |
|---|---|---|---|---|---|---|
| **NMWQCC Groundwater Quality Standards** | | **0.005** | **1.0** | **0.7** | **0.62** | **250** |
| MW-11 | 12/21/2015 | 0.00130 | <0.00100 | <0.00100 | <0.00150 | 55.0 |
| | 6/2/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 46.0 |
| | 12/9/2016 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 44.0 |
| | 5/9/2017 | 0.00230 | <0.00100 | <0.00100 | <0.00150 | 56.0 |
| | 11/15/2017 | **0.0130** | <0.00100 | <0.00100 | 0.00180 | 35.0 |
| | 5/10/2018 | **--** | -- | -- | -- | 44.0 |
| | 5/17/2018 | 0.00160 | <0.00100 | <0.00100 | <0.00150 | -- |
| | 11/12/2018 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 42.0 |
| | 5/14/2019 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 43.0 |
| | 11/12/2019 | 0.00100 | <0.00100 | <0.00100 | <0.00200 | 33.0 |
| | 3/23/2020 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 44.0 |
| | 9/23/2020 | 0.00140 | <0.00100 | <0.00100 | <0.00150 | 43.0 |
| | 3/30/2021 | 0.00150 | <0.00100 | <0.00100 | <0.00150 | 52.0 |
| | 10/7/2021 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 56.0 |
| | 4/13/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 62.0 |
| | 11/8/2022 | <0.00100 | <0.00100 | <0.00100 | <0.00150 | 60.0 |
| | 4/27/2023 | 0.0016 | <0.0010 | <0.0010 | <0.0015 | 61 |
| | 10/17/2023 | -- | -- | -- | -- | 65.7 |

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




0 1000 2000 ft

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

N

GHD

ET GATHERING & PROCESSING, LLC
LEA COUNTY, NEW MEXICO
A-7 BETTIS
NMOCD 1RP-1540

Project No. **12603932**
Date **March 2024**

**SITE LOCATION MAP**

**FIGURE 1**

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12603932\Digital_Design\ACAD\Figures\RPT002\12603932-GHD-00-00-RPT-EN-D101_DL-002.dwg

Data Source: USGS 7.5 Minute Quad "Eunice and Eunice NE, New Mexico"
Lat/Long: 32.47536° North, 103.14215° West


LEGEND

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

0 30 60 ft

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

N

GHD

ET GATHERING & PROCESSING, LLC
LEA COUNTY, NEW MEXICO
A-7 BETTIS
NMOCD 1RP-1540

SITE DETAILS MAP

Project No. **12603932**
Date **March 2024**

**FIGURE 2**

Filename: \\ghdnetghdlUS\Albuquerque\Projects\562\12603932\Digital_Design\ACAD\Figures\RPT002\12603932-GHD-00-00-RPT-EN-D101_DL-002.dwg

Data Source: NAIP Imagery, New Mexico 2014
Lat/Long: 32.47536° North, 103.14215° West


LEGEND

- MONITORING WELL LOCATION
- RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS
- GROUNDWATER ELEVATION CONTOUR (INTERVAL = 0.1 FT)
- 3354.00 GROUNDWATER ELEVATION (FT AMSL)
- DIRECTION OF GROUNDWATER FLOW

NOTE:

1. MW-1, AND MW-11 WERE NOT USED IN CONTOURING.

0 30 60 ft

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

N

GHD

ET GATHERING & PROCESSING, LLC
LEA COUNTY, NEW MEXICO
A-7 BETTIS
NMOCD 1RP-1540

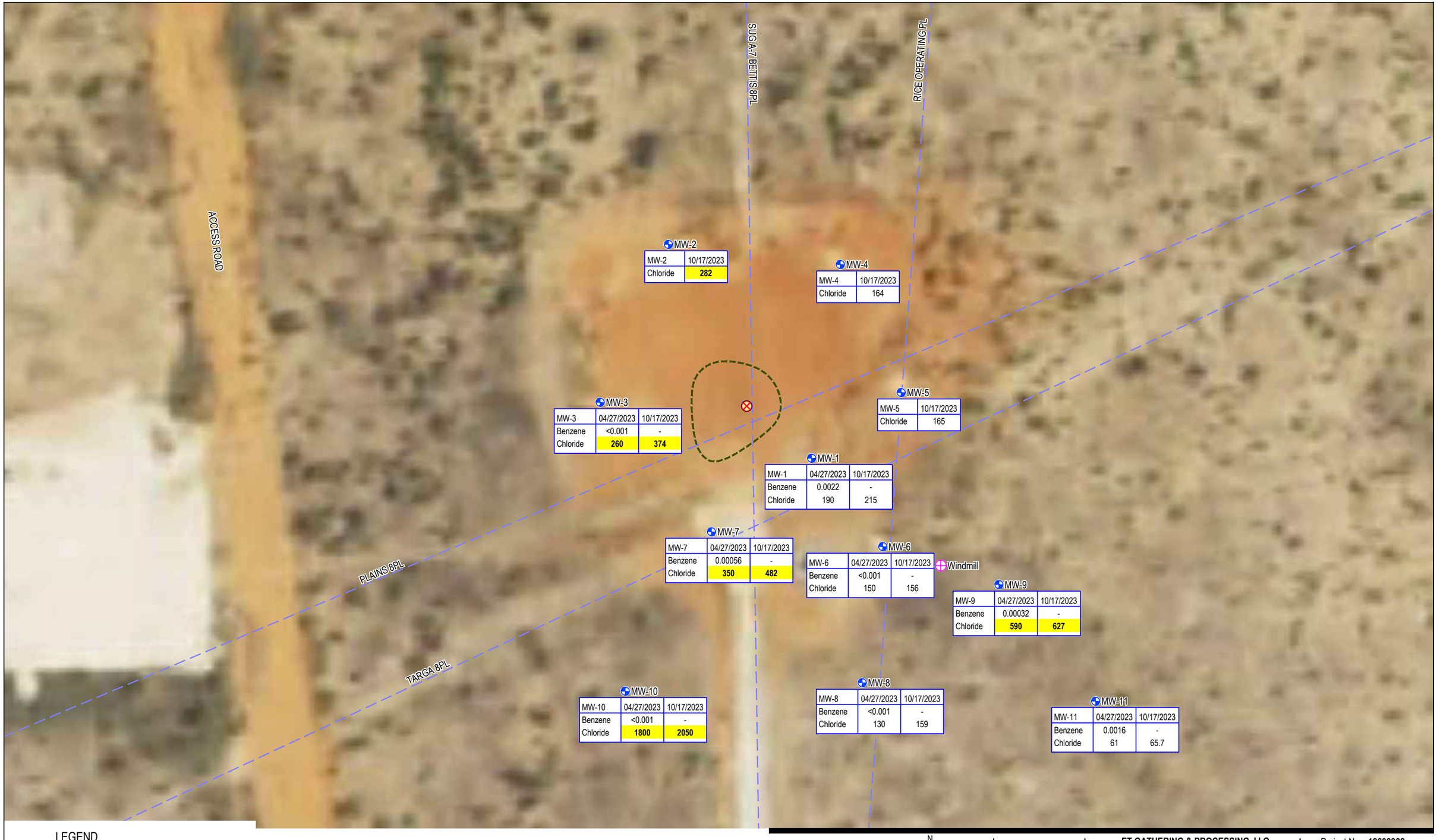
POTENTIOMETRIC SURFACE MAP
(OCTOBER 2023)

Project No. 12603932
Date March 2024

FIGURE 4

Filename: \\ghdnetghdfil\US\Albuquerque\Projects\562\12603932\Digital_Design\ACAD\Figures\RPT002\12603932-GHD-00-00-RPT-EN-D101_DL-002.dwg

Data Source: NAIP Imagery, New Mexico 2014
Lat/Long: 32.47536° North, 103.14215° West




LEGEND

- MONITORING WELL LOCATION
- RELEASE POINT
- SUBSURFACE PIPELINE
- EXCAVATION LIMITS
- \- NOT ANALYZED

NOTES:

1. GROUNDWATER CONCENTRATIONS PRESENTED IN MILLIGRAMS PER LITER (mg/L).
2. YELLOW SHADED CELLS INDICATE EXCEEDANCE OF THE NMWQCC STANDARD.

0 30 60 ft

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

N

GHD

ET GATHERING & PROCESSING, LLC
LEA COUNTY, NEW MEXICO
A-7 BETTIS
NMOCD 1RP-1540

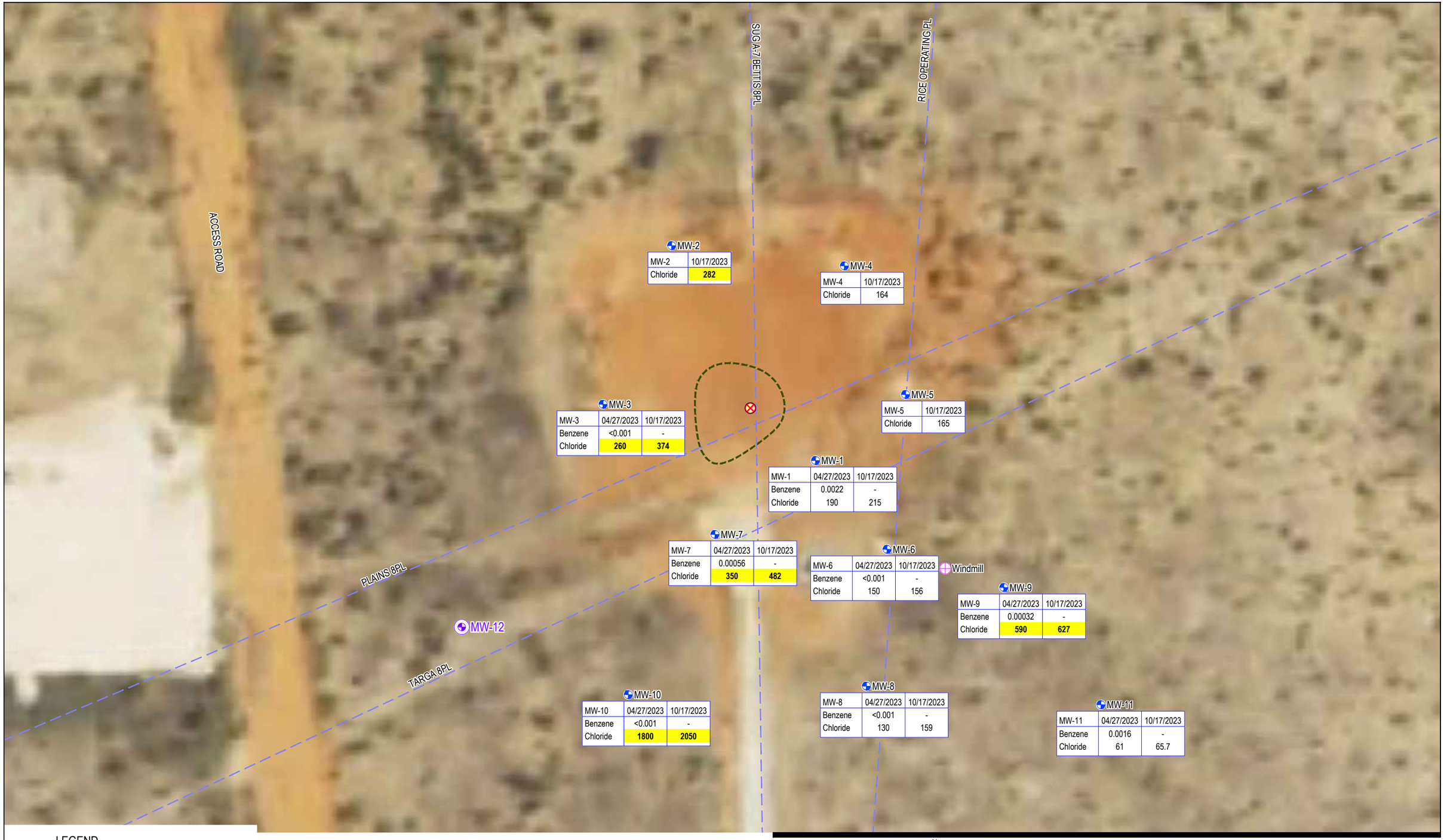
COC CONCENTRATIONS
IN GROUNDWATER (2023)

Project No. 12603932
Date March 2024

FIGURE 5

Filename: \\ghdnetghd\US\Albuquerque\Projects\562\12603932\Digital_Design\ACAD\Figures\RPT002\12603932-GHD-00-00-RPT-EN-D101_DL-002.dwg

Data Source: NAIP Imagery, New Mexico 2014
Lat/Long: 32.47536° North, 103.14215° West




LEGEND

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

0 30 60 ft

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

N

GHD

**ET GATHERING & PROCESSING, LLC**
**LEA COUNTY, NEW MEXICO**
**A-7 BETTIS**
**NMOCD 1RP-1540**

**PROPOSED MONITORING WELL LOCATION MAP**

Project No. **12603932**
Date **March 2024**

**FIGURE 6**

Filename: \\phdnasfiph01\US\Albuquerque\Projects\56\12603932\Digital_Design\ACAD\Figures\RPT002\12603932-GHD-00-00-RPT-EN-D101_DL-002.dwg

Data Source: NAIP Imagery, New Mexico 2014
Lat/Long: 32.47536° North, 103.14215° West

# Appendices

# Appendix A

## Laboratory Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 09, 2023

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

RE: A 7 Bettis OrderNo.: 2304C68

Dear Blair Owen:

Hall Environmental Analysis Laboratory received 10 sample(s) on 4/28/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

**CLIENT:** GHD
**Client Sample ID:** MW-3
**Project:** A 7 Bettis
**Collection Date:** 4/27/2023 11:45:00 AM
**Lab ID:** 2304C68-001 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 260 | 50 | * | mg/L | 100 | 5/2/2023 6:35:52 PM | R96479 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-3
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 11:45:00 AM
**Lab ID:** 2304C68-001 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 111 | 70-130 | | %Rec | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %Rec | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %Rec | 1 | 5/6/2023 4:03:00 AM | R96575 |
| Surr: Toluene-d8 | 94.5 | 70-130 | | %Rec | 1 | 5/6/2023 4:03:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-6
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 3:10:00 PM
**Lab ID:** 2304C68-002 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 150 | 50 | | mg/L | 100 | 5/2/2023 7:00:40 PM | R96479 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD
**Client Sample ID:** MW-6
**Project:** A 7 Bettis
**Collection Date:** 4/27/2023 3:10:00 PM
**Lab ID:** 2304C68-002 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 112 | 70-130 | | %Rec | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %Rec | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Surr: Dibromofluoromethane | 100 | 70-130 | | %Rec | 1 | 5/6/2023 4:27:00 AM | R96575 |
| Surr: Toluene-d8 | 94.6 | 70-130 | | %Rec | 1 | 5/6/2023 4:27:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-1
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 11:10:00 AM
**Lab ID:** 2304C68-003 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 190 | 50 | | mg/L | 100 | 5/2/2023 7:50:18 PM | R96479 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | 2.2 | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1-Methylnaphthalene | 16 | 4.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-1
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 11:10:00 AM
**Lab ID:** 2304C68-003 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 115 | 70-130 | | %Rec | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 100 | 70-130 | | %Rec | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Surr: Dibromofluoromethane | 100 | 70-130 | | %Rec | 1 | 5/6/2023 4:51:00 AM | R96575 |
| Surr: Toluene-d8 | 94.0 | 70-130 | | %Rec | 1 | 5/6/2023 4:51:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-11
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 2:00:00 PM
**Lab ID:** 2304C68-004 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 61 | 50 | | mg/L | 100 | 5/2/2023 8:15:07 PM | R96479 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | 1.6 | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-11
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 2:00:00 PM
**Lab ID:** 2304C68-004 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 114 | 70-130 | | %Rec | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 103 | 70-130 | | %Rec | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Surr: Dibromofluoromethane | 100 | 70-130 | | %Rec | 1 | 5/6/2023 5:16:00 AM | R96575 |
| Surr: Toluene-d8 | 95.3 | 70-130 | | %Rec | 1 | 5/6/2023 5:16:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** DUP01
**Project:** A 7 Bettis **Collection Date:** 4/27/2023
**Lab ID:** 2304C68-005 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 180 | 10 | | mg/L | 200 | 5/4/2023 6:36:45 PM | R96547 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit |
| P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit |
| RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** DUP01
**Project:** A 7 Bettis **Collection Date:** 4/27/2023
**Lab ID:** 2304C68-005 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 114 | 70-130 | | %Rec | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %Rec | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %Rec | 1 | 5/6/2023 5:40:00 AM | R96575 |
| Surr: Toluene-d8 | 95.0 | 70-130 | | %Rec | 1 | 5/6/2023 5:40:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-8
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 1:30:00 PM
**Lab ID:** 2304C68-006 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 130 | 50 | | mg/L | 100 | 5/2/2023 9:04:46 PM | R96479 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-8
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 1:30:00 PM
**Lab ID:** 2304C68-006 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 111 | 70-130 | | %Rec | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 100 | 70-130 | | %Rec | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Surr: Dibromofluoromethane | 96.8 | 70-130 | | %Rec | 1 | 5/6/2023 6:04:00 AM | R96575 |
| Surr: Toluene-d8 | 94.3 | 70-130 | | %Rec | 1 | 5/6/2023 6:04:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-9
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 4:40:00 PM
**Lab ID:** 2304C68-007 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 590 | 100 | * | mg/L | 200 | 5/4/2023 6:49:09 PM | R96547 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-9
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 4:40:00 PM
**Lab ID:** 2304C68-007 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 4-Isopropyltoluene | 2.6 | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| sec-Butylbenzene | 2.4 | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 110 | 70-130 | | %Rec | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 99.3 | 70-130 | | %Rec | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %Rec | 1 | 5/6/2023 6:28:00 AM | R96575 |
| Surr: Toluene-d8 | 99.6 | 70-130 | | %Rec | 1 | 5/6/2023 6:28:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD
**Client Sample ID:** MW-10
**Project:** A 7 Bettis
**Collection Date:** 4/27/2023 1:00:00 PM
**Lab ID:** 2304C68-008 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 1800 | 100 | * | mg/L | 200 | 5/4/2023 7:01:34 PM | R96547 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-10
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 1:00:00 PM
**Lab ID:** 2304C68-008 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 111 | 70-130 | | %Rec | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %Rec | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %Rec | 1 | 5/6/2023 6:53:00 AM | R96575 |
| Surr: Toluene-d8 | 93.0 | 70-130 | | %Rec | 1 | 5/6/2023 6:53:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD
**Client Sample ID:** MW-7
**Project:** A 7 Bettis
**Collection Date:** 4/27/2023 12:20:00 PM
**Lab ID:** 2304C68-009 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **JMT** | |
| Chloride | 350 | 50 | * | mg/L | 100 | 5/2/2023 10:44:02 PM | R96479 |
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** MW-7
**Project:** A 7 Bettis **Collection Date:** 4/27/2023 12:20:00 PM
**Lab ID:** 2304C68-009 **Matrix:** AQUEOUS **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 111 | 70-130 | | %Rec | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 99.3 | 70-130 | | %Rec | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Surr: Dibromofluoromethane | 98.9 | 70-130 | | %Rec | 1 | 5/6/2023 7:17:00 AM | R96575 |
| Surr: Toluene-d8 | 93.3 | 70-130 | | %Rec | 1 | 5/6/2023 7:17:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** Trip Blank
**Project:** A 7 Bettis **Collection Date:**
**Lab ID:** 2304C68-010 **Matrix:** TRIP BLANK **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| Benzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Toluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Naphthalene | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 2-Methylnaphthalene | ND | 4.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Acetone | ND | 10 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Bromobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Bromodichloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Bromoform | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Bromomethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 2-Butanone | ND | 10 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Carbon disulfide | ND | 10 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Carbon Tetrachloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Chlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Chloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Chloroform | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Chloromethane | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 2-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 4-Chlorotoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| cis-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| cis-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Dibromochloromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Dibromomethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,3-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,4-Dichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Dichlorodifluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,1-Dichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,1-Dichloroethene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,3-Dichloropropane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 2,2-Dichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

**Analytical Report**
Lab Order **2304C68**
Date Reported: **5/9/2023**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Client Sample ID:** Trip Blank
**Project:** A 7 Bettis **Collection Date:**
**Lab ID:** 2304C68-010 **Matrix:** TRIP BLANK **Received Date:** 4/28/2023 4:20:00 PM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8260B: VOLATILES** | | | | | | Analyst: **CCM** | |
| 1,1-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Hexachlorobutadiene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 2-Hexanone | ND | 10 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Isopropylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 4-Isopropyltoluene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 4-Methyl-2-pentanone | ND | 10 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Methylene Chloride | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| n-Butylbenzene | ND | 3.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| n-Propylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| sec-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Styrene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| tert-Butylbenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Tetrachloroethene (PCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| trans-1,2-DCE | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| trans-1,3-Dichloropropene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,1,1-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,1,2-Trichloroethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Trichloroethene (TCE) | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Trichlorofluoromethane | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| 1,2,3-Trichloropropane | ND | 2.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Vinyl chloride | ND | 1.0 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Xylenes, Total | ND | 1.5 | | µg/L | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Surr: 1,2-Dichloroethane-d4 | 112 | 70-130 | | %Rec | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Surr: 4-Bromofluorobenzene | 98.5 | 70-130 | | %Rec | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %Rec | 1 | 5/6/2023 7:41:00 AM | R96575 |
| Surr: Toluene-d8 | 93.8 | 70-130 | | %Rec | 1 | 5/6/2023 7:41:00 AM | R96575 |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2304C68**

***09-May-23***

**Client:** GHD

**Project:** A 7 Bettis

| Sample ID: **MB** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **R96479** | RunNo: **96479** | | | | | | | |
| Prep Date: | Analysis Date: **5/2/2023** | SeqNo: **3495781** | Units: **mg/L** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 0.50 | | | | | | | | |

| Sample ID: **LCS** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **R96479** | RunNo: **96479** | | | | | | | |
| Prep Date: | Analysis Date: **5/2/2023** | SeqNo: **3495782** | Units: **mg/L** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 4.9 | 0.50 | 5.000 | 0 | 98.0 | 90 | 110 | | | |

| Sample ID: **MB** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **R96547** | RunNo: **96547** | | | | | | | |
| Prep Date: | Analysis Date: **5/4/2023** | SeqNo: **3500043** | Units: **mg/L** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 0.50 | | | | | | | | |

| Sample ID: **LCS** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **R96547** | RunNo: **96547** | | | | | | | |
| Prep Date: | Analysis Date: **5/4/2023** | SeqNo: **3500044** | Units: **mg/L** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 4.6 | 0.50 | 5.000 | 0 | 91.7 | 90 | 110 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2304C68**

***09-May-23***

**Client:** GHD

**Project:** A 7 Bettis

| Sample ID: **100ng lcs** | SampType: **LCS** | TestCode: **EPA Method 8260B: VOLATILES** |
|---|---|---|
| Client ID: **LCSW** | Batch ID: **R96575** | RunNo: **96575** |
| Prep Date: | Analysis Date: **5/6/2023** | SeqNo: **3501718** Units: **µg/L** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 19 | 1.0 | 20.00 | 0 | 96.3 | 70 | 130 | | | |
| Toluene | 19 | 1.0 | 20.00 | 0 | 95.4 | 70 | 130 | | | |
| Chlorobenzene | 19 | 1.0 | 20.00 | 0 | 97.1 | 70 | 130 | | | |
| 1,1-Dichloroethene | 18 | 1.0 | 20.00 | 0 | 89.2 | 70 | 130 | | | |
| Trichloroethene (TCE) | 19 | 1.0 | 20.00 | 0 | 93.0 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 11 | | 10.00 | | 109 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 10 | | 10.00 | | 101 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 9.8 | | 10.00 | | 97.7 | 70 | 130 | | | |
| Surr: Toluene-d8 | 9.4 | | 10.00 | | 94.5 | 70 | 130 | | | |

| Sample ID: **mb** | SampType: **MBLK** | TestCode: **EPA Method 8260B: VOLATILES** |
|---|---|---|
| Client ID: **PBW** | Batch ID: **R96575** | RunNo: **96575** |
| Prep Date: | Analysis Date: **5/6/2023** | SeqNo: **3501719** Units: **µg/L** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 1.0 | | | | | | | | |
| Toluene | ND | 1.0 | | | | | | | | |
| Ethylbenzene | ND | 1.0 | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 1.0 | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | | | | | | | |
| 1,2-Dichloroethane (EDC) | ND | 1.0 | | | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | | | | | | | | |
| Naphthalene | ND | 2.0 | | | | | | | | |
| 1-Methylnaphthalene | ND | 4.0 | | | | | | | | |
| 2-Methylnaphthalene | ND | 4.0 | | | | | | | | |
| Acetone | ND | 10 | | | | | | | | |
| Bromobenzene | ND | 1.0 | | | | | | | | |
| Bromodichloromethane | ND | 1.0 | | | | | | | | |
| Bromoform | ND | 1.0 | | | | | | | | |
| Bromomethane | ND | 3.0 | | | | | | | | |
| 2-Butanone | ND | 10 | | | | | | | | |
| Carbon disulfide | ND | 10 | | | | | | | | |
| Carbon Tetrachloride | ND | 1.0 | | | | | | | | |
| Chlorobenzene | ND | 1.0 | | | | | | | | |
| Chloroethane | ND | 2.0 | | | | | | | | |
| Chloroform | ND | 1.0 | | | | | | | | |
| Chloromethane | ND | 3.0 | | | | | | | | |
| 2-Chlorotoluene | ND | 1.0 | | | | | | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

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

WO#: **2304C68**
***09-May-23***

**Client:** GHD
**Project:** A 7 Bettis

| Sample ID: **mb** | SampType: **MBLK** | TestCode: **EPA Method 8260B: VOLATILES** |
|---|---|---|
| Client ID: **PBW** | Batch ID: **R96575** | RunNo: **96575** |
| Prep Date: | Analysis Date: **5/6/2023** | SeqNo: **3501719** Units: **µg/L** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-Chlorotoluene | ND | 1.0 | | | | | | | | |
| cis-1,2-DCE | ND | 1.0 | | | | | | | | |
| cis-1,3-Dichloropropene | ND | 1.0 | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 2.0 | | | | | | | | |
| Dibromochloromethane | ND | 1.0 | | | | | | | | |
| Dibromomethane | ND | 1.0 | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 1.0 | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 1.0 | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 1.0 | | | | | | | | |
| Dichlorodifluoromethane | ND | 1.0 | | | | | | | | |
| 1,1-Dichloroethane | ND | 1.0 | | | | | | | | |
| 1,1-Dichloroethene | ND | 1.0 | | | | | | | | |
| 1,2-Dichloropropane | ND | 1.0 | | | | | | | | |
| 1,3-Dichloropropane | ND | 1.0 | | | | | | | | |
| 2,2-Dichloropropane | ND | 2.0 | | | | | | | | |
| 1,1-Dichloropropene | ND | 1.0 | | | | | | | | |
| Hexachlorobutadiene | ND | 1.0 | | | | | | | | |
| 2-Hexanone | ND | 10 | | | | | | | | |
| Isopropylbenzene | ND | 1.0 | | | | | | | | |
| 4-Isopropyltoluene | ND | 1.0 | | | | | | | | |
| 4-Methyl-2-pentanone | ND | 10 | | | | | | | | |
| Methylene Chloride | ND | 3.0 | | | | | | | | |
| n-Butylbenzene | ND | 3.0 | | | | | | | | |
| n-Propylbenzene | ND | 1.0 | | | | | | | | |
| sec-Butylbenzene | ND | 1.0 | | | | | | | | |
| Styrene | ND | 1.0 | | | | | | | | |
| tert-Butylbenzene | ND | 1.0 | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 2.0 | | | | | | | | |
| Tetrachloroethene (PCE) | ND | 1.0 | | | | | | | | |
| trans-1,2-DCE | ND | 1.0 | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 1.0 | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 1.0 | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 1.0 | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 1.0 | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 1.0 | | | | | | | | |
| Trichloroethene (TCE) | ND | 1.0 | | | | | | | | |
| Trichlorofluoromethane | ND | 1.0 | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 2.0 | | | | | | | | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix | E | Above Quantitation Range/Estimated Value |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| PQL | Practical Quanitative Limit | RL | Reporting Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2304C68**

***09-May-23***

**Client:** GHD

**Project:** A 7 Bettis

| Sample ID: **mb** | SampType: **MBLK** | TestCode: **EPA Method 8260B: VOLATILES** |
|---|---|---|
| Client ID: **PBW** | Batch ID: **R96575** | RunNo: **96575** |
| Prep Date: | Analysis Date: **5/6/2023** | SeqNo: **3501719** Units: **µg/L** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | ND | 1.0 | | | | | | | | |
| Xylenes, Total | ND | 1.5 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 12 | | 10.00 | | 116 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 10 | | 10.00 | | 104 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 10 | | 10.00 | | 101 | 70 | 130 | | | |
| Surr: Toluene-d8 | 9.6 | | 10.00 | | 95.6 | 70 | 130 | | | |

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| D | Sample Diluted Due to Matrix |
| H | Holding times for preparation or analysis exceeded |
| ND | Not Detected at the Reporting Limit |
| PQL | Practical Quanitative Limit |
| S | % Recovery outside of standard limits. If undiluted results may be estimated. |
| B | Analyte detected in the associated Method Blank |
| E | Above Quantitation Range/Estimated Value |
| J | Analyte detected below quantitation limits |
| P | Sample pH Not In Range |
| RL | Reporting Limit |

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

# Sample Log-In Check List

Client Name: GHD | Work Order Number: 2304C68 | RcptNo: 1

Received By: **Joseph Alderette** 4/28/2023 4:20:00 PM

Completed By: **Cheyenne Cason** 4/28/2023 4:54:48 PM

Reviewed By: 5/1/23

## Chain of Custody

| | | | |
|---|---|---|---|
| 1. Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. How was the sample delivered? | Client | | |

## Log In

| | | | |
|---|---|---|---|
| 3. Was an attempt made to cool the samples? | Yes ☑ | No ☐ | NA ☐ |
| 4. Were all samples received at a temperature of >0° C to 6.0°C | Yes ☑ | No ☐ | NA ☐ |
| 5. Sample(s) in proper container(s)? | Yes ☑ | No ☐ | |
| 6. Sufficient sample volume for indicated test(s)? | Yes ☑ | No ☐ | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes ☑ | No ☐ | |
| 8. Was preservative added to bottles? | Yes ☐ | No ☑ | NA ☐ |
| 9. Received at least 1 vial with headspace <1/4" for AQ VOA? | Yes ☑ | No ☐ | NA ☐ |
| 10. Were any sample containers received broken? | Yes ☐ | No ☑ | |
| 11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) | Yes ☑ | No ☐ | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes ☑ | No ☐ | |
| 13. Is it clear what analyses were requested? | Yes ☑ | No ☐ | |
| 14. Were all holding times able to be met? (If no, notify customer for authorization.) | Yes ☑ | No ☐ | |

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: 5/1/23

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | 1.5 | Good | Not Present | Morty | | |

# Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE ABQ, NM 87110

Phone #: 505-934-0902

email or Fax#:

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

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

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: A-7 Bettis

Project #: 12603932

Project Manager: Blair Owen

Sampler:
On Ice: ☑ Yes ☐ No
# of Coolers: 1 Marty
Cooler Temp(including CF): 1.6-0.1=1.5 (°C)

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

| Date | Time | Matrix | Sample Name | Container Type and # | Preservative Type | HEAL No. 2304068 | BTEX / MTBE / TMB's (8021) | TPH:8015D(GRO / DRO / MRO) | 8081 Pesticides/8082 PCB's | EDB (Method 504.1) | PAHs by 8310 or 8270SIMS | RCRA 8 Metals | Cl, F, Br, $NO_3$, $NO_2$, $PO_4$, $SO_4$ | 8260 (VOA) | 8270 (Semi-VOA) | Total Coliform (Present/Absent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/27 | 1145 | | MW-3 | 3 VOA 2 500ml | HCl | 001 | | | | | | | X | X | | |
| 4/27 | 1210 | | MW-6 | | | 002 | | | | | | | X | X | | |
| 4/27 | 1110 | | MW-1 | | | 003 | | | | | | | X | X | | |
| 4/27 | 1400 | | MW-11 | | | 004 | | | | | | | X | X | | |
| — | — | | DUP01 | | | 005 | | | | | | | X | X | | |
| 4/27 | 1370 | | MW-8 | | | 006 | | | | | | | X | X | | |
| 4/27 | 1440 | | MW-9 | | | 007 | | | | | | | X | X | | |
| 4/27 | 1300 | | MW-10 | | | 008 | | | | | | | X | X | | |
| 4/26 | 1220 | | MW-7 | | | 009 | | | | | | | X | X | | |
| | | | TRIP Blank DAD 5/1/23 | | | -010 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 4/28 | 1620 | | | COO | 4.28.23 | 16:20 |
| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |

Remarks:

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

October 31, 2023

Simon Kozik
GHD
6121 Indian School Rd NE Ste 200
Albuquerque, NM 87110

Work Order: **HS23101262**

Laboratory Results for: **12603932 - A-7 Bettis**

Dear Simon Kozik,

ALS Environmental received 13 sample(s) on Oct 19, 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: 31-Oct-23

**Client:** GHD
**Project:** 12603932 - A-7 Bettis
**Work Order:** HS23101262

**SAMPLE SUMMARY**

| Lab Samp ID | Client Sample ID | Matrix | TagNo | Collection Date | Date Received | Hold |
|---|---|---|---|---|---|---|
| HS23101262-01 | MW-2-20231017 | Groundwater | | 17-Oct-2023 18:00 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-02 | MW-3-20231017 | Groundwater | | 17-Oct-2023 18:05 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-03 | MW-4-20231017 | Groundwater | | 17-Oct-2023 15:25 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-04 | MW-1-20231017 | Groundwater | | 17-Oct-2023 17:40 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-05 | MW-7-20231017 | Groundwater | | 17-Oct-2023 17:25 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-06 | MW-5-20231017 | Groundwater | | 17-Oct-2023 15:30 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-07 | MW-8-20231017 | Groundwater | | 17-Oct-2023 16:20 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-08 | MW-11-20231017 | Groundwater | | 17-Oct-2023 16:15 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-09 | MW-9-20231017 | Groundwater | | 17-Oct-2023 17:00 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-10 | MW-6-20231017 | Groundwater | | 17-Oct-2023 16:50 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-11 | MW-10-20231017 | Groundwater | | 17-Oct-2023 18:15 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-12 | DUP-01 | Groundwater | | 17-Oct-2023 00:00 | 19-Oct-2023 09:20 | ☐ |
| HS23101262-13 | Trip Blank | Water | cg-100323-132 | 17-Oct-2023 00:00 | 19-Oct-2023 09:20 | ☑ |

**ALS Houston, US** Date: 31-Oct-23

**Client:** GHD **CASE NARRATIVE**
**Project:** 12603932 - A-7 Bettis
**Work Order:** HS23101262

## Work Order Comments

- Login comments:Trip Blank received, not listed on COC placed on hold.

## WetChemistry by Method E300

### Batch ID: R450482

#### Sample ID: MW-11-20231017 (HS23101262-08MS)

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-2-20231017
Collection Date: 17-Oct-2023 18:00

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-01
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **282** | | **5.00** | **mg/L** | 10 | 30-Oct-2023 17:01 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-3-20231017
Collection Date: 17-Oct-2023 18:05

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-02
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **374** | | **5.00** | **mg/L** | 10 | 30-Oct-2023 17:07 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-4-20231017
Collection Date: 17-Oct-2023 15:25

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-03
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **164** | | **2.50** | **mg/L** | 5 | 30-Oct-2023 17:12 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-1-20231017
Collection Date: 17-Oct-2023 17:40

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-04
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **215** | | **2.50** | **mg/L** | 5 | 30-Oct-2023 17:18 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-7-20231017
Collection Date: 17-Oct-2023 17:25

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-05
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **482** | | **5.00** | **mg/L** | 10 | 30-Oct-2023 17:24 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-5-20231017
Collection Date: 17-Oct-2023 15:30

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-06
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **165** | | **1.00** | **mg/L** | 2 | 30-Oct-2023 17:30 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-8-20231017
Collection Date: 17-Oct-2023 16:20

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-07
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **159** | | **1.00** | **mg/L** | 2 | 30-Oct-2023 18:05 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-11-20231017
Collection Date: 17-Oct-2023 16:15

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-08
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **65.7** | | **0.500** | **mg/L** | 1 | 30-Oct-2023 18:11 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-9-20231017
Collection Date: 17-Oct-2023 17:00

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-09
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **627** | | **5.00** | **mg/L** | 10 | 30-Oct-2023 18:28 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-6-20231017
Collection Date: 17-Oct-2023 16:50

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-10
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **156** | | **1.00** | **mg/L** | 2 | 30-Oct-2023 18:34 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: MW-10-20231017
Collection Date: 17-Oct-2023 18:15

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-11
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **2,050** | | **25.0** | **mg/L** | 50 | 30-Oct-2023 18:40 |

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

**ALS Houston, US** Date: 31-Oct-23

Client: GHD
Project: 12603932 - A-7 Bettis
Sample ID: DUP-01
Collection Date: 17-Oct-2023 00:00

**ANALYTICAL REPORT**
WorkOrder:HS23101262
Lab ID:HS23101262-12
Matrix:Groundwater

| ANALYSES | RESULT | QUAL | REPORT LIMIT | UNITS | DILUTION FACTOR | DATE ANALYZED |
|---|---|---|---|---|---|---|
| **ANIONS BY E300.0, REV 2.1, 1993** | | **Method:E300** | | | | Analyst: TH |
| **Chloride** | **2,140** | | **25.0** | **mg/L** | 50 | 30-Oct-2023 18:46 |

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

**ALS Houston, US** Date: 31-Oct-23

**Client:** GHD
**Project:** 12603932 - A-7 Bettis
**WorkOrder:** HS23101262

## DATES REPORT

| Sample ID | Client Samp ID | Collection Date | Leachate Date | Prep Date | Analysis Date | DF |
|---|---|---|---|---|---|---|
| **Batch ID:** R450482 ( 0 ) | **Test Name :** ANIONS BY E300.0, REV 2.1, 1993 | | | | **Matrix:** Groundwater | |
| HS23101262-01 | MW-2-20231017 | 17 Oct 2023 18:00 | | | 30 Oct 2023 17:01 | 10 |
| HS23101262-02 | MW-3-20231017 | 17 Oct 2023 18:05 | | | 30 Oct 2023 17:07 | 10 |
| HS23101262-03 | MW-4-20231017 | 17 Oct 2023 15:25 | | | 30 Oct 2023 17:12 | 5 |
| HS23101262-04 | MW-1-20231017 | 17 Oct 2023 17:40 | | | 30 Oct 2023 17:18 | 5 |
| HS23101262-05 | MW-7-20231017 | 17 Oct 2023 17:25 | | | 30 Oct 2023 17:24 | 10 |
| HS23101262-06 | MW-5-20231017 | 17 Oct 2023 15:30 | | | 30 Oct 2023 17:30 | 2 |
| HS23101262-07 | MW-8-20231017 | 17 Oct 2023 16:20 | | | 30 Oct 2023 18:05 | 2 |
| HS23101262-08 | MW-11-20231017 | 17 Oct 2023 16:15 | | | 30 Oct 2023 18:11 | 1 |
| HS23101262-09 | MW-9-20231017 | 17 Oct 2023 17:00 | | | 30 Oct 2023 18:28 | 10 |
| HS23101262-10 | MW-6-20231017 | 17 Oct 2023 16:50 | | | 30 Oct 2023 18:34 | 2 |
| HS23101262-11 | MW-10-20231017 | 17 Oct 2023 18:15 | | | 30 Oct 2023 18:40 | 50 |
| HS23101262-12 | DUP-01 | 17 Oct 2023 00:00 | | | 30 Oct 2023 18:46 | 50 |

**ALS Houston, US** Date: 31-Oct-23

**Client:** GHD
**Project:** 12603932 - A-7 Bettis
**WorkOrder:** HS23101262

**QC BATCH REPORT**

**Batch ID:** R450482 ( 0 ) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

**MBLK** Sample ID: **MBLK** Units: **mg/L** Analysis Date: **30-Oct-2023 14:36**
Client ID: Run ID: **ICS-Integrion_450482** SeqNo: **7642623** PrepDate: DF: **1**

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

**LCS** Sample ID: **LCS** Units: **mg/L** Analysis Date: **30-Oct-2023 14:48**
Client ID: Run ID: **ICS-Integrion_450482** SeqNo: **7642624** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 20.29 | 0.500 | 20 | 0 | 101 | 90 - 110 | | | | |

**MS** Sample ID: **HS23101916-11MS** Units: **mg/L** Analysis Date: **30-Oct-2023 15:35**
Client ID: Run ID: **ICS-Integrion_450482** SeqNo: **7642626** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 23.63 | 0.500 | 10 | 13.22 | 104 | 80 - 120 | | | | |

**MS** Sample ID: **HS23101262-08MS** Units: **mg/L** Analysis Date: **30-Oct-2023 18:17**
Client ID: **MW-11-20231017** Run ID: **ICS-Integrion_450482** SeqNo: **7642647** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 71.21 | 0.500 | 10 | 65.66 | 55.5 | 80 - 120 | | | | SO |

**MSD** Sample ID: **HS23101916-11MSD** Units: **mg/L** Analysis Date: **30-Oct-2023 15:41**
Client ID: Run ID: **ICS-Integrion_450482** SeqNo: **7642627** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 23.5 | 0.500 | 10 | 13.22 | 103 | 80 - 120 | 23.63 | 0.539 | 20 | |

**MSD** Sample ID: **HS23101262-08MSD** Units: **mg/L** Analysis Date: **30-Oct-2023 18:22**
Client ID: **MW-11-20231017** Run ID: **ICS-Integrion_450482** SeqNo: **7642648** PrepDate: DF: **1**

| Analyte | Result | PQL | SPK Val | SPK Ref Value | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 71.31 | 0.500 | 10 | 65.66 | 56.5 | 80 - 120 | 71.21 | 0.143 | 20 | SO |

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

| | | | |
|---|---|---|---|
| HS23101262-01 | HS23101262-02 | HS23101262-03 | HS23101262-04 |
| HS23101262-05 | HS23101262-06 | HS23101262-07 | HS23101262-08 |
| HS23101262-09 | HS23101262-10 | HS23101262-11 | HS23101262-12 |

**ALS Houston, US** Date: 31-Oct-23

**Client:** GHD
**Project:** 12603932 - A-7 Bettis
**WorkOrder:** **HS23101262**

**QUALIFIERS, ACRONYMS, UNITS**

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

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

**ALS Houston, US** Date: 31-Oct-23

## CERTIFICATIONS,ACCREDITATIONS & LICENSES

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

**ALS Houston, US** Date: 31-Oct-23

## Sample Receipt Checklist

**Work Order ID:** HS23101262 **Date/Time Received:** 19-Oct-2023 09:20

**Client Name:** GHD Albuquerque **Received by:** Corey Grandits

**Completed By:** /S/ Corey Grandits (eSignature) 19-Oct-2023 14:20 (Date/Time) **Reviewed by:** /S/ James Guin (eSignature) 20-Oct-2023 09:35 (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 ☐ | 2 Page(s) |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | COC IDs:305651, 305650 |
| 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): | 1.7UC/1.6C | IR31 | |
| Cooler(s)/Kit(s): | 51636 | | |
| Date/Time sample(s) sent to storage: | 10/19/23 | | |
| 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: Trip Blank received, not listed on COC placed on hold.

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 21

COC ID: 305651

ALS Project Manager: | ALS Work Order #:

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | |
|---|---|---|---|---|---|
| Purchase Order | 12603932 - E-19002-GS-26050005 | Project Name | 12603932 - A-7 Bettis | A | 8260_LL_W (8260 BTEX) |
| Work Order | | Project Number | 12603932 | B | 300_W (Chloride) |
| Company Name | GHD | Bill To Company | ETC Texas Pipeline, LTD | C | |
| Send Report To | Blair Owen | Invoice Attn | ETC Pipeline A/P | D | |
| Address | 11451 Katy Fwy Suite 400 | Address | 1300 Main Street | E | |
| | | | | F | |
| City/State/Zip | Houston, TX 77079 | City/State/Zip | Houston TX 77002 | G | |
| Phone | (561) 339-3572 | Phone | | H | |
| Fax | | Fax | | I | |
| e-Mail Address | blair.owen@ghd.com | e-Mail Address | apinvoicesetp.mailbox@energytransfer.com | J | |

HS23101262
GHD
12603932 - A-7 Bettis

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-2-20231017 | 10/17 | 1800 | GW | 8 | 1 | | X | | | | | | | | | |
| 2 | MW-3-20231017 | 10/17 | 1805 | GW | 8 | 1 | | X | | | | | | | | | |
| 3 | MW-4-20231017 | 10/17 | 1525 | GW | 8 | 1 | | X | | | | | | | | | |
| 4 | MW-1-20231017 | 10/17 | 1740 | GW | 8 | 1 | | X | | | | | | | | | |
| 5 | MW-7-20231017 | 10/17 | 1725 | GW | 8 | 1 | | X | | | | | | | | | |
| 6 | MW-5-20231017 | 10/17 | 1530 | GW | 8 | 1 | | X | | | | | | | | | |
| 7 | MW-8-20231017 | 10/17 | 1620 | GW | 8 | 1 | | X | | | | | | | | | |
| 8 | MW-11-20231017 | 10/17 | 1615 | GW | 8 | 1 | | X | | | | | | | | | |
| 9 | MW-9-20231017 | 10/17 | 1700 | GW | 8 | 1 | | X | | | | | | | | | |
| 10 | MW-6-20231017 | 10/17 | 1650 | GW | 8 | 1 | | X | | | | | | | | | |

Sampler(s) Please Print & Sign: Hunter Johnson

Shipment Method:

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: 10/18 | Time: 0745 | Received by: | |
| Relinquished by: | Date: | Time: | Received by (Laboratory): CG 10-19-23 0920 | |
| Logged by (Laboratory): | Date: | Time: | Checked by (Laboratory): | |

Notes: 12603932 - A-7 Bettis

| Cooler ID | Cooler Temp. |
|---|---|
| 516236 | 1.7 |
| 18291 | |

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.

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 2 of 2

COC ID: 305650

ALS Project Manager: | ALS Work Order #:

| Customer Information | | Project Information | | Parameter/Method Request for Analysis | |
|---|---|---|---|---|---|
| Purchase Order | 12603932 - E-19002-GS-26050005 | Project Name | 12603932 - A-7 Bettis | A | 8260_LL_W (8260 BTEX) |
| Work Order | | Project Number | 12603932 | B | 300_W (Chloride) |
| Company Name | GHD | Bill To Company | ETC Texas Pipeline, LTD | C | |
| Send Report To | Blair Owen | Invoice Attn | ETC Pipeline A/P | D | |
| Address | 11451 Katy Fwy Suite 400 | Address | 1300 Main Street | E | |
| | | | | F | |
| City/State/Zip | Houston, TX 77079 | City/State/Zip | Houston TX 77002 | G | |
| Phone | (561) 339-3572 | Phone | | H | |
| Fax | | Fax | | I | |
| e-Mail Address | blair.owen@ghd.com | e-Mail Address | apinvoicesetp.mailbox@energytransfer.com | J | |

**HS23101262**
GHD
12603932 - A-7 Bettis

| No. | Sample Description | Date | Time | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-10-20231017 | 10/17 | 1815 | GW | 8 | 1 | | X | | | | | | | | | |
| 2 | DUP-07 | 10/17 | | GW | 8 | 1 | | X | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

Sampler(s) Please Print & Sign: Hunter Johnson

Shipment Method:

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

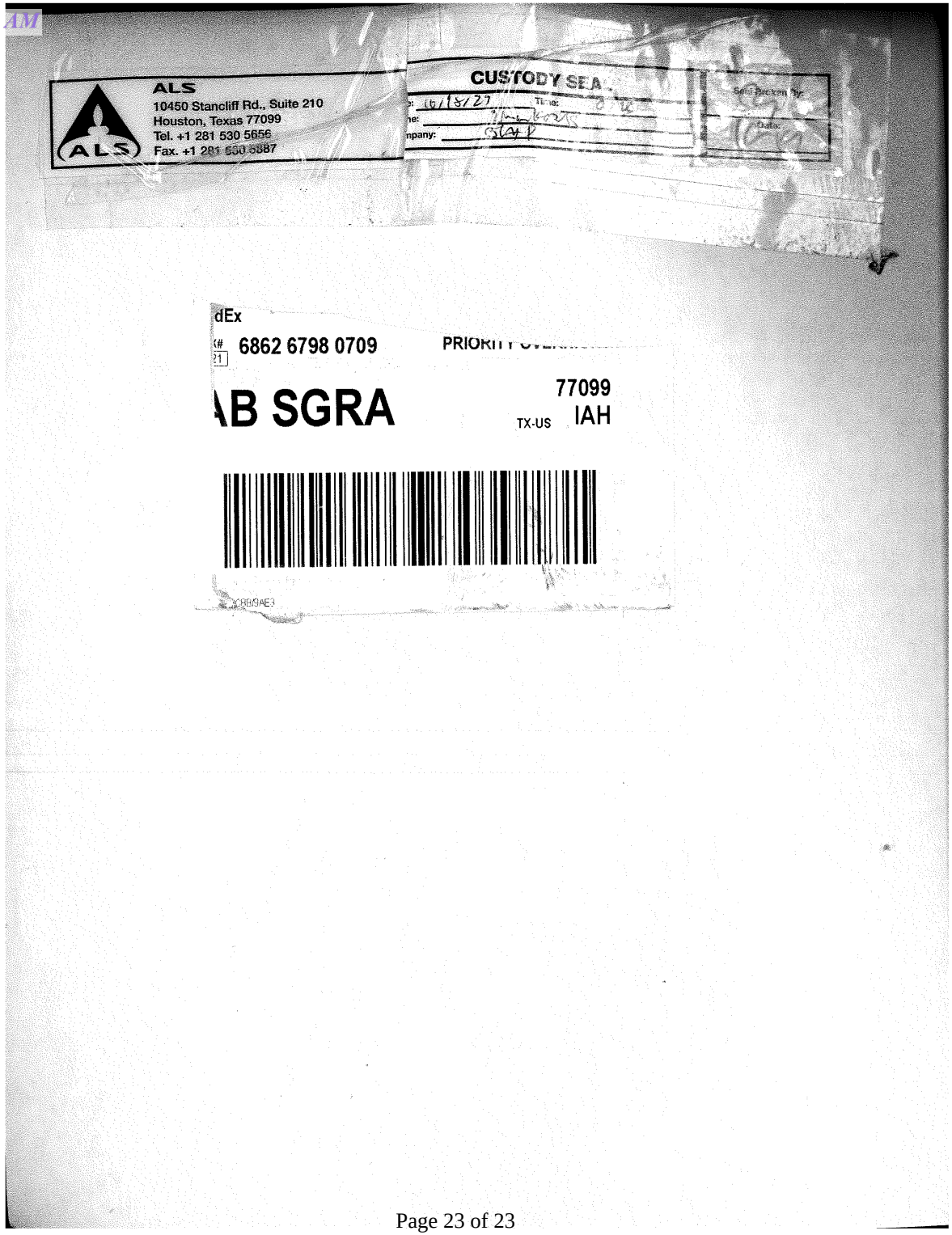
Results Due Date:

| | | | | |
|---|---|---|---|---|
| Relinquished by: | Date: 10/18 | Time: 0745 | Received by: | Notes: 12603932 - A-7 Bettis |
| Relinquished by: | Date: | Time: | Received by (Laboratory): CH 10-19-23 0930 | Cooler ID / Cooler Temp. |
| Logged by (Laboratory): | Date: | Time: | Checked by (Laboratory): | QC Package: (Check One Box Below) |

QC Package: [X] Level II Std QC [ ] Level III Std QC/Raw Data [ ] Level IV SW846/CLP [ ] Other [ ] TRRP Checklist [ ] TRRP Level IV

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

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



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

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

CONDITIONS

Action 342826

## CONDITIONS

| Operator: | OGRID: |
|---|---|
| ETC Texas Pipeline, Ltd.<br>8111 Westchester Drive<br>Dallas, TX 75225 | 371183 |
| | Action Number:<br>342826 |
| | 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 A-7 Bettis: Content Satisfactory 1. Continue semi-annual groundwater monitoring for chloride in MW-1, MW-3, MW-6, MW-7, MW-9 and MW-10 2. Continue annual groundwater monitoring in wells: MW-2, MW-4, MW-5, MW-8, and MW-11 3. BTEX may be suspended from the sampling program as at least eight (8) consecutive quarters and/or semi-annual events have demonstrated concentrations below the standards in the WQCC. 4. Proceed to install MW-12 upgradient of MW-10 as planned. 5. Submit the 2024 Annual Report by April 1 2025. | 6/7/2024 |