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Your ref: AP-007  
Our ref: 12604539-Buchanan-2

August 7, 2025

Mr. Michael Buchanan  
State of New Mexico  
Energy, Minerals, and Natural Resources Department  
Oil Conservation Division  
8801 Horizon Boulevard NE, Suite 260  
Albuquerque, New Mexico 87113

2024 Annual Groundwater Monitoring Report  
Chevron Grayburg 6-Inch Sec. 6 (Historical)  
Plains All American Pipeline, L.P.  
Lea County, New Mexico  
New Mexico Oil Conservation Division Remediation Case No. 1RP-2637  
Incident Number nAPP2108849308

Dear Mr. Buchanan:

On behalf of Plains All American Pipeline, L.P. (Plains), GHD Services Inc. (GHD) is submitting the *2024 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 2024 in accordance with the NMOCD's recommendations in response to the *2023 Annual Groundwater Monitoring Report*.

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

Regards,

A handwritten signature in blue ink, appearing to read "A. Copeland", is positioned above the printed name.

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Encl.: 2024 Annual Groundwater Monitoring Report



# **2024 Annual Groundwater Monitoring Report**

**Chevron Grayburg 6-Inch Sec. 6  
(Historical)**

**Lea County, New Mexico**

**NMOCD 1RP-2637**

**Incident ID #: nAPP2108849308**

Plains All American Pipeline, L.P.

August 7, 2025

➔ **The Power of Commitment**

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# 1. Introduction and Site History

This report presents the results of groundwater monitoring activities at the Plains All American Pipeline, L.P. (Plains) Chevron Grayburg 6-Inch Sec. 6 (Historical) release Site (Site) by GHD Services Inc. (GHD). The Site is located approximately 14 miles southwest of Lovington and in the NW ¼, NE ¼, Section 6, Township 18 South, Range 35 East in Lea County, New Mexico. The coordinates of this Site are 32.7811 N latitude and 103.4925°W longitude. The location of the Site is shown in Figure 1. A detailed map of the Site is provided on Figure 2. The property affected by the release is owned by the State of New Mexico and is administered by the New Mexico State Land Office (NMSLO). The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under Remediation Plan (RP)-2637 and is associated with incident number nAPP2108849308.

A crude oil release occurred on October 8, 2010, due to an excavator striking a tee connected to the Chevron Grayburg 6-inch pipeline during line replacement. An Initial Release Notification and Corrective Action, Form C-141 was submitted to the New Mexico Oil Conservation Division (NMOCD) on October 8, 2010, and was assigned Remediation Permit (RP) 1RP-2637. A copy of the Release Notification and Corrective Action, Form C-141 is attached as Appendix A. On October 22, 2010, project management responsibilities and remediation responsibilities were assumed by Basin Environmental Service Technologies, LLC (Basin). Four monitoring wells (MW-1, MW-2, MW-3, and MW-4) were installed in June 2012 and three monitoring wells (MW-5, MW-6, and MW-7) were installed in March 2013 to delineate the extent of groundwater contamination.

On October 1, 2016, GHD assumed Site groundwater project management and remediation responsibilities. Results of groundwater monitoring events and light non-aqueous phase liquid (LNAPL) recovery prior to October 1, 2016, were provided by Plains. GHD is relying on the provided information to be accurate and true. GHD provided oversight to the installation of seven monitoring wells (MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14) in November 2017 to further delineate the extent of groundwater contamination. All wells were installed with NMOCD approval. A detailed map of the Site with monitoring well locations depicted is provided on Figure 2.

Currently, the Site has a network of 14 groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14) which are monitored quarterly to monitor the concentrations of constituents of concern (COCs) and to delineate the extent of the contamination. The COCs are benzene, toluene, ethylbenzene, and total xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAH), which includes benzo(a)pyrene, total naphthalene, and combined monomethylnaphthalenes (1-methylnaphthalenes and 2-methylnaphthalenes).

## 2. Groundwater Monitoring

GHD performed quarterly groundwater monitoring activities at the Site on February 26-27 and 29, May 20-21, August 19-20, and November 18-19, 2024. The monitoring program included quarterly groundwater gauging and sampling from monitoring wells.

### 2.1 Monitoring Well Gauging

On February 26-27 and 29, May 20-21, August 19-20, and November 18-19, 2024, GHD personnel measured the depth to groundwater in monitoring wells MW-1 through MW-14 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.

Based on the data collected in 2024, groundwater flow is generally west-southwest and is consistent with historical data for the Site. The groundwater gradient was calculated at 0.0006 foot per linear foot (ft/ft) in February, 0.003 ft/ft in May, 0.029 ft/ft in August, and 0.048 ft/ft in November. The potentiometric surface indicates groundwater elevations

have inclined an average 0.74 feet between November 2023 and November 2024. Fluctuations in the elevation of the potentiometric surface are attributed to seasonal weather conditions. Groundwater potentiometric surface maps are presented as Figures 3, 4, 5, and 6.

Two of the fourteen monitoring wells at the Site contained LNAPL throughout 2024 with measurable thicknesses ranging from 0.01 ft to 4.88 ft. Depth to groundwater, LNAPL thickness, and calculated groundwater elevations are summarized in Table 1 and represented on Figures 7, 8, 9, and 10.

## 2.2 Groundwater Sampling

Following gauging during each quarterly monitoring event in February, May, August, and November 2024, GHD personnel utilized clean, disposable, polyvinyl chloride (PVC) bailers to purge a minimum of three well volumes of groundwater or until the well was dry. The well was allowed to recover before collecting a groundwater sample. Purged water recovered during the monitoring events was placed into the Site's above-ground storage tank (AST) pending disposal. Purge water was periodically transported off-Site and disposed at a NMOCD-approved disposal facility as directed by Plains. Disposal records are available upon request.

Groundwater samples were collected, placed in laboratory provided sample containers, packed in a cooler with ice, and transported under Chain-of-Custody documentation to Pace Analytical Laboratory in Mt. Juliet, Tennessee in February 2024 and ALS Environmental Laboratory in Houston, Texas in May, August, and November 2024. Analyses of BTEX were performed according to the United States Environmental Protection Agency (USEPA) Method SW846-8021B for the February event and according to the USEPA Method SW846-8260 for the May, August, and November events.

On an annual basis, groundwater samples are analyzed for PAH by EPA Method SW846-8270C-SIM for monitoring wells not having previously met the criteria of two consecutive years of PAH compounds being below NMWQCC standards and below 0.001 milligrams per liter (mg/L) for PAH compounds with no NMWQCC standard as required by the NMOCD. One sample was collected from monitoring well MW-8 on November 19, 2024, and was submitted for PAH analysis.

## 2.3 Quality Assurance/Quality Control

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

## 2.4 Analytical Results

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

Analytical results indicated benzene at concentrations exceeding the NMWQCC Groundwater Remediation and Delineation Limit in samples from one of twelve monitoring wells sampled in the first (February) quarterly monitoring event, two of thirteen monitoring wells sampled in the second (May) quarterly monitoring event, one of thirteen monitoring wells sampled in the third (August) quarterly monitoring event, and three of thirteen monitoring wells sampled in the fourth (November) quarterly monitoring event. Analytical results indicated toluene, ethylbenzene, and total xylenes at concentrations below NMWQCC standards in all monitoring wells sampled in 2024. Analytical results exhibited naphthalene at concentrations exceeding the NMWQCC Groundwater Remediation and Delineation Limit in samples from monitoring well MW-8. Naphthalene concentrations exceeded the NMWQCC Groundwater Remediation and Delineation Limit in the sample from monitoring well MW-8.

The groundwater analytical results are summarized in Table 2 and the groundwater PAH results are summarized in Table 3. Copies of the Certified Laboratory Analytical Reports are attached as Appendix B. COC concentration maps are presented as Figures 7, 8, 9, and 10.

## 3. Remediation Activities

### 3.1 Mobile Dual Phase Extraction

A Mobile Dual Phase Extraction (MDPE) event for the recovery of LNAPL and impacted groundwater at the Site was conducted by Talon-LPE (Talon) on monitoring well MW-7 on January 8, 2024. Talon estimates approximately 463 gallons of fluids were recovered during the MDPE event. The total hydrocarbon recovery in vapor and liquid phase was approximately 52.26 gallons. All fluids recovered from the MDPE events were disposed of at approved licensed disposal facility, and all hydrocarbon vapors were destroyed in a thermal oxidizer within the emissions limits established by the PI-7 Permit.

### 3.2 LNAPL Transmissivity Evaluation

GHD conducted a LNAPL transmissivity ( $T_n$ ) evaluation at the Site. Testing was performed pursuant to the methodology contained in ASTM International (ASTM) Standard E2856-13 *Standard Guide for Estimation of LNAPL Transmissivity* (May 2013) using the baildown technique at a select well with recent static/equilibrium in-well LNAPL thickness of at least 0.5 feet. Well MW-7 was selected for transmissivity testing as it meets this minimum in-well LNAPL thickness requirement. Testing occurred on May 21 and November 29, 2024. The rapid removal of LNAPL with minimal groundwater drawdown was monitored for recharge to estimate  $T_n$  using the API LNAPL Transmissivity Workbook (2012). Results were compared against the ITRC de minimis threshold ( $T_n \leq 0.8 \text{ ft}^2/\text{day}$ ).

Results from MW-7 indicate that the magnitude of the recoverability of the LNAPL (or  $T_n$ ) is consistent with what ITRC recommends as a de minimis level. As such, these results support that the LNAPL remaining at the Site is predominantly immobile residual and the magnitude of LNAPL recoverability is already less than what would be considered a practical endpoint to LNAPL recovery (i.e., recovery to the maximum extent practical. Detailed findings are in Appendices C and D.

### 3.3 LNAPL Stability Evaluation

GHD performed an evaluation of Site contamination to assess the stability and mobility of residual LNAPL and associated dissolved phase impacts. Statistical analysis of dissolved BTEX data, including the Mann-Kendall test, confirmed stable or declining trends, with many wells showing low or non-detect concentrations for years. These trends, combined with evidence of natural attenuation, indicate effective reduction of dissolved hydrocarbon concentrations over time. Detailed findings are in Appendix E.

## 4. Summary and Recommendations

### 4.1 Summary

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

- LNAPL was gauged in two of the fourteen monitoring wells at the Site with thicknesses ranging from 0.01 ft to 4.88 ft.

- Benzene concentrations exceeded the NMWQCC Groundwater Remediation and Delineation Limit in three of the fourteen monitoring wells at the Site.
- Toluene, ethylbenzene, and xylene concentrations were below the NMWQCC Groundwater Remediation and Delineation Limits in all monitoring wells sampled at the Site in 2024.
- Annual PAH analysis for monitoring well MW-8 indicated a concentration exceedance of naphthalene.
- One MDPE event was conducted on monitoring well MW-7 by Talon.
- Transmissivity testing was performed at monitoring well MW-7 two times per year to account for seasonal variability, in May and November.

## 4.2 Recommendations

Based on the results of the 2024 groundwater monitoring events, GHD recommends the following in 2025:

- Modify sampling plan from a quarterly to a semi-annual sampling schedule. Perform semi-annual groundwater monitoring events for sampling of groundwater and analysis of BTEX by USEPA Method SW846-8021B for all Site monitoring wells.
- Request to remove monitoring wells MW-2, MW-3, MW-5, and MW-13 from the groundwater monitoring program. These monitoring wells are either redundant on delineation boundary or redundant within the LNAPL/dissolved phase plume boundary. These monitoring wells will not be P&A and will remain in place for future remediation evaluations.
- Continue annual PAH sampling in monitoring well MW-8.
- Discontinue MDPE events at MW-7. The transmissivity test results support that support that the LNAPL remaining at the site is predominantly immobile residual and the magnitude of LNAPL recoverability is less than what would be considered a practical endpoint to LNAPL recovery (i.e., recovery to the maximum extent practical). We propose continuing to monitor MW-7 as part of the routine groundwater monitoring program to confirm that LNAPL conditions remain stable over time.

Table 1

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**Summary of Groundwater Gauging and Elevation Data  
Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-1               | 1/10/2020   |       | 3982.09                 | --                   | --             | --                 | --                              | --                  |
| MW-1               | 2/19/2020   |       | 3982.09                 | --                   | --             | --                 | --                              | --                  |
| MW-1               | 2/24/2020   |       | 3982.09                 | 123.07               | --             | --                 | 3859.02                         | 135.59              |
| MW-1               | 3/13/2020   |       | 3982.09                 | --                   | --             | --                 | --                              | --                  |
| MW-1               | 4/29/2020   |       | 3982.09                 | 123.24               | --             | --                 | 3858.85                         | --                  |
| MW-1               | 5/26/2020   |       | 3982.09                 | 123.14               | --             | --                 | 3858.95                         | --                  |
| MW-1               | 6/16/2020   |       | 3982.09                 | 123.13               | --             | --                 | 3858.96                         | --                  |
| MW-1               | 7/30/2020   |       | 3982.09                 | 123.14               | --             | --                 | 3858.95                         | --                  |
| MW-1               | 8/26/2020   |       | 3982.09                 | 123.05               | --             | --                 | 3859.04                         | --                  |
| MW-1               | 9/17/2020   |       | 3982.09                 | 123.18               | --             | --                 | 3858.91                         | 128.9               |
| MW-1               | 10/21/2020  |       | 3982.09                 | 123.2                | --             | --                 | 3858.89                         | --                  |
| MW-1               | 11/4/2020   |       | 3982.09                 | 123.26               | --             | --                 | 3858.83                         | --                  |
| MW-1               | 12/9/2020   |       | 3982.09                 | 123.22               | --             | --                 | 3858.87                         | --                  |
| MW-1               | 1/28/2021   |       | 3982.09                 | 123.31               | --             | --                 | 3858.78                         | --                  |
| MW-1               | 2/25/2021   |       | 3982.09                 | 123.33               | --             | --                 | 3858.76                         | 128.97              |
| MW-1               | 3/24/2021   |       | 3982.09                 | 123.33               | --             | --                 | 3858.76                         | --                  |
| MW-1               | 4/30/2021   |       | 3982.09                 | 123.33               | --             | --                 | 3858.76                         | --                  |
| MW-1               | 5/11/2021   |       | 3982.09                 | 123.39               | --             | --                 | 3858.7                          | --                  |
| MW-1               | 6/28/2021   |       | 3982.09                 | 123.33               | --             | --                 | 3858.76                         | --                  |
| MW-1               | 7/27/2021   |       | 3982.09                 | 123.26               | --             | --                 | 3858.83                         | --                  |
| MW-1               | 8/24/2021   |       | 3982.09                 | 123.25               | --             | --                 | 3858.84                         | --                  |
| MW-1               | 9/30/2021   |       | 3982.09                 | 123.4                | --             | --                 | 3858.69                         | 128.97              |
| MW-1               | 10/28/2021  |       | 3982.09                 | 123.45               | --             | --                 | 3858.64                         | 128.97              |
| MW-1               | 11/16/2021  |       | 3982.09                 | 122.49               | --             | --                 | 3859.6                          | 128.97              |
| MW-1               | 2/1/2022    |       | 3982.09                 | 123.78               | --             | --                 | 3858.31                         | 128.97              |
| MW-1               | 2/22/2022   |       | 3982.09                 | 123.89               | --             | --                 | 3858.2                          | 128.91              |
| MW-1               | 3/16/2022   |       | 3982.09                 | 123.91               | --             | --                 | 3858.18                         | 128.91              |
| MW-1               | 4/11/2022   |       | 3982.09                 | 123.99               | --             | --                 | 3858.1                          | 128.91              |
| MW-1               | 5/24/2022   |       | 3982.09                 | 124.16               | --             | --                 | 3857.93                         | 128.91              |
| MW-1               | 6/15/2022   |       | 3982.09                 | 124.27               | --             | --                 | 3857.82                         | 128.91              |
| MW-1               | 7/28/2022   |       | 3982.09                 | 124.25               | --             | --                 | 3857.84                         | 128.91              |
| MW-1               | 8/24/2022   |       | 3982.09                 | 124.39               | --             | --                 | 3857.7                          | 128.91              |
| MW-1               | 11/2/2022   |       | 3982.09                 | 124.55               | --             | --                 | 3857.54                         | 128.91              |
| MW-1               | 1/23/2023   |       | 3982.09                 | 124.79               | --             | --                 | 3857.3                          | 128.91              |
| MW-1               | 2/17/2023   |       | 3982.09                 | 124.85               | --             | --                 | 3857.24                         | 129.28              |
| MW-1               | 3/1/2023    |       | 3982.09                 | 124.84               | --             | --                 | 3857.25                         | 129.28              |
| MW-1               | 4/24/2023   |       | 3982.09                 | 125.37               | --             | --                 | 3856.72                         | 126.13              |
| MW-1               | 5/9/2023    |       | 3982.09                 | 124.93               | --             | --                 | 3857.16                         | 126.13              |
| MW-1               | 6/16/2023   |       | 3982.09                 | 124.83               | --             | --                 | 3857.26                         | 126.13              |
| MW-1               | 7/21/2023   |       | 3982.09                 | 124.86               | --             | --                 | 3857.23                         | 126.13              |
| MW-1               | 8/8/2023    |       | 3982.09                 | 124.86               | --             | --                 | 3857.23                         | 126.13              |
| MW-1               | 9/15/2023   |       | 3982.09                 | 124.88               | --             | --                 | 3857.21                         | 126.13              |
| MW-1               | 10/20/2023  |       | 3982.09                 | 124.87               | --             | --                 | 3857.22                         | --                  |
| MW-1               | 11/16/2023  |       | 3982.09                 | 124.78               | --             | --                 | 3857.31                         | --                  |

Table 1

**Summary of Groundwater Gauging and Elevation Data  
Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-1               | 2/26/2024   |       | 3982.09                 | 124.86               | --             | --                 | 3857.23                         | 126.13              |
| MW-1               | 5/20/2024   |       | 3982.09                 | 125                  | --             | --                 | 3857.09                         | 129.08              |
| MW-1               | 8/20/2024   |       | 3982.09                 | 125.07               | --             | --                 | 3857.02                         | 129.14              |
| MW-1               | 11/18/2024  |       | 3982.09                 | 125.26               | --             | --                 | 3856.83                         | 129.2               |
| MW-2               | 2/24/2020   |       | 3981.21                 | 122.19               | --             | --                 | 3859.02                         | 127.41              |
| MW-2               | 4/29/2020   |       | 3981.21                 | 122.35               | --             | --                 | 3858.86                         | --                  |
| MW-2               | 5/26/2020   |       | 3981.21                 | 122.22               | --             | --                 | 3858.99                         | --                  |
| MW-2               | 6/16/2020   |       | 3981.21                 | 123.5                | --             | --                 | 3857.71                         | --                  |
| MW-2               | 7/30/2020   |       | 3981.21                 | 122.23               | --             | --                 | 3858.98                         | --                  |
| MW-2               | 8/26/2020   |       | 3981.21                 | 123.52               | --             | --                 | 3857.69                         | --                  |
| MW-2               | 9/17/2020   |       | 3981.21                 | 122.29               | --             | --                 | 3858.92                         | 127.38              |
| MW-2               | 10/21/2020  |       | 3981.21                 | 122.27               | --             | --                 | 3858.94                         | --                  |
| MW-2               | 11/4/2020   |       | 3981.21                 | 122.35               | --             | --                 | 3858.86                         | --                  |
| MW-2               | 12/9/2020   |       | 3981.21                 | 122.29               | --             | --                 | 3858.92                         | --                  |
| MW-2               | 1/28/2021   |       | 3981.21                 | 122.38               | --             | --                 | 3858.83                         | --                  |
| MW-2               | 2/25/2021   |       | 3981.21                 | 122.44               | --             | --                 | 3858.77                         | 127.65              |
| MW-2               | 3/24/2021   |       | 3981.21                 | 122.43               | --             | --                 | 3858.78                         | --                  |
| MW-2               | 4/30/2021   |       | 3981.21                 | 122.45               | --             | --                 | 3858.76                         | --                  |
| MW-2               | 5/11/2021   |       | 3981.21                 | 122.46               | --             | --                 | 3858.75                         | --                  |
| MW-2               | 6/28/2021   |       | 3981.21                 | 122.41               | --             | --                 | 3858.8                          | --                  |
| MW-2               | 7/27/2021   |       | 3981.21                 | 122.35               | --             | --                 | 3858.86                         | --                  |
| MW-2               | 8/24/2021   |       | 3981.21                 | 122.35               | --             | --                 | 3858.86                         | --                  |
| MW-2               | 9/30/2021   |       | 3981.21                 | 122.49               | --             | --                 | 3858.72                         | 127.65              |
| MW-2               | 10/28/2021  |       | 3981.21                 | 122.54               | --             | --                 | 3858.67                         | 127.65              |
| MW-2               | 11/16/2021  |       | 3981.21                 | 122.54               | --             | --                 | 3858.67                         | 127.65              |
| MW-2               | 2/1/2022    |       | 3981.21                 | 122.86               | --             | --                 | 3858.35                         | 127.65              |
| MW-2               | 2/22/2022   |       | 3981.21                 | 122.95               | --             | --                 | 3858.26                         | 127.65              |
| MW-2               | 3/16/2022   |       | 3981.21                 | 123.02               | --             | --                 | 3858.19                         | 127.65              |
| MW-2               | 4/11/2022   |       | 3981.21                 | 123.12               | --             | --                 | 3858.09                         | 127.65              |
| MW-2               | 5/24/2022   |       | 3981.21                 | 123.21               | --             | --                 | 3858                            | 127.65              |
| MW-2               | 6/15/2022   |       | 3981.21                 | 123.35               | --             | --                 | 3857.86                         | 127.65              |
| MW-2               | 7/28/2022   |       | 3981.21                 | 123.37               | --             | --                 | 3857.84                         | 127.65              |
| MW-2               | 8/24/2022   |       | 3981.21                 | 123.52               | --             | --                 | 3857.69                         | 127.65              |
| MW-2               | 11/2/2022   |       | 3981.21                 | 123.66               | --             | --                 | 3857.55                         | 127.65              |
| MW-2               | 2/17/2023   |       | 3981.21                 | 123.93               | --             | --                 | 3857.28                         | 128.1               |
| MW-2               | 5/9/2023    |       | 3981.21                 | 124.05               | --             | --                 | 3857.16                         | 128.1               |
| MW-2               | 8/8/2023    |       | 3981.21                 | 123.95               | --             | --                 | 3857.26                         | 128.1               |
| MW-2               | 11/16/2023  |       | 3981.21                 | 125.06               | --             | --                 | 3856.15                         | --                  |
| MW-2               | 2/26/2024   |       | 3981.21                 | 123.99               | --             | --                 | 3857.22                         | 128.1               |
| MW-2               | 5/20/2024   |       | 3981.21                 | 124.11               | --             | --                 | 3857.1                          | 127.8               |
| MW-2               | 8/20/2024   |       | 3981.21                 | 124.59               | --             | --                 | 3856.62                         | 128.35              |
| MW-2               | 11/18/2024  |       | 3981.21                 | 124.35               | --             | --                 | 3856.86                         | 128.15              |
| MW-3               | 1/10/2020   |       | 3982.31                 | --                   | --             | --                 | --                              | --                  |
| MW-3               | 2/19/2020   |       | 3982.31                 | --                   | --             | --                 | --                              | --                  |



Table 1

**Summary of Groundwater Gauging and Elevation Data  
Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-3               | 2/24/2020   |       | 3982.31                 | 123.39               | --             | --                 | 3858.92                         | 131.76              |
| MW-3               | 3/13/2020   |       | 3982.31                 | --                   | --             | --                 | --                              | --                  |
| MW-3               | 4/29/2020   |       | 3982.31                 | 123.51               | --             | --                 | 3858.8                          | --                  |
| MW-3               | 5/26/2020   |       | 3982.31                 | 123.4                | --             | --                 | 3858.91                         | --                  |
| MW-3               | 6/16/2020   |       | 3982.31                 | 123.4                | --             | --                 | 3858.91                         | --                  |
| MW-3               | 7/30/2020   |       | 3982.31                 | 123.4                | --             | --                 | 3858.91                         | --                  |
| MW-3               | 8/26/2020   |       | 3982.31                 | 123.42               | --             | --                 | 3858.89                         | --                  |
| MW-3               | 9/15/2020   |       | 3982.31                 | 123.44               | --             | --                 | 3858.87                         | --                  |
| MW-3               | 9/15/2020   |       | 3982.31                 | 123.47               | --             | --                 | 3858.84                         | --                  |
| MW-3               | 9/17/2020   |       | 3982.31                 | 123.45               | --             | --                 | 3858.86                         | 131.45              |
| MW-3               | 10/21/2020  |       | 3982.31                 | 123.46               | --             | --                 | 3858.85                         | --                  |
| MW-3               | 11/4/2020   |       | 3982.31                 | 123.57               | --             | --                 | 3858.74                         | --                  |
| MW-3               | 12/9/2020   |       | 3982.31                 | 123.5                | --             | --                 | 3858.81                         | --                  |
| MW-3               | 1/28/2021   |       | 3982.31                 | 123.63               | --             | --                 | 3858.68                         | --                  |
| MW-3               | 2/25/2021   |       | 3982.31                 | 123.63               | --             | --                 | 3858.68                         | 131.47              |
| MW-3               | 3/24/2021   |       | 3982.31                 | 123.59               | --             | --                 | 3858.72                         | --                  |
| MW-3               | 4/30/2021   |       | 3982.31                 | 123.61               | --             | --                 | 3858.7                          | --                  |
| MW-3               | 5/11/2021   |       | 3982.31                 | 123.66               | --             | --                 | 3858.65                         | --                  |
| MW-3               | 6/28/2021   |       | 3982.31                 | 123.6                | --             | --                 | 3858.71                         | --                  |
| MW-3               | 7/27/2021   |       | 3982.31                 | 123.52               | --             | --                 | 3858.79                         | --                  |
| MW-3               | 8/24/2021   |       | 3982.31                 | 123.51               | --             | --                 | 3858.8                          | --                  |
| MW-3               | 9/30/2021   |       | 3982.31                 | 123.67               | --             | --                 | 3858.64                         | 131.47              |
| MW-3               | 10/28/2021  |       | 3982.31                 | 123.72               | --             | --                 | 3858.59                         | 131.47              |
| MW-3               | 11/16/2021  |       | 3982.31                 | 123.7                | --             | --                 | 3858.61                         | 131.47              |
| MW-3               | 2/1/2022    |       | 3982.31                 | 124.02               | --             | --                 | 3858.29                         | 131.47              |
| MW-3               | 2/22/2022   |       | 3982.31                 | 124.17               | --             | --                 | 3858.14                         | 131.39              |
| MW-3               | 3/16/2022   |       | 3982.31                 | 124.18               | --             | --                 | 3858.13                         | 131.39              |
| MW-3               | 4/11/2022   |       | 3982.31                 | 124.25               | --             | --                 | 3858.06                         | 131.39              |
| MW-3               | 5/24/2022   |       | 3982.31                 | 124.43               | --             | --                 | 3857.88                         | 131.39              |
| MW-3               | 6/15/2022   |       | 3982.31                 | 124.52               | --             | --                 | 3857.79                         | 131.39              |
| MW-3               | 7/28/2022   |       | 3982.31                 | 124.52               | --             | --                 | 3857.79                         | 131.39              |
| MW-3               | 8/24/2022   |       | 3982.31                 | 124.68               | --             | --                 | 3857.63                         | 131.39              |
| MW-3               | 11/2/2022   |       | 3982.31                 | 124.82               | --             | --                 | 3857.49                         | 131.39              |
| MW-3               | 2/17/2023   | LNAPL | 3982.31                 | 125.11               | 125.1          | 0.01               | 3857.208                        | 131.52              |
| MW-3               | 4/24/2023   |       | 3982.31                 | 125.23               | --             | --                 | 3857.08                         | 131.52              |
| MW-3               | 5/9/2023    |       | 3982.31                 | 125.21               | --             | --                 | 3857.1                          | 131.52              |
| MW-3               | 6/16/2023   |       | 3982.31                 | 125.05               | --             | --                 | 3857.26                         | 131.52              |
| MW-3               | 7/21/2023   |       | 3982.31                 | 125.09               | --             | --                 | 3857.22                         | 131.52              |
| MW-3               | 8/8/2023    |       | 3982.31                 | 125.09               | --             | --                 | 3857.22                         | 131.52              |
| MW-3               | 11/16/2023  |       | 3982.31                 | 125.18               | --             | --                 | 3857.13                         | --                  |
| MW-3               | 2/26/2024   |       | 3982.31                 | 125.16               | --             | --                 | 3857.15                         | 131.52              |
| MW-3               | 5/20/2024   |       | 3982.31                 | 125.24               | --             | --                 | 3857.07                         | 131.21              |
| MW-3               | 8/20/2024   |       | 3982.31                 | 125.34               | --             | --                 | 3856.97                         | 131.33              |
| MW-3               | 11/18/2024  |       | 3982.31                 | 125.5                | --             | --                 | 3856.81                         | 131.3               |

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Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-4               | 2/24/2020   |       | 3982.48                 | 123.45               | --             | --                 | 3859.03                         | 135.59              |
| MW-4               | 4/29/2020   |       | 3982.48                 | 123.7                | --             | --                 | 3858.78                         | --                  |
| MW-4               | 5/26/2020   |       | 3982.48                 | 123.5                | --             | --                 | 3858.98                         | --                  |
| MW-4               | 6/16/2020   |       | 3982.48                 | 122.23               | --             | --                 | 3860.25                         | --                  |
| MW-4               | 7/30/2020   |       | 3982.48                 | 123.53               | --             | --                 | 3858.95                         | --                  |
| MW-4               | 8/26/2020   |       | 3982.48                 | 122.24               | --             | --                 | 3860.24                         | --                  |
| MW-4               | 9/17/2020   |       | 3982.48                 | 123.57               | --             | --                 | 3858.91                         | 135.65              |
| MW-4               | 10/21/2020  |       | 3982.48                 | 123.57               | --             | --                 | 3858.91                         | --                  |
| MW-4               | 11/4/2020   |       | 3982.48                 | 123.6                | --             | --                 | 3858.88                         | --                  |
| MW-4               | 12/9/2020   |       | 3982.48                 | 123.6                | --             | --                 | 3858.88                         | --                  |
| MW-4               | 1/28/2021   |       | 3982.48                 | 123.69               | --             | --                 | 3858.79                         | --                  |
| MW-4               | 2/25/2021   |       | 3982.48                 | 123.71               | --             | --                 | 3858.77                         | 135.71              |
| MW-4               | 3/24/2021   |       | 3982.48                 | 123.7                | --             | --                 | 3858.78                         | --                  |
| MW-4               | 4/30/2021   |       | 3982.48                 | 123.7                | --             | --                 | 3858.78                         | --                  |
| MW-4               | 5/11/2021   |       | 3982.48                 | 123.77               | --             | --                 | 3858.71                         | --                  |
| MW-4               | 6/28/2021   |       | 3982.48                 | 123.71               | --             | --                 | 3858.77                         | --                  |
| MW-4               | 7/27/2021   |       | 3982.48                 | 123.64               | --             | --                 | 3858.84                         | --                  |
| MW-4               | 8/24/2021   |       | 3982.48                 | 123.64               | --             | --                 | 3858.84                         | --                  |
| MW-4               | 9/30/2021   |       | 3982.48                 | 123.77               | --             | --                 | 3858.71                         | 135.71              |
| MW-4               | 10/28/2021  |       | 3982.48                 | 123.81               | --             | --                 | 3858.67                         | 135.71              |
| MW-4               | 11/16/2021  |       | 3982.48                 | 123.82               | --             | --                 | 3858.66                         | 135.71              |
| MW-4               | 2/1/2022    |       | 3982.48                 | 124.12               | --             | --                 | 3858.36                         | 135.71              |
| MW-4               | 2/22/2022   |       | 3982.48                 | 124.13               | --             | --                 | 3858.35                         | 135.6               |
| MW-4               | 3/16/2022   |       | 3982.48                 | 124.25               | --             | --                 | 3858.23                         | 135.6               |
| MW-4               | 4/11/2022   |       | 3982.48                 | 124.39               | --             | --                 | 3858.09                         | 135.6               |
| MW-4               | 5/24/2022   |       | 3982.48                 | 124.43               | --             | --                 | 3858.05                         | 135.6               |
| MW-4               | 6/15/2022   |       | 3982.48                 | 124.54               | --             | --                 | 3857.94                         | 135.6               |
| MW-4               | 7/28/2022   |       | 3982.48                 | 124.59               | --             | --                 | 3857.89                         | 135.6               |
| MW-4               | 8/24/2022   |       | 3982.48                 | 124.74               | --             | --                 | 3857.74                         | 135.6               |
| MW-4               | 11/2/2022   |       | 3982.48                 | 124.89               | --             | --                 | 3857.59                         | 135.6               |
| MW-4               | 2/17/2023   |       | 3982.48                 | 125.18               | --             | --                 | 3857.3                          | 135.29              |
| MW-4               | 5/9/2023    |       | 3982.48                 | 125.26               | --             | --                 | 3857.22                         | 135.29              |
| MW-4               | 8/8/2023    |       | 3982.48                 | 125.17               | --             | --                 | 3857.31                         | 135.29              |
| MW-4               | 11/16/2023  |       | 3982.48                 | 124.16               | --             | --                 | 3858.32                         | --                  |
| MW-4               | 2/26/2024   |       | 3982.48                 | 125.24               | --             | --                 | 3857.24                         | 135.29              |
| MW-4               | 5/20/2024   |       | 3982.48                 | 125.34               | --             | --                 | 3857.14                         | 135.53              |
| MW-4               | 8/20/2024   |       | 3982.48                 | 125.44               | --             | --                 | 3857.04                         | 135.67              |
| MW-4               | 11/18/2024  |       | 3982.48                 | 125.6                | --             | --                 | 3856.88                         | 135.7               |
| MW-5               | 2/24/2020   |       | 3981.45                 | 122.44               | --             | --                 | 3859.01                         | 136.32              |
| MW-5               | 4/29/2020   |       | 3981.45                 | 122.61               | --             | --                 | 3858.84                         | --                  |
| MW-5               | 5/26/2020   |       | 3981.45                 | 122.5                | --             | --                 | 3858.95                         | --                  |
| MW-5               | 6/16/2020   |       | 3981.45                 | 122.47               | --             | --                 | 3858.98                         | --                  |
| MW-5               | 7/30/2020   |       | 3981.45                 | 122.48               | --             | --                 | 3858.97                         | --                  |
| MW-5               | 8/26/2020   |       | 3981.45                 | 122.5                | --             | --                 | 3858.95                         | --                  |



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| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-5               | 9/17/2020   |       | 3981.45                 | 122.55               | --             | --                 | 3858.9                          | 136.29              |
| MW-5               | 10/21/2020  |       | 3981.45                 | 122.55               | --             | --                 | 3858.9                          | --                  |
| MW-5               | 11/4/2020   |       | 3981.45                 | 122.63               | --             | --                 | 3858.82                         | --                  |
| MW-5               | 12/9/2020   |       | 3981.45                 | 122.58               | --             | --                 | 3858.87                         | --                  |
| MW-5               | 1/28/2021   |       | 3981.45                 | 122.66               | --             | --                 | 3858.79                         | --                  |
| MW-5               | 2/25/2021   |       | 3981.45                 | 122.75               | --             | --                 | 3858.7                          | 136.42              |
| MW-5               | 3/24/2021   |       | 3981.45                 | 122.69               | --             | --                 | 3858.76                         | --                  |
| MW-5               | 4/30/2021   |       | 3981.45                 | 122.72               | --             | --                 | 3858.73                         | --                  |
| MW-5               | 5/11/2021   |       | 3981.45                 | 127.75               | --             | --                 | 3853.7                          | --                  |
| MW-5               | 6/28/2021   |       | 3981.45                 | 122.69               | --             | --                 | 3858.76                         | --                  |
| MW-5               | 7/27/2021   |       | 3981.45                 | 122.6                | --             | --                 | 3858.85                         | --                  |
| MW-5               | 8/24/2021   |       | 3981.45                 | 122.61               | --             | --                 | 3858.84                         | --                  |
| MW-5               | 9/30/2021   |       | 3981.45                 | 122.74               | --             | --                 | 3858.71                         | 136.42              |
| MW-5               | 10/28/2021  |       | 3981.45                 | 122.79               | --             | --                 | 3858.66                         | 136.42              |
| MW-5               | 11/16/2021  |       | 3981.45                 | 122.8                | --             | --                 | 3858.65                         | 136.42              |
| MW-5               | 2/1/2022    |       | 3981.45                 | 123.11               | --             | --                 | 3858.34                         | 136.42              |
| MW-5               | 2/22/2022   |       | 3981.45                 | 123.22               | --             | --                 | 3858.23                         | 136.31              |
| MW-5               | 3/16/2022   |       | 3981.45                 | 123.25               | --             | --                 | 3858.2                          | 136.31              |
| MW-5               | 4/11/2022   |       | 3981.45                 | 123.37               | --             | --                 | 3858.08                         | 136.31              |
| MW-5               | 5/24/2022   |       | 3981.45                 | 123.46               | --             | --                 | 3857.99                         | 136.31              |
| MW-5               | 6/15/2022   |       | 3981.45                 | 123.53               | --             | --                 | 3857.92                         | 136.31              |
| MW-5               | 7/28/2022   |       | 3981.45                 | 123.58               | --             | --                 | 3857.87                         | 136.31              |
| MW-5               | 8/24/2022   |       | 3981.45                 | 123.73               | --             | --                 | 3857.72                         | 136.31              |
| MW-5               | 11/2/2022   |       | 3981.45                 | 123.8                | --             | --                 | 3857.65                         | 136.31              |
| MW-5               | 2/17/2023   |       | 3981.45                 | 124.11               | --             | --                 | 3857.34                         | 136.41              |
| MW-5               | 5/9/2023    |       | 3981.45                 | 124.25               | --             | --                 | 3857.2                          | 136.41              |
| MW-5               | 8/8/2023    |       | 3981.45                 | 124.17               | --             | --                 | 3857.28                         | 136.41              |
| MW-5               | 11/16/2023  |       | 3981.45                 | 123.54               | --             | --                 | 3857.91                         | --                  |
| MW-5               | 2/26/2024   |       | 3981.45                 | 124.27               | --             | --                 | 3857.18                         | 136.41              |
| MW-5               | 5/20/2024   |       | 3981.45                 | 124.32               | --             | --                 | 3857.13                         | 136.25              |
| MW-5               | 8/20/2024   |       | 3981.45                 | 124.42               | --             | --                 | 3857.03                         | 136.29              |
| MW-5               | 11/18/2024  |       | 3981.45                 | 124.61               | --             | --                 | 3856.84                         | 136.35              |
| MW-6               | 1/10/2020   |       | 3982.27                 | --                   | --             | --                 | --                              | --                  |
| MW-6               | 2/19/2020   |       | 3982.27                 | --                   | --             | --                 | --                              | --                  |
| MW-6               | 2/24/2020   |       | 3982.27                 | 123.4                | --             | --                 | 3858.87                         | 139.87              |
| MW-6               | 3/13/2020   |       | 3982.27                 | --                   | --             | --                 | --                              | --                  |
| MW-6               | 4/29/2020   |       | 3982.27                 | 123.51               | --             | --                 | 3858.76                         | --                  |
| MW-6               | 5/26/2020   |       | 3982.27                 | 123.41               | --             | --                 | 3858.86                         | --                  |
| MW-6               | 6/16/2020   |       | 3982.27                 | 123.41               | --             | --                 | 3858.86                         | --                  |
| MW-6               | 7/30/2020   |       | 3982.27                 | 123.41               | --             | --                 | 3858.86                         | --                  |
| MW-6               | 8/26/2020   |       | 3982.27                 | 123.44               | --             | --                 | 3858.83                         | --                  |
| MW-6               | 9/17/2020   |       | 3982.27                 | 123.44               | --             | --                 | 3858.83                         | 139.72              |
| MW-6               | 10/21/2020  |       | 3982.27                 | 123.46               | --             | --                 | 3858.81                         | --                  |
| MW-6               | 11/4/2020   |       | 3982.27                 | 123.5                | --             | --                 | 3858.77                         | --                  |

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| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-6               | 12/9/2020   |       | 3982.27                 | 123.5                | --             | --                 | 3858.77                         | --                  |
| MW-6               | 1/28/2021   |       | 3982.27                 | 123.56               | --             | --                 | 3858.71                         | --                  |
| MW-6               | 2/25/2021   |       | 3982.27                 | 123.62               | --             | --                 | 3858.65                         | 139.7               |
| MW-6               | 3/24/2021   |       | 3982.27                 | 123.6                | --             | --                 | 3858.67                         | --                  |
| MW-6               | 4/30/2021   |       | 3982.27                 | 123.63               | --             | --                 | 3858.64                         | --                  |
| MW-6               | 5/11/2021   |       | 3982.27                 | 123.66               | --             | --                 | 3858.61                         | --                  |
| MW-6               | 6/28/2021   |       | 3982.27                 | 123.62               | --             | --                 | 3858.65                         | --                  |
| MW-6               | 7/27/2021   |       | 3982.27                 | 123.55               | --             | --                 | 3858.72                         | --                  |
| MW-6               | 8/24/2021   |       | 3982.27                 | 123.56               | --             | --                 | 3858.71                         | --                  |
| MW-6               | 9/30/2021   |       | 3982.27                 | 123.65               | --             | --                 | 3858.62                         | 139.7               |
| MW-6               | 10/28/2021  |       | 3982.27                 | 123.7                | --             | --                 | 3858.57                         | 139.7               |
| MW-6               | 11/16/2021  |       | 3982.27                 | 123.71               | --             | --                 | 3858.56                         | 139.7               |
| MW-6               | 2/1/2022    |       | 3982.27                 | 124.01               | --             | --                 | 3858.26                         | 139.7               |
| MW-6               | 2/22/2022   |       | 3982.27                 | 124.12               | --             | --                 | 3858.15                         | 139.61              |
| MW-6               | 3/16/2022   |       | 3982.27                 | 124.16               | --             | --                 | 3858.11                         | 139.61              |
| MW-6               | 4/11/2022   |       | 3982.27                 | 124.28               | --             | --                 | 3857.99                         | 139.61              |
| MW-6               | 5/24/2022   |       | 3982.27                 | 124.38               | --             | --                 | 3857.89                         | 139.61              |
| MW-6               | 6/15/2022   |       | 3982.27                 | 124.47               | --             | --                 | 3857.8                          | 139.61              |
| MW-6               | 7/28/2022   |       | 3982.27                 | 124.52               | --             | --                 | 3857.75                         | 139.61              |
| MW-6               | 8/24/2022   |       | 3982.27                 | 124.67               | --             | --                 | 3857.6                          | 139.61              |
| MW-6               | 11/2/2022   |       | 3982.27                 | 124.82               | --             | --                 | 3857.45                         | 139.61              |
| MW-6               | 2/17/2023   |       | 3982.27                 | 125.05               | --             | --                 | 3857.22                         | 139.55              |
| MW-6               | 5/9/2023    |       | 3982.27                 | 125.2                | --             | --                 | 3857.07                         | 139.55              |
| MW-6               | 8/9/2023    |       | 3982.27                 | 125.14               | --             | --                 | 3857.13                         | 139.55              |
| MW-6               | 9/15/2023   |       | --                      | 125.17               | --             | --                 | --                              | 139.55              |
| MW-6               | 10/20/2023  |       | 3982.27                 | 125.13               | --             | --                 | 3857.14                         | --                  |
| MW-6               | 11/16/2023  |       | 3982.27                 | 125.07               | --             | --                 | 3857.2                          | --                  |
| MW-6               | 2/26/2024   |       | 3982.27                 | 125.13               | --             | --                 | 3857.14                         | 139.55              |
| MW-6               | 5/20/2024   |       | 3982.27                 | 125.24               | --             | --                 | 3857.03                         | 139.45              |
| MW-6               | 8/19/2024   |       | 3982.27                 | 125.35               | --             | --                 | 3856.92                         | 139.35              |
| MW-6               | 11/18/2024  |       | 3982.27                 | 125.52               | --             | --                 | 3856.75                         | 141.14              |
| MW-7               | 1/10/2020   | LNAPL | 3981.71                 | 127.08               | 122.18         | 4.9                | 3858.599                        | --                  |
| MW-7               | 2/19/2020   | LNAPL | 3981.71                 | 127.79               | 121.99         | 5.8                | 3858.618                        | --                  |
| MW-7               | 2/24/2020   | LNAPL | 3981.71                 | 125.47               | 122.38         | 3.09               | 3858.743                        | --                  |
| MW-7               | 3/13/2020   | LNAPL | 3981.71                 | 122.86               | 122.86         | 0                  | 3858.85                         | --                  |
| MW-7               | 4/29/2020   | LNAPL | 3981.71                 | 127.8                | 122.15         | 5.65               | 3858.487                        | --                  |
| MW-7               | 5/26/2020   | LNAPL | 3981.71                 | 127.53               | 122.07         | 5.46               | 3858.603                        | --                  |
| MW-7               | 6/11/2020   | LNAPL | 3981.71                 | 128.02               | 122.01         | 6.01               | 3858.558                        | --                  |
| MW-7               | 6/12/2020   |       | 3981.71                 | 122.85               | --             | --                 | 3858.86                         | --                  |
| MW-7               | 6/16/2020   | LNAPL | 3981.71                 | 123.11               | 122.81         | 0.3                | 3858.843                        | --                  |
| MW-7               | 7/30/2020   | LNAPL | 3981.71                 | 127.77               | 122            | 5.77               | 3858.614                        | --                  |
| MW-7               | 8/26/2020   | LNAPL | 3981.71                 | 127.84               | 122.01         | 5.83               | 3858.592                        | --                  |
| MW-7               | 9/15/2020   | LNAPL | 3981.71                 | 127.09               | 122.06         | 5.03               | 3858.694                        | --                  |
| MW-7               | 9/15/2020   |       | 3981.71                 | 122.78               | --             | --                 | 3858.93                         | --                  |

Table 1

**Summary of Groundwater Gauging and Elevation Data  
Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-7               | 9/17/2020   | LNAPL | 3981.71                 | 122.92               | 122.89         | 0.03               | 3858.814                        | --                  |
| MW-7               | 10/21/2020  | LNAPL | 3981.71                 | 127.3                | 122.17         | 5.13               | 3858.565                        | --                  |
| MW-7               | 11/4/2020   | LNAPL | 3981.71                 | 126.64               | 122.35         | 4.29               | 3858.545                        | --                  |
| MW-7               | 12/9/2020   | LNAPL | 3981.71                 | 128.37               | 122.07         | 6.3                | 3858.443                        | --                  |
| MW-7               | 1/28/2021   | LNAPL | 3981.71                 | 128.7                | 122.12         | 6.58               | 3858.34                         | --                  |
| MW-7               | 2/25/2021   | LNAPL | 3981.71                 | 128.58               | 122.22         | 6.36               | 3858.281                        | 133.11              |
| MW-7               | 3/24/2021   | LNAPL | 3981.71                 | 127.19               | 122.33         | 4.86               | 3858.457                        | --                  |
| MW-7               | 4/30/2021   | LNAPL | 3981.71                 | 128.65               | 122.11         | 6.54               | 3858.357                        | --                  |
| MW-7               | 5/11/2021   | LNAPL | 3981.71                 | 128.84               | 122.13         | 6.71               | 3858.305                        | --                  |
| MW-7               | 6/28/2021   | LNAPL | 3981.71                 | 128.9                | 122.04         | 6.86               | 3858.367                        | --                  |
| MW-7               | 7/27/2021   | LNAPL | 3981.71                 | 128.67               | 121.99         | 6.68               | 3858.451                        | --                  |
| MW-7               | 8/24/2021   | LNAPL | 3981.71                 | 128.96               | 121.95         | 7.01               | 3858.428                        | --                  |
| MW-7               | 9/30/2021   | LNAPL | 3981.71                 | 127.92               | 122.3          | 5.62               | 3858.342                        | 133.11              |
| MW-7               | 10/28/2021  | LNAPL | 3981.71                 | 127.97               | 122.35         | 5.62               | 3858.292                        | 133.11              |
| MW-7               | 11/16/2021  | LNAPL | 3981.71                 | 129.15               | 122.16         | 6.99               | 3858.222                        | 133.11              |
| MW-7               | 2/1/2022    | LNAPL | 3981.71                 | 129.08               | 122.55         | 6.53               | 3857.919                        | 133.11              |
| MW-7               | 2/22/2022   | LNAPL | 3981.71                 | 129.05               | 122.67         | 6.38               | 3857.828                        | 133.02              |
| MW-7               | 3/16/2022   | LNAPL | 3981.71                 | 129.33               | 122.71         | 6.62               | 3857.742                        | 133.02              |
| MW-7               | 4/11/2022   | LNAPL | 3981.71                 | 126.96               | 123.25         | 3.71               | 3857.755                        | 133.02              |
| MW-7               | 5/24/2022   | LNAPL | 3981.71                 | 126.35               | 123.54         | 2.81               | 3857.636                        | 133.02              |
| MW-7               | 6/15/2022   | LNAPL | 3981.71                 | 124.99               | 123.76         | 1.23               | 3857.716                        | 133.02              |
| MW-7               | 7/28/2022   | LNAPL | 3981.71                 | 124.4                | 123.97         | 0.43               | 3857.658                        | 133.02              |
| MW-7               | 8/24/2022   | LNAPL | 3981.71                 | 124.72               | 124.1          | 0.62               | 3857.492                        | 133.02              |
| MW-7               | 10/6/2022   | LNAPL | 3981.71                 | 124.39               | 124.25         | 0.14               | 3857.433                        | 133.02              |
| MW-7               | 10/6/2022   |       | 3981.71                 | 124.98               | --             | --                 | 3856.73                         | 133.02              |
| MW-7               | 11/2/2022   | LNAPL | 3981.71                 | 124.21               | 124.18         | 0.03               | 3857.524                        | 133.02              |
| MW-7               | 11/2/2022   |       | 3981.71                 | 125.06               | --             | --                 | 3856.65                         | 133.02              |
| MW-7               | 11/30/2022  | LNAPL | 3981.71                 | 124.62               | 124.51         | 0.11               | 3857.179                        | 133.02              |
| MW-7               | 11/30/2022  | LNAPL | 3981.71                 | 124.57               | 124.56         | 0.01               | 3857.148                        | 133.02              |
| MW-7               | 1/23/2023   | LNAPL | 3981.71                 | 125.28               | 124.44         | 0.84               | 3857.11                         | 133.02              |
| MW-7               | 2/17/2023   | LNAPL | 3981.71                 | 125.45               | 124.6          | 0.85               | 3856.948                        | 133.33              |
| MW-7               | 3/1/2023    | LNAPL | 3981.71                 | 125.61               | 124.51         | 1.1                | 3856.991                        | 133.33              |
| MW-7               | 4/24/2023   | LNAPL | 3981.71                 | 125.85               | 124.5          | 1.35               | 3856.954                        | 133.33              |
| MW-7               | 5/9/2023    | LNAPL | 3981.71                 | 126.09               | 124.38         | 1.71               | 3857.005                        | 133.33              |
| MW-7               | 6/16/2023   | LNAPL | 3981.71                 | 124.65               | 124.53         | 0.12               | 3857.157                        | 133.33              |
| MW-7               | 7/21/2023   | LNAPL | 3981.71                 | 124.62               | 124.5          | 0.12               | 3857.187                        | 133.33              |
| MW-7               | 8/31/2023   | LNAPL | 3981.71                 | 127.59               | 124.05         | 3.54               | 3856.987                        | --                  |
| MW-7               | 9/15/2023   | LNAPL | 3981.71                 | 128.15               | 124.4          | 3.75               | 3856.597                        | 133.33              |
| MW-7               | 10/20/2023  | LNAPL | 3981.71                 | 125.2                | 124.52         | 0.68               | 3857.061                        | --                  |
| MW-7               | 11/16/2023  | LNAPL | 3981.71                 | 126.27               | 124.31         | 1.96               | 3857.028                        | --                  |
| MW-7               | 2/26/2024   | LNAPL | 3981.71                 | 125.59               | 124.46         | 1.13               | 3857.035                        | --                  |
| MW-7               | 5/20/2024   | LNAPL | 3981.71                 | 127.57               | 124.25         | 3.32               | 3856.829                        | 132.85              |
| MW-7               | 8/20/2024   | LNAPL | 3981.71                 | 127.4                | 124.36         | 3.04               | 3854.31                         | 132.93              |
| MW-7               | 11/18/2024  | LNAPL | 3981.71                 | 129.27               | 124.39         | 4.88               | 3852.44                         | 132.88              |

Table 1

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Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-8               | 1/10/2020   |       | 3981.2                  | --                   | --             | --                 | --                              | --                  |
| MW-8               | 2/19/2020   |       | 3981.2                  | --                   | --             | --                 | --                              | --                  |
| MW-8               | 2/24/2020   |       | 3981.2                  | 122.34               | --             | --                 | 3858.86                         | 136.44              |
| MW-8               | 3/13/2020   |       | 3981.2                  | --                   | --             | --                 | --                              | --                  |
| MW-8               | 4/29/2020   |       | 3981.2                  | 122.49               | --             | --                 | 3858.71                         | --                  |
| MW-8               | 5/26/2020   |       | 3981.2                  | 122.39               | --             | --                 | 3858.81                         | --                  |
| MW-8               | 6/16/2020   |       | 3981.2                  | 122.4                | --             | --                 | 3858.8                          | --                  |
| MW-8               | 7/30/2020   |       | 3981.2                  | 122.39               | --             | --                 | 3858.81                         | --                  |
| MW-8               | 8/26/2020   |       | 3981.2                  | 122.42               | --             | --                 | 3858.78                         | --                  |
| MW-8               | 9/15/2020   |       | 3981.2                  | 122.42               | --             | --                 | 3858.78                         | --                  |
| MW-8               | 9/15/2020   |       | 3981.2                  | 122.47               | --             | --                 | 3858.73                         | --                  |
| MW-8               | 9/17/2020   |       | 3981.2                  | 122.4                | --             | --                 | 3858.8                          | 136.4               |
| MW-8               | 10/21/2020  |       | 3981.2                  | 122.45               | --             | --                 | 3858.75                         | --                  |
| MW-8               | 11/4/2020   |       | 3981.2                  | 122.51               | --             | --                 | 3858.69                         | --                  |
| MW-8               | 12/9/2020   |       | 3981.2                  | 122.51               | --             | --                 | 3858.69                         | --                  |
| MW-8               | 1/28/2021   |       | 3981.2                  | 122.57               | --             | --                 | 3858.63                         | --                  |
| MW-8               | 2/25/2021   |       | 3981.2                  | 122.6                | --             | --                 | 3858.6                          | 136.44              |
| MW-8               | 3/24/2021   |       | 3981.2                  | 122.58               | --             | --                 | 3858.62                         | --                  |
| MW-8               | 4/30/2021   |       | 3981.2                  | 122.58               | --             | --                 | 3858.62                         | --                  |
| MW-8               | 5/11/2021   |       | 3981.2                  | 122.63               | --             | --                 | 3858.57                         | --                  |
| MW-8               | 6/28/2021   |       | 3981.2                  | 122.55               | --             | --                 | 3858.65                         | --                  |
| MW-8               | 7/27/2021   |       | 3981.2                  | 122.5                | --             | --                 | 3858.7                          | --                  |
| MW-8               | 8/24/2021   |       | 3981.2                  | 122.5                | --             | --                 | 3858.7                          | --                  |
| MW-8               | 9/30/2021   |       | 3981.2                  | 122.66               | --             | --                 | 3858.54                         | 136.44              |
| MW-8               | 10/28/2021  |       | 3981.2                  | 122.71               | --             | --                 | 3858.49                         | 136.44              |
| MW-8               | 11/16/2021  |       | 3981.2                  | 122.73               | --             | --                 | 3858.47                         | 136.44              |
| MW-8               | 2/1/2022    |       | 3981.2                  | 123.08               | --             | --                 | 3858.12                         | 136.44              |
| MW-8               | 2/22/2022   |       | 3981.2                  | 123.14               | --             | --                 | 3858.06                         | 136.21              |
| MW-8               | 3/16/2022   |       | 3981.2                  | 123.22               | --             | --                 | 3857.98                         | 136.21              |
| MW-8               | 4/11/2022   |       | 3981.2                  | 123.28               | --             | --                 | 3857.92                         | 136.21              |
| MW-8               | 5/24/2022   |       | 3981.2                  | 123.5                | --             | --                 | 3857.7                          | 136.21              |
| MW-8               | 6/15/2022   |       | 3981.2                  | 123.51               | --             | --                 | 3857.69                         | 136.21              |
| MW-8               | 7/28/2022   |       | 3981.2                  | 123.57               | --             | --                 | 3857.63                         | 136.21              |
| MW-8               | 8/24/2022   |       | 3981.2                  | 123.72               | --             | --                 | 3857.48                         | 136.21              |
| MW-8               | 11/2/2022   |       | 3981.2                  | 123.87               | --             | --                 | 3857.33                         | 136.21              |
| MW-8               | 1/23/2023   |       | 3981.2                  | 124.12               | --             | --                 | 3857.08                         | 136.21              |
| MW-8               | 2/17/2023   |       | 3981.2                  | 124.17               | --             | --                 | 3857.03                         | 136.18              |
| MW-8               | 3/1/2023    |       | 3981.2                  | 124.17               | --             | --                 | 3857.03                         | 136.18              |
| MW-8               | 4/24/2023   |       | 3981.2                  | 124.22               | --             | --                 | 3856.98                         | 136.14              |
| MW-8               | 5/9/2023    |       | 3981.2                  | 124.17               | --             | --                 | 3857.03                         | 136.14              |
| MW-8               | 6/16/2023   |       | 3981.2                  | 124.09               | --             | --                 | 3857.11                         | 136.14              |
| MW-8               | 7/21/2023   |       | 3981.2                  | 124.13               | --             | --                 | 3857.07                         | 136.14              |
| MW-8               | 8/9/2023    |       | 3981.2                  | 124.09               | --             | --                 | 3857.11                         | 136.14              |
| MW-8               | 9/15/2023   |       | 3981.2                  | 124.16               | --             | --                 | 3857.04                         | 136.14              |

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Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-8               | 10/20/2023  |       | 3981.2                  | 124.13               | --             | --                 | 3857.07                         | --                  |
| MW-8               | 11/16/2023  |       | 3981.2                  | 124.05               | --             | --                 | 3857.15                         | --                  |
| MW-8               | 1/10/2024   |       | 3981.2                  | 124.16               | --             | --                 | 3857.04                         | --                  |
| MW-8               | 2/26/2024   |       | 3981.2                  | 124.1                | --             | --                 | 3857.1                          | 136.14              |
| MW-8               | 5/20/2024   |       | 3981.2                  | 124.26               | --             | --                 | 3856.94                         | 136.06              |
| MW-8               | 8/20/2024   |       | 3981.2                  | 124.36               | --             | --                 | 3856.84                         | 136.12              |
| MW-8               | 11/18/2024  |       | 3981.2                  | 124.42               | --             | --                 | 3856.78                         | 141.93              |
| MW-9               | 1/10/2020   |       | 3980.44                 | --                   | --             | --                 | --                              | --                  |
| MW-9               | 2/19/2020   |       | 3980.44                 | --                   | --             | --                 | --                              | --                  |
| MW-9               | 2/24/2020   |       | 3980.44                 | 121.56               | --             | --                 | 3858.88                         | 140.78              |
| MW-9               | 3/13/2020   |       | 3980.44                 | --                   | --             | --                 | --                              | --                  |
| MW-9               | 4/29/2020   |       | 3980.44                 | 121.69               | --             | --                 | 3858.75                         | --                  |
| MW-9               | 5/26/2020   |       | 3980.44                 | 121.59               | --             | --                 | 3858.85                         | --                  |
| MW-9               | 6/16/2020   |       | 3980.44                 | 121.57               | --             | --                 | 3858.87                         | --                  |
| MW-9               | 7/30/2020   |       | 3980.44                 | 121.55               | --             | --                 | 3858.89                         | --                  |
| MW-9               | 8/26/2020   |       | 3980.44                 | 121.6                | --             | --                 | 3858.84                         | --                  |
| MW-9               | 9/17/2020   |       | 3980.44                 | 121.64               | --             | --                 | 3858.8                          | 140.51              |
| MW-9               | 10/21/2020  |       | 3980.44                 | 121.63               | --             | --                 | 3858.81                         | --                  |
| MW-9               | 11/4/2020   |       | 3980.44                 | 121.7                | --             | --                 | 3858.74                         | --                  |
| MW-9               | 12/9/2020   |       | 3980.44                 | 121.66               | --             | --                 | 3858.78                         | --                  |
| MW-9               | 1/28/2021   |       | 3980.44                 | 121.77               | --             | --                 | 3858.67                         | --                  |
| MW-9               | 2/25/2021   |       | 3980.44                 | 121.88               | --             | --                 | 3858.56                         | 140.68              |
| MW-9               | 3/24/2021   |       | 3980.44                 | 121.74               | --             | --                 | 3858.7                          | --                  |
| MW-9               | 4/30/2021   |       | 3980.44                 | 121.8                | --             | --                 | 3858.64                         | --                  |
| MW-9               | 5/11/2021   |       | 3980.44                 | 121.81               | --             | --                 | 3858.63                         | --                  |
| MW-9               | 6/28/2021   |       | 3980.44                 | 121.73               | --             | --                 | 3858.71                         | --                  |
| MW-9               | 7/27/2021   |       | 3980.44                 | 122.66               | --             | --                 | 3857.78                         | --                  |
| MW-9               | 8/24/2021   |       | 3980.44                 | 121.66               | --             | --                 | 3858.78                         | --                  |
| MW-9               | 9/30/2021   |       | 3980.44                 | 121.85               | --             | --                 | 3858.58                         | 140.68              |
| MW-9               | 10/28/2021  |       | 3980.44                 | 121.9                | --             | --                 | 3858.54                         | 140.68              |
| MW-9               | 11/16/2021  |       | 3980.44                 | 121.92               | --             | --                 | 3858.52                         | 140.68              |
| MW-9               | 2/1/2022    |       | 3980.44                 | 122.27               | --             | --                 | 3858.17                         | 140.68              |
| MW-9               | 2/22/2022   |       | 3980.44                 | 122.41               | --             | --                 | 3858.03                         | 140.54              |
| MW-9               | 3/16/2022   |       | 3980.44                 | 122.41               | --             | --                 | 3858.03                         | 140.54              |
| MW-9               | 4/11/2022   |       | 3980.44                 | 122.5                | --             | --                 | 3857.93                         | 140.54              |
| MW-9               | 5/24/2022   |       | 3980.44                 | 122.68               | --             | --                 | 3857.76                         | 140.54              |
| MW-9               | 6/15/2022   |       | 3980.44                 | 122.78               | --             | --                 | 3857.65                         | 140.54              |
| MW-9               | 7/28/2022   |       | 3980.44                 | 122.76               | --             | --                 | 3857.68                         | 140.54              |
| MW-9               | 8/24/2022   |       | 3980.44                 | 122.94               | --             | --                 | 3857.5                          | 140.54              |
| MW-9               | 11/2/2022   |       | 3980.44                 | 123.08               | --             | --                 | 3857.36                         | 140.54              |
| MW-9               | 2/17/2023   |       | 3980.44                 | 123.35               | --             | --                 | 3857.09                         | 140.63              |
| MW-9               | 5/9/2023    |       | 3980.44                 | 123.48               | --             | --                 | 3856.96                         | 140.63              |
| MW-9               | 8/8/2023    |       | 3980.44                 | 123.3                | --             | --                 | 3857.14                         | 140.63              |
| MW-9               | 11/16/2023  |       | 3980.44                 | 123.21               | --             | --                 | 3857.23                         | --                  |

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Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-9               | 2/26/2024   |       | 3980.44                 | 123.29               | --             | --                 | 3857.15                         | 140.63              |
| MW-9               | 5/20/2024   |       | 3980.44                 | 123.45               | --             | --                 | 3856.99                         | 140.43              |
| MW-9               | 8/20/2024   |       | 3980.44                 | 123.56               | --             | --                 | 3856.88                         | 140.49              |
| MW-9               | 11/18/2024  |       | 3980.44                 | 123.78               | --             | --                 | 3856.66                         | 140.51              |
| MW-10              | 1/10/2020   |       | 3980.06                 | --                   | --             | --                 | --                              | --                  |
| MW-10              | 2/19/2020   |       | 3980.06                 | --                   | --             | --                 | --                              | --                  |
| MW-10              | 2/24/2020   |       | 3980.06                 | 121.26               | --             | --                 | 3858.8                          | 141.52              |
| MW-10              | 3/13/2020   |       | 3980.06                 | --                   | --             | --                 | --                              | --                  |
| MW-10              | 4/29/2020   |       | 3980.06                 | 121.41               | --             | --                 | 3858.65                         | --                  |
| MW-10              | 5/26/2020   |       | 3980.06                 | 121.31               | --             | --                 | 3858.75                         | --                  |
| MW-10              | 6/16/2020   |       | 3980.06                 | 121.29               | --             | --                 | 3858.77                         | --                  |
| MW-10              | 7/30/2020   |       | 3980.06                 | 121.28               | --             | --                 | 3858.78                         | --                  |
| MW-10              | 8/26/2020   |       | 3980.06                 | 121.32               | --             | --                 | 3858.74                         | --                  |
| MW-10              | 9/17/2020   |       | 3980.06                 | 121.34               | --             | --                 | 3858.72                         | 141.48              |
| MW-10              | 10/21/2020  |       | 3980.06                 | 121.37               | --             | --                 | 3858.69                         | --                  |
| MW-10              | 11/4/2020   |       | 3980.06                 | 121.42               | --             | --                 | 3858.64                         | --                  |
| MW-10              | 12/9/2020   |       | 3980.06                 | 121.42               | --             | --                 | 3858.64                         | --                  |
| MW-10              | 1/28/2021   |       | 3980.06                 | 121.49               | --             | --                 | 3858.57                         | --                  |
| MW-10              | 2/25/2021   |       | 3980.06                 | 121.48               | --             | --                 | 3858.58                         | 141.3               |
| MW-10              | 3/24/2021   |       | 3980.06                 | 121.46               | --             | --                 | 3858.6                          | --                  |
| MW-10              | 4/30/2021   |       | 3980.06                 | 121.5                | --             | --                 | 3858.56                         | --                  |
| MW-10              | 5/11/2021   |       | 3980.06                 | 121.54               | --             | --                 | 3858.52                         | --                  |
| MW-10              | 6/28/2021   |       | 3980.06                 | 121.46               | --             | --                 | 3858.6                          | --                  |
| MW-10              | 7/27/2021   |       | 3980.06                 | 121.37               | --             | --                 | 3858.69                         | --                  |
| MW-10              | 8/24/2021   |       | 3980.06                 | 121.39               | --             | --                 | 3858.67                         | --                  |
| MW-10              | 9/30/2021   |       | 3980.06                 | 121.56               | --             | --                 | 3858.5                          | 141.3               |
| MW-10              | 10/28/2021  |       | 3980.06                 | 121.63               | --             | --                 | 3858.43                         | 141.3               |
| MW-10              | 11/16/2021  |       | 3980.06                 | 121.64               | --             | --                 | 3858.42                         | 141.3               |
| MW-10              | 2/1/2022    |       | 3980.06                 | 122                  | --             | --                 | 3858.06                         | 141.3               |
| MW-10              | 2/22/2022   |       | 3980.06                 | 122.1                | --             | --                 | 3857.96                         | 141.25              |
| MW-10              | 3/16/2022   |       | 3980.06                 | 122.13               | --             | --                 | 3857.93                         | 141.25              |
| MW-10              | 4/11/2022   |       | 3980.06                 | 122.22               | --             | --                 | 3857.84                         | 141.25              |
| MW-10              | 5/24/2022   |       | 3980.06                 | 122.42               | --             | --                 | 3857.64                         | 141.25              |
| MW-10              | 6/15/2022   |       | 3980.06                 | 122.48               | --             | --                 | 3857.58                         | 141.25              |
| MW-10              | 7/28/2022   |       | 3980.06                 | 122.51               | --             | --                 | 3857.55                         | 141.25              |
| MW-10              | 8/24/2022   |       | 3980.06                 | 122.67               | --             | --                 | 3857.39                         | 141.25              |
| MW-10              | 11/2/2022   |       | 3980.06                 | 122.46               | --             | --                 | 3857.6                          | 141.25              |
| MW-10              | 2/17/2023   |       | 3980.06                 | 123.1                | --             | --                 | 3856.96                         | 141.28              |
| MW-10              | 4/24/2023   |       | 3980.06                 | 123.18               | --             | --                 | 3856.88                         | 141.2               |
| MW-10              | 5/9/2023    |       | 3980.06                 | 123.17               | --             | --                 | 3856.89                         | 141.2               |
| MW-10              | 6/16/2023   |       | 3980.06                 | 123.03               | --             | --                 | 3857.03                         | 141.2               |
| MW-10              | 7/21/2023   |       | 3980.06                 | 123.04               | --             | --                 | 3857.02                         | 141.2               |
| MW-10              | 8/8/2023    |       | 3980.06                 | 123.05               | --             | --                 | 3857.01                         | 141.2               |
| MW-10              | 9/15/2023   |       | 3980.06                 | 123.11               | --             | --                 | 3856.95                         | 141.2               |



Table 1

**Summary of Groundwater Gauging and Elevation Data  
Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-10              | 10/20/2023  |       | 3980.06                 | 123.09               | --             | --                 | 3856.97                         | --                  |
| MW-10              | 11/16/2023  |       | 3980.06                 | 122.94               | --             | --                 | 3857.12                         | --                  |
| MW-10              | 2/26/2024   |       | 3980.06                 | 123.01               | --             | --                 | 3857.05                         | 141.2               |
| MW-10              | 5/20/2024   |       | 3980.06                 | 123.16               | --             | --                 | 3856.9                          | 141.14              |
| MW-10              | 8/20/2024   |       | 3980.06                 | 123.25               | --             | --                 | 3856.81                         | 141.11              |
| MW-10              | 11/18/2024  |       | 3980.06                 | 123.45               | --             | --                 | 3856.61                         | 141.43              |
| MW-11              | 2/24/2020   |       | 3981.92                 | 123                  | --             | --                 | 3858.92                         | 142.94              |
| MW-11              | 4/29/2020   |       | 3981.92                 | 123.16               | --             | --                 | 3858.76                         | --                  |
| MW-11              | 5/26/2020   |       | 3981.92                 | 123.05               | --             | --                 | 3858.87                         | --                  |
| MW-11              | 6/16/2020   |       | 3981.92                 | 123.05               | --             | --                 | 3858.87                         | --                  |
| MW-11              | 7/30/2020   |       | 3981.92                 | 123.05               | --             | --                 | 3858.87                         | --                  |
| MW-11              | 8/26/2020   |       | 3981.92                 | 123.08               | --             | --                 | 3858.84                         | --                  |
| MW-11              | 9/17/2020   |       | 3981.92                 | 123.07               | --             | --                 | 3858.85                         | 141.79              |
| MW-11              | 10/21/2020  |       | 3981.92                 | 123.11               | --             | --                 | 3858.81                         | --                  |
| MW-11              | 11/4/2020   |       | 3981.92                 | 123.18               | --             | --                 | 3858.74                         | --                  |
| MW-11              | 12/9/2020   |       | 3981.92                 | 123.19               | --             | --                 | 3858.73                         | --                  |
| MW-11              | 1/28/2021   |       | 3981.92                 | 123.23               | --             | --                 | 3858.69                         | --                  |
| MW-11              | 2/25/2021   |       | 3981.92                 | 123.25               | --             | --                 | 3858.67                         | 141.7               |
| MW-11              | 3/24/2021   |       | 3981.92                 | 123.23               | --             | --                 | 3858.69                         | --                  |
| MW-11              | 4/30/2021   |       | 3981.92                 | 123.24               | --             | --                 | 3858.68                         | --                  |
| MW-11              | 5/11/2021   |       | 3981.92                 | 123.31               | --             | --                 | 3858.61                         | --                  |
| MW-11              | 6/28/2021   |       | 3981.92                 | 123.24               | --             | --                 | 3858.68                         | --                  |
| MW-11              | 7/27/2021   |       | 3981.92                 | 123.17               | --             | --                 | 3858.75                         | --                  |
| MW-11              | 8/24/2021   |       | 3981.92                 | 123.18               | --             | --                 | 3858.74                         | --                  |
| MW-11              | 9/30/2021   |       | 3981.92                 | 123.3                | --             | --                 | 3858.62                         | 141.7               |
| MW-11              | 10/28/2021  |       | 3981.92                 | 123.37               | --             | --                 | 3858.55                         | 141.7               |
| MW-11              | 11/16/2021  |       | 3981.92                 | 123.36               | --             | --                 | 3858.56                         | 141.7               |
| MW-11              | 2/1/2022    |       | 3981.92                 | 123.71               | --             | --                 | 3858.21                         | 141.7               |
| MW-11              | 2/22/2022   |       | 3981.92                 | 123.79               | --             | --                 | 3858.13                         | 141.69              |
| MW-11              | 3/16/2022   |       | 3981.92                 | 123.81               | --             | --                 | 3858.11                         | 141.69              |
| MW-11              | 4/11/2022   |       | 3981.92                 | 123.88               | --             | --                 | 3858.04                         | 141.69              |
| MW-11              | 5/24/2022   |       | 3981.92                 | 124.1                | --             | --                 | 3857.82                         | 141.69              |
| MW-11              | 5/24/2022   |       | 3981.92                 | 124.16               | --             | --                 | 3857.76                         | 141.69              |
| MW-11              | 6/15/2022   |       | 3981.92                 | 124.12               | --             | --                 | 3857.8                          | 141.69              |
| MW-11              | 8/24/2022   |       | 3981.92                 | 124.31               | --             | --                 | 3857.61                         | 141.69              |
| MW-11              | 11/2/2022   |       | 3981.92                 | 124.46               | --             | --                 | 3857.46                         | 141.69              |
| MW-11              | 1/23/2023   |       | 3981.92                 | 124.71               | --             | --                 | 3857.21                         | 141.69              |
| MW-11              | 2/17/2023   |       | 3981.92                 | 124.73               | --             | --                 | 3857.19                         | 141.83              |
| MW-11              | 3/1/2023    |       | 3981.92                 | 124.77               | --             | --                 | 3857.15                         | 141.83              |
| MW-11              | 4/24/2023   |       | 3981.92                 | 124.85               | --             | --                 | 3857.07                         | 141.62              |
| MW-11              | 5/9/2023    |       | 3981.92                 | 124.8                | --             | --                 | 3857.12                         | 141.62              |
| MW-11              | 6/16/2023   |       | 3981.92                 | 124.71               | --             | --                 | 3857.21                         | 141.62              |
| MW-11              | 7/21/2023   |       | 3981.92                 | 124.77               | --             | --                 | 3857.15                         | 141.62              |
| MW-11              | 8/9/2023    |       | 3981.92                 | 124.71               | --             | --                 | 3857.21                         | 141.62              |

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Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-11              | 9/15/2023   |       | 3981.92                 | 124.81               | --             | --                 | 3857.11                         | 141.62              |
| MW-11              | 10/20/2023  |       | 3981.92                 | 124.78               | --             | --                 | 3857.14                         | --                  |
| MW-11              | 11/16/2023  |       | 3981.92                 | 124.69               | --             | --                 | 3857.23                         | --                  |
| MW-11              | 2/26/2024   |       | 3981.92                 | 124.74               | --             | --                 | 3857.18                         | 141.62              |
| MW-11              | 5/20/2024   |       | 3981.92                 | 124.9                | --             | --                 | 3857.02                         | 141.54              |
| MW-11              | 8/20/2024   |       | 3981.92                 | 124.98               | --             | --                 | 3856.94                         | 141.65              |
| MW-11              | 11/18/2024  |       | 3981.92                 | 125.15               | --             | --                 | 3856.77                         | 146.52              |
| MW-12              | 1/10/2020   | LNAPL | 3982.15                 | 123.48               | 123.25         | 0.23               | 3858.856                        | --                  |
| MW-12              | 2/19/2020   | LNAPL | 3982.15                 | 123.54               | 123.2          | 0.34               | 3858.885                        | --                  |
| MW-12              | 2/24/2020   | LNAPL | 3982.15                 | 123.38               | 123.2          | 0.18               | 3858.916                        | --                  |
| MW-12              | 3/13/2020   | LNAPL | 3982.15                 | 123.5                | 123.24         | 0.26               | 3858.861                        | --                  |
| MW-12              | 4/29/2020   | LNAPL | 3982.15                 | 123.76               | 123.34         | 0.42               | 3858.73                         | --                  |
| MW-12              | 5/26/2020   | LNAPL | 3982.15                 | 123.56               | 123.23         | 0.33               | 3858.857                        | --                  |
| MW-12              | 6/16/2020   | LNAPL | 3982.15                 | 123.65               | 123.22         | 0.43               | 3858.848                        | --                  |
| MW-12              | 7/30/2020   | LNAPL | 3982.15                 | 123.7                | 123.23         | 0.47               | 3858.831                        | --                  |
| MW-12              | 8/26/2020   | LNAPL | 3982.15                 | 123.66               | 123.25         | 0.41               | 3858.822                        | --                  |
| MW-12              | 9/15/2020   | LNAPL | 3982.15                 | 123.41               | 123.25         | 0.16               | 3858.87                         | --                  |
| MW-12              | 9/15/2020   | LNAPL | 3982.15                 | 123.71               | 123.32         | 0.39               | 3858.756                        | --                  |
| MW-12              | 9/17/2020   | LNAPL | 3982.15                 | 123.57               | 123.27         | 0.3                | 3858.823                        | --                  |
| MW-12              | 10/21/2020  | LNAPL | 3982.15                 | 123.8                | 123.28         | 0.52               | 3858.771                        | --                  |
| MW-12              | 11/4/2020   | LNAPL | 3982.15                 | 123.74               | 123.35         | 0.39               | 3858.726                        | --                  |
| MW-12              | 12/9/2020   | LNAPL | 3982.15                 | 123.91               | 123.34         | 0.57               | 3858.702                        | --                  |
| MW-12              | 1/28/2021   | LNAPL | 3982.15                 | 123.9                | 123.4          | 0.5                | 3858.655                        | --                  |
| MW-12              | 2/25/2021   | LNAPL | 3982.15                 | 123.88               | 123.38         | 0.5                | 3858.675                        | 142.01              |
| MW-12              | 3/24/2021   | LNAPL | 3982.15                 | 123.98               | 123.37         | 0.61               | 3858.664                        | --                  |
| MW-12              | 4/30/2021   | LNAPL | 3982.15                 | 124.19               | 123.37         | 0.82               | 3858.624                        | --                  |
| MW-12              | 5/11/2021   | LNAPL | 3982.15                 | 124.28               | 123.42         | 0.86               | 3858.567                        | --                  |
| MW-12              | 6/28/2021   | LNAPL | 3982.15                 | 124.36               | 123.31         | 1.05               | 3858.64                         | --                  |
| MW-12              | 7/27/2021   | LNAPL | 3982.15                 | 124.38               | 123.21         | 1.17               | 3858.718                        | --                  |
| MW-12              | 8/24/2021   | LNAPL | 3982.15                 | 124.53               | 123.21         | 1.32               | 3858.689                        | --                  |
| MW-12              | 9/30/2021   | LNAPL | 3982.15                 | 124.35               | 123.43         | 0.92               | 3858.545                        | 142.01              |
| MW-12              | 10/28/2021  | LNAPL | 3982.15                 | 124.4                | 123.48         | 0.92               | 3858.495                        | 142.01              |
| MW-12              | 11/16/2021  | LNAPL | 3982.15                 | 124.61               | 123.4          | 1.21               | 3858.52                         | 142.01              |
| MW-12              | 2/1/2022    | LNAPL | 3982.15                 | 124.53               | 123.8          | 0.73               | 3858.211                        | 142.01              |
| MW-12              | 2/22/2022   | LNAPL | 3982.15                 | 124.7                | 123.93         | 0.77               | 3858.074                        | 142.18              |
| MW-12              | 3/16/2022   | LNAPL | 3982.15                 | 124.75               | 123.96         | 0.79               | 3858.04                         | 142.18              |
| MW-12              | 4/11/2022   | LNAPL | 3982.15                 | 124.9                | 124.08         | 0.82               | 3857.914                        | 142.18              |
| MW-12              | 5/24/2022   | LNAPL | 3982.15                 | 125.1                | 124.22         | 0.88               | 3857.763                        | 142.18              |
| MW-12              | 6/15/2022   | LNAPL | 3982.15                 | 124.87               | 124.25         | 0.62               | 3857.782                        | 142.18              |
| MW-12              | 7/25/2022   | LNAPL | 3982.15                 | 124.95               | 124.33         | 0.62               | 3857.702                        | 142.18              |
| MW-12              | 8/24/2022   | LNAPL | 3982.15                 | 125.13               | 124.47         | 0.66               | 3857.555                        | 142.18              |
| MW-12              | 10/6/2022   | LNAPL | 3982.15                 | 125.23               | 124.25         | 0.98               | 3857.714                        | 142.18              |
| MW-12              | 10/6/2022   | LNAPL | 3982.15                 | 124.69               | 124.68         | 0.01               | 3857.468                        | 142.18              |
| MW-12              | 11/2/2022   | LNAPL | 3982.15                 | 124.79               | 124.66         | 0.13               | 3857.465                        | 142.18              |



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SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-12              | 11/2/2022   | LNAPL | 3982.15                 | 124.78               | 124.76         | 0.02               | 3857.386                        | 142.18              |
| MW-12              | 11/30/2022  | LNAPL | 3982.15                 | 124.86               | 124.77         | 0.09               | 3857.363                        | 142.18              |
| MW-12              | 11/30/2022  | LNAPL | 3982.15                 | 124.74               | 124.73         | 0.01               | 3857.418                        | 142.18              |
| MW-12              | 1/23/2023   | LNAPL | 3982.15                 | 124.98               | 124.95         | 0.03               | 3857.194                        | 142.18              |
| MW-12              | 2/17/2023   | LNAPL | 3982.15                 | 124.94               | 124.92         | 0.02               | 3857.226                        | 142.27              |
| MW-12              | 3/1/2023    |       | 3982.15                 | 125.03               | --             | --                 | 3857.12                         | 142.27              |
| MW-12              | 4/24/2023   |       | 3982.15                 | 125.08               | --             | --                 | 3857.07                         | 142.2               |
| MW-12              | 5/9/2023    | LNAPL | 3982.15                 | 125.05               | 125            | 0.05               | 3857.14                         | 142.2               |
| MW-12              | 6/16/2023   | LNAPL | 3982.15                 | 124.94               | 124.92         | 0.02               | 3857.226                        | 142.2               |
| MW-12              | 7/21/2023   | LNAPL | 3982.15                 | 124.93               | 124.92         | 0.01               | 3857.228                        | 142.2               |
| MW-12              | 8/31/2023   |       | 3982.15                 | 125                  | --             | --                 | 3857.15                         | --                  |
| MW-12              | 9/15/2023   | LNAPL | 3982.15                 | 125.05               | 125.04         | 0.01               | 3857.108                        | 142.2               |
| MW-12              | 10/20/2023  | LNAPL | 3982.15                 | 125.04               | 125.03         | 0.01               | 3857.118                        | --                  |
| MW-12              | 11/16/2023  | LNAPL | 3982.15                 | 125                  | 124.98         | 0.02               | 3857.166                        | --                  |
| MW-12              | 2/26/2024   | LNAPL | 3982.15                 | 125.04               | 125.03         | 0.01               | 3857.118                        | --                  |
| MW-12              | 5/20/2024   |       | 3982.15                 | 125.13               | --             | --                 | 3857.02                         | 142.16              |
| MW-12              | 8/20/2024   |       | 3982.15                 | 125.21               | --             | --                 | 3856.94                         | 142.2               |
| MW-12              | 11/18/2024  |       | 3982.15                 | 125.41               | --             | --                 | 3856.74                         | 142.18              |
| MW-13              | 2/24/2020   |       | 3980.82                 | 121.81               | --             | --                 | 3859.01                         | 141.36              |
| MW-13              | 4/29/2020   |       | 3980.82                 | 122                  | --             | --                 | 3858.82                         | --                  |
| MW-13              | 5/26/2020   |       | 3980.82                 | 121.88               | --             | --                 | 3858.94                         | --                  |
| MW-13              | 6/16/2020   |       | 3980.82                 | 121.89               | --             | --                 | 3858.93                         | --                  |
| MW-13              | 7/30/2020   |       | 3980.82                 | 121.87               | --             | --                 | 3858.95                         | --                  |
| MW-13              | 8/26/2020   |       | 3980.82                 | 121.9                | --             | --                 | 3858.92                         | --                  |
| MW-13              | 9/17/2020   |       | 3980.82                 | 121.92               | --             | --                 | 3858.9                          | 141.31              |
| MW-13              | 10/21/2020  |       | 3980.82                 | 121.93               | --             | --                 | 3858.89                         | --                  |
| MW-13              | 11/4/2020   |       | 3980.82                 | 122.01               | --             | --                 | 3858.81                         | --                  |
| MW-13              | 12/9/2020   |       | 3980.82                 | 121.97               | --             | --                 | 3858.85                         | --                  |
| MW-13              | 1/28/2021   |       | 3980.82                 | 122.05               | --             | --                 | 3858.77                         | --                  |
| MW-13              | 2/25/2021   |       | 3980.82                 | 122.11               | --             | --                 | 3858.71                         | 141.42              |
| MW-13              | 3/24/2021   |       | 3980.82                 | 122.06               | --             | --                 | 3858.76                         | --                  |
| MW-13              | 4/30/2021   |       | 3980.82                 | 122.1                | --             | --                 | 3858.72                         | --                  |
| MW-13              | 5/11/2021   |       | 3980.82                 | 122.13               | --             | --                 | 3858.69                         | --                  |
| MW-13              | 6/28/2021   |       | 3980.82                 | 122.27               | --             | --                 | 3858.55                         | --                  |
| MW-13              | 7/27/2021   |       | 3980.82                 | 121.97               | --             | --                 | 3858.85                         | --                  |
| MW-13              | 8/24/2021   |       | 3980.82                 | 121.88               | --             | --                 | 3858.94                         | --                  |
| MW-13              | 9/30/2021   |       | 3980.82                 | 122.37               | --             | --                 | 3858.45                         | 141.42              |
| MW-13              | 10/28/2021  |       | 3980.82                 | 122.4                | --             | --                 | 3858.42                         | 141.42              |
| MW-13              | 11/16/2021  |       | 3980.82                 | 122.48               | --             | --                 | 3858.34                         | 141.42              |
| MW-13              | 2/1/2022    |       | 3980.82                 | 122.54               | --             | --                 | 3858.28                         | 141.42              |
| MW-13              | 2/22/2022   |       | 3980.82                 | 122.64               | --             | --                 | 3858.18                         | 141.26              |
| MW-13              | 3/16/2022   |       | 3980.82                 | 122.67               | --             | --                 | 3858.15                         | 141.26              |
| MW-13              | 4/11/2022   |       | 3980.82                 | 122.82               | --             | --                 | 3858                            | 141.26              |
| MW-13              | 5/24/2022   |       | 3980.82                 | 122.86               | --             | --                 | 3857.96                         | 141.26              |

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Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-13              | 6/15/2022   |       | 3980.82                 | 123                  | --             | --                 | 3857.82                         | 141.26              |
| MW-13              | 7/28/2022   |       | 3980.82                 | 123.05               | --             | --                 | 3857.77                         | 141.26              |
| MW-13              | 8/24/2022   |       | 3980.82                 | 123.19               | --             | --                 | 3857.63                         | 141.26              |
| MW-13              | 11/2/2022   |       | 3980.82                 | 123.34               | --             | --                 | 3857.48                         | 141.26              |
| MW-13              | 2/17/2023   |       | 3980.82                 | 123.63               | --             | --                 | 3857.19                         | 141.37              |
| MW-13              | 5/9/2023    |       | 3980.82                 | 123.67               | --             | --                 | 3857.15                         | 141.37              |
| MW-13              | 8/8/2023    |       | 3980.82                 | 123.59               | --             | --                 | 3857.23                         | 141.37              |
| MW-13              | 11/16/2023  |       | 3980.82                 | 124.08               | --             | --                 | 3856.74                         | --                  |
| MW-13              | 2/26/2024   |       | 3980.82                 | 123.64               | --             | --                 | 3857.18                         | 141.37              |
| MW-13              | 5/20/2024   |       | 3980.82                 | 123.74               | --             | --                 | 3857.08                         | 141.2               |
| MW-13              | 8/20/2024   |       | 3980.82                 | 123.83               | --             | --                 | 3856.99                         | 141.26              |
| MW-13              | 11/18/2024  |       | 3980.82                 | 124.03               | --             | --                 | 3856.79                         | 141.3               |
| MW-14              | 2/24/2020   |       | 3981.35                 | 122.38               | --             | --                 | 3858.97                         | 141.49              |
| MW-14              | 4/29/2020   |       | 3981.35                 | 122.53               | --             | --                 | 3858.82                         | --                  |
| MW-14              | 5/26/2020   |       | 3981.35                 | 122.42               | --             | --                 | 3858.93                         | --                  |
| MW-14              | 6/16/2020   |       | 3981.35                 | 122.42               | --             | --                 | 3858.93                         | --                  |
| MW-14              | 7/30/2020   |       | 3981.35                 | 122.42               | --             | --                 | 3858.93                         | --                  |
| MW-14              | 8/26/2020   |       | 3981.35                 | 122.44               | --             | --                 | 3858.91                         | --                  |
| MW-14              | 9/17/2020   |       | 3981.35                 | 122.48               | --             | --                 | 3858.87                         | 141.44              |
| MW-14              | 10/21/2020  |       | 3981.35                 | 122.48               | --             | --                 | 3858.87                         | --                  |
| MW-14              | 11/4/2020   |       | 3981.35                 | 122.55               | --             | --                 | 3858.8                          | --                  |
| MW-14              | 12/9/2020   |       | 3981.35                 | 122.52               | --             | --                 | 3858.83                         | --                  |
| MW-14              | 1/28/2021   |       | 3981.35                 | 122.65               | --             | --                 | 3858.7                          | --                  |
| MW-14              | 2/25/2021   |       | 3981.35                 | 122.67               | --             | --                 | 3858.68                         | 141.41              |
| MW-14              | 3/24/2021   |       | 3981.35                 | 122.61               | --             | --                 | 3858.74                         | --                  |
| MW-14              | 4/30/2021   |       | 3981.35                 | 122.64               | --             | --                 | 3858.71                         | --                  |
| MW-14              | 5/11/2021   |       | 3981.35                 | 122.67               | --             | --                 | 3858.68                         | --                  |
| MW-14              | 6/28/2021   |       | 3981.35                 | 122.62               | --             | --                 | 3858.73                         | --                  |
| MW-14              | 7/27/2021   |       | 3981.35                 | 122.55               | --             | --                 | 3858.8                          | --                  |
| MW-14              | 8/24/2021   |       | 3981.35                 | 122.57               | --             | --                 | 3858.78                         | --                  |
| MW-14              | 9/30/2021   |       | 3981.35                 | 122.68               | --             | --                 | 3858.67                         | 141.41              |
| MW-14              | 10/28/2021  |       | 3981.35                 | 122.74               | --             | --                 | 3858.61                         | 141.41              |
| MW-14              | 11/16/2021  |       | 3981.35                 | 122.76               | --             | --                 | 3858.59                         | 141.41              |
| MW-14              | 2/1/2022    |       | 3981.35                 | 123.07               | --             | --                 | 3858.28                         | 141.41              |
| MW-14              | 2/22/2022   |       | 3981.35                 | 123.15               | --             | --                 | 3858.2                          | 141.41              |
| MW-14              | 3/16/2022   |       | 3981.35                 | 123.18               | --             | --                 | 3858.17                         | 141.41              |
| MW-14              | 4/11/2022   |       | 3981.35                 | 123.32               | --             | --                 | 3858.03                         | 141.41              |
| MW-14              | 5/24/2022   |       | 3981.35                 | 123.36               | --             | --                 | 3857.99                         | 141.41              |
| MW-14              | 6/15/2022   |       | 3981.35                 | 123.48               | --             | --                 | 3857.87                         | 141.41              |
| MW-14              | 7/28/2022   |       | 3981.35                 | 123.48               | --             | --                 | 3857.87                         | 141.41              |
| MW-14              | 8/24/2022   |       | 3981.35                 | 123.67               | --             | --                 | 3857.68                         | 141.41              |
| MW-14              | 11/2/2022   |       | 3981.35                 | 123.82               | --             | --                 | 3857.53                         | 141.41              |
| MW-14              | 2/17/2023   |       | 3981.35                 | 124.12               | --             | --                 | 3857.23                         | 141.5               |
| MW-14              | 5/9/2023    |       | 3981.35                 | 124.15               | --             | --                 | 3857.2                          | 141.5               |

Table 1

**Summary of Groundwater Gauging and Elevation Data  
Plains All American Pipeline, L.P.  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID | Sample Date | Notes | Top-of-Casing Elevation | Depth to Groundwater | Depth to LNAPL | Thickness of LNAPL | Corrected Groundwater Elevation | Total Depth of Well |
|--------------------|-------------|-------|-------------------------|----------------------|----------------|--------------------|---------------------------------|---------------------|
| MW-14              | 8/8/2023    |       | 3981.35                 | 124.12               | --             | --                 | 3857.23                         | 141.5               |
| MW-14              | 11/16/2023  |       | 3981.35                 | 124.08               | --             | --                 | 3857.27                         | --                  |
| MW-14              | 2/26/2024   |       | 3981.35                 | 124.16               | --             | --                 | 3857.19                         | 141.5               |
| MW-14              | 5/20/2024   |       | 3981.35                 | 124.26               | --             | --                 | 3857.09                         | 141.33              |
| MW-14              | 8/20/2024   |       | 3981.35                 | 124.35               | --             | --                 | 3857                            | 141.4               |
| MW-14              | 11/18/2024  |       | 3981.35                 | 124.54               | --             | --                 | 3856.81                         | 141.5               |

## Notes:

1. All dates are in the format: MM/DD/YY
2. --: No gauging data collected on corresponding date
3. LNAPL: Light Non-Aqueous Phase Liquids
4. Elevations of the potentiometric surface were calculated using a LNAPL specific gravity of 0.81 gram/cubic centimeter (g/cc)

Table 2

**Summary of Groundwater Analytical Results**  
**Plains All American Pipeline, L.P.**  
**Chevron Grayburg 6-Inch Sec. 6**  
**SRS No. Chevron Grayburg 6-Inch Historical**  
**Lea County, New Mexico**  
**NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID                                                                | Sample Date | Sample Type | Benzene     | Toluene     | Ethylbenzene | Xylenes (total) |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|--------------|-----------------|
| <b>New Mexico Water Quality Control Commission (NMWCC) Human Health Standards</b> |             |             | <b>0.01</b> | <b>0.75</b> | <b>0.75</b>  | <b>0.62</b>     |
| MW-1                                                                              | 02/25/20    | DUP         | 0.0529      | 0.0876      | 0.0398       | 0.0696          |
| MW-1                                                                              | 02/25/20    |             | 0.0537      | 0.105       | 0.0472       | 0.083           |
| MW-1                                                                              | 05/27/20    |             | 0.0213      | 0.0462      | 0.0175       | 0.0201          |
| MW-1                                                                              | 09/18/20    | DUP         | 0.0243      | 0.0493      | 0.019        | 0.0337          |
| MW-1                                                                              | 09/18/20    |             | 0.0263      | 0.0523      | 0.0204       | 0.0362          |
| MW-1                                                                              | 11/04/20    |             | 0.0192      | 0.0275      | 0.0115       | 0.0151          |
| MW-1                                                                              | 02/25/21    | DUP         | 0.00522     | 0.0156      | 0.00656      | 0.0105          |
| MW-1                                                                              | 02/25/21    |             | 0.00618     | 0.018       | 0.00752      | 0.0119          |
| MW-1                                                                              | 05/12/21    |             | 0.038       | 0.0152      | 0.00876      | 0.0146          |
| MW-1                                                                              | 08/25/21    | DUP         | 0.0143      | 0.0452      | 0.0176       | 0.0326          |
| MW-1                                                                              | 08/25/21    |             | 0.0137      | 0.0417      | 0.0164       | 0.0312          |
| MW-1                                                                              | 11/16/21    |             | 0.092       | 0.283       | 0.11         | 0.132           |
| MW-1                                                                              | 02/22/22    |             | 0.00796     | 0.0171      | 0.00659      | 0.0142          |
| MW-1                                                                              | 05/25/22    |             | 0.0198      | 0.0812      | 0.0285       | 0.0511          |
| MW-1                                                                              | 09/13/22    |             | 0.0458      | 0.0675      | 0.026        | 0.0532          |
| MW-1                                                                              | 11/03/22    |             | 0.0683      | 0.15        | 0.0619       | 0.0908          |
| MW-1                                                                              | 02/17/23    |             | 0.00734     | 0.0233      | 0.00765      | 0.0317          |
| MW-1                                                                              | 05/09/23    |             | 0.0163      | 0.0666      | 0.0299       | 0.0643          |
| MW-1                                                                              | 08/08/23    |             | 0.0177      | 0.0349      | 0.012        | 0.0252          |
| MW-1                                                                              | 11/16/23    |             | 0.0351      | 0.0349      | 0.00856      | 0.0324          |
| MW-1                                                                              | 02/29/24    |             | 0.00536     | 0.00431     | 0.00105      | 0.00379         |
| MW-1                                                                              | 05/20/24    |             | 0.0059      | 0.019       | 0.0062       | 0.007           |
| MW-1                                                                              | 08/20/24    |             | <0.001      | 0.0035      | 0.002        | 0.0054          |
| MW-1                                                                              | 11/18/24    |             | 0.0028      | 0.0096      | 0.0058       | 0.01            |
| MW-2                                                                              | 02/25/20    |             | 0.000297 J  | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 05/27/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 09/18/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 11/04/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 02/25/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 05/12/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 08/25/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 11/16/21    |             | 0.000123 J  | <0.000278   | <0.000137    | <0.000174       |
| MW-2                                                                              | 02/22/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 05/25/22    |             | <0.000493   | <0.000998   | <0.000462    | <0.00132        |
| MW-2                                                                              | 09/13/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 11/03/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 02/17/23    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-2                                                                              | 05/09/23    |             | 0.000288 J  | <0.001      | <0.0005      | <0.0015         |
| MW-2                                                                              | 08/08/23    |             | 0.00104 B   | <0.001      | <0.0005      | <0.0015         |
| MW-2                                                                              | 11/16/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-2                                                                              | 02/27/24    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-2                                                                              | 05/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-2                                                                              | 08/19/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-2                                                                              | 11/18/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-3                                                                              | 02/25/20    |             | 0.00082     | <0.000412   | <0.00016     | <0.00051        |
| MW-3                                                                              | 05/27/20    |             | 0.000825    | <0.000412   | <0.00016     | <0.00051        |
| MW-3                                                                              | 09/18/20    |             | 0.000475 J  | 0.000542 J  | 0.000615     | 0.00165         |
| MW-3                                                                              | 11/04/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-3                                                                              | 02/25/21    |             | 0.000353 J  | <0.000412   | <0.00016     | <0.00051        |
| MW-3                                                                              | 05/12/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-3                                                                              | 08/25/21    |             | 0.000861    | <0.000412   | <0.00016     | <0.00051        |

Table 2

**Summary of Groundwater Analytical Results**  
**Plains All American Pipeline, L.P.**  
**Chevron Grayburg 6-Inch Sec. 6**  
**SRS No. Chevron Grayburg 6-Inch Historical**  
**Lea County, New Mexico**  
**NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID                                                                | Sample Date | Sample Type | Benzene           | Toluene          | Ethylbenzene      | Xylenes (total)   |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------------|------------------|-------------------|-------------------|
| <b>New Mexico Water Quality Control Commission (NMWCC) Human Health Standards</b> |             |             | <b>0.01</b>       | <b>0.75</b>      | <b>0.75</b>       | <b>0.62</b>       |
| MW-3                                                                              | 11/16/21    |             | <b>0.000253 J</b> | <0.000278        | <0.000137         | <0.000174         |
| MW-3                                                                              | 02/22/22    | DUP         | <b>0.000388 J</b> | <b>0.00175</b>   | <b>0.000415 J</b> | <b>0.00304</b>    |
| MW-3                                                                              | 02/22/22    |             | <b>0.000335 J</b> | <0.000412        | <0.00016          | <0.00051          |
| MW-3                                                                              | 05/25/22    |             | <b>0.000539 J</b> | <0.000998        | <0.000462         | <0.00132          |
| MW-3                                                                              | 09/13/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-3                                                                              | 11/03/22    |             | <b>0.007</b>      | <0.000412        | <0.00016          | <0.00051          |
| MW-3                                                                              | 02/17/23    |             | <b>0.000617</b>   | <0.000412        | <0.00016          | <0.00051          |
| MW-3                                                                              | 05/09/23    |             | <b>0.00177</b>    | <0.001           | <0.0005           | <0.0015           |
| MW-3                                                                              | 08/08/23    |             | <b>0.00239 B</b>  | <0.001           | <0.0005           | <0.0015           |
| MW-3                                                                              | 11/16/23    |             | <b>0.00254</b>    | <0.001           | <0.0005           | <0.0015           |
| MW-3                                                                              | 02/27/24    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-3                                                                              | 05/20/24    |             | <0.001            | <0.001           | <0.001            | <0.003            |
| MW-3                                                                              | 08/19/24    |             | <0.001            | <0.001           | <0.001            | <0.003            |
| MW-3                                                                              | 11/18/24    |             | <0.001            | <0.001           | <0.001            | <0.003            |
| MW-4                                                                              | 02/24/20    |             | <b>0.00058</b>    | <0.000412        | <b>0.000283 J</b> | <b>0.000512 J</b> |
| MW-4                                                                              | 05/27/20    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 09/17/20    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 11/04/20    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 02/25/21    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 05/12/21    |             | <0.00019          | <0.000412        | <b>0.00033 J</b>  | <0.00051          |
| MW-4                                                                              | 08/24/21    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 11/16/21    |             | <0.0000941        | <0.000278        | <0.000137         | <0.000174         |
| MW-4                                                                              | 02/22/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 05/25/22    |             | <0.000493         | <0.000998        | <0.000462         | <0.00132          |
| MW-4                                                                              | 09/13/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 11/03/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 02/17/23    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-4                                                                              | 05/09/23    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-4                                                                              | 08/08/23    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-4                                                                              | 11/16/23    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-4                                                                              | 02/27/24    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-4                                                                              | 05/20/24    |             | <0.001            | <0.001           | <0.001            | <0.003            |
| MW-4                                                                              | 08/20/24    |             | <0.001            | <0.001           | <0.001            | <0.003            |
| MW-4                                                                              | 11/18/24    |             | <0.001            | <0.001           | <0.001            | <0.003            |
| MW-5                                                                              | 02/25/20    |             | <b>0.000247 J</b> | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 05/27/20    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 09/18/20    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 11/04/20    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 02/25/21    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 05/12/21    |             | <0.00019          | <0.000412        | <b>0.000247 J</b> | <0.00051          |
| MW-5                                                                              | 08/25/21    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 11/16/21    |             | <0.0000941        | <0.000278        | <0.000137         | <0.000174         |
| MW-5                                                                              | 02/22/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 05/25/22    |             | <0.000493         | <0.000998        | <0.000462         | <0.00132          |
| MW-5                                                                              | 09/13/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 11/03/22    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 02/17/23    |             | <0.00019          | <0.000412        | <0.00016          | <0.00051          |
| MW-5                                                                              | 05/09/23    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-5                                                                              | 08/08/23    |             | <b>0.00111 B</b>  | <b>0.00153 B</b> | <b>0.00061 B</b>  | <b>0.0021 B</b>   |
| MW-5                                                                              | 11/16/23    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |
| MW-5                                                                              | 02/27/24    |             | <0.0005           | <0.001           | <0.0005           | <0.0015           |

Table 2

**Summary of Groundwater Analytical Results**  
**Plains All American Pipeline, L.P.**  
**Chevron Grayburg 6-Inch Sec. 6**  
**SRS No. Chevron Grayburg 6-Inch Historical**  
**Lea County, New Mexico**  
**NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID                                                                | Sample Date | Sample Type | Benzene           | Toluene           | Ethylbenzene      | Xylenes (total)   |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------------|-------------------|-------------------|-------------------|
| <b>New Mexico Water Quality Control Commission (NMWCC) Human Health Standards</b> |             |             | <b>0.01</b>       | <b>0.75</b>       | <b>0.75</b>       | <b>0.62</b>       |
| MW-5                                                                              | 05/20/24    |             | <0.001            | <0.001            | <0.001            | <0.003            |
| MW-5                                                                              | 08/19/24    |             | <0.001            | <0.001            | <0.001            | <0.003            |
| MW-5                                                                              | 11/18/24    |             | <0.001            | <0.001            | <0.001            | <0.003            |
| MW-6                                                                              | 02/25/20    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 05/27/20    |             | <0.00019          | <0.000412         | <b>0.000208 J</b> | <b>0.000709 J</b> |
| MW-6                                                                              | 09/18/20    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 11/04/20    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 02/25/21    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 05/12/21    |             | <0.00019          | <0.000412         | <b>0.000477 J</b> | <0.00051          |
| MW-6                                                                              | 08/25/21    |             | <b>0.000344 J</b> | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 11/16/21    |             | <b>0.000246 J</b> | <0.000278         | <0.000137         | <b>0.000208 J</b> |
| MW-6                                                                              | 02/22/22    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 05/25/22    |             | <0.000493         | <0.000998         | <0.000462         | <0.00132          |
| MW-6                                                                              | 09/13/22    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 11/03/22    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 02/17/23    | DUP         | <0.00019          | <b>0.000481 J</b> | <0.00016          | <0.00051          |
| MW-6                                                                              | 02/17/23    |             | <0.00019          | <0.000412         | <0.00016          | <0.00051          |
| MW-6                                                                              | 05/09/23    |             | <0.0005           | <0.001            | <0.0005           | <0.0015           |
| MW-6                                                                              | 08/09/23    |             | <b>0.0243</b>     | <b>0.0103</b>     | <b>0.0019 B</b>   | <b>0.0159</b>     |
| MW-6                                                                              | 11/16/23    | DUP         | <0.0005           | <0.001            | <0.0005           | <0.0015           |
| MW-6                                                                              | 11/16/23    |             | <0.0005           | <0.001            | <0.0005           | <0.0015           |
| MW-6                                                                              | 02/29/24    |             | <0.0005           | <0.001            | <0.0005           | <0.0015           |
| MW-6                                                                              | 05/20/24    |             | <0.001            | <0.001            | <0.001            | <0.003            |
| MW-6                                                                              | 08/19/24    |             | <0.001            | <0.001            | <0.001            | <0.003            |
| MW-6                                                                              | 11/18/24    |             | <0.001            | <0.001            | <0.001            | <0.003            |
| MW-7                                                                              | 02/24/20    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 05/26/20    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 09/15/20    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 09/17/20    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 11/04/20    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 02/25/21    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 05/11/21    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 02/22/22    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 05/24/22    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 11/02/22    |             | -                 | -                 | -                 | -                 |
| MW-7                                                                              | 02/17/23    |             | -                 | -                 | -                 | -                 |
| MW-8                                                                              | 02/24/20    |             | <b>2.22</b>       | <b>0.783</b>      | <b>0.099</b>      | <b>0.412</b>      |
| MW-8                                                                              | 05/27/20    |             | <b>3.06</b>       | <b>0.876</b>      | <b>0.0507</b>     | <b>0.232</b>      |
| MW-8                                                                              | 09/17/20    |             | <b>2.01</b>       | <b>0.0873</b>     | <b>0.0371</b>     | <b>0.187</b>      |
| MW-8                                                                              | 11/04/20    |             | <b>2.42</b>       | <b>0.751</b>      | <b>0.0879</b>     | <b>0.344</b>      |
| MW-8                                                                              | 02/25/21    |             | <b>2.63</b>       | <b>1.07</b>       | <b>0.103</b>      | <b>0.481</b>      |
| MW-8                                                                              | 05/12/21    | DUP         | <b>2.09</b>       | <b>0.192</b>      | <b>0.0396</b>     | <b>0.179</b>      |
| MW-8                                                                              | 05/12/21    |             | <b>1.78</b>       | <b>0.24</b>       | <b>0.0417</b>     | <b>0.204</b>      |
| MW-8                                                                              | 08/24/21    |             | <b>2.63</b>       | <b>1.3</b>        | <b>0.0945</b>     | <b>0.668</b>      |
| MW-8                                                                              | 11/16/21    |             | <b>1.61</b>       | <b>0.403</b>      | <b>0.0499</b>     | <b>0.24</b>       |
| MW-8                                                                              | 02/22/22    |             | <b>1.56</b>       | <b>0.149</b>      | <b>0.0237</b>     | <b>0.119</b>      |
| MW-8                                                                              | 05/25/22    |             | <b>2</b>          | <b>0.368</b>      | <b>0.035</b>      | <b>0.224</b>      |
| MW-8                                                                              | 09/13/22    |             | <b>2.14</b>       | <b>0.47</b>       | <b>0.0322</b>     | <b>0.217</b>      |
| MW-8                                                                              | 11/03/22    | DUP         | <b>1.44</b>       | <b>0.11</b>       | <b>0.0276</b>     | <b>0.132</b>      |
| MW-8                                                                              | 11/03/22    |             | <b>1.19</b>       | <b>0.0615</b>     | <b>0.0222</b>     | <b>0.106</b>      |
| MW-8                                                                              | 02/17/23    |             | <b>1.92</b>       | <b>1.91</b>       | <b>0.0362</b>     | <b>0.354</b>      |

Table 2

**Summary of Groundwater Analytical Results**  
**Plains All American Pipeline, L.P.**  
**Chevron Grayburg 6-Inch Sec. 6**  
**SRS No. Chevron Grayburg 6-Inch Historical**  
**Lea County, New Mexico**  
**NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID                                                                | Sample Date | Sample Type | Benzene     | Toluene     | Ethylbenzene | Xylenes (total) |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|--------------|-----------------|
| <b>New Mexico Water Quality Control Commission (NMWCC) Human Health Standards</b> |             |             | <b>0.01</b> | <b>0.75</b> | <b>0.75</b>  | <b>0.62</b>     |
| MW-8                                                                              | 05/09/23    | DUP         | 2.08        | 0.997       | 0.0621       | 0.586           |
| MW-8                                                                              | 05/09/23    |             | 2.41        | 1.19        | 0.0716       | 0.68            |
| MW-8                                                                              | 08/09/23    |             | 3.68        | 0.62        | 0.0542       | 0.394           |
| MW-8                                                                              | 11/16/23    |             | 2.88        | 0.311       | 0.0649       | 0.492           |
| MW-8                                                                              | 02/29/24    | DUP         | 3.03        | 0.657       | 0.0594       | 0.444           |
| MW-8                                                                              | 02/29/24    |             | 2.48        | 0.547       | 0.048        | 0.516           |
| MW-8                                                                              | 05/20/24    | DUP         | 1.1         | 0.28        | 0.021        | 0.26            |
| MW-8                                                                              | 05/20/24    |             | 1.2         | 0.33        | 0.024        | 0.3             |
| MW-8                                                                              | 08/19/24    | DUP         | 0.38        | 0.18        | 0.0088       | 0.094           |
| MW-8                                                                              | 08/19/24    |             | 0.53        | 0.14        | 0.008        | 0.089           |
| MW-8                                                                              | 11/19/24    | DUP         | 0.066       | 0.02        | 0.0023       | 0.018           |
| MW-8                                                                              | 11/19/24    |             | 0.062       | 0.018       | 0.0021       | 0.016           |
| MW-9                                                                              | 02/25/20    | DUP         | 0.00609     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 02/25/20    |             | 0.00571     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 05/27/20    | DUP         | 0.00984     | <0.000412   | 0.000192 J   | 0.00115 J       |
| MW-9                                                                              | 05/27/20    |             | 0.00401     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 09/18/20    |             | 0.0053      | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 11/04/20    | DUP         | 0.00281     | 0.000463 J  | 0.000172 J   | <0.00051        |
| MW-9                                                                              | 11/04/20    |             | 0.00318     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 02/25/21    |             | 0.00301     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 05/12/21    |             | 0.00229     | 0.000458 J  | <0.00016     | <0.00051        |
| MW-9                                                                              | 08/25/21    |             | 0.00351     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 11/16/21    |             | 0.00343     | <0.000278   | 0.000146 J   | 0.000422 J      |
| MW-9                                                                              | 02/22/22    |             | 0.00144     | 0.000453 J  | <0.00016     | <0.00051        |
| MW-9                                                                              | 05/25/22    |             | 0.00176 J   | <0.000998   | <0.000462    | <0.00132        |
| MW-9                                                                              | 09/13/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 11/03/22    |             | 0.00459     | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 02/17/23    |             | 0.000624    | <0.000412   | <0.00016     | <0.00051        |
| MW-9                                                                              | 05/09/23    |             | 0.000435 J  | <0.001      | <0.0005      | <0.0015         |
| MW-9                                                                              | 08/08/23    |             | 0.00184 B   | <0.001      | <0.0005      | <0.0015         |
| MW-9                                                                              | 11/16/23    |             | 0.00174     | <0.001      | <0.0005      | <0.0015         |
| MW-9                                                                              | 02/29/24    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-9                                                                              | 05/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-9                                                                              | 08/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-9                                                                              | 11/18/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-10                                                                             | 02/25/20    |             | 0.00353     | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 05/27/20    |             | 0.00258     | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 09/17/20    |             | 0.0022      | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 11/04/20    |             | 0.00164     | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 02/25/21    |             | 0.000851    | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 05/12/21    |             | 0.000823    | 0.000467 J  | <0.00016     | <0.00051        |
| MW-10                                                                             | 08/25/21    |             | 0.000584    | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 11/16/21    |             | 0.00402     | <0.000278   | <0.000137    | <0.000174       |
| MW-10                                                                             | 02/22/22    |             | 0.00162     | 0.00048 J   | <0.00016     | <0.00051        |
| MW-10                                                                             | 05/25/22    |             | 0.00207     | <0.000998   | <0.000462    | <0.00132        |
| MW-10                                                                             | 09/13/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 11/03/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 02/17/23    |             | 0.000909    | <0.000412   | <0.00016     | <0.00051        |
| MW-10                                                                             | 05/09/23    |             | 0.000506    | <0.001      | <0.0005      | <0.0015         |
| MW-10                                                                             | 08/08/23    |             | 0.000912 B  | <0.001      | <0.0005      | <0.0015         |
| MW-10                                                                             | 11/16/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |



Table 2

**Summary of Groundwater Analytical Results**  
**Plains All American Pipeline, L.P.**  
**Chevron Grayburg 6-Inch Sec. 6**  
**SRS No. Chevron Grayburg 6-Inch Historical**  
**Lea County, New Mexico**  
**NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID                                                                | Sample Date | Sample Type | Benzene        | Toluene           | Ethylbenzene      | Xylenes (total)   |
|-----------------------------------------------------------------------------------|-------------|-------------|----------------|-------------------|-------------------|-------------------|
| <b>New Mexico Water Quality Control Commission (NMWCC) Human Health Standards</b> |             |             | <b>0.01</b>    | <b>0.75</b>       | <b>0.75</b>       | <b>0.62</b>       |
| MW-10                                                                             | 02/29/24    |             | <0.0005        | <0.001            | <0.0005           | <0.0015           |
| MW-10                                                                             | 05/20/24    |             | <0.001         | <0.001            | <0.001            | <0.003            |
| MW-10                                                                             | 08/20/24    |             | <b>0.0029</b>  | <0.001            | <0.001            | <0.003            |
| MW-10                                                                             | 11/18/24    |             | <0.001         | <0.001            | <0.001            | <0.003            |
| MW-11                                                                             | 02/24/20    |             | <b>0.117</b>   | <b>0.00785</b>    | <b>0.005</b>      | <b>0.0305</b>     |
| MW-11                                                                             | 05/27/20    |             | <b>0.00193</b> | <0.000412         | <b>0.000191 J</b> | <0.00051          |
| MW-11                                                                             | 09/17/20    |             | <b>0.00287</b> | <0.000412         | <b>0.00243</b>    | <b>0.000799 J</b> |
| MW-11                                                                             | 11/04/20    |             | <b>0.0138</b>  | <0.000412         | <b>0.00177</b>    | <b>0.00142 J</b>  |
| MW-11                                                                             | 02/25/21    |             | <b>0.0429</b>  | <b>0.000905 J</b> | <b>0.00459</b>    | <b>0.00545</b>    |
| MW-11                                                                             | 05/12/21    |             | <b>0.0144</b>  | <0.000412         | <b>0.00339</b>    | <b>0.00148 J</b>  |
| MW-11                                                                             | 08/25/21    |             | <b>0.00644</b> | <0.000412         | <0.00016          | <0.00051          |
| MW-11                                                                             | 11/16/21    | DUP         | <b>0.231</b>   | <b>0.00804</b>    | <b>0.00637</b>    | <b>0.0343</b>     |
| MW-11                                                                             | 11/16/21    |             | <b>0.238</b>   | <b>0.00813</b>    | <b>0.00645</b>    | <b>0.0342</b>     |
| MW-11                                                                             | 02/22/22    |             | <b>0.0127</b>  | <0.000412         | <b>0.000191 J</b> | <b>0.000667 J</b> |
| MW-11                                                                             | 05/25/22    |             | <b>0.0316</b>  | <0.000998         | <0.000462         | <b>0.00288 J</b>  |
| MW-11                                                                             | 09/13/22    |             | <b>0.0057</b>  | <0.000412         | <0.00016          | <0.00051          |
| MW-11                                                                             | 11/03/22    |             | <b>0.0146</b>  | <0.000412         | <0.00016          | <0.00051          |
| MW-11                                                                             | 02/17/23    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-11                                                                             | 05/09/23    |             | <b>0.0158</b>  | <0.001            | <0.0005           | <0.0015           |
| MW-11                                                                             | 08/09/23    |             | <b>0.104</b>   | <b>0.00167 B</b>  | <b>0.00109 B</b>  | <b>0.00283 B</b>  |
| MW-11                                                                             | 11/16/23    |             | <b>0.0107</b>  | <0.001            | <0.0005           | <0.0015           |
| MW-11                                                                             | 02/29/24    | DUP         | <0.0005        | <0.001            | <0.0005           | <0.0015           |
| MW-11                                                                             | 02/29/24    |             | <0.0005        | <0.001            | <0.0005           | <0.0015           |
| MW-11                                                                             | 05/21/24    | DUP         | <b>0.0095</b>  | <0.001            | <0.001            | <0.003            |
| MW-11                                                                             | 05/21/24    |             | <b>0.0084</b>  | <0.001            | <0.001            | <0.003            |
| MW-11                                                                             | 08/20/24    | DUP         | <b>0.0041</b>  | <0.001            | <0.001            | <0.003            |
| MW-11                                                                             | 08/20/24    |             | <b>0.0054</b>  | <0.001            | <0.001            | <0.003            |
| MW-11                                                                             | 11/19/24    | DUP         | <b>0.018</b>   | <0.001            | <0.001            | <b>0.0045</b>     |
| MW-11                                                                             | 11/19/24    |             | <b>0.017</b>   | <0.001            | <0.001            | <b>0.0045</b>     |
| MW-12                                                                             | 02/24/20    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 05/26/20    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 09/17/20    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 11/04/20    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 02/25/21    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 05/11/21    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 02/22/22    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 05/24/22    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 02/17/23    |             | -              | -                 | -                 | -                 |
| MW-12                                                                             | 05/21/24    |             | <b>0.19</b>    | <b>0.066</b>      | <b>0.016</b>      | <b>0.039</b>      |
| MW-12                                                                             | 11/19/24    |             | <b>0.46</b>    | <b>0.052</b>      | <b>0.015</b>      | <b>0.055</b>      |
| MW-13                                                                             | 02/25/20    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 05/27/20    | DUP         | <b>0.00072</b> | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 05/27/20    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 09/18/20    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 11/04/20    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 02/25/21    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 05/12/21    |             | <0.00019       | <0.000412         | <b>0.000161 J</b> | <0.00051          |
| MW-13                                                                             | 08/25/21    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 11/16/21    |             | <0.0000941     | <0.000278         | <0.000137         | <0.000174         |
| MW-13                                                                             | 02/22/22    |             | <0.00019       | <0.000412         | <0.00016          | <0.00051          |
| MW-13                                                                             | 05/25/22    |             | <0.000493      | <0.000998         | <0.000462         | <0.00132          |

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**Chevron Grayburg 6-Inch Sec. 6**  
**SRS No. Chevron Grayburg 6-Inch Historical**  
**Lea County, New Mexico**  
**NMOCD Incident No: nAPP2108849308**

| Monitoring Well ID                                                                | Sample Date | Sample Type | Benzene     | Toluene     | Ethylbenzene | Xylenes (total) |
|-----------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|--------------|-----------------|
| <b>New Mexico Water Quality Control Commission (NMWCC) Human Health Standards</b> |             |             | <b>0.01</b> | <b>0.75</b> | <b>0.75</b>  | <b>0.62</b>     |
| MW-13                                                                             | 09/13/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-13                                                                             | 11/03/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-13                                                                             | 02/17/23    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-13                                                                             | 05/09/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-13                                                                             | 08/08/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-13                                                                             | 11/16/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-13                                                                             | 02/29/24    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-13                                                                             | 05/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-13                                                                             | 08/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-13                                                                             | 11/18/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-14                                                                             | 02/25/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 05/27/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 09/18/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 11/04/20    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 02/25/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 05/12/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 08/25/21    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 11/16/21    |             | <0.0000941  | <0.000278   | <0.000137    | <0.000174       |
| MW-14                                                                             | 02/22/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 05/25/22    |             | <0.000493   | <0.000998   | <0.000462    | <0.00132        |
| MW-14                                                                             | 09/13/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 11/03/22    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 02/17/23    |             | <0.00019    | <0.000412   | <0.00016     | <0.00051        |
| MW-14                                                                             | 05/09/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-14                                                                             | 08/08/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-14                                                                             | 11/16/23    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-14                                                                             | 02/29/24    |             | <0.0005     | <0.001      | <0.0005      | <0.0015         |
| MW-14                                                                             | 05/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-14                                                                             | 08/20/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |
| MW-14                                                                             | 11/18/24    |             | <0.001      | <0.001      | <0.001       | <0.003          |

## Notes:

1. Analytical results are presented in milligrams per liter (mg/L)
2. All dates are in the format: MM/DD/YY
3. Shaded results indicates results exceeding their respective New Mexico Water Quality Control Commission (NMWCC) Human
4. Bolded results indicate analyte was detected above the laboratory detection limit
5. <: Analyte was not detected at or above the laboratory reporting limit
6. J: Concentration is less than the quantitation limit and is an estimated value
7. B: The sample matrix interfered with the ability to make any accurate determination or the analyte was detected in the associated
8. -: Not Analyzed
9. DUP: Duplicate Sample
10. LNAPL: Light Non-Aqueous Phase Liquids

Table 3  
Summary of Groundwater PAH Compound Analytical Results  
Plains All American Pipeline, L.P.  
Chevron Grayburg 6-Inch Sec. 6 (Historical)  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No. nAPP2108849308

| Monitoring Well ID                                                          | Sample Date | Sample Type | Anthracene | Acenaphthene | Acenaphthylene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene    | Dibenzo(a,h)anthracene | Dibenzofuran | Fluoranthene | Fluorene    | Indeno(1,2,3-cd)pyrene | Naphthalene | Phenanthrene | Pyrene      | 1-Methylnaphthalene | 2-Methylnaphthalene |
|-----------------------------------------------------------------------------|-------------|-------------|------------|--------------|----------------|--------------------|----------------|----------------------|----------------------|----------------------|-------------|------------------------|--------------|--------------|-------------|------------------------|-------------|--------------|-------------|---------------------|---------------------|
| New Mexico Water Quality Control Commission (NMWQCC) Human Health Standards |             |             | 0.001      | 0.001        | 0.001          | 0.001              | 0.0002         | 0.001                | 0.001                | 0.001                | 0.001       | 0.001                  | 0.001        | 0.001        | 0.001       | 0.001                  | 0.03        | 0.001        | 0.001       | 0.03                | 0.03                |
| MW-1                                                                        | 7/3/12      |             | <0.00526   | <0.00526     | <0.00526       | <0.00526           | <0.00526       | <0.00526             | <0.00526             | <0.00526             | <0.00526    | <0.00526               | <0.00526     | <0.00526     | <0.00526    | <0.00526               | 0.00672     | <0.00526     | <0.00526    | NA                  | <0.00526            |
| MW-1                                                                        | 5/7/14      |             | <0.000050  | 0.000368     | <0.000050      | <0.000050          | <0.000050      | <0.000050            | <0.000050            | <0.000050            | <0.000050   | <0.000050              | 0.00247      | <0.000050    | 0.00173     | <0.000050              | 0.00974     | 0.00171      | <0.000050   | NA                  | NA                  |
| MW-1                                                                        | 11/29/17    |             | <0.000183  | <0.000183    | <0.000183      | 0.000331           | 0.000355       | 0.000428             | 0.000453             | 0.000580             | 0.000449    | 0.000525               | 0.000343     | 0.000132 J   | 0.000646    | 0.000563               | 0.00252     | 0.000619     | 0.000173 J  | 0.00185             | 0.00207             |
| MW-1                                                                        | 11/15/18    |             | 0.0000551  | 0.0000435 J  | <0.0000120     | <0.00000410        | <0.0000116     | 0.00000549 J         | 0.00000294 J         | <0.0000136           | 0.0000125 J | <0.00000396            | 0.000171     | <0.0000157   | 0.000289    | <0.0000148             | 0.000655    | 0.000158     | 0.0000279 J | 0.00154             | 0.000366            |
|                                                                             |             |             |            |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-2                                                                        | 7/3/12      |             | <0.00526   | <0.00526     | <0.00526       | <0.00526           | <0.00526       | <0.00526             | <0.00526             | <0.00526             | <0.00526    | <0.00526               | <0.00526     | <0.00526     | <0.00526    | <0.00526               | <0.00526    | <0.00526     | <0.00526    | NA                  | <0.00526            |
| MW-2                                                                        | 5/7/14      |             | <0.000052  | <0.000052    | <0.000052      | <0.000052          | <0.000052      | <0.000052            | <0.000052            | <0.000052            | <0.000052   | <0.000052              | <0.000052    | <0.000052    | <0.000052   | <0.000052              | <0.000052   | <0.000052    | <0.000052   | NA                  | NA                  |
| MW-2                                                                        | 10/16/19    |             | <0.0000280 | <0.0000200   | <0.0000240     | <0.00000820        | <0.0000232     | <0.00000424          | <0.00000454          | <0.0000272           | <0.0000216  | <0.00000792            | 0.00000625 J | <0.0000314   | <0.0000170  | <0.0000296             | <0.0000396  | <0.0000164   | <0.0000234  | <0.0000164          | <0.0000180          |
| MW-2                                                                        | 11/4/20     |             | <0.0000190 | <0.0000190   | <0.0000171     | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | <0.0000179  | <0.0000160             | <0.0000191   | <0.0000270   | <0.0000169  | <0.0000158             | <0.0000917  | <0.0000180   | <0.0000169  | <0.0000687          | <0.0000674          |
|                                                                             |             |             |            |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-3                                                                        | 7/3/12      |             | <0.00510   | <0.00510     | <0.00510       | <0.00510           | <0.00510       | <0.00510             | <0.00510             | <0.00510             | <0.00510    | <0.00510               | <0.00510     | <0.00510     | <0.00510    | <0.00510               | <0.00510    | <0.00510     | <0.00510    | NA                  | <0.00510            |
| MW-3                                                                        | 5/7/14      |             | <0.000051  | <0.000051    | <0.000051      | <0.000051          | <0.000051      | <0.000051            | <0.000051            | <0.000051            | <0.000051   | <0.000051              | <0.000051    | <0.000051    | <0.000051   | <0.000051              | <0.000051   | <0.000051    | <0.000051   | NA                  | NA                  |
| MW-3                                                                        | 11/15/18    |             | <0.0000140 | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000318     | <0.0000157   | 0.000213    | <0.0000148             | 0.000793    | 0.0000760    | <0.0000117  | 0.000752            | <0.00000902         |
| MW-3                                                                        | 10/16/19    |             | <0.0000140 | 0.0000136 J  | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000328     | <0.0000157   | 0.000144    | <0.0000148             | 0.000383    | 0.0000916    | <0.0000117  | 0.000377            | 0.0000142 J         |
|                                                                             |             |             |            |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-4                                                                        | 7/3/12      |             | <0.00510   | <0.00510     | <0.00510       | <0.00510           | <0.00510       | <0.00510             | <0.00510             | <0.00510             | <0.00510    | <0.00510               | <0.00510     | <0.00510     | <0.00510    | <0.00510               | <0.00510    | <0.00510     | <0.00510    | NA                  | <0.00510            |
| MW-4                                                                        | 11/29/17    |             | <0.000183  | <0.000183    | <0.000183      | <0.000183          | <0.000183      | <0.000183            | <0.000183            | <0.000183            | <0.000183   | <0.000183              | <0.000183    | <0.000183    | 0.000133 J  | <0.000183              | 0.000170 J  | 0.000316     | <0.000183   | NA                  | NA                  |
| MW-4                                                                        | 11/15/18    |             | <0.0000140 | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000120 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.000148 J  | <0.00000820  | <0.0000117  | 0.00000905 J        | <0.00000902         |
| MW-4                                                                        | 10/17/19    |             | <0.0000140 | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000512 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000354 J | <0.00000820  | <0.0000117  | 0.0000108 J         | 0.0000110 J         |
|                                                                             |             |             |            |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-5                                                                        | 3/8/13      |             | <0.0103    | <0.0103      | <0.0103        | <0.0103            | <0.0103        | <0.0103              | <0.0103              | <0.0103              | <0.0103     | <0.0103                | <0.0103      | <0.0103      | <0.0103     | <0.0103                | <0.0103     | <0.0103      | <0.0103     | NA                  | <0.0103             |
| MW-5                                                                        | 5/7/14      |             | <0.000051  | <0.000051    | <0.000051      | <0.000051          | <0.000051      | <0.000051            | <0.000051            | <0.000051            | <0.000051   | <0.000051              | <0.000051    | <0.000051    | <0.000051   | <0.000051              | <0.000051   | <0.000051    | <0.000051   | NA                  | NA                  |
| MW-5                                                                        | 10/17/19    |             | <0.0000140 | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000465 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000242 J | <0.00000820  | <0.0000117  | <0.00000821         | <0.00000902         |
| MW-5                                                                        | 10/17/19    | DUP         | <0.0000140 | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | 0.00000431 J         | 0.00000262 J         | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000588 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000270 J | <0.00000820  | <0.0000117  | <0.00000821         | <0.00000902         |
| MW-5                                                                        | 11/4/20     |             | <0.0000190 | <0.0000190   | <0.0000171     | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | <0.0000179  | <0.0000160             | <0.0000191   | <0.0000270   | <0.0000169  | <0.0000158             | <0.0000917  | <0.0000180   | <0.0000169  | <0.0000687          | <0.0000674          |
|                                                                             |             |             |            |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-6                                                                        | 3/8/13      |             | <0.0102    | <0.0102      | <0.0102        | <0.0102            | <0.0102        | <0.0102              | <0.0102              | <0.0102              | <0.0102     | <0.0102                | <0.0102      | <0.0102      | <0.0102     | <0.0102                | <0.0102     | <0.0102      | <0.0102     | NA                  | <0.0102             |
| MW-6                                                                        | 5/7/14      |             | <0.000051  | <0.000051    | <0.000051      | <0.000051          | <0.000051      | <0.000051            | <0.000051            | <0.000051            | <0.000051   | <0.000051              | <0.000051    | <0.000051    | <0.000051   | <0.000051              | <0.000051   | <0.000051    | <0.000051   | NA                  | NA                  |
| MW-6                                                                        | 10/16/19    |             | <0.0000140 | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000614 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000337 J | <0.00000820  | <0.0000117  | <0.00000821         | <0.00000902         |
| MW-6                                                                        | 11/4/20     |             | <0.0000190 | <0.0000190   | <0.0000171     | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | <0.0000179  | <0.0000160             | <0.0000191   | <0.00000270  | <0.0000169  | <0.0000158             | <0.0000917  | <0.00000180  | <0.0000169  | <0.0000687          | <0.0000674          |
| MW-7                                                                        | 3/8/13      |             | <0.0102    | <0.0102      | <0.0102        | <0.0102            | <0.0102        | <0.0102              | <0.0102              | <0.0102              | <0.0102     | <0.0102                | 0.0058       | <0.0102      | 0.00408     | <0.0102                | 0.0652      | 0.00537      | <0.0102     | NA                  | 0.0535              |
|                                                                             |             |             |            |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |

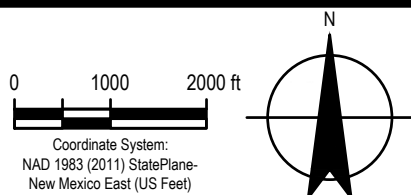
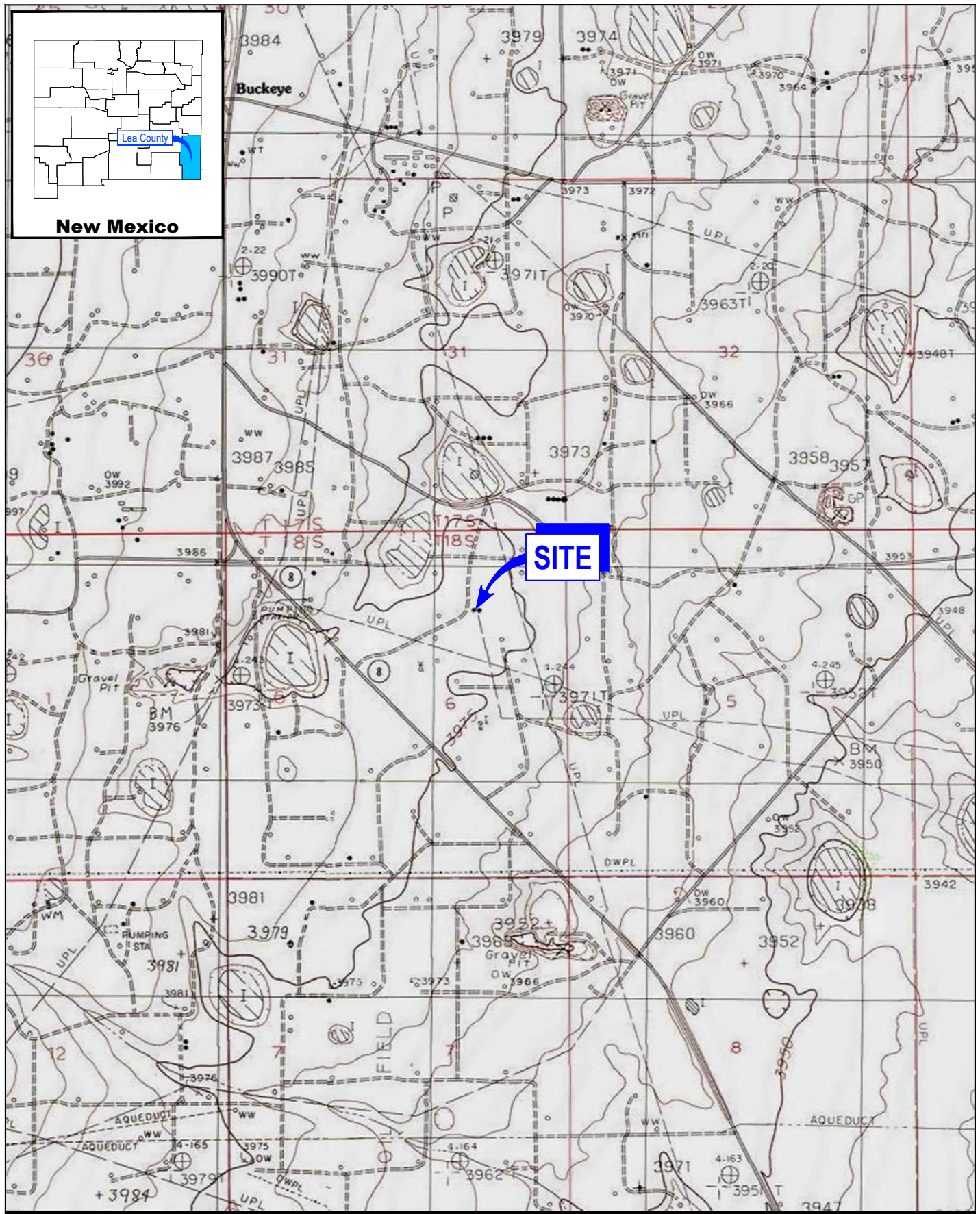
Table 3

Summary of Groundwater PAH Compound Analytical Results  
Plains All American Pipeline, L.P.  
Chevron Grayburg 6-Inch Sec. 6 (Historical)  
SRS Chevron Grayburg 6-Inch Historical  
Lea County, New Mexico  
NMOCD Incident No. nAPP2108849308

| Monitoring Well ID                                                          | Sample Date | Sample Type | Anthracene  | Acenaphthene | Acenaphthylene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene    | Dibenzo(a,h)anthracene | Dibenzofuran | Fluoranthene | Fluorene    | Indeno(1,2,3-cd)pyrene | Naphthalene | Phenanthrene | Pyrene      | 1-Methylnaphthalene | 2-Methylnaphthalene |
|-----------------------------------------------------------------------------|-------------|-------------|-------------|--------------|----------------|--------------------|----------------|----------------------|----------------------|----------------------|-------------|------------------------|--------------|--------------|-------------|------------------------|-------------|--------------|-------------|---------------------|---------------------|
| New Mexico Water Quality Control Commission (NMWQCC) Human Health Standards |             |             | 0.001       | 0.001        | 0.001          | 0.001              | 0.0002         | 0.001                | 0.001                | 0.001                | 0.001       | 0.001                  | 0.001        | 0.001        | 0.001       | 0.001                  | 0.03        | 0.001        | 0.001       | 0.03                | 0.03                |
| MW-8                                                                        | 11/30/17    |             | <0.000184   | 0.000649     | 0.000610       | <0.000184          | <0.000184      | <0.000184            | <0.000184            | <0.000184            | 0.000344    | <0.000184              | 0.00247      | <0.000184    | 0.00341     | <0.000184              | 0.0633      | 0.00427      | 0.000304    | NA                  | NA                  |
| MW-8                                                                        | 11/15/18    |             | <0.0000140  | 0.000412     | <0.0000120     | <0.00000410        | <0.0000116     | 0.00000608 J         | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00401      | <0.0000157   | 0.00303     | <0.0000148             | 0.0812      | 0.00157      | 0.0000203 J | 0.0945              | 0.659               |
| MW-8                                                                        | 10/17/19    |             | 0.0000821   | 0.000540     | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00425      | <0.0000157   | 0.00322     | <0.0000148             | 0.0538      | 0.00203      | 0.0000247 J | 0.0726              | 0.0517              |
| MW-8                                                                        | 11/4/20     |             | 0.000112    | 0.000355     | 0.0005030      | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | <0.0000179  | <0.0000160             | 0.00504      | <0.0000270   | 0.00332     | <0.0000158             | 0.0663      | 0.00313      | <0.0000169  | 0.0737              | 0.0471              |
| MW-8                                                                        | 11/16/21    |             | <0.0000190  | 0.000543     | <0.0000171     | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | 0.0000319 J | <0.0000160             | 0.00388      | 0.0000372 J  | 0.00332     | <0.0000158             | 0.0552      | 0.00297      | 0.0000344 J | 0.0542              | 0.0272              |
| MW-8                                                                        | 11/3/22     |             | <0.0000190  | 0.000511     | <0.0000171     | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | 0.0000259 J | <0.0000160             | 0.00372      | 0.0000368 J  | 0.00307     | <0.0000158             | 0.0415      | 0.00329      | 0.0000363 J | 0.0384              | 0.0178              |
| MW-8                                                                        | 1/10/24     |             | <0.0000500  | 0.000246     | <0.0000500     | <0.0000500         | <0.0000500     | <0.0000500           | <0.0000500           | <0.0000500           | <0.0000500  | <0.0000500             | 0.00177      | <0.000100    | 0.00139     | <0.0000500             | 0.0182      | 0.00141      | <0.0000500  | 0.0166              | 0.00669             |
| MW-8                                                                        | 11/19/24    |             | <0.001      | <0.001       | <0.001         | <0.001             | <0.001         | <0.001               | <0.001               | <0.001               | <0.001      | <0.001                 | <0.001       | <0.001       | <0.001      | <0.001                 | 0.0034      | <0.001       | <0.001      | NA                  | NA                  |
|                                                                             |             |             |             |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-9                                                                        | 11/30/17    |             | <0.000183   | <0.000183    | <0.000183      | <0.000183          | <0.000183      | <0.000183            | <0.000183            | <0.000183            | <0.000183   | <0.000183              | <0.000183    | <0.000183    | 0.000134 J  | <0.000183              | 0.000134 J  | 0.000305     | <0.000183   | NA                  | NA                  |
| MW-9                                                                        | 11/15/18    |             | <0.0000140  | 0.0000145 J  | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000382     | <0.0000157   | 0.000117    | <0.0000148             | 0.000406    | 0.000137     | <0.0000117  | 0.000418            | 0.0000156 J         |
| MW-9                                                                        | 10/17/19    |             | <0.0000140  | 0.0000500 J  | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00123      | <0.0000157   | 0.000509    | <0.0000148             | 0.00127     | 0.000503     | <0.0000117  | 0.00124             | 0.0000655 J         |
| MW-9                                                                        | 11/4/20     |             | <0.0000190  | 0.0000267 J  | 0.0000656      | <0.0000203         | <0.0000184     | <0.0000168           | <0.0000184           | <0.0000202           | <0.0000179  | <0.0000160             | 0.00123      | <0.0000270   | 0.000476    | <0.0000158             | 0.00113     | 0.000438     | <0.0000169  | 0.00126             | <0.0000674          |
| MW-9                                                                        | 11/16/21    |             | <0.000183   | <0.000183    | <0.000183      | <0.000183          | <0.000183      | <0.000183            | <0.000183            | <0.000183            | <0.000183   | <0.000183              | 0.000614     | <0.0000270   | 0.000209    | <0.0000158             | 0.000334    | 0.000252     | <0.0000169  | 0.000339 J4         | <0.0000674 J4       |
| MW-9                                                                        | 11/3/22     |             | <0.000190   | <0.000190    | <0.000171      | <0.0000203         | <0.000184      | <0.000168            | <0.000184            | <0.0000202           | <0.000179   | <0.000160              | 0.000232     | 0.0000301 J  | 0.000070    | <0.0000158             | 0.000114 J  | 0.000078     | 0.0000236 J | 0.0000915 J         | <0.0000674 J4       |
|                                                                             |             |             |             |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-10                                                                       | 11/30/17    |             | <0.000184   | <0.000184    | <0.000184      | <0.000184          | <0.000184      | <0.000184            | <0.000184            | <0.000184            | <0.000184   | <0.000184              | <0.000184    | <0.000184    | 0.000151 J  | <0.000184              | 0.000163 J  | 0.000347     | <0.000184   | NA                  | NA                  |
| MW-10                                                                       | 11/15/18    |             | <0.0000140  | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | <0.00000105  | <0.0000157   | <0.00000850 | <0.0000148             | 0.000214 J  | <0.00000820  | <0.0000117  | <0.00000821         | <0.00000902         |
| MW-10                                                                       | 10/16/19    |             | <0.0000140  | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000443     | <0.0000157   | 0.000122    | <0.0000148             | 0.000769    | 0.000190     | <0.0000117  | 0.00255             | 0.0000235 J         |
| MW-10                                                                       | 10/16/19    | DUP         | <0.0000140  | 0.0000149 J  | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000369     | <0.0000157   | 0.000114    | <0.0000148             | 0.000606    | 0.000151     | <0.0000117  | 0.00235             | 0.0000199 J         |
|                                                                             |             |             |             |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-11                                                                       | 11/30/17    |             | <0.000180   | 0.000323     | 0.000333       | <0.000180          | <0.000180      | <0.000180            | <0.000180            | <0.000180            | 0.000199    | <0.000180              | 0.00135      | <0.000180    | 0.00218     | <0.000180              | 0.00103     | 0.00245      | 0.000187    | NA                  | NA                  |
| MW-11                                                                       | 11/15/18    |             | 0.0000142 J | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | 0.00000386 J         | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000319 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000571 J | 0.0000111 J  | 0.0000206 J | <0.00000821         | <0.00000902         |
| MW-11                                                                       | 10/16/19    |             | <0.0000140  | 0.0000316 J  | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000202     | <0.0000157   | 0.000147    | <0.0000148             | 0.000887    | 0.0000995    | <0.0000117  | 0.00176             | 0.000774            |
|                                                                             |             |             |             |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-12                                                                       | 11/30/17    |             | <0.000180   | <0.000180    | <0.000180      | <0.000180          | <0.000180      | <0.000180            | <0.000180            | <0.000180            | <0.000180   | <0.000180              | <0.000180    | <0.000180    | 0.000190    | <0.000180              | 0.000456    | 0.000338     | <0.000180   | NA                  | NA                  |
| MW-12                                                                       | 11/15/18    |             | <0.0000140  | 0.0000333 J  | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.000307     | <0.0000157   | 0.000239    | <0.0000148             | 0.00387     | 0.000123     | <0.0000117  | 0.00356             | 0.000992            |
|                                                                             |             |             |             |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-13                                                                       | 11/30/17    |             | <0.000185   | <0.000185    | <0.000185      | <0.000185          | <0.000185      | <0.000185            | <0.000185            | <0.000185            | <0.000185   | <0.000185              | <0.000185    | <0.000185    | <0.000185   | <0.000185              | <0.000370   | 0.000257     | <0.000185   | <0.000111           | 0.000630            |
| MW-13                                                                       | 11/15/18    |             | <0.0000140  | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | 0.00000233 J         | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | 0.00000169 J | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000813 J | <0.00000820  | <0.0000117  | <0.00000821         | <0.00000902         |
|                                                                             |             |             |             |              |                |                    |                |                      |                      |                      |             |                        |              |              |             |                        |             |              |             |                     |                     |
| MW-14                                                                       | 11/30/17    |             | <0.000182   | <0.000182    | <0.000182      | <0.000182          | <0.000182      | <0.000182            | <0.000182            | <0.000182            | <0.000182   | <0.000182              | <0.000182    | <0.000182    | 0.000131 J  | <0.000182              | 0.000148 J  | 0.000323     | <0.000182   | <0.000109 U K       | 0.000734            |
| MW-14                                                                       | 11/15/18    |             | <0.0000140  | <0.0000100   | <0.0000120     | <0.00000410        | <0.0000116     | <0.00000212          | <0.00000227          | <0.0000136           | <0.0000108  | <0.00000396            | <0.00000105  | <0.0000157   | <0.00000850 | <0.0000148             | 0.0000956 J | <0.00000820  | <0.0000117  | <0.00000821         | <0.00000902         |

- Notes:
- Sample results listed from 2012 and 2014 were collected and reported by Basin Environmental Service Technologies, LLC
  - Polycyclic Aromatic Hydrocarbons (PAH) analysis by Environmental Protection Agency (EPA) Method SW846-8270C-SIM
  - All reported concentrations are reported as milligrams per Liter (mg/L)
  - Bold font indicates laboratory detection
  - Yellow shaded cells indicate results exceeding NMWQCC Human Health Standards
  - Green shaded cells indicate results meeting NMWQCC regulatory requirement of 2 consecutive years of PAH compounds below the Human Health Standards
  - < = Not detected above the Sample Detection Limit
  - NA - No Analysis
  - J - Denotes an estimated concentration detected above the Sample Detection Limit and below the Method Quantitation Limit
  - NMWQCC Human Health Standard for combined naphthalene + 1-methylnaphthalene + 2-methylnaphthalene is 0.03 mg/L per NMAC 20.6.2.3103 A.(1)(jj)





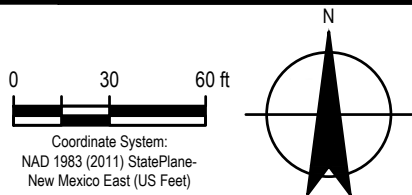
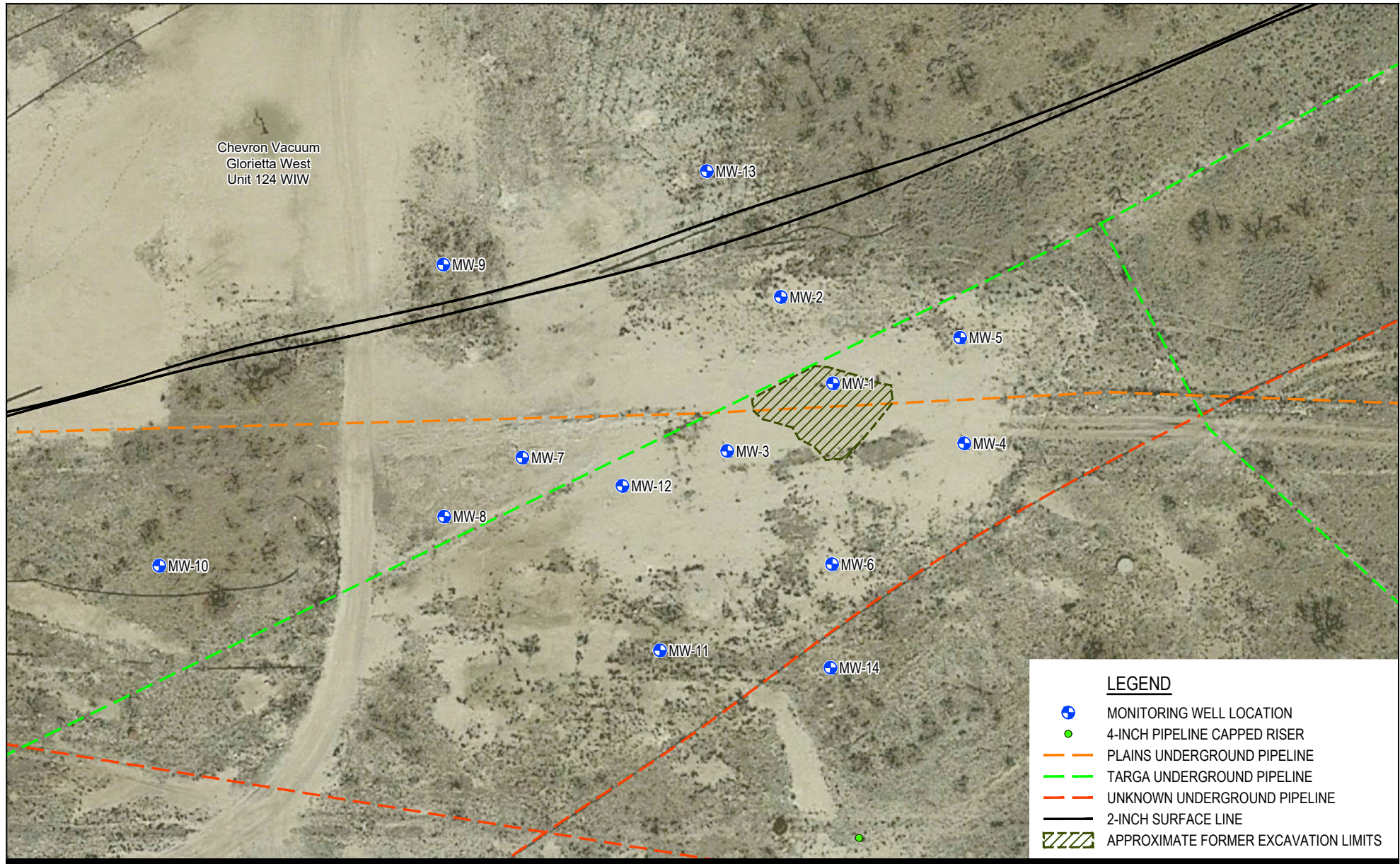
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

Project No. 12604539  
Date March 2024

SITE LOCATION MAP

FIGURE 1





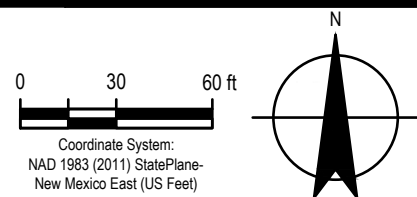
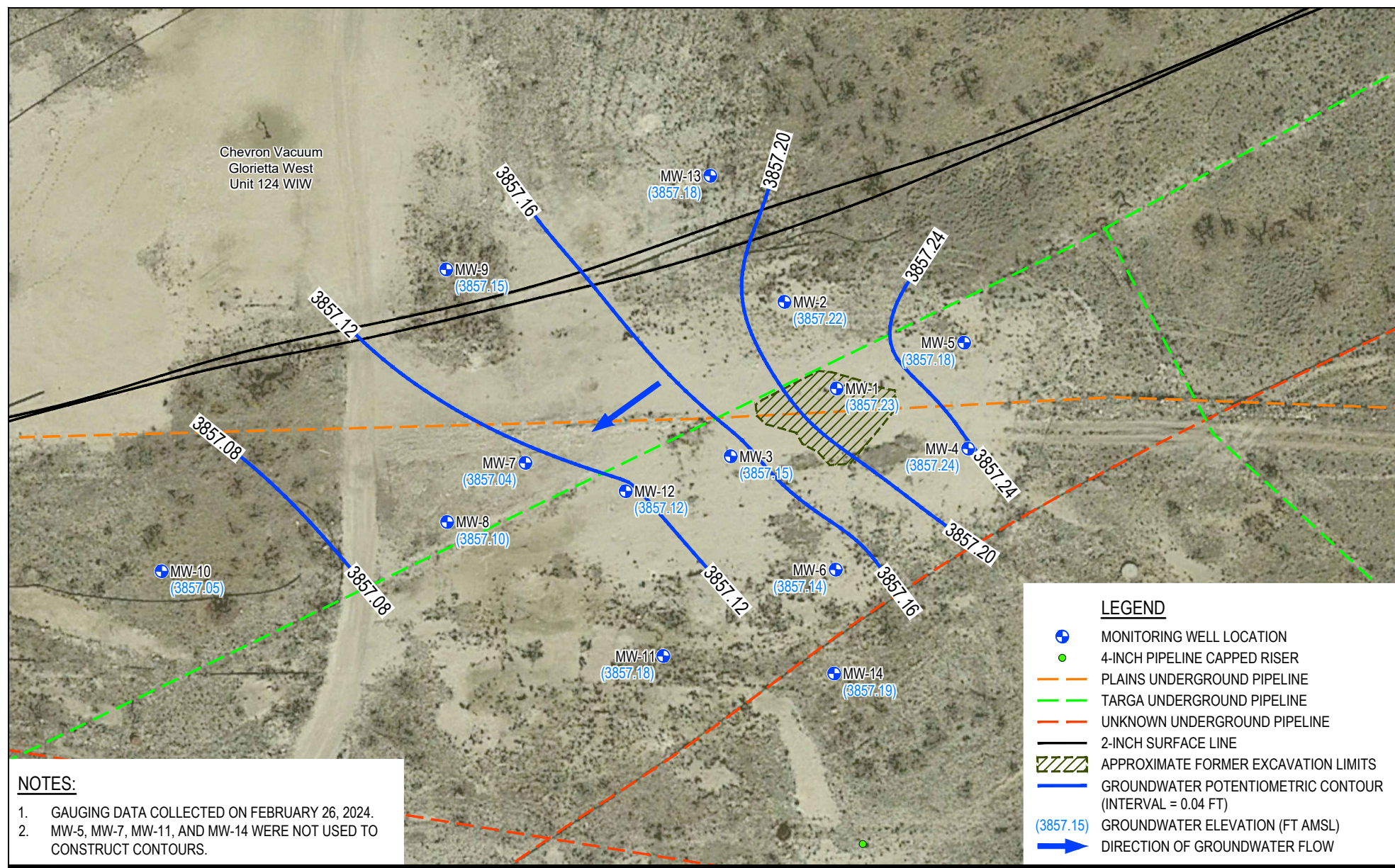
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

Project No. 12604539  
Date March 2024

SITE DETAILS MAP

FIGURE 2





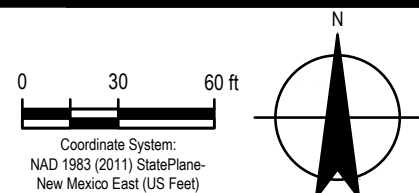
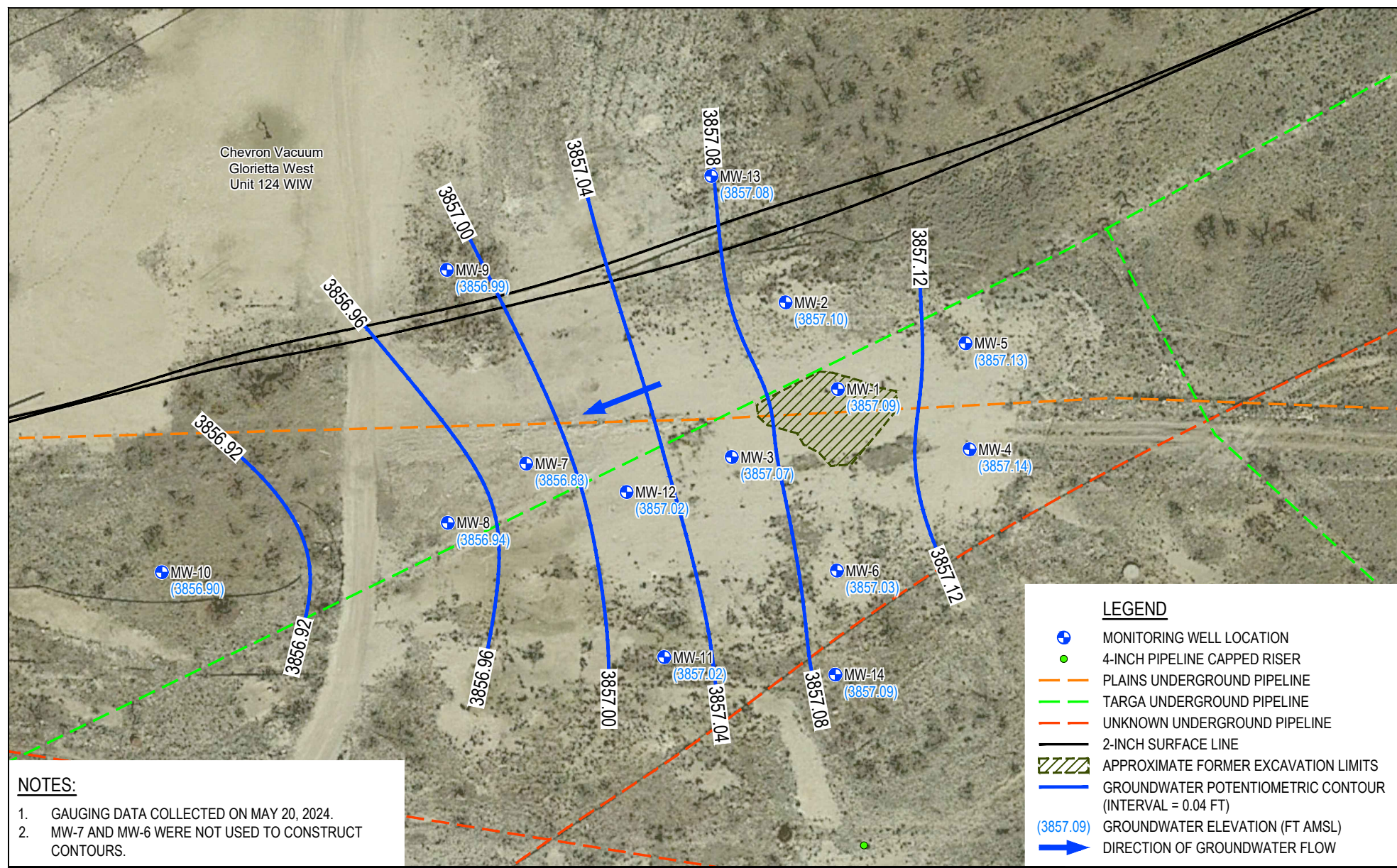
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

**POTENTIOMETRIC SURFACE MAP  
(FEBRUARY 2024)**

Project No. 12604539  
Date April 2024

**FIGURE 3**





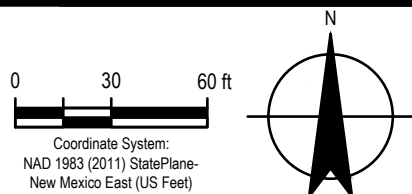
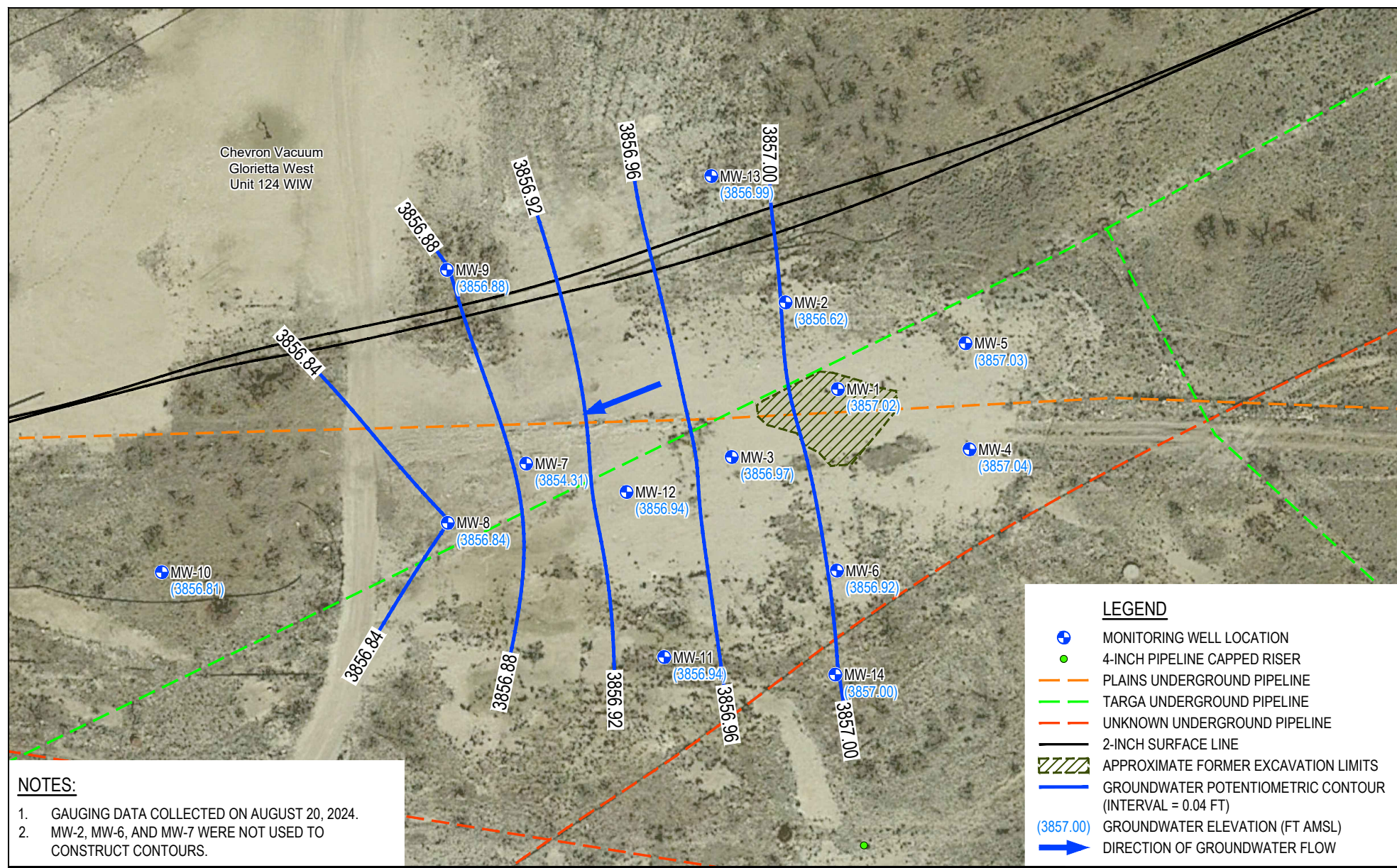
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

**POTENTIOMETRIC SURFACE MAP  
(MAY 2024)**

Project No. 12604539  
Date September 2024

**FIGURE 4**





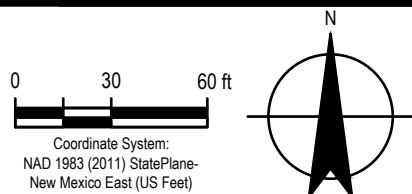
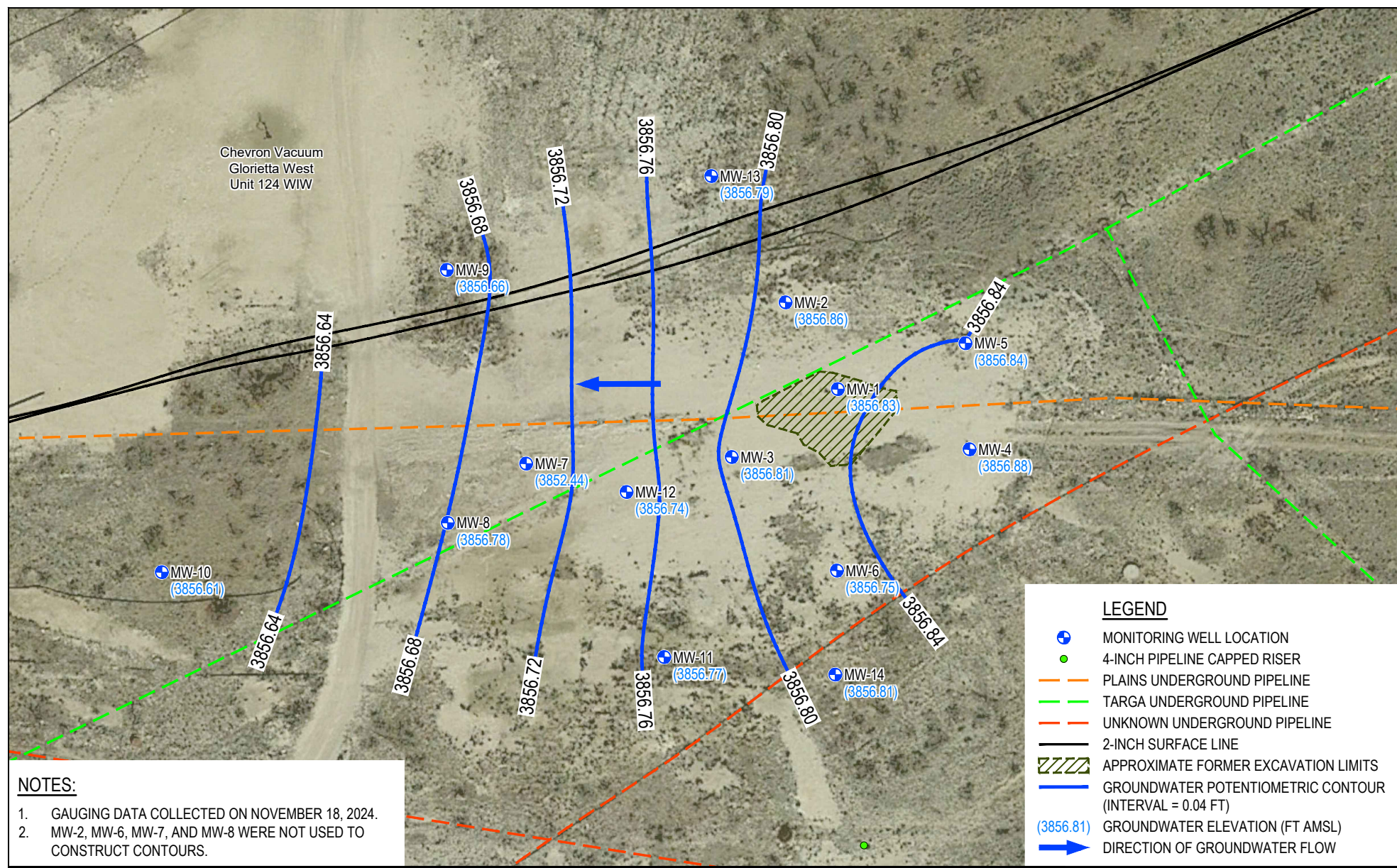
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

**POTENTIOMETRIC SURFACE MAP  
(AUGUST 2024)**

Project No. 12604539  
Date December 2024

**FIGURE 5**





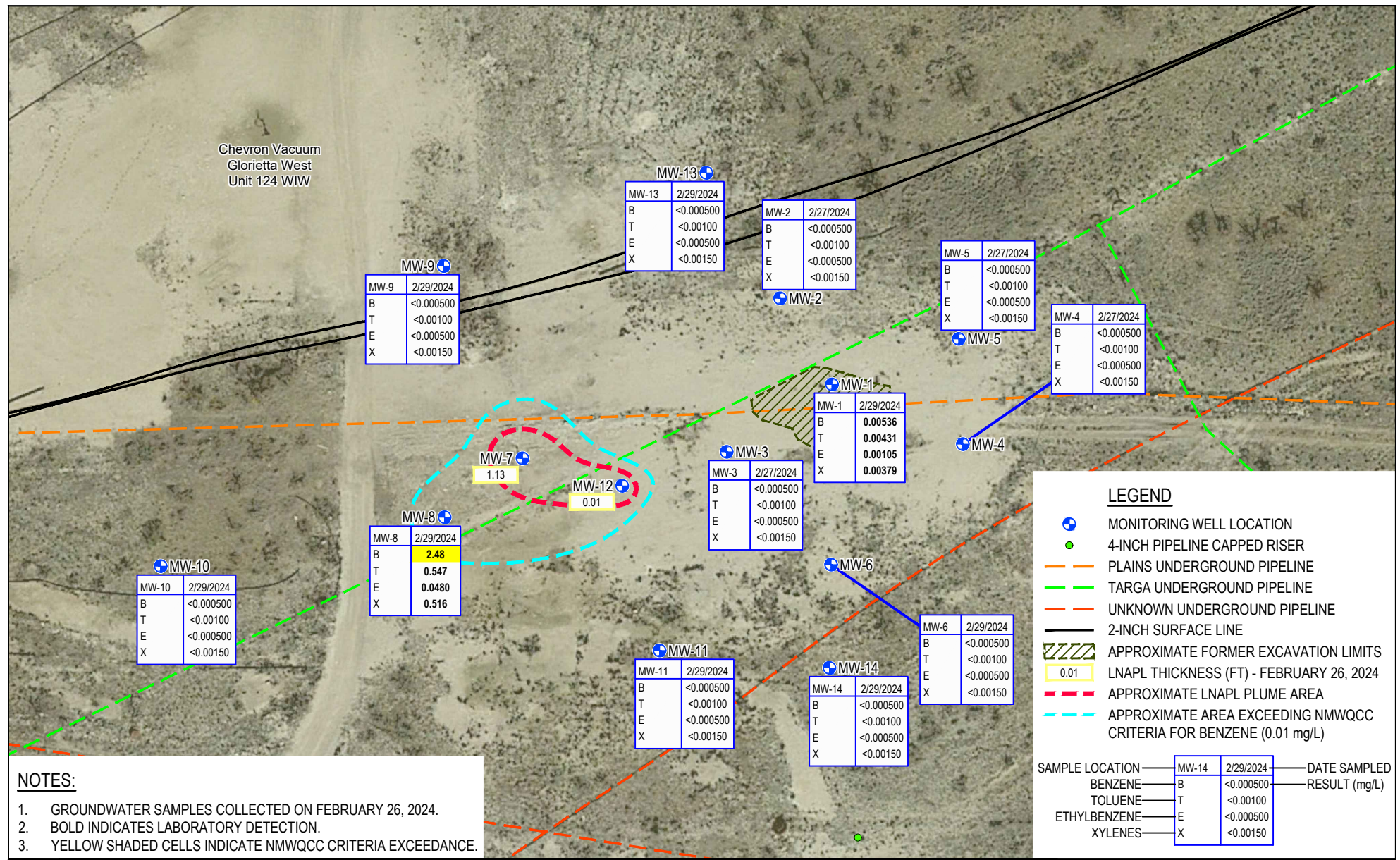
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

**POTENTIOMETRIC SURFACE MAP  
(NOVEMBER 2024)**

Project No. 12604539  
Date December 2024

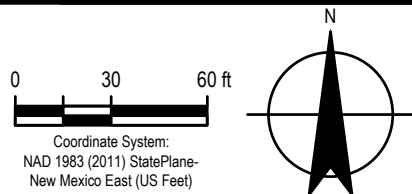
**FIGURE 6**





## NOTES:

- GROUNDWATER SAMPLES COLLECTED ON FEBRUARY 26, 2024.
- BOLD INDICATES LABORATORY DETECTION.
- YELLOW SHADED CELLS INDICATE NMWQCC CRITERIA EXCEEDANCE.



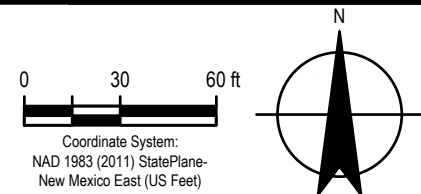
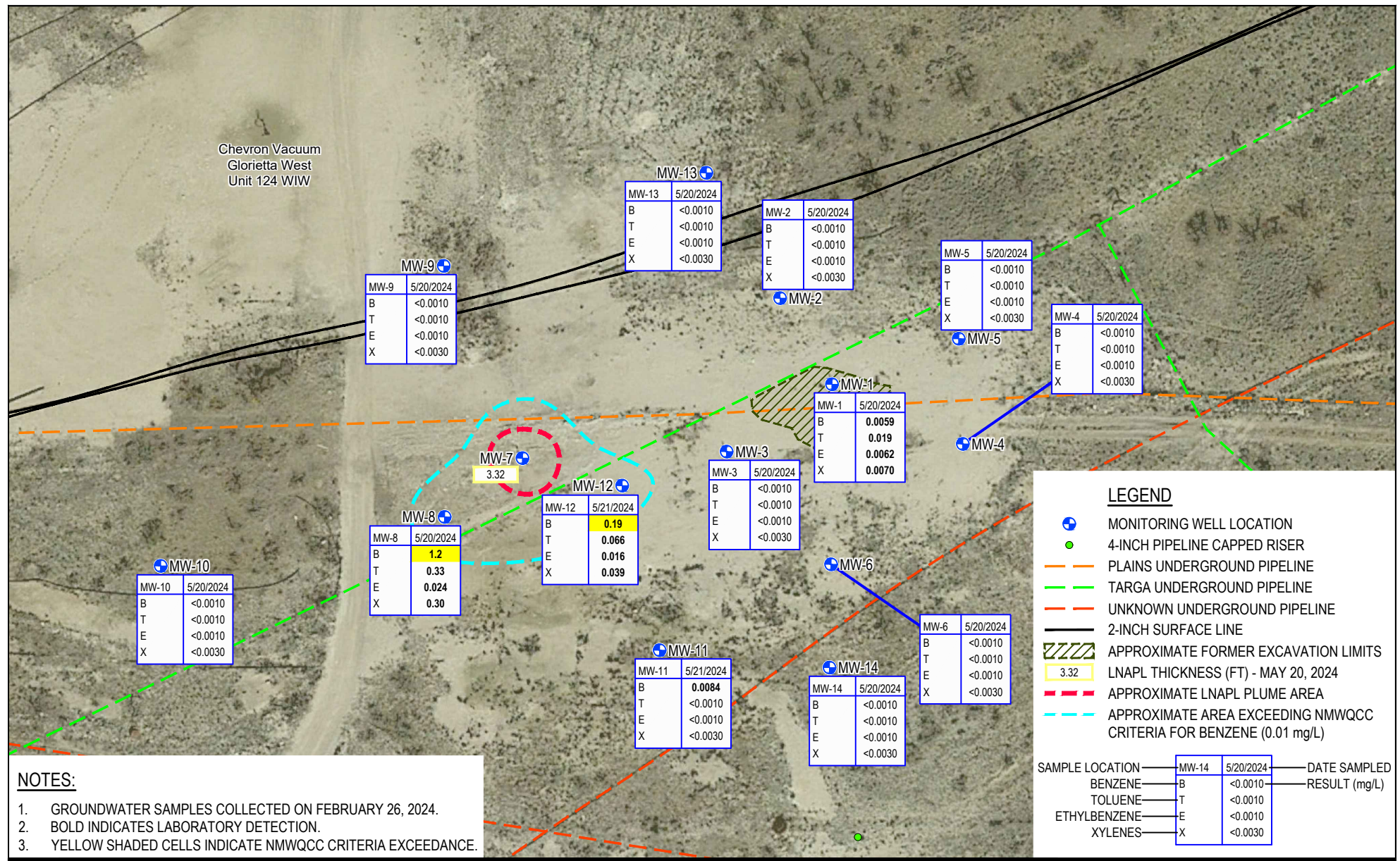
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

COC CONCENTRATIONS IN  
GROUNDWATER (FEBRUARY 2024)

Project No. 12604539  
Date September 2024

FIGURE 7





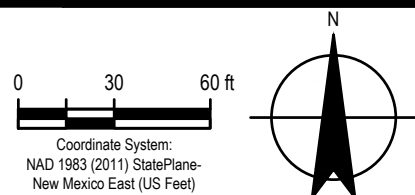
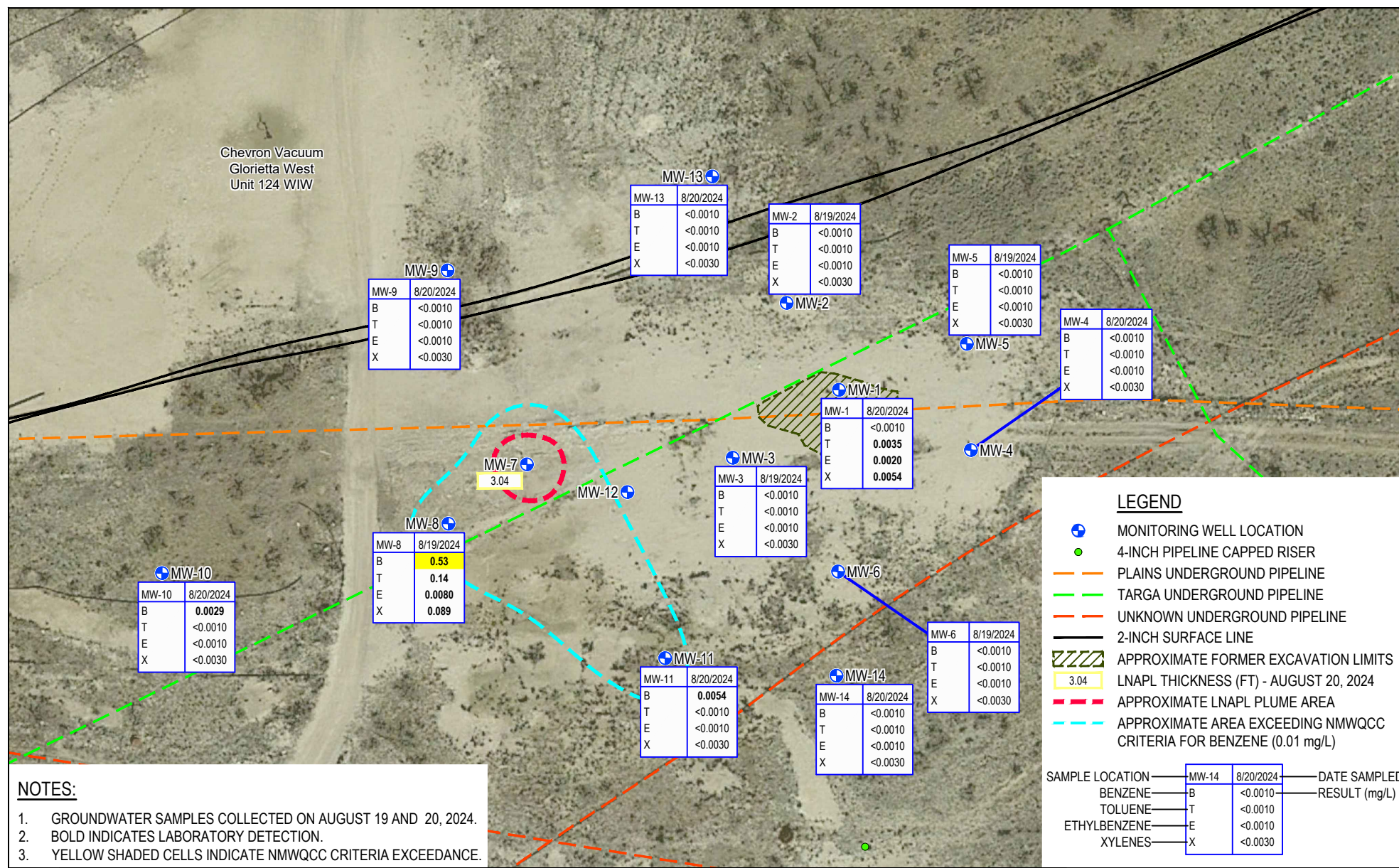
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOC No: nAPP2108846308

COC CONCENTRATIONS IN  
GROUNDWATER (MAY 2024)

Project No. 12604539  
Date September 2024

FIGURE 8





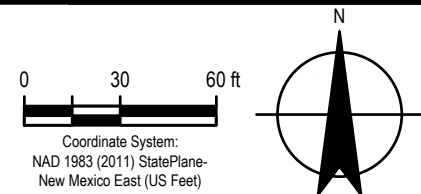
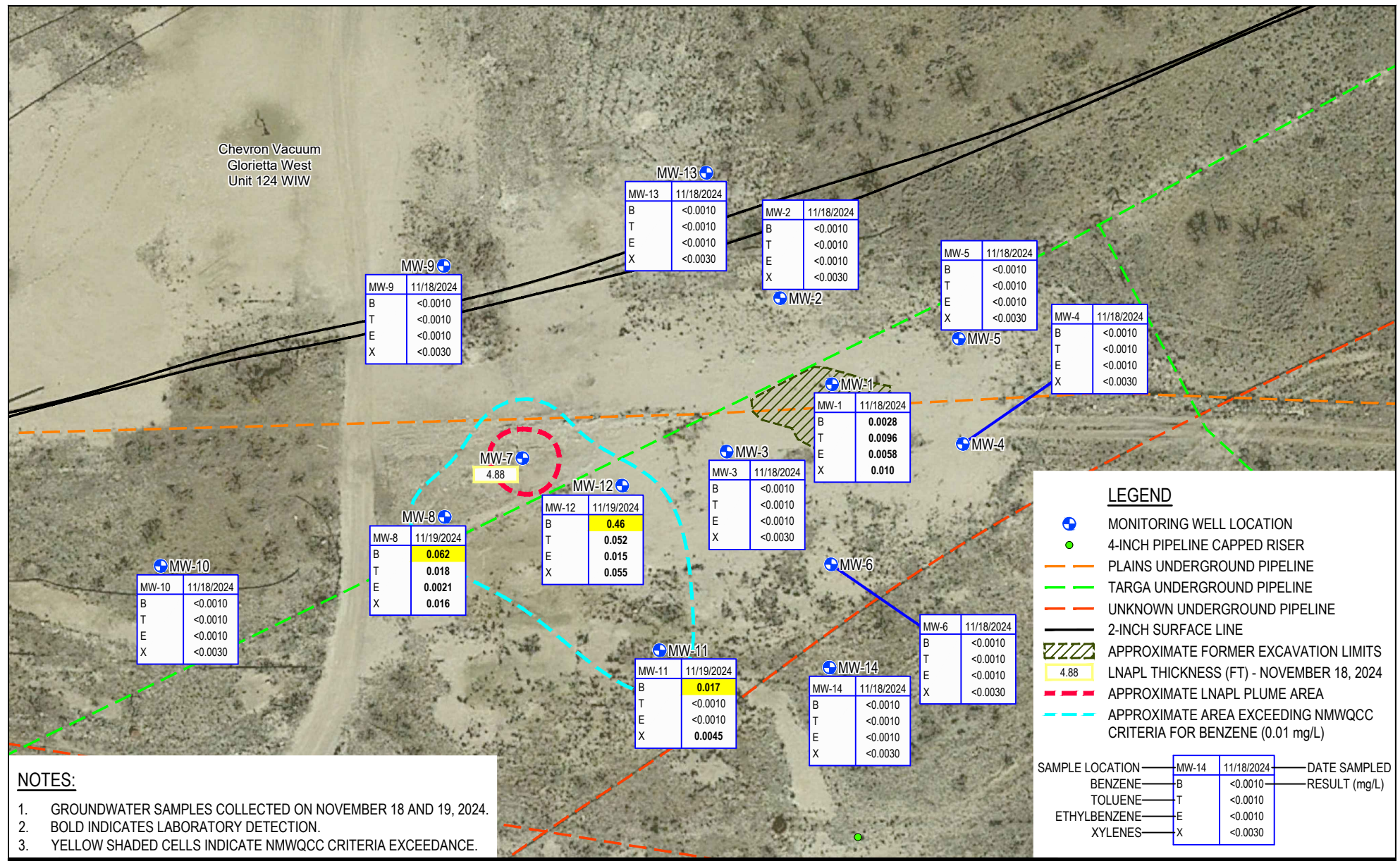
PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

Project No. 12604539  
Date December 2024

COC CONCENTRATIONS IN  
GROUNDWATER (AUGUST 2024)

FIGURE 9





PLAINS ALL AMERICAN PIPELINE, L.P.  
LEA COUNTY, NEW MEXICO  
CHEVRON GRAYBURG 6-INCH SEC. 6 (HISTORICAL)  
NMOCD No: nAPP2108846308

COC CONCENTRATIONS IN  
GROUNDWATER (NOVEMBER 2024)

Project No. 12604539  
Date December 2024

FIGURE 10

# Appendices



# Appendix A

## Release Notification and Corrective Action, Form C-141

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-14  
Revised October 10, 200

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report

☐ Final Report

|                 |                                      |               |                |
|-----------------|--------------------------------------|---------------|----------------|
| Name of Company | Plains Pipeline, LP                  | Contact       | Jason Henry    |
| Address         | 2530 Hwy 214 - Denver City, TX 79323 | Telephone No. | (575) 441-1099 |
| Facility Name   | Chevron Grayburg 6-inch Sec. 6       | Facility Type | Pipeline       |
| Surface Owner   | NMSLO                                | Mineral Owner |                |
|                 |                                      | Lease No.     |                |

#### LOCATION OF RELEASE

|                  |              |                 |              |               |                  |               |                |               |
|------------------|--------------|-----------------|--------------|---------------|------------------|---------------|----------------|---------------|
| Unit Letter<br>B | Section<br>6 | Township<br>18S | Range<br>35E | Feet from the | North/South Line | Feet from the | East/West Line | County<br>Lea |
|------------------|--------------|-----------------|--------------|---------------|------------------|---------------|----------------|---------------|

Latitude N 32.7810858° Longitude W 103.4924927°

WTR 80'

#### NATURE OF RELEASE

|                             |                                                                                                           |                                           |                    |                            |                    |
|-----------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------|----------------------------|--------------------|
| Type of Release             | Crude Oil                                                                                                 | Volume of Release                         | 120 bbls           | Volume Recovered           | 115 bbls           |
| Source of Release           | 6" Steel Pipeline                                                                                         | Date and Hour of Occurrence               | 10/08/2010 @ 10:00 | Date and Hour of Discovery | 10/08/2010 @ 10:00 |
| Was Immediate Notice Given? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required |                                           |                    |                            |                    |
| By Whom?                    | Jason Henry                                                                                               | If YES, To Whom?                          | Larry Johnson      |                            |                    |
| Was a Watercourse Reached?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                       |                                           |                    |                            |                    |
|                             |                                                                                                           | Date and Hour                             | 10/08/2010 @ 11:30 |                            |                    |
|                             |                                                                                                           | If YES, Volume Impacting the Watercourse. |                    |                            |                    |

If a Watercourse was Impacted, Describe Fully.\*

**RECEIVED**

OCT 15

HOBBSD

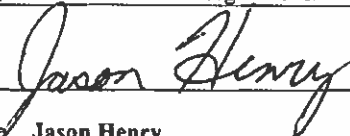
Describe Cause of Problem and Remedial Action Taken.\*

Excavator struck a tee connected to the Chevron Grayburg 6" pipeline causing a release of crude oil. Throughput for the subject line is 2,000 bbls/day and the operating pressure of the pipeline is 50 psi. The depth of the pipeline at the release point is approximately 2' bgs. The H2S concentration in the crude is less than 10 ppm and the gravity of the crude is 36.

Describe Area Affected and Cleanup Action Taken.\*

The released crude pooled in the trench next to the pipeline and a vac truck was used to recover the free product. The impacted area will be remediated per applicable guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

|                                                                                                |                                                                                                                                                 |                                   |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION                                                                                                                       |                                   |
| Printed Name: Jason Henry                                                                      | Approved by District Supervisor <br>ENVIRONMENTAL ENGINEER |                                   |
| Title: Remediation Coordinator                                                                 | Approval Date: 10.15.10                                                                                                                         | Expiration Date: 12.15.10         |
| E-mail Address: jhenry@paalp.com                                                               | Conditions of Approval:                                                                                                                         | Attached <input type="checkbox"/> |
| Date: 10-15-2010 Phone: (575) 441-1099                                                         | SUBMIT FINAL C-141 w/DOCS BY                                                                                                                    | IRP# 10.10.2637                   |

Attach Additional Sheets If Necessary

# **Appendix B**

## **Certified Laboratory Analytical Reports**





## ANALYTICAL REPORT

March 13, 2024

**Plains All American, LP - GHD**

Sample Delivery Group: L1711923  
Samples Received: 03/05/2024  
Project Number:  
Description: Chevron Grayburg 6-Inch Sec. 6 (Historical)  
Site: SRS CHEVRON GRAYBURG 6-INCH HI  
Report To: Adrianna Copeland  
2135 S Loop 250 W  
Midland, TX 79703

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

Entire Report Reviewed By:

A handwritten signature in blue ink that reads "Brittanie Boyd".

Brittanie L Boyd  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

|                                                 |    |                 |
|-------------------------------------------------|----|-----------------|
| Cp: Cover Page                                  | 1  | <sup>1</sup> Cp |
| Tc: Table of Contents                           | 2  |                 |
| Ss: Sample Summary                              | 3  | <sup>2</sup> Tc |
| Cn: Case Narrative                              | 5  |                 |
| Sr: Sample Results                              | 6  | <sup>3</sup> Ss |
| GB-MW-2-02272024 L1711923-01                    | 6  |                 |
| GB-MW-3-02272024 L1711923-02                    | 7  | <sup>4</sup> Cn |
| GB-MW-4-02272024 L1711923-03                    | 8  | <sup>5</sup> Sr |
| GB-MW-5-02272024 L1711923-04                    | 9  |                 |
| GB-MW-13-02292024 L1711923-05                   | 10 | <sup>6</sup> Qc |
| GB-MW-14-02292024 L1711923-06                   | 11 |                 |
| GB-MW-1-02292024 L1711923-07                    | 12 | <sup>7</sup> Gl |
| GB-MW-6-02292024 L1711923-08                    | 13 | <sup>8</sup> Al |
| GB-MW-8-02292024 L1711923-09                    | 14 |                 |
| GB-MW-9-02292024 L1711923-10                    | 15 | <sup>9</sup> Sc |
| GB-MW-10-02292024 L1711923-11                   | 16 |                 |
| GB-MW-11-02292024 L1711923-12                   | 17 |                 |
| GB-DUP1-02292024 L1711923-13                    | 18 |                 |
| GB-DUP2-02292024 L1711923-14                    | 19 |                 |
| Qc: Quality Control Summary                     | 20 |                 |
| Volatile Organic Compounds (GC) by Method 8021B | 20 |                 |
| Gl: Glossary of Terms                           | 22 |                 |
| Al: Accreditations & Locations                  | 23 |                 |
| Sc: Sample Chain of Custody                     | 24 |                 |

GB-MW-2-02272024 L1711923-01 GW

Collected by Hector Orosco  
Collected date/time 02/27/24 09:40  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 14:24        | 03/07/24 14:24     | JAH     | Mt. Juliet, TN |

1  
Cp

2  
Tc

3  
Ss

GB-MW-3-02272024 L1711923-02 GW

Collected by Hector Orosco  
Collected date/time 02/27/24 09:50  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 14:47        | 03/07/24 14:47     | JAH     | Mt. Juliet, TN |

4  
Cn

5  
Sr

GB-MW-4-02272024 L1711923-03 GW

Collected by Hector Orosco  
Collected date/time 02/27/24 10:00  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 15:09        | 03/07/24 15:09     | JAH     | Mt. Juliet, TN |

6  
Qc

7  
Gl

GB-MW-5-02272024 L1711923-04 GW

Collected by Hector Orosco  
Collected date/time 02/27/24 10:10  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 15:32        | 03/07/24 15:32     | JAH     | Mt. Juliet, TN |

8  
Al

9  
Sc

GB-MW-13-02292024 L1711923-05 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 12:20  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 15:55        | 03/07/24 15:55     | JAH     | Mt. Juliet, TN |

GB-MW-14-02292024 L1711923-06 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 13:30  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 16:18        | 03/07/24 16:18     | JAH     | Mt. Juliet, TN |

GB-MW-1-02292024 L1711923-07 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 12:10  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 16:41        | 03/07/24 16:41     | JAH     | Mt. Juliet, TN |

GB-MW-6-02292024 L1711923-08 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 12:45  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 17:04        | 03/07/24 17:04     | JAH     | Mt. Juliet, TN |



GB-MW-8-02292024 L1711923-09 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 13:30  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 20       | 03/07/24 19:20        | 03/07/24 19:20     | JAH     | Mt. Juliet, TN |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

GB-MW-9-02292024 L1711923-10 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 12:50  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 17:27        | 03/07/24 17:27     | JAH     | Mt. Juliet, TN |

<sup>4</sup>Cn

<sup>5</sup>Sr

GB-MW-10-02292024 L1711923-11 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 12:00  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 17:49        | 03/07/24 17:49     | JAH     | Mt. Juliet, TN |

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

GB-MW-11-02292024 L1711923-12 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 14:00  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 18:12        | 03/07/24 18:12     | JAH     | Mt. Juliet, TN |

<sup>9</sup>Sc

GB-DUP1-02292024 L1711923-13 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 00:00  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2241590 | 1        | 03/07/24 18:34        | 03/07/24 18:34     | JAH     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8021B | WG2244349 | 20       | 03/12/24 14:47        | 03/12/24 14:47     | DWR     | Mt. Juliet, TN |

GB-DUP2-02292024 L1711923-14 GW

Collected by Hector Orosco  
Collected date/time 02/29/24 00:00  
Received date/time 03/05/24 09:00

| Method                                          | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Volatile Organic Compounds (GC) by Method 8021B | WG2244349 | 1        | 03/12/24 15:10        | 03/12/24 15:10     | DWR     | Mt. Juliet, TN |

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brittnie L Boyd  
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Collected date/time: 02/27/24 09:40

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 14:24        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 14:24        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 14:24        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 14:24        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.1           |           | 79.0-125    |          | 03/07/2024 14:24        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Collected date/time: 02/27/24 09:50

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 14:47        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 14:47        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 14:47        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 14:47        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 90.8           |           | 79.0-125    |          | 03/07/2024 14:47        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/27/24 10:00

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 15:09        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 15:09        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 15:09        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 15:09        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.3           |           | 79.0-125    |          | 03/07/2024 15:09        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/27/24 10:10

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 15:32        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 15:32        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 15:32        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 15:32        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.1           |           | 79.0-125    |          | 03/07/2024 15:32        | <a href="#">WG2241590</a> |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Collected date/time: 02/29/24 12:20

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 15:55        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 15:55        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 15:55        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 15:55        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.0           |           | 79.0-125    |          | 03/07/2024 15:55        | <a href="#">WG2241590</a> |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 16:18        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 16:18        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 16:18        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 16:18        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 91.8           |           | 79.0-125    |          | 03/07/2024 16:18        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/29/24 12:10

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | 0.00536        |           | 0.000500    | 1        | 03/07/2024 16:41        | <a href="#">WG2241590</a> |
| Toluene                         | 0.00431        |           | 0.00100     | 1        | 03/07/2024 16:41        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | 0.00105        |           | 0.000500    | 1        | 03/07/2024 16:41        | <a href="#">WG2241590</a> |
| Total Xylene                    | 0.00379        |           | 0.00150     | 1        | 03/07/2024 16:41        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 90.4           |           | 79.0-125    |          | 03/07/2024 16:41        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/29/24 12:45

L1711923

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 17:04        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 17:04        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 17:04        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 17:04        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 91.8           |           | 79.0-125    |          | 03/07/2024 17:04        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/29/24 13:30

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | 2.48           |           | 0.0100      | 20       | 03/07/2024 19:20        | <a href="#">WG2241590</a> |
| Toluene                         | 0.547          |           | 0.0200      | 20       | 03/07/2024 19:20        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | 0.0480         |           | 0.0100      | 20       | 03/07/2024 19:20        | <a href="#">WG2241590</a> |
| Total Xylene                    | 0.516          |           | 0.0300      | 20       | 03/07/2024 19:20        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 91.0           |           | 79.0-125    |          | 03/07/2024 19:20        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Collected date/time: 02/29/24 12:50

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 17:27        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 17:27        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 17:27        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 17:27        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 90.8           |           | 79.0-125    |          | 03/07/2024 17:27        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/29/24 12:00

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 17:49        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 17:49        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 17:49        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 17:49        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.1           |           | 79.0-125    |          | 03/07/2024 17:49        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/29/24 14:00

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/07/2024 18:12        | <a href="#">WG2241590</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/07/2024 18:12        | <a href="#">WG2241590</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/07/2024 18:12        | <a href="#">WG2241590</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/07/2024 18:12        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 91.7           |           | 79.0-125    |          | 03/07/2024 18:12        | <a href="#">WG2241590</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Collected date/time: 02/29/24 00:00

Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | 3.03           |           | 0.0100      | 20       | 03/12/2024 14:47        | <a href="#">WG2244349</a> |
| Toluene                         | 0.657          |           | 0.0200      | 20       | 03/12/2024 14:47        | <a href="#">WG2244349</a> |
| Ethylbenzene                    | 0.0594         |           | 0.000500    | 1        | 03/07/2024 18:34        | <a href="#">WG2241590</a> |
| Total Xylene                    | 0.444          |           | 0.00150     | 1        | 03/07/2024 18:34        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 90.4           |           | 79.0-125    |          | 03/07/2024 18:34        | <a href="#">WG2241590</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.5           |           | 79.0-125    |          | 03/12/2024 14:47        | <a href="#">WG2244349</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Volatile Organic Compounds (GC) by Method 8021B

| Analyte                         | Result<br>mg/l | Qualifier | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------------|----------------|-----------|-------------|----------|-------------------------|---------------------------|
| Benzene                         | ND             |           | 0.000500    | 1        | 03/12/2024 15:10        | <a href="#">WG2244349</a> |
| Toluene                         | ND             |           | 0.00100     | 1        | 03/12/2024 15:10        | <a href="#">WG2244349</a> |
| Ethylbenzene                    | ND             |           | 0.000500    | 1        | 03/12/2024 15:10        | <a href="#">WG2244349</a> |
| Total Xylene                    | ND             |           | 0.00150     | 1        | 03/12/2024 15:10        | <a href="#">WG2244349</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 92.9           |           | 79.0-125    |          | 03/12/2024 15:10        | <a href="#">WG2244349</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

W02241590

Volatile Organic Compounds (GC) by Method 8021B

[L1711923-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R4044087-2 03/07/24 12:31

| Analyte                            | MB Result<br>mg/l | MB Qualifier | MB MDL<br>mg/l | MB RDL<br>mg/l |
|------------------------------------|-------------------|--------------|----------------|----------------|
| Benzene                            | U                 |              | 0.000190       | 0.000500       |
| Toluene                            | U                 |              | 0.000412       | 0.00100        |
| Ethylbenzene                       | U                 |              | 0.000160       | 0.000500       |
| Total Xylene                       | U                 |              | 0.000510       | 0.00150        |
| (S)<br>a,a,a-Trifluorotoluene(PID) | 93.3              |              |                | 79.0-125       |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R4044087-1 03/07/24 10:58

| Analyte                            | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|----------------------|--------------------|---------------|------------------|---------------|
| Benzene                            | 0.0500               | 0.0492             | 98.4          | 77.0-122         |               |
| Toluene                            | 0.0500               | 0.0450             | 90.0          | 80.0-121         |               |
| Ethylbenzene                       | 0.0500               | 0.0506             | 101           | 80.0-123         |               |
| Total Xylene                       | 0.150                | 0.142              | 94.7          | 47.0-154         |               |
| (S)<br>a,a,a-Trifluorotoluene(PID) |                      |                    | 88.6          | 79.0-125         |               |

Volatile Organic Compounds (GC) by Method 8021B [L1711923-13,14](#)

Method Blank (MB)

(MB) R4044617-4 03/12/24 13:41

| Analyte                            | MB Result<br>mg/l | MB Qualifier | MB MDL<br>mg/l | MB RDL<br>mg/l |
|------------------------------------|-------------------|--------------|----------------|----------------|
| Benzene                            | U                 |              | 0.000190       | 0.000500       |
| Toluene                            | U                 |              | 0.000412       | 0.00100        |
| Ethylbenzene                       | U                 |              | 0.000160       | 0.000500       |
| Total Xylene                       | U                 |              | 0.000510       | 0.00150        |
| (S)<br>a,a,a-Trifluorotoluene(PID) | 94.0              |              |                | 79.0-125       |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R4044617-3 03/12/24 11:29

| Analyte                            | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|----------------------|--------------------|---------------|------------------|---------------|
| Benzene                            | 0.0500               | 0.0496             | 99.2          | 77.0-122         |               |
| Toluene                            | 0.0500               | 0.0481             | 96.2          | 80.0-121         |               |
| Ethylbenzene                       | 0.0500               | 0.0532             | 106           | 80.0-123         |               |
| Total Xylene                       | 0.150                | 0.149              | 99.3          | 47.0-154         |               |
| (S)<br>a,a,a-Trifluorotoluene(PID) |                      |                    | 99.2          | 79.0-125         |               |

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDL                          | Method Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ND                           | Not detected at the Reporting Limit (or MDL where applicable).                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| RDL                          | Reported Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Rec.                         | Recovery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| RPD                          | Relative Percent Difference.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| SDG                          | Sample Delivery Group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (S)                          | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.                                                                                                                                                                                                                                               |
| U                            | Not detected at the Reporting Limit (or MDL where applicable).                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Analyte                      | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.                                                                                                                                                                                                                                                                                                                                                                                                 |
| Dilution                     | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.                                                                                    |
| Limits                       | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.                                                                                                                                                                                                                                                      |
| Qualifier                    | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.                                                                                                                                                                  |
| Result                       | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Case Narrative (Cn)          | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.                                                                                                                                                                          |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.                                                                                                                                                                                              |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.                                                              |
| Sample Results (Sr)          | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.                                                                                                                                                                                             |
| Sample Summary (Ss)          | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.                                                                                                                                                                                                                                                                                                                                                            |

QualifierDescription

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| Alabama                        | 40660       | Nebraska                    | NE-OS-15-05      |
| Alaska                         | 17-026      | Nevada                      | TN000032021-1    |
| Arizona                        | AZ0612      | New Hampshire               | 2975             |
| Arkansas                       | 88-0469     | New Jersey--NELAP           | TN002            |
| California                     | 2932        | New Mexico <sup>1</sup>     | TN00003          |
| Colorado                       | TN00003     | New York                    | 11742            |
| Connecticut                    | PH-0197     | North Carolina              | Env375           |
| Florida                        | E87487      | North Carolina <sup>1</sup> | DW21704          |
| Georgia                        | NELAP       | North Carolina <sup>3</sup> | 41               |
| Georgia <sup>1</sup>           | 923         | North Dakota                | R-140            |
| Idaho                          | TN00003     | Ohio--VAP                   | CL0069           |
| Illinois                       | 200008      | Oklahoma                    | 9915             |
| Indiana                        | C-TN-01     | Oregon                      | TN200002         |
| Iowa                           | 364         | Pennsylvania                | 68-02979         |
| Kansas                         | E-10277     | Rhode Island                | LA000356         |
| Kentucky <sup>1 6</sup>        | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>          | 16          | South Dakota                | n/a              |
| Louisiana                      | AI30792     | Tennessee <sup>1 4</sup>    | 2006             |
| Louisiana                      | LA018       | Texas                       | T104704245-20-18 |
| Maine                          | TN00003     | Texas <sup>5</sup>          | LAB0152          |
| Maryland                       | 324         | Utah                        | TN000032021-11   |
| Massachusetts                  | M-TN003     | Vermont                     | VT2006           |
| Michigan                       | 9958        | Virginia                    | 110033           |
| Minnesota                      | 047-999-395 | Washington                  | C847             |
| Mississippi                    | TN00003     | West Virginia               | 233              |
| Missouri                       | 340         | Wisconsin                   | 998093910        |
| Montana                        | CERT0086    | Wyoming                     | A2LA             |
| A2LA -- ISO 17025              | 1461.01     | AIHA-LAP, LLC EMLAP         | 100789           |
| A2LA -- ISO 17025 <sup>5</sup> | 1461.02     | DOD                         | 1461.01          |
| Canada                         | 1461.01     | USDA                        | P330-15-00234    |
| EPA--Crypto                    | TN00003     |                             |                  |

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



**Plains All American, LP - GHD**

2135 S Loop 250 W  
Midland, TX 79703

Billing Information:

Accounts Payable  
1106 Griffith Dr.  
Midland, TX 79706

Pres  
Chk

Analysis / Container / Preservative



**MT JULIET, TN**

1206S Lebanon Rd Mount Juliet, TN 37122  
Submitting a sample via this chain of custody  
constitutes acknowledgment and acceptance of the  
Pace Terms and Conditions found at:  
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG #

**C183**

Acctnum: **PLAINSGHD**

Template: **T224574**

Prelogin: **P1050445**

PM: 829 - Brittne L Boyd

PB:

Shipped Via: **FedEX Priority**

Remarks

Sample # (lab only)

Report to:

**Adrianna Copeland**

Email To:

**adrianna.copeland@ghd.com; Christopher.Knigh**

Project Description:

**Chevron Grayburg 6-Inch Sec. 6 (Historical)**

City/State

Collected:

**Lea County NM**

Please Circle:

PT MT CT ET

Phone: **281-615-3420**

Client Project #

Lab Project #

**PLAINSGHD-CHEVGRAY**

Collected by (print):

**Hector Orozco**

Site/Facility ID #

**SRS CHEVRON GRAYBURG 6-**

P.O. #

Collected by (signature):

**Hector Orozco**

**Rush?** (Lab MUST Be Notified)

☐ Same Day ☒ Five Day  
☐ Next Day ☐ 5 Day (Rad Only)  
☐ Two Day ☐ 10 Day (Rad Only)  
☐ Three Day

Quote #

Date Results Needed

No.  
of  
Cnts

Immediately

Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix \*

Depth

Date

Time

BTEX 40m/Amb+HCl

|                   |  |    |  |         |      |   |   |
|-------------------|--|----|--|---------|------|---|---|
| GB-MW-2-02272024  |  | GW |  | 2-27-24 | 0940 | 3 | ✓ |
| GB-MW-3-02272024  |  | GW |  | 2-27-24 | 0950 | 3 | ✓ |
| GB-MW-4-02272024  |  | GW |  | 2-27-24 | 1000 | 3 | ✓ |
| GB-MW-5-02272024  |  | GW |  | 2-27-24 | 1010 | 3 | ✓ |
| GB-MW-13-02292024 |  | GW |  | 2-29-24 | 1220 | 3 | ✓ |
| GB-MW-14-02292024 |  | GW |  | 2-29-24 | 1330 | 3 | ✓ |
| GB-MW-1-02292024  |  |    |  | 2-29-24 | 1210 | 3 | ✓ |
| GB-MW-6-02292024  |  |    |  | 2-29-24 | 1245 | 3 | ✓ |
| GB-MW-8-02292024  |  |    |  | 2-29-24 | 1330 | 3 | ✓ |
| GB-MW-9-02292024  |  |    |  | 2-29-24 | 1250 | 3 | ✓ |

\* Matrix:

SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other

Remarks:

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

**7210 2108 5255**

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP ☐ Y ☐ N  
COC Signed/Accurate: ☒ ☐ ☐ ☐ N  
Bottles arrive intact: ☒ ☐ ☐ ☐ N  
Correct bottles used: ☒ ☐ ☐ ☐ N  
Sufficient volume sent: ☒ ☐ ☐ ☐ N  
If Applicable  
VOA Zero Headspace: ☐ Y ☒ N  
Preservation Correct/Checked: ☐ Y ☒ N  
RAD Screen <0.5 mR/hr: ☒ Y ☐ N

Relinquished by: (Signature)

**Hector Orozco**

Date:

**3-1-24**

Time:

**1115**

Received by: (Signature)

Trip Blank Received:

Yes ☒ No ☐

HCL/ MeOH  
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp:

**0.4 + 0.4 42**

Bottles Received:

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

**3/5/24 900**

Time:

Hold:

Condition:

NCF / OK



## Plains All American, LP - GHD

2135 S Loop 250 W  
Midland, TX 79703

## Billing Information:

Accounts Payable  
1106 Griffith Dr.  
Midland, TX 79706Pres  
Chk

## Analysis / Container / Preservative



## MT JULIET, TN

12065 Lebanon Rd. Mount Juliet, TN 37122  
Submitting a sample via this chain of custody  
constitutes acknowledgment and acceptance of the  
Pace Terms and Conditions found at:  
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # 1711923

Table # C183

Acctnum: PLAINSGHD

Template: T224574

Prelogin: P1050445

PM: 829 - Brittne L Boyd

PB:

Shipped Via: FedEX Priority

Remarks

Sample # (lab only)

Report to: Adrianna Copeland  
Email To: adrianna.copeland@ghd.com; Christopher.KnightProject Description: Chevron Grayburg 6-Inch Sec. 6 (Historical)  
City/State Collected: Lea county NM  
Please Circle: PT MT CT ET

Phone: 281-615-3420

Client Project #

Lab Project #

PLAINSGHD-CHEVGRAY

Collected by (print): Hector orosco

Site/Facility ID #

SRS CHEVRON GRAYBURG 6-

P.O. #

Collected by (signature): Hektor

Rush? (Lab MUST Be Notified)

☐ Same Day ☒ Five Day  
☐ Next Day ☐ 5 Day (Rad Only)  
☐ Two Day ☐ 10 Day (Rad Only)  
☐ Three Day

Quote #

Date Results Needed

No.  
of  
CntrsImmediately  
Packed on Ice N ☐ Y ☒

| Sample ID         | Comp/Grab | Matrix * | Depth | Date    | Time | No.<br>of<br>Cntrs |
|-------------------|-----------|----------|-------|---------|------|--------------------|
| GB-MW-10-02292024 |           | GW       |       | 2-29-24 | 1200 | 3                  |
| GB-MW-11-02292024 |           | GW       |       | 2-29-24 | 1400 | 3                  |
|                   |           | GW       |       |         |      |                    |
| GB-DUP1-02292024  |           | GW       |       |         |      | 3                  |
| GB-DUP2-02292024  |           | GW       |       |         |      | 3                  |
|                   |           | GW       |       |         |      |                    |
| Trip Blank        |           | GW       |       |         |      | 1                  |
|                   |           | GW       |       |         |      |                    |
|                   |           | GW       |       |         |      |                    |
|                   |           | GW       |       |         |      |                    |

\* Matrix:

SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other

Remarks:

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

7210 2108 5255

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N  
COC Signed/Accurate: ☒ Y ☐ N  
Bottles arrive intact: ☒ Y ☐ N  
Correct bottles used: ☒ Y ☐ N  
Sufficient volume sent: ☒ Y ☐ N  
If Applicable  
VOA Zero Headspace: ☐ Y ☒ N  
Preservation Correct/Checked: ☒ Y ☐ N  
RAD Screen <0.5 mR/hr: ☒ Y ☐ N

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received: Yes ☐ No ☒HCL/ MeOH  
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: MSA 9°C  
0.4 + 0.0 = 0.4  
Bottles Received: 42

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 3/5/24 Time: 900

Hold:

Condition:

NCF 1 OK





---

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

June 03, 2024

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

Work Order: **HS24051563**

Laboratory Results for: **12604539- Chevron Grayburg 6-Inch**

Dear Chris Knight,

ALS Environmental received 16 sample(s) on May 22, 2024 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: LUIS.AGUILAR

Luis.Aguilar

## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**Work Order:** HS24051563

## SAMPLE SUMMARY

| Lab Samp ID   | Client Sample ID       | Matrix      | TagNo         | Collection Date   | Date Received     | Hold                                |
|---------------|------------------------|-------------|---------------|-------------------|-------------------|-------------------------------------|
| HS24051563-01 | Chevron-MW-2-05202024  | Groundwater |               | 20-May-2024 10:33 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-02 | Chevron-MW-3-05202024  | Groundwater |               | 20-May-2024 11:06 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-03 | Chevron-MW-4-05202024  | Groundwater |               | 20-May-2024 12:41 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-04 | Chevron-MW-5-05202024  | Groundwater |               | 20-May-2024 13:28 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-05 | Chevron-MW-13-05202024 | Groundwater |               | 20-May-2024 14:23 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-06 | Chevron-MW-14-05202024 | Groundwater |               | 20-May-2024 15:01 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-07 | Chevron-MW-1-05202024  | Groundwater |               | 20-May-2024 15:32 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-08 | Chevron-MW-6-05202024  | Groundwater |               | 20-May-2024 10:50 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-09 | Chevron-MW-8-05202024  | Groundwater |               | 20-May-2024 12:00 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-10 | Chevron-MW-9-05202024  | Groundwater |               | 20-May-2024 15:10 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-11 | Chevron-MW-10-05202024 | Groundwater |               | 20-May-2024 16:10 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-12 | Chevron-MW-11-05212024 | Groundwater |               | 21-May-2024 09:55 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-13 | Chevron-MW-12-05212024 | Groundwater |               | 21-May-2024 11:30 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-14 | Chevron-DUP1-05202024  | Groundwater |               | 20-May-2024 00:00 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-15 | Chevron-DUP2-05202024  | Groundwater |               | 21-May-2024 00:00 | 22-May-2024 10:15 | <input type="checkbox"/>            |
| HS24051563-16 | Trip Blank             | Water       | CG-040124-626 | 21-May-2024 00:00 | 22-May-2024 10:15 | <input checked="" type="checkbox"/> |



ALS Houston, US

Date: 03-Jun-24

Client: GHD  
Project: 12604539- Chevron Grayburg 6-Inch  
Work Order: HS24051563

CASE NARRATIVE

Work Order Comments

- Login notes:  
Trip blank collected is not in the chain and sample Chevron-DUP2-05202024 has a collect date of 05/21/2024. Where Chevron-DUP1-05202024 has collect date of 05/20/2024.

GCMS Volatiles by Method SW8260

Batch ID: R467863,R468283

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

Batch ID: R467814

Sample ID: Chevron-MW-1-05202024 (HS24051563-07MS)

- MS/MSD failed QC limit due to suspect matrix effect

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-2-05202024

Collection Date:20-May-2024 10:33

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-01

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 16:29 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 16:29 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 16:29 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 16:29 |
| Surr: 1,2-Dichloroethane-d4    | 88.2     |               | 70-126          | %REC         | 1                  | 28-May-2024 16:29 |
| Surr: 4-Bromofluorobenzene     | 92.5     |               | 77-113          | %REC         | 1                  | 28-May-2024 16:29 |
| Surr: Dibromofluoromethane     | 92.3     |               | 77-123          | %REC         | 1                  | 28-May-2024 16:29 |
| Surr: Toluene-d8               | 94.6     |               | 82-127          | %REC         | 1                  | 28-May-2024 16:29 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-3-05202024

Collection Date:20-May-2024 11:06

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-02

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 | Analyst: AKP    |       |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 28-May-2024 16:51 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 28-May-2024 16:51 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 28-May-2024 16:51 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L  | 1                  | 28-May-2024 16:51 |
| Surr: 1,2-Dichloroethane-d4    | 90.0     |               | 70-126          | %REC  | 1                  | 28-May-2024 16:51 |
| Surr: 4-Bromofluorobenzene     | 94.3     |               | 77-113          | %REC  | 1                  | 28-May-2024 16:51 |
| Surr: Dibromofluoromethane     | 93.9     |               | 77-123          | %REC  | 1                  | 28-May-2024 16:51 |
| Surr: Toluene-d8               | 98.8     |               | 82-127          | %REC  | 1                  | 28-May-2024 16:51 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-4-05202024

Collection Date:20-May-2024 12:41

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-03

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:13 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:13 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:13 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 17:13 |
| Surr: 1,2-Dichloroethane-d4    | 90.5     |               | 70-126          | %REC         | 1                  | 28-May-2024 17:13 |
| Surr: 4-Bromofluorobenzene     | 93.5     |               | 77-113          | %REC         | 1                  | 28-May-2024 17:13 |
| Surr: Dibromofluoromethane     | 93.2     |               | 77-123          | %REC         | 1                  | 28-May-2024 17:13 |
| Surr: Toluene-d8               | 95.0     |               | 82-127          | %REC         | 1                  | 28-May-2024 17:13 |

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



ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-5-05202024

Collection Date:20-May-2024 13:28

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-04

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:35 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:35 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:35 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 17:35 |
| Surr: 1,2-Dichloroethane-d4    | 92.2     |               | 70-126          | %REC         | 1                  | 28-May-2024 17:35 |
| Surr: 4-Bromofluorobenzene     | 92.2     |               | 77-113          | %REC         | 1                  | 28-May-2024 17:35 |
| Surr: Dibromofluoromethane     | 93.6     |               | 77-123          | %REC         | 1                  | 28-May-2024 17:35 |
| Surr: Toluene-d8               | 96.5     |               | 82-127          | %REC         | 1                  | 28-May-2024 17:35 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-13-05202024

Collection Date:20-May-2024 14:23

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-05

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:57 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:57 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 17:57 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 17:57 |
| Surr: 1,2-Dichloroethane-d4    | 89.9     |               | 70-126          | %REC         | 1                  | 28-May-2024 17:57 |
| Surr: 4-Bromofluorobenzene     | 93.5     |               | 77-113          | %REC         | 1                  | 28-May-2024 17:57 |
| Surr: Dibromofluoromethane     | 93.3     |               | 77-123          | %REC         | 1                  | 28-May-2024 17:57 |
| Surr: Toluene-d8               | 96.7     |               | 82-127          | %REC         | 1                  | 28-May-2024 17:57 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-14-05202024

Collection Date:20-May-2024 15:01

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-06

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 18:19 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 18:19 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 18:19 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 18:19 |
| Surr: 1,2-Dichloroethane-d4    | 91.3     |               | 70-126          | %REC         | 1                  | 28-May-2024 18:19 |
| Surr: 4-Bromofluorobenzene     | 92.7     |               | 77-113          | %REC         | 1                  | 28-May-2024 18:19 |
| Surr: Dibromofluoromethane     | 93.4     |               | 77-123          | %REC         | 1                  | 28-May-2024 18:19 |
| Surr: Toluene-d8               | 96.4     |               | 82-127          | %REC         | 1                  | 28-May-2024 18:19 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-1-05202024

Collection Date:20-May-2024 15:32

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-07

Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.0059 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 18:41 |
| Ethylbenzene                   | 0.0062 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 18:41 |
| Toluene                        | 0.019  |               | 0.0010          | mg/L         | 1                  | 28-May-2024 18:41 |
| Xylenes, Total                 | 0.0070 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 18:41 |
| Surr: 1,2-Dichloroethane-d4    | 89.2   |               | 70-126          | %REC         | 1                  | 28-May-2024 18:41 |
| Surr: 4-Bromofluorobenzene     | 96.9   |               | 77-113          | %REC         | 1                  | 28-May-2024 18:41 |
| Surr: Dibromofluoromethane     | 89.9   |               | 77-123          | %REC         | 1                  | 28-May-2024 18:41 |
| Surr: Toluene-d8               | 97.4   |               | 82-127          | %REC         | 1                  | 28-May-2024 18:41 |

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



ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-6-05202024

Collection Date:20-May-2024 10:50

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-08

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 22:23 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 22:23 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 22:23 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 22:23 |
| Surr: 1,2-Dichloroethane-d4    | 88.2     |               | 70-126          | %REC         | 1                  | 28-May-2024 22:23 |
| Surr: 4-Bromofluorobenzene     | 91.7     |               | 77-113          | %REC         | 1                  | 28-May-2024 22:23 |
| Surr: Dibromofluoromethane     | 91.4     |               | 77-123          | %REC         | 1                  | 28-May-2024 22:23 |
| Surr: Toluene-d8               | 97.1     |               | 82-127          | %REC         | 1                  | 28-May-2024 22:23 |

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

## ALS Houston, US

Date: 03-Jun-24

Client: GHD  
Project: 12604539- Chevron Grayburg 6-Inch  
Sample ID: Chevron-MW-8-05202024  
Collection Date: 20-May-2024 12:00

## ANALYTICAL REPORT

WorkOrder:HS24051563  
Lab ID:HS24051563-09  
Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 1.2    |               | 0.025           | mg/L         | 25                 | 02-Jun-2024 14:17 |
| Ethylbenzene                   | 0.024  |               | 0.0010          | mg/L         | 1                  | 28-May-2024 22:45 |
| Toluene                        | 0.33   |               | 0.025           | mg/L         | 25                 | 02-Jun-2024 14:17 |
| Xylenes, Total                 | 0.30   |               | 0.0030          | mg/L         | 1                  | 28-May-2024 22:45 |
| Surr: 1,2-Dichloroethane-d4    | 82.0   |               | 70-126          | %REC         | 1                  | 28-May-2024 22:45 |
| Surr: 1,2-Dichloroethane-d4    | 100    |               | 70-126          | %REC         | 25                 | 02-Jun-2024 14:17 |
| Surr: 4-Bromofluorobenzene     | 101    |               | 77-113          | %REC         | 1                  | 28-May-2024 22:45 |
| Surr: 4-Bromofluorobenzene     | 97.3   |               | 77-113          | %REC         | 25                 | 02-Jun-2024 14:17 |
| Surr: Dibromofluoromethane     | 84.5   |               | 77-123          | %REC         | 1                  | 28-May-2024 22:45 |
| Surr: Dibromofluoromethane     | 99.9   |               | 77-123          | %REC         | 25                 | 02-Jun-2024 14:17 |
| Surr: Toluene-d8               | 97.7   |               | 82-127          | %REC         | 1                  | 28-May-2024 22:45 |
| Surr: Toluene-d8               | 96.9   |               | 82-127          | %REC         | 25                 | 02-Jun-2024 14:17 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-9-05202024

Collection Date:20-May-2024 15:10

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-10

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 02-Jun-2024 12:41 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 02-Jun-2024 12:41 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 02-Jun-2024 12:41 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 02-Jun-2024 12:41 |
| Surr: 1,2-Dichloroethane-d4    | 96.4     |               | 70-126          | %REC         | 1                  | 02-Jun-2024 12:41 |
| Surr: 4-Bromofluorobenzene     | 97.5     |               | 77-113          | %REC         | 1                  | 02-Jun-2024 12:41 |
| Surr: Dibromofluoromethane     | 98.1     |               | 77-123          | %REC         | 1                  | 02-Jun-2024 12:41 |
| Surr: Toluene-d8               | 98.0     |               | 82-127          | %REC         | 1                  | 02-Jun-2024 12:41 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-10-05202024

Collection Date:20-May-2024 16:10

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-11

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 |       |                    | Analyst: AKP      |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 28-May-2024 23:29 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 28-May-2024 23:29 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 28-May-2024 23:29 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L  | 1                  | 28-May-2024 23:29 |
| Surr: 1,2-Dichloroethane-d4    | 86.9     |               | 70-126          | %REC  | 1                  | 28-May-2024 23:29 |
| Surr: 4-Bromofluorobenzene     | 95.4     |               | 77-113          | %REC  | 1                  | 28-May-2024 23:29 |
| Surr: Dibromofluoromethane     | 91.4     |               | 77-123          | %REC  | 1                  | 28-May-2024 23:29 |
| Surr: Toluene-d8               | 102      |               | 82-127          | %REC  | 1                  | 28-May-2024 23:29 |

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



ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-11-05212024

Collection Date:21-May-2024 09:55

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-12

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.0084   |               | 0.0010          | mg/L         | 1                  | 28-May-2024 23:51 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 23:51 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-May-2024 23:51 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-May-2024 23:51 |
| Surr: 1,2-Dichloroethane-d4    | 87.1     |               | 70-126          | %REC         | 1                  | 28-May-2024 23:51 |
| Surr: 4-Bromofluorobenzene     | 95.7     |               | 77-113          | %REC         | 1                  | 28-May-2024 23:51 |
| Surr: Dibromofluoromethane     | 91.7     |               | 77-123          | %REC         | 1                  | 28-May-2024 23:51 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC         | 1                  | 28-May-2024 23:51 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-MW-12-05212024

Collection Date:21-May-2024 11:30

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-13

Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.19   |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:13 |
| Ethylbenzene                   | 0.016  |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:13 |
| Toluene                        | 0.066  |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:13 |
| Xylenes, Total                 | 0.039  |               | 0.0030          | mg/L         | 1                  | 29-May-2024 00:13 |
| Surr: 1,2-Dichloroethane-d4    | 86.7   |               | 70-126          | %REC         | 1                  | 29-May-2024 00:13 |
| Surr: 4-Bromofluorobenzene     | 99.5   |               | 77-113          | %REC         | 1                  | 29-May-2024 00:13 |
| Surr: Dibromofluoromethane     | 91.4   |               | 77-123          | %REC         | 1                  | 29-May-2024 00:13 |
| Surr: Toluene-d8               | 100    |               | 82-127          | %REC         | 1                  | 29-May-2024 00:13 |

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

## ALS Houston, US

Date: 03-Jun-24

Client: GHD  
Project: 12604539- Chevron Grayburg 6-Inch  
Sample ID: Chevron-DUP1-05202024  
Collection Date: 20-May-2024 00:00

## ANALYTICAL REPORT

WorkOrder:HS24051563  
Lab ID:HS24051563-14  
Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 1.1    |               | 0.025           | mg/L         | 25                 | 02-Jun-2024 14:42 |
| Ethylbenzene                   | 0.021  |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:35 |
| Toluene                        | 0.28   |               | 0.025           | mg/L         | 25                 | 02-Jun-2024 14:42 |
| Xylenes, Total                 | 0.26   |               | 0.0030          | mg/L         | 1                  | 29-May-2024 00:35 |
| Surr: 1,2-Dichloroethane-d4    | 81.8   |               | 70-126          | %REC         | 1                  | 29-May-2024 00:35 |
| Surr: 1,2-Dichloroethane-d4    | 95.2   |               | 70-126          | %REC         | 25                 | 02-Jun-2024 14:42 |
| Surr: 4-Bromofluorobenzene     | 97.8   |               | 77-113          | %REC         | 1                  | 29-May-2024 00:35 |
| Surr: 4-Bromofluorobenzene     | 96.9   |               | 77-113          | %REC         | 25                 | 02-Jun-2024 14:42 |
| Surr: Dibromofluoromethane     | 85.2   |               | 77-123          | %REC         | 1                  | 29-May-2024 00:35 |
| Surr: Dibromofluoromethane     | 97.1   |               | 77-123          | %REC         | 25                 | 02-Jun-2024 14:42 |
| Surr: Toluene-d8               | 96.0   |               | 82-127          | %REC         | 1                  | 29-May-2024 00:35 |
| Surr: Toluene-d8               | 97.5   |               | 82-127          | %REC         | 25                 | 02-Jun-2024 14:42 |

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

ALS Houston, US

Date: 03-Jun-24

Client:GHD

Project:12604539- Chevron Grayburg 6-Inch

Sample ID:Chevron-DUP2-05202024

Collection Date:21-May-2024 00:00

ANALYTICAL REPORT

WorkOrder:HS24051563

Lab ID:HS24051563-15

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.0095   |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:57 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:57 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 29-May-2024 00:57 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 29-May-2024 00:57 |
| Surr: 1,2-Dichloroethane-d4    | 83.9     |               | 70-126          | %REC         | 1                  | 29-May-2024 00:57 |
| Surr: 4-Bromofluorobenzene     | 94.1     |               | 77-113          | %REC         | 1                  | 29-May-2024 00:57 |
| Surr: Dibromofluoromethane     | 88.4     |               | 77-123          | %REC         | 1                  | 29-May-2024 00:57 |
| Surr: Toluene-d8               | 102      |               | 82-127          | %REC         | 1                  | 29-May-2024 00:57 |

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

ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

**DATES REPORT**

| Sample ID                      | Client Samp ID         | Collection Date                                   | Leachate Date | Prep Date | Analysis Date              | DF |
|--------------------------------|------------------------|---------------------------------------------------|---------------|-----------|----------------------------|----|
| <b>Batch ID:</b> R467814 ( 0 ) |                        | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24051563-01                  | Chevron-MW-2-05202024  | 20 May 2024 10:33                                 |               |           | 28 May 2024 16:29          | 1  |
| HS24051563-02                  | Chevron-MW-3-05202024  | 20 May 2024 11:06                                 |               |           | 28 May 2024 16:51          | 1  |
| HS24051563-03                  | Chevron-MW-4-05202024  | 20 May 2024 12:41                                 |               |           | 28 May 2024 17:13          | 1  |
| HS24051563-04                  | Chevron-MW-5-05202024  | 20 May 2024 13:28                                 |               |           | 28 May 2024 17:35          | 1  |
| HS24051563-05                  | Chevron-MW-13-05202024 | 20 May 2024 14:23                                 |               |           | 28 May 2024 17:57          | 1  |
| HS24051563-06                  | Chevron-MW-14-05202024 | 20 May 2024 15:01                                 |               |           | 28 May 2024 18:19          | 1  |
| HS24051563-07                  | Chevron-MW-1-05202024  | 20 May 2024 15:32                                 |               |           | 28 May 2024 18:41          | 1  |
| <b>Batch ID:</b> R467863 ( 0 ) |                        | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24051563-08                  | Chevron-MW-6-05202024  | 20 May 2024 10:50                                 |               |           | 28 May 2024 22:23          | 1  |
| HS24051563-09                  | Chevron-MW-8-05202024  | 20 May 2024 12:00                                 |               |           | 28 May 2024 22:45          | 1  |
| HS24051563-11                  | Chevron-MW-10-05202024 | 20 May 2024 16:10                                 |               |           | 28 May 2024 23:29          | 1  |
| HS24051563-12                  | Chevron-MW-11-05212024 | 21 May 2024 09:55                                 |               |           | 28 May 2024 23:51          | 1  |
| HS24051563-13                  | Chevron-MW-12-05212024 | 21 May 2024 11:30                                 |               |           | 29 May 2024 00:13          | 1  |
| HS24051563-14                  | Chevron-DUP1-05202024  | 20 May 2024 00:00                                 |               |           | 29 May 2024 00:35          | 1  |
| HS24051563-15                  | Chevron-DUP2-05202024  | 21 May 2024 00:00                                 |               |           | 29 May 2024 00:57          | 1  |
| <b>Batch ID:</b> R468283 ( 0 ) |                        | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24051563-09                  | Chevron-MW-8-05202024  | 20 May 2024 12:00                                 |               |           | 02 Jun 2024 14:17          | 25 |
| HS24051563-10                  | Chevron-MW-9-05202024  | 20 May 2024 15:10                                 |               |           | 02 Jun 2024 12:41          | 1  |
| HS24051563-14                  | Chevron-DUP1-05202024  | 20 May 2024 00:00                                 |               |           | 02 Jun 2024 14:42          | 25 |



## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

## QC BATCH REPORT

| Batch ID: R467814 ( 0 )     |                         | Instrument: VOA11 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |          |                |
|-----------------------------|-------------------------|-------------------|---------|----------------------------------------|------|---------------|---------------|----------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240528 | Units: ug/L       |         | Analysis Date: 28-May-2024 10:32       |      |               |               |          |                |
| Client ID:                  | Run ID: VOA11_467814    | SeqNo: 8032936    |         | PrepDate:                              |      | DF: 1         |               |          |                |
| Analyte                     | Result                  | PQL               | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | RPD %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0               |         |                                        |      |               |               |          |                |
| Ethylbenzene                | < 1.0                   | 1.0               |         |                                        |      |               |               |          |                |
| Toluene                     | < 1.0                   | 1.0               |         |                                        |      |               |               |          |                |
| Xylenes, Total              | < 3.0                   | 3.0               |         |                                        |      |               |               |          |                |
| Surr: 1,2-Dichloroethane-d4 | 43.29                   | 1.0               | 50      | 0                                      | 86.6 | 70 - 123      |               |          |                |
| Surr: 4-Bromofluorobenzene  | 46.15                   | 1.0               | 50      | 0                                      | 92.3 | 77 - 113      |               |          |                |
| Surr: Dibromofluoromethane  | 45.37                   | 1.0               | 50      | 0                                      | 90.7 | 73 - 126      |               |          |                |
| Surr: Toluene-d8            | 48.51                   | 1.0               | 50      | 0                                      | 97.0 | 81 - 120      |               |          |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240528 | Units: ug/L    |         | Analysis Date: 28-May-2024 09:26 |      |               |               |          |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|----------|----------------|
| Client ID:                  | Run ID: VOA11_467814    | SeqNo: 8032934 |         | PrepDate:                        |      | DF: 1         |               |          |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | RPD %RPD | RPD Limit Qual |
| Benzene                     | 17.18                   | 1.0            | 20      | 0                                | 85.9 | 74 - 120      |               |          |                |
| Ethylbenzene                | 16.12                   | 1.0            | 20      | 0                                | 80.6 | 77 - 117      |               |          |                |
| Toluene                     | 16.89                   | 1.0            | 20      | 0                                | 84.4 | 77 - 118      |               |          |                |
| Xylenes, Total              | 48.66                   | 3.0            | 60      | 0                                | 81.1 | 75 - 122      |               |          |                |
| Surr: 1,2-Dichloroethane-d4 | 41.96                   | 1.0            | 50      | 0                                | 83.9 | 70 - 123      |               |          |                |
| Surr: 4-Bromofluorobenzene  | 49.77                   | 1.0            | 50      | 0                                | 99.5 | 77 - 113      |               |          |                |
| Surr: Dibromofluoromethane  | 44.87                   | 1.0            | 50      | 0                                | 89.7 | 73 - 126      |               |          |                |
| Surr: Toluene-d8            | 48.07                   | 1.0            | 50      | 0                                | 96.1 | 81 - 120      |               |          |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240528 | Units: ug/L    |         | Analysis Date: 28-May-2024 09:48 |      |               |               |          |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|----------|----------------|
| Client ID:                  | Run ID: VOA11_467814     | SeqNo: 8032935 |         | PrepDate:                        |      | DF: 1         |               |          |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | RPD %RPD | RPD Limit Qual |
| Benzene                     | 16.74                    | 1.0            | 20      | 0                                | 83.7 | 74 - 120      | 17.18         | 2.58     | 20             |
| Ethylbenzene                | 16.45                    | 1.0            | 20      | 0                                | 82.3 | 77 - 117      | 16.12         | 2.05     | 20             |
| Toluene                     | 16.97                    | 1.0            | 20      | 0                                | 84.9 | 77 - 118      | 16.89         | 0.495    | 20             |
| Xylenes, Total              | 49.26                    | 3.0            | 60      | 0                                | 82.1 | 75 - 122      | 48.66         | 1.24     | 20             |
| Surr: 1,2-Dichloroethane-d4 | 42.12                    | 1.0            | 50      | 0                                | 84.2 | 70 - 123      | 41.96         | 0.393    | 20             |
| Surr: 4-Bromofluorobenzene  | 47.52                    | 1.0            | 50      | 0                                | 95.0 | 77 - 113      | 49.77         | 4.62     | 20             |
| Surr: Dibromofluoromethane  | 44.52                    | 1.0            | 50      | 0                                | 89.0 | 73 - 126      | 44.87         | 0.789    | 20             |
| Surr: Toluene-d8            | 49.29                    | 1.0            | 50      | 0                                | 98.6 | 81 - 120      | 48.07         | 2.5      | 20             |

## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

## QC BATCH REPORT

| Batch ID: R467814 ( 0 )          |        | Instrument: VOA11          |         | Method: LOW LEVEL VOLATILES BY SW8260C |       |                                  |               |       |           |      |
|----------------------------------|--------|----------------------------|---------|----------------------------------------|-------|----------------------------------|---------------|-------|-----------|------|
| <b>MS</b>                        |        | Sample ID: HS24051563-07MS |         | Units: ug/L                            |       | Analysis Date: 28-May-2024 19:03 |               |       |           |      |
| Client ID: Chevron-MW-1-05202024 |        | Run ID: VOA11_467814       |         | SeqNo: 8034425                         |       | PrepDate:                        |               | DF: 1 |           |      |
| Analyte                          | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC  | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Benzene                          | 17.28  | 1.0                        | 20      | 5.877                                  | 57.0  | 70 - 127                         |               |       |           | S    |
| Ethylbenzene                     | 15.91  | 1.0                        | 20      | 6.172                                  | 48.7  | 70 - 124                         |               |       |           | S    |
| Toluene                          | 16.87  | 1.0                        | 20      | 18.75                                  | -9.40 | 70 - 123                         |               |       |           | S    |
| Xylenes, Total                   | 47.69  | 3.0                        | 60      | 7.022                                  | 67.8  | 70 - 130                         |               |       |           | S    |
| Surr: 1,2-Dichloroethane-d4      | 41.78  | 1.0                        | 50      | 0                                      | 83.6  | 70 - 126                         |               |       |           |      |
| Surr: 4-Bromofluorobenzene       | 49.11  | 1.0                        | 50      | 0                                      | 98.2  | 77 - 113                         |               |       |           |      |
| Surr: Dibromofluoromethane       | 44.4   | 1.0                        | 50      | 0                                      | 88.8  | 77 - 123                         |               |       |           |      |
| Surr: Toluene-d8                 | 48.2   | 1.0                        | 50      | 0                                      | 96.4  | 82 - 127                         |               |       |           |      |

| <b>MSD</b>                       |        | Sample ID: HS24051563-07MSD |         | Units: ug/L    |       | Analysis Date: 28-May-2024 19:26 |               |       |           |      |
|----------------------------------|--------|-----------------------------|---------|----------------|-------|----------------------------------|---------------|-------|-----------|------|
| Client ID: Chevron-MW-1-05202024 |        | Run ID: VOA11_467814        |         | SeqNo: 8034426 |       | PrepDate:                        |               | DF: 1 |           |      |
| Analyte                          | Result | PQL                         | SPK Val | SPK Ref Value  | %REC  | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Benzene                          | 15.6   | 1.0                         | 20      | 5.877          | 48.6  | 70 - 127                         | 17.28         | 10.2  | 20        | S    |
| Ethylbenzene                     | 14.53  | 1.0                         | 20      | 6.172          | 41.8  | 70 - 124                         | 15.91         | 9.03  | 20        | S    |
| Toluene                          | 15.28  | 1.0                         | 20      | 18.75          | -17.4 | 70 - 123                         | 16.87         | 9.95  | 20        | S    |
| Xylenes, Total                   | 44.11  | 3.0                         | 60      | 7.022          | 61.8  | 70 - 130                         | 47.69         | 7.8   | 20        | S    |
| Surr: 1,2-Dichloroethane-d4      | 42.86  | 1.0                         | 50      | 0              | 85.7  | 70 - 126                         | 41.78         | 2.56  | 20        |      |
| Surr: 4-Bromofluorobenzene       | 48.38  | 1.0                         | 50      | 0              | 96.8  | 77 - 113                         | 49.11         | 1.5   | 20        |      |
| Surr: Dibromofluoromethane       | 45.13  | 1.0                         | 50      | 0              | 90.3  | 77 - 123                         | 44.4          | 1.65  | 20        |      |
| Surr: Toluene-d8                 | 47.95  | 1.0                         | 50      | 0              | 95.9  | 82 - 127                         | 48.2          | 0.513 | 20        |      |

The following samples were analyzed in this batch:

|               |               |               |               |
|---------------|---------------|---------------|---------------|
| HS24051563-01 | HS24051563-02 | HS24051563-03 | HS24051563-04 |
| HS24051563-05 | HS24051563-06 | HS24051563-07 |               |

## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

## QC BATCH REPORT

| Batch ID: R467863 ( 0 )     |                         | Instrument: VOA11 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|-------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240528 | Units: ug/L       |         | Analysis Date: 28-May-2024 22:00       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA11_467863    | SeqNo: 8034466    |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL               | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0               |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0               |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0               |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0               |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 43.45                   | 1.0               | 50      | 0                                      | 86.9 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 48.37                   | 1.0               | 50      | 0                                      | 96.7 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 45.12                   | 1.0               | 50      | 0                                      | 90.2 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.39                   | 1.0               | 50      | 0                                      | 96.8 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240528 | Units: ug/L    |         | Analysis Date: 28-May-2024 20:54 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA11_467863    | SeqNo: 8034466 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 17.28                   | 1.0            | 20      | 0                                | 86.4 | 74 - 120      |               |      |                |
| Ethylbenzene                | 16.08                   | 1.0            | 20      | 0                                | 80.4 | 77 - 117      |               |      |                |
| Toluene                     | 16.93                   | 1.0            | 20      | 0                                | 84.6 | 77 - 118      |               |      |                |
| Xylenes, Total              | 48.38                   | 3.0            | 60      | 0                                | 80.6 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 39.4                    | 1.0            | 50      | 0                                | 78.8 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 48.7                    | 1.0            | 50      | 0                                | 97.4 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 43.67                   | 1.0            | 50      | 0                                | 87.3 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.43                   | 1.0            | 50      | 0                                | 96.9 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240528 | Units: ug/L    |         | Analysis Date: 28-May-2024 21:16 |      |               |               |       |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|----------------|
| Client ID:                  | Run ID: VOA11_467863     | SeqNo: 8034465 |         | PrepDate:                        |      | DF: 1         |               |       |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 17.1                     | 1.0            | 20      | 0                                | 85.5 | 74 - 120      | 17.28         | 1.07  | 20             |
| Ethylbenzene                | 16.59                    | 1.0            | 20      | 0                                | 83.0 | 77 - 117      | 16.08         | 3.17  | 20             |
| Toluene                     | 17.36                    | 1.0            | 20      | 0                                | 86.8 | 77 - 118      | 16.93         | 2.55  | 20             |
| Xylenes, Total              | 49.98                    | 3.0            | 60      | 0                                | 83.3 | 75 - 122      | 48.38         | 3.25  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 40.81                    | 1.0            | 50      | 0                                | 81.6 | 70 - 123      | 39.4          | 3.53  | 20             |
| Surr: 4-Bromofluorobenzene  | 48.16                    | 1.0            | 50      | 0                                | 96.3 | 77 - 113      | 48.7          | 1.12  | 20             |
| Surr: Dibromofluoromethane  | 44.05                    | 1.0            | 50      | 0                                | 88.1 | 73 - 126      | 43.67         | 0.866 | 20             |
| Surr: Toluene-d8            | 48.95                    | 1.0            | 50      | 0                                | 97.9 | 81 - 120      | 48.43         | 1.06  | 20             |

## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

## QC BATCH REPORT

| Batch ID: R467863 ( 0 )     |        | Instrument: VOA11          |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |       |                |
|-----------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|-------|----------------|
| <b>MS</b>                   |        | Sample ID: HS24051607-12MS |         | Units: ug/L                            |      | Analysis Date: 29-May-2024 05:45 |               |       |                |
| Client ID:                  |        | Run ID: VOA11_467863       |         | SeqNo: 8034487                         |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 16.99  | 1.0                        | 20      | 0                                      | 85.0 | 70 - 127                         |               |       |                |
| Ethylbenzene                | 15.33  | 1.0                        | 20      | 0                                      | 76.6 | 70 - 124                         |               |       |                |
| Toluene                     | 16.09  | 1.0                        | 20      | 0                                      | 80.4 | 70 - 123                         |               |       |                |
| Xylenes, Total              | 44.8   | 3.0                        | 60      | 0                                      | 74.7 | 70 - 130                         |               |       |                |
| Surr: 1,2-Dichloroethane-d4 | 41.64  | 1.0                        | 50      | 0                                      | 83.3 | 70 - 126                         |               |       |                |
| Surr: 4-Bromofluorobenzene  | 49.13  | 1.0                        | 50      | 0                                      | 98.3 | 77 - 113                         |               |       |                |
| Surr: Dibromofluoromethane  | 44.48  | 1.0                        | 50      | 0                                      | 89.0 | 77 - 123                         |               |       |                |
| Surr: Toluene-d8            | 47.67  | 1.0                        | 50      | 0                                      | 95.3 | 82 - 127                         |               |       |                |

|                             |        |                             |         |                |      |                                  |               |        |                |
|-----------------------------|--------|-----------------------------|---------|----------------|------|----------------------------------|---------------|--------|----------------|
| <b>MSD</b>                  |        | Sample ID: HS24051607-12MSD |         | Units: ug/L    |      | Analysis Date: 29-May-2024 06:07 |               |        |                |
| Client ID:                  |        | Run ID: VOA11_467863        |         | SeqNo: 8034488 |      | PrepDate:                        |               | DF: 1  |                |
| Analyte                     | Result | PQL                         | SPK Val | SPK Ref Value  | %REC | Control Limit                    | RPD Ref Value | %RPD   | RPD Limit Qual |
| Benzene                     | 16.64  | 1.0                         | 20      | 0              | 83.2 | 70 - 127                         | 16.99         | 2.11   | 20             |
| Ethylbenzene                | 15.21  | 1.0                         | 20      | 0              | 76.1 | 70 - 124                         | 15.33         | 0.753  | 20             |
| Toluene                     | 15.97  | 1.0                         | 20      | 0              | 79.9 | 70 - 123                         | 16.09         | 0.722  | 20             |
| Xylenes, Total              | 44.72  | 3.0                         | 60      | 0              | 74.5 | 70 - 130                         | 44.8          | 0.183  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 40.92  | 1.0                         | 50      | 0              | 81.8 | 70 - 126                         | 41.64         | 1.74   | 20             |
| Surr: 4-Bromofluorobenzene  | 49.11  | 1.0                         | 50      | 0              | 98.2 | 77 - 113                         | 49.13         | 0.0476 | 20             |
| Surr: Dibromofluoromethane  | 45.19  | 1.0                         | 50      | 0              | 90.4 | 77 - 123                         | 44.48         | 1.57   | 20             |
| Surr: Toluene-d8            | 48.43  | 1.0                         | 50      | 0              | 96.9 | 82 - 127                         | 47.67         | 1.59   | 20             |

The following samples were analyzed in this batch:

|               |               |               |               |
|---------------|---------------|---------------|---------------|
| HS24051563-08 | HS24051563-09 | HS24051563-11 | HS24051563-12 |
| HS24051563-13 | HS24051563-14 | HS24051563-15 |               |

## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

## QC BATCH REPORT

| Batch ID: R468283 ( 0 )     |                         | Instrument: VOA4 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240602 | Units: ug/L      |         | Analysis Date: 02-Jun-2024 12:19       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA4_468283     | SeqNo: 8043210   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 48.66                   | 1.0              | 50      | 0                                      | 97.3 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 48.46                   | 1.0              | 50      | 0                                      | 96.9 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 50.76                   | 1.0              | 50      | 0                                      | 102  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.78                   | 1.0              | 50      | 0                                      | 97.6 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240602 | Units: ug/L    |         | Analysis Date: 02-Jun-2024 11:10 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA4_468283     | SeqNo: 8043208 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 19.47                   | 1.0            | 20      | 0                                | 97.4 | 74 - 120      |               |      |                |
| Ethylbenzene                | 20.56                   | 1.0            | 20      | 0                                | 103  | 77 - 117      |               |      |                |
| Toluene                     | 20.03                   | 1.0            | 20      | 0                                | 100  | 77 - 118      |               |      |                |
| Xylenes, Total              | 61.86                   | 3.0            | 60      | 0                                | 103  | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 48.04                   | 1.0            | 50      | 0                                | 96.1 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 50.03                   | 1.0            | 50      | 0                                | 100  | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 48.44                   | 1.0            | 50      | 0                                | 96.9 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.96                   | 1.0            | 50      | 0                                | 99.9 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240602 | Units: ug/L    |         | Analysis Date: 02-Jun-2024 11:33 |      |               |               |      |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA4_468283      | SeqNo: 8043209 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 18.28                    | 1.0            | 20      | 0                                | 91.4 | 74 - 120      | 19.47         | 6.29 | 20             |
| Ethylbenzene                | 18.98                    | 1.0            | 20      | 0                                | 94.9 | 77 - 117      | 20.56         | 7.98 | 20             |
| Toluene                     | 19                       | 1.0            | 20      | 0                                | 95.0 | 77 - 118      | 20.03         | 5.28 | 20             |
| Xylenes, Total              | 57.99                    | 3.0            | 60      | 0                                | 96.6 | 75 - 122      | 61.86         | 6.47 | 20             |
| Surr: 1,2-Dichloroethane-d4 | 49.08                    | 1.0            | 50      | 0                                | 98.2 | 70 - 123      | 48.04         | 2.15 | 20             |
| Surr: 4-Bromofluorobenzene  | 51.21                    | 1.0            | 50      | 0                                | 102  | 77 - 113      | 50.03         | 2.34 | 20             |
| Surr: Dibromofluoromethane  | 49.71                    | 1.0            | 50      | 0                                | 99.4 | 73 - 126      | 48.44         | 2.6  | 20             |
| Surr: Toluene-d8            | 50.98                    | 1.0            | 50      | 0                                | 102  | 81 - 120      | 49.96         | 2.02 | 20             |



## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

## QC BATCH REPORT

| Batch ID: R468283 ( 0 )          |        | Instrument: VOA4           |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |       |                |
|----------------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|-------|----------------|
| <b>MS</b>                        |        | Sample ID: HS24051563-10MS |         | Units: ug/L                            |      | Analysis Date: 02-Jun-2024 20:46 |               |       |                |
| Client ID: Chevron-MW-9-05202024 |        | Run ID: VOA4_468283        |         | SeqNo: 8043231                         |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                          | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                          | 17.49  | 1.0                        | 20      | 0.7562                                 | 83.7 | 70 - 127                         |               |       |                |
| Ethylbenzene                     | 17.57  | 1.0                        | 20      | 0                                      | 87.8 | 70 - 124                         |               |       |                |
| Toluene                          | 16.92  | 1.0                        | 20      | 0                                      | 84.6 | 70 - 123                         |               |       |                |
| Xylenes, Total                   | 51.37  | 3.0                        | 60      | 0                                      | 85.6 | 70 - 130                         |               |       |                |
| Surr: 1,2-Dichloroethane-d4      | 51.18  | 1.0                        | 50      | 0                                      | 102  | 70 - 126                         |               |       |                |
| Surr: 4-Bromofluorobenzene       | 50.5   | 1.0                        | 50      | 0                                      | 101  | 77 - 113                         |               |       |                |
| Surr: Dibromofluoromethane       | 49.77  | 1.0                        | 50      | 0                                      | 99.5 | 77 - 123                         |               |       |                |
| Surr: Toluene-d8                 | 49.82  | 1.0                        | 50      | 0                                      | 99.6 | 82 - 127                         |               |       |                |

| <b>MSD</b>                       |        | Sample ID: HS24051563-10MSD |         | Units: ug/L    |      | Analysis Date: 02-Jun-2024 21:09 |               |       |                |
|----------------------------------|--------|-----------------------------|---------|----------------|------|----------------------------------|---------------|-------|----------------|
| Client ID: Chevron-MW-9-05202024 |        | Run ID: VOA4_468283         |         | SeqNo: 8043232 |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                          | Result | PQL                         | SPK Val | SPK Ref Value  | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                          | 16.82  | 1.0                         | 20      | 0.7562         | 80.3 | 70 - 127                         | 17.49         | 3.89  | 20             |
| Ethylbenzene                     | 16.84  | 1.0                         | 20      | 0              | 84.2 | 70 - 124                         | 17.57         | 4.26  | 20             |
| Toluene                          | 16.53  | 1.0                         | 20      | 0              | 82.6 | 70 - 123                         | 16.92         | 2.33  | 20             |
| Xylenes, Total                   | 50.22  | 3.0                         | 60      | 0              | 83.7 | 70 - 130                         | 51.37         | 2.27  | 20             |
| Surr: 1,2-Dichloroethane-d4      | 48.15  | 1.0                         | 50      | 0              | 96.3 | 70 - 126                         | 51.18         | 6.09  | 20             |
| Surr: 4-Bromofluorobenzene       | 50.61  | 1.0                         | 50      | 0              | 101  | 77 - 113                         | 50.5          | 0.226 | 20             |
| Surr: Dibromofluoromethane       | 49.04  | 1.0                         | 50      | 0              | 98.1 | 77 - 123                         | 49.77         | 1.49  | 20             |
| Surr: Toluene-d8                 | 50.42  | 1.0                         | 50      | 0              | 101  | 82 - 127                         | 49.82         | 1.2   | 20             |

The following samples were analyzed in this batch: HS24051563-09 HS24051563-10 HS24051563-14

## ALS Houston, US

Date: 03-Jun-24

**Client:** GHD  
**Project:** 12604539- Chevron Grayburg 6-Inch  
**WorkOrder:** HS24051563

**QUALIFIERS,  
ACRONYMS, UNITS**

| <b>Qualifier</b> | <b>Description</b>                                                        |
|------------------|---------------------------------------------------------------------------|
| *                | 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                               |

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

| <b>Unit Reported</b> | <b>Description</b>   |
|----------------------|----------------------|
| mg/L                 | Milligrams per Liter |

ALS Houston, US

Date: 03-Jun-24

---

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

---

| Agency         | Number                  | Expire Date |
|----------------|-------------------------|-------------|
| Arkansas       | 88-00356_2024           | 27-Mar-2025 |
| California     | 2919; 2025              | 30-Apr-2025 |
| Florida        | E87611-38               | 30-Jun-2024 |
| Illinois       | 2000322023-11           | 30-Jun-2024 |
| Kansas         | E-10352 2023-2024       | 31-Jul-2024 |
| Kentucky       | 123043                  | 30-Apr-2025 |
| Louisiana      | 03087 2023-2024         | 30-Jun-2024 |
| Maryland       | 343; 2023-2024          | 30-Jun-2024 |
| North Carolina | 624 - 2024              | 31-Dec-2024 |
| Oklahoma       | 2023-140                | 31-Aug-2024 |
| Tennessee      | 04016                   | 30-Apr-2025 |
| Texas          | T104704231 TX-C24-00130 | 30-Apr-2025 |
| Utah           | TX026932023-14          | 31-Jul-2024 |

ALS Houston, US

Date: 03-Jun-24

## Sample Receipt Checklist

Work Order ID: HS24051563

Date/Time Received: 22-May-2024 10:15

Client Name: GHDHouston

Received by: Si Ma

|                                 |                   |                                 |                   |
|---------------------------------|-------------------|---------------------------------|-------------------|
| Completed By: /S/ Armand Morgan | 24-May-2024 18:28 | Reviewed by: /S/ sebastian.lugo | 28-May-2024 14:36 |
| eSignature                      | Date/Time         | eSignature                      | Date/Time         |

Matrices: WCarrier name: FedEx

Shipping container/cooler in good condition?

Yes ☒No ☐Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐No ☐Not Present ☒

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

VOA/TX1005/TX1006 Solids in hermetically sealed vials?

Yes ☐No ☐Not Present ☒

Chain of custody present?

Yes ☒No ☐

2 Page(s)

Chain of custody signed when relinquished and received?

Yes ☒No ☐

COC IDs:317841/317842

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):

1.5UC/1.6C

IR 31

Cooler(s)/Kit(s):

BLUE

Date/Time sample(s) sent to storage:

05/24/24 18:30

Water - VOA vials have zero headspace?

Yes ☒No ☐No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☐No ☐N/A ☒

pH adjusted?

Yes ☐No ☐N/A ☒

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:

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+1 970 490 1511Everett, WA  
+1 425 356 2600Holland, MI  
+1 616 399 6070

## Chain of Custody Form

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

Page 1 of 2

COC ID: 317841

| Customer Information |                                   | Project Information |                                               | Parameter/Method Request for Analysis |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|-----------------------------------|---------------------|-----------------------------------------------|---------------------------------------|-------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Purchase Order       | 12604539- Chevron Grayburg 6-Inch | Project Name        | 12604539- Chevron Grayburg 6-Inch             | A                                     | 8250_LL_W(8260 BTEX)                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Work Order           |                                   | Project Number      | 12604539                                      | B                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Company Name         | GHD                               | Bill To Company     | Plains All American Pipeline, LP              | C                                     | <b>HS24051563</b><br>GHD<br>12604539- Chevron Grayburg 6-Inch<br> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Send Report To       | Chris Knight                      | Invoice Attn        | Kerolanne Hudgens                             | D                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Address              | 11451 Katy Fwy<br>Suite 400       | Address             | c/o ENV-00, Accounts Payable<br>P.O. Box 4648 | E                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |                                   |                     |                                               | F                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| City/State/Zip       | Houston, TX 77079                 | City/State/Zip      | Houston TX 77210-4648                         | G                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Phone                | (713) 734-3090                    | Phone               | (713) 646-4610                                | H                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fax                  | (713) 734-3391                    | Fax                 | (713) 646-4199                                | I                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| e-Mail Address       | Christopher.Knight@ghd.com        | e-Mail Address      | Kerolanne.hudgens@plains.com                  | J                                     |                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| No. | Sample Description     | Date    | Time  | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|------------------------|---------|-------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1   | Chevron-MW-2-05202024  | 5-20-24 | 10:33 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 2   | Chevron-MW-3-05202024  | 5-20-24 | 11:06 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 3   | Chevron-MW-4-05202024  | 5-20-24 | 12:41 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 4   | Chevron-MW-5-05202024  | 5-20-24 | 13:28 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 5   | Chevron-MW-13-05202024 | 5-20-24 | 14:23 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 6   | Chevron-MW-14-05202024 | 5-20-24 | 15:01 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 7   | Chevron-MW-1-05202024  | 5-20-24 | 15:32 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 8   | Chevron-MW-6-05202024  | 5-20-24 | 10:50 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 9   | Chevron-MW-8-05202024  | 5-20-24 | 12:00 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 10  | Chevron-MW-9-05202024  | 5-20-24 | 15:10 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |

|                                                                                                                                                                              |  |                                           |  |                                                                                                                                                              |  |                                                                                                                                                                                                                          |  |                                                 |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|--|--|--|
| Sampler(s) Please Print & Sign                                                                                                                                               |  | Shipment Method                           |  | Required Turnaround Time: (Check Box)                                                                                                                        |  |                                                                                                                                                                                                                          |  | Results Due Date:                               |  |  |  |
| Jairo Flores <i>JF</i> Bryce M. <i>BM</i><br>Relinquished by: Jairo Flores <i>JF</i><br>Relinquished by:                                                                     |  | Date: 5-21-24 Time: 11:20<br>Received by: |  | <input checked="" type="checkbox"/> STD 10 Wk. Days <input type="checkbox"/> 5 Wk. Days <input type="checkbox"/> 2 Wk. Days <input type="checkbox"/> 24 Hour |  |                                                                                                                                                                                                                          |  | Notes: 12604539- Chevron Grayburg 6-Inch Sec. 6 |  |  |  |
| Logged by (Laboratory):                                                                                                                                                      |  | Date: Time:                               |  | Received by (Laboratory):<br>Gm 05/22/24 10:15<br>Checked by (Laboratory):                                                                                   |  |                                                                                                                                                                                                                          |  | Cooler ID: Cooler Temp.:<br>BML 1.5             |  |  |  |
| Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 7-Other 8-4°C 9-5035 |  | QC Package: (Check One Box Below)         |  |                                                                                                                                                              |  | <input checked="" type="checkbox"/> Level III Std. QC <input type="checkbox"/> Level III Std. QC (Lab. Use)<br><input type="checkbox"/> Level IV Std. QC (Lab. Use) <input type="checkbox"/> Level IV Std. QC (Lab. Use) |  |                                                 |  |  |  |

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.

3. The Chain of Custody is a legal document. All information must be completed accurately.

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+1 970 490 1511Holland, MI  
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## Chain of Custody Form

Page 2 of 2

COC ID: 317842

Houston, TX  
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+1 610 948 4903Salt Lake City, UT  
+1 801 266 7700South Charleston, WV  
+1 304 356 3168York, PA  
+1 717 505 5280

ALS Project Manager: ALS Work Order #:

| Customer Information |                                | Project Information |                                               | Parameter/Method Request for Analysis |                       |
|----------------------|--------------------------------|---------------------|-----------------------------------------------|---------------------------------------|-----------------------|
| Purchase Order       | 12604539- Chevron Grayburg 6-I | Project Name        | 12604539- Chevron Grayburg 6-Inch             | A                                     | 8260_LL_W (8260 BTEX) |
| Work Order           |                                | Project Number      | 12604539                                      | B                                     |                       |
| Company Name         | GHD                            | Bill To Company     | Plains All American Pipeline, LP              | C                                     |                       |
| Send Report To       | Chris Knight                   | Invoice Attn        | Karolanne Hudgens                             | D                                     |                       |
| Address              | 11451 Katy Fwy<br>Suite 400    | Address             | c/o ENV-00, Accounts Payable<br>P.O. Box 4648 | E                                     |                       |
| City/State/Zip       | Houston, TX 77079              | City/State/Zip      | Houston TX 77210-4648                         | F                                     |                       |
| Phone                | (713) 734-3090                 | Phone               | (713) 646-4610                                | G                                     |                       |
| Fax                  | (713) 734-3391                 | Fax                 | (713) 646-4199                                | H                                     |                       |
| e-Mail Address       | Christopher.Knight@ghd.com     | e-Mail Address      | Karolanne.hudgens@plains.com                  | I                                     |                       |
|                      |                                |                     |                                               | J                                     |                       |

HS24051563

GHD

12604539- Chevron Grayburg 6-Inch



| No. | Sample Description     | Date    | Time  | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|------------------------|---------|-------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1   | Chevron-MW-10-05202024 | 5-20-24 | 16:10 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 2   | Chevron-MW-11-05212024 | 5-21-24 | 09:55 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 3   | Chevron-MW-12-05212024 | 5-21-24 | 11:30 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 4   | Chevron-Dup1-05202024  | 5-20-24 | —     | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 5   | Chevron-Dup2-05202024  | 5-21-24 | —     | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 6   |                        |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 7   |                        |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 8   |                        |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 9   |                        |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 10  |                        |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |

|                                                                                                                                                                              |  |                 |             |                                                                                                                                                                                                    |  |                                                                                                                                                                                       |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Sampler(s) Please Print & Sign<br>Jairo F. [Signature] Bruce M. [Signature]                                                                                                  |  | Shipment Method |             | Required Turnaround Time: (Check Box)<br><input checked="" type="checkbox"/> STC 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour |  | Results Due Date:                                                                                                                                                                     |  |
| Relinquished by:<br>Jairo F. [Signature]                                                                                                                                     |  | Date: 5-21-24   | Time: 11:20 | Received by:<br>[Signature]                                                                                                                                                                        |  | Notes: 12604539- Chevron Grayburg 6-Inch Sec. 6                                                                                                                                       |  |
| Relinquished by:                                                                                                                                                             |  | Date:           | Time:       | Received by (Laboratory):<br>[Signature]                                                                                                                                                           |  | QC Package: (Check One Box Below)                                                                                                                                                     |  |
| Logged by (Laboratory):                                                                                                                                                      |  | Date:           | Time:       | Checked by (Laboratory):                                                                                                                                                                           |  | <input checked="" type="checkbox"/> 2000 Std OC<br><input type="checkbox"/> 2000 Std OC/Pass/Fail<br><input type="checkbox"/> 2000 Std OC/Pass/Fail<br><input type="checkbox"/> Other |  |
| Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 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.

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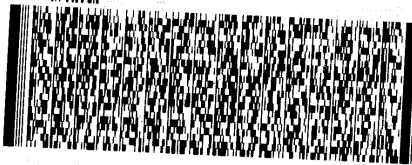
**Must Deliver Next Business Day  
Time and Tempature Sensitive!**

**ALS**

ORIGIN ID:SGRA (505) 546-2198  
SIMON KOZIK  
GHD  
1608 NORTH 26TH ST ARTESIA  
ARTESIA, NM 88210  
UNITED STATES US

SHIP DATE: 26APR24  
ACTWGT: 1.00 LB MAN  
CAD: 0221247/CAFE3755  
DIMS: 19x16x13 IN

TO **SAMPLE RECEIVING**  
**ALS GROUP USA, CORP**  
**10450 STANCLIFF ROAD**  
**SUITE 210**  
**HOUSTON TX 77099**  
(281) 530-5666  
**REF: 12604537 - LOVINGTON = BO 100501 - 509 - LA**

RMA: 

**FedEx**  
Express  


TRK# 0221 **6862 6804 8730**

**RETURNS MON - SAT**  
**PRIORITY OVERNIGHT**

**FedEx**  
TRK# 0221 **6862 6804 8730**

**WED - 22 MAY 10:30A**  
**PRIORITY OVERNIGHT**

**AB SGRA**

TX - US **77099**  
EXP 04/25





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

September 03, 2024

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

Work Order: **HS24081403**

Laboratory Results for: **Chevron Grayburg 6-Inch**

Dear Chris Knight,

ALS Environmental received 15 sample(s) on Aug 22, 2024 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL  
Luis.Aguilar

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**Work Order:** HS24081403

## SAMPLE SUMMARY

| Lab Samp ID   | Client Sample ID         | Matrix      | TagNo | Collection Date   | Date Received     | Hold                     |
|---------------|--------------------------|-------------|-------|-------------------|-------------------|--------------------------|
| HS24081403-01 | 12604539-MW-2-20240819   | Groundwater |       | 19-Aug-2024 12:40 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-02 | 12604539-MW-3-20240819   | Groundwater |       | 19-Aug-2024 13:30 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-03 | 12604539-MW-4-20240820   | Groundwater |       | 20-Aug-2024 11:05 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-04 | 12604539-MW-5-20240819   | Groundwater |       | 19-Aug-2024 14:40 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-05 | 12604539-MW-13-20240820  | Groundwater |       | 20-Aug-2024 13:35 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-06 | 12604539-MW-14-20240820  | Groundwater |       | 20-Aug-2024 12:20 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-07 | 12604539-MW-1-20240820   | Groundwater |       | 20-Aug-2024 08:45 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-08 | 12604539-MW-8-20240819   | Groundwater |       | 19-Aug-2024 11:55 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-09 | MW-6-20240819            | Groundwater |       | 19-Aug-2024 15:55 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-10 | MW-9-20240820            | Groundwater |       | 20-Aug-2024 13:30 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-11 | MW-10-20240820           | Groundwater |       | 20-Aug-2024 15:20 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-12 | MW-11-20240820           | Groundwater |       | 20-Aug-2024 11:35 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-13 | 12604539-DUP-01-20240819 | Groundwater |       | 19-Aug-2024 00:00 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-14 | DUP-02-20240820          | Groundwater |       | 20-Aug-2024 00:00 | 22-Aug-2024 09:45 | <input type="checkbox"/> |
| HS24081403-15 | TRIP BLANK               | Groundwater |       | 19-Aug-2024 00:00 | 22-Aug-2024 09:45 | <input type="checkbox"/> |

**ALS Houston, US**

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**Work Order:** HS24081403

**CASE NARRATIVE**

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**GCMS Volatiles by Method SW8260****Batch ID: R476060**

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

**Batch ID: R475762,R475867,R476096**

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

**Batch ID: R475657****Sample ID: MW-6-20240819 (HS24081403-09)**

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference. Benzene
-



ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-2-20240819

Collection Date:19-Aug-2024 12:40

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-01

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 17:20 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 17:20 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 17:20 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 17:20 |
| Surr: 1,2-Dichloroethane-d4    | 111      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 17:20 |
| Surr: 4-Bromofluorobenzene     | 109      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 17:20 |
| Surr: Dibromofluoromethane     | 121      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 17:20 |
| Surr: Toluene-d8               | 87.0     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 17:20 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-3-20240819

Collection Date:19-Aug-2024 13:30

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-02

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 17:42 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 17:42 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 17:42 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 17:42 |
| Surr: 1,2-Dichloroethane-d4    | 111      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 17:42 |
| Surr: 4-Bromofluorobenzene     | 111      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 17:42 |
| Surr: Dibromofluoromethane     | 121      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 17:42 |
| Surr: Toluene-d8               | 86.4     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 17:42 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-4-20240820

Collection Date:20-Aug-2024 11:05

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-03

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:05 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:05 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:05 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 18:05 |
| Surr: 1,2-Dichloroethane-d4    | 107      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 18:05 |
| Surr: 4-Bromofluorobenzene     | 105      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 18:05 |
| Surr: Dibromofluoromethane     | 115      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 18:05 |
| Surr: Toluene-d8               | 88.2     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 18:05 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-5-20240819

Collection Date:19-Aug-2024 14:40

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-04

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:27 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:27 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:27 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 18:27 |
| Surr: 1,2-Dichloroethane-d4    | 108      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 18:27 |
| Surr: 4-Bromofluorobenzene     | 111      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 18:27 |
| Surr: Dibromofluoromethane     | 115      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 18:27 |
| Surr: Toluene-d8               | 85.6     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 18:27 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-13-20240820

Collection Date:20-Aug-2024 13:35

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-05

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:49 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:49 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 18:49 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 18:49 |
| Surr: 1,2-Dichloroethane-d4    | 109      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 18:49 |
| Surr: 4-Bromofluorobenzene     | 108      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 18:49 |
| Surr: Dibromofluoromethane     | 118      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 18:49 |
| Surr: Toluene-d8               | 86.3     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 18:49 |

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



ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-14-20240820

Collection Date:20-Aug-2024 12:20

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-06

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:12 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:12 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:12 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 19:12 |
| Surr: 1,2-Dichloroethane-d4    | 109      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 19:12 |
| Surr: 4-Bromofluorobenzene     | 108      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 19:12 |
| Surr: Dibromofluoromethane     | 113      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 19:12 |
| Surr: Toluene-d8               | 86.3     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 19:12 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:12604539-MW-1-20240820

Collection Date:20-Aug-2024 08:45

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-07

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:34 |
| Ethylbenzene                   | 0.0020   |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:34 |
| Toluene                        | 0.0035   |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:34 |
| Xylenes, Total                 | 0.0054   |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 19:34 |
| Surr: 1,2-Dichloroethane-d4    | 109      |               | 70-126          | %REC         | 1                  | 27-Aug-2024 19:34 |
| Surr: 4-Bromofluorobenzene     | 108      |               | 77-113          | %REC         | 1                  | 27-Aug-2024 19:34 |
| Surr: Dibromofluoromethane     | 112      |               | 77-123          | %REC         | 1                  | 27-Aug-2024 19:34 |
| Surr: Toluene-d8               | 84.5     |               | 82-127          | %REC         | 1                  | 27-Aug-2024 19:34 |

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

## ALS Houston, US

Date: 03-Sep-24

Client: GHD  
Project: Chevron Grayburg 6-Inch  
Sample ID: 12604539-MW-8-20240819  
Collection Date: 19-Aug-2024 11:55

## ANALYTICAL REPORT

WorkOrder:HS24081403  
Lab ID:HS24081403-08  
Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.53   |               | 0.010           | mg/L         | 10                 | 31-Aug-2024 12:35 |
| Ethylbenzene                   | 0.0080 |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:56 |
| Toluene                        | 0.14   |               | 0.0010          | mg/L         | 1                  | 27-Aug-2024 19:56 |
| Xylenes, Total                 | 0.089  |               | 0.0030          | mg/L         | 1                  | 27-Aug-2024 19:56 |
| Surr: 1,2-Dichloroethane-d4    | 113    |               | 70-126          | %REC         | 1                  | 27-Aug-2024 19:56 |
| Surr: 1,2-Dichloroethane-d4    | 86.6   |               | 70-126          | %REC         | 10                 | 31-Aug-2024 12:35 |
| Surr: 4-Bromofluorobenzene     | 108    |               | 77-113          | %REC         | 1                  | 27-Aug-2024 19:56 |
| Surr: 4-Bromofluorobenzene     | 95.6   |               | 77-113          | %REC         | 10                 | 31-Aug-2024 12:35 |
| Surr: Dibromofluoromethane     | 114    |               | 77-123          | %REC         | 1                  | 27-Aug-2024 19:56 |
| Surr: Dibromofluoromethane     | 98.2   |               | 77-123          | %REC         | 10                 | 31-Aug-2024 12:35 |
| Surr: Toluene-d8               | 85.8   |               | 82-127          | %REC         | 1                  | 27-Aug-2024 19:56 |
| Surr: Toluene-d8               | 99.8   |               | 82-127          | %REC         | 10                 | 31-Aug-2024 12:35 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:MW-6-20240819

Collection Date:19-Aug-2024 15:55

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-09

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 | Analyst: AKP    |       |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 27-Aug-2024 20:18 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 27-Aug-2024 20:18 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L  | 1                  | 27-Aug-2024 20:18 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L  | 1                  | 27-Aug-2024 20:18 |
| Surr: 1,2-Dichloroethane-d4    | 111      |               | 70-126          | %REC  | 1                  | 27-Aug-2024 20:18 |
| Surr: 4-Bromofluorobenzene     | 111      |               | 77-113          | %REC  | 1                  | 27-Aug-2024 20:18 |
| Surr: Dibromofluoromethane     | 116      |               | 77-123          | %REC  | 1                  | 27-Aug-2024 20:18 |
| Surr: Toluene-d8               | 85.3     |               | 82-127          | %REC  | 1                  | 27-Aug-2024 20:18 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:MW-9-20240820

Collection Date:20-Aug-2024 13:30

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-10

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-Aug-2024 18:49 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-Aug-2024 18:49 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-Aug-2024 18:49 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-Aug-2024 18:49 |
| Surr: 1,2-Dichloroethane-d4    | 80.4     |               | 70-126          | %REC         | 1                  | 28-Aug-2024 18:49 |
| Surr: 4-Bromofluorobenzene     | 94.5     |               | 77-113          | %REC         | 1                  | 28-Aug-2024 18:49 |
| Surr: Dibromofluoromethane     | 91.5     |               | 77-123          | %REC         | 1                  | 28-Aug-2024 18:49 |
| Surr: Toluene-d8               | 100.0    |               | 82-127          | %REC         | 1                  | 28-Aug-2024 18:49 |

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



ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:MW-10-20240820

Collection Date:20-Aug-2024 15:20

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-11

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.0029   |               | 0.0010          | mg/L         | 1                  | 28-Aug-2024 19:12 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-Aug-2024 19:12 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 28-Aug-2024 19:12 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 28-Aug-2024 19:12 |
| Surr: 1,2-Dichloroethane-d4    | 84.6     |               | 70-126          | %REC         | 1                  | 28-Aug-2024 19:12 |
| Surr: 4-Bromofluorobenzene     | 91.9     |               | 77-113          | %REC         | 1                  | 28-Aug-2024 19:12 |
| Surr: Dibromofluoromethane     | 96.6     |               | 77-123          | %REC         | 1                  | 28-Aug-2024 19:12 |
| Surr: Toluene-d8               | 98.0     |               | 82-127          | %REC         | 1                  | 28-Aug-2024 19:12 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:MW-11-20240820

Collection Date:20-Aug-2024 11:35

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-12

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.0054   |               | 0.0010          | mg/L         | 1                  | 29-Aug-2024 18:59 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 29-Aug-2024 18:59 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 29-Aug-2024 18:59 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 29-Aug-2024 18:59 |
| Surr: 1,2-Dichloroethane-d4    | 86.2     |               | 70-126          | %REC         | 1                  | 29-Aug-2024 18:59 |
| Surr: 4-Bromofluorobenzene     | 92.7     |               | 77-113          | %REC         | 1                  | 29-Aug-2024 18:59 |
| Surr: Dibromofluoromethane     | 95.4     |               | 77-123          | %REC         | 1                  | 29-Aug-2024 18:59 |
| Surr: Toluene-d8               | 99.1     |               | 82-127          | %REC         | 1                  | 29-Aug-2024 18:59 |

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

## ALS Houston, US

Date: 03-Sep-24

Client: GHD  
Project: Chevron Grayburg 6-Inch  
Sample ID: 12604539-DUP-01-20240819  
Collection Date: 19-Aug-2024 00:00

## ANALYTICAL REPORT

WorkOrder:HS24081403  
Lab ID:HS24081403-13  
Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.38   |               | 0.010           | mg/L         | 10                 | 31-Aug-2024 13:00 |
| Ethylbenzene                   | 0.0088 |               | 0.0010          | mg/L         | 1                  | 30-Aug-2024 19:23 |
| Toluene                        | 0.18   |               | 0.0010          | mg/L         | 1                  | 30-Aug-2024 19:23 |
| Xylenes, Total                 | 0.094  |               | 0.0030          | mg/L         | 1                  | 30-Aug-2024 19:23 |
| Surr: 1,2-Dichloroethane-d4    | 97.3   |               | 70-126          | %REC         | 1                  | 30-Aug-2024 19:23 |
| Surr: 1,2-Dichloroethane-d4    | 89.2   |               | 70-126          | %REC         | 10                 | 31-Aug-2024 13:00 |
| Surr: 4-Bromofluorobenzene     | 97.1   |               | 77-113          | %REC         | 1                  | 30-Aug-2024 19:23 |
| Surr: 4-Bromofluorobenzene     | 95.8   |               | 77-113          | %REC         | 10                 | 31-Aug-2024 13:00 |
| Surr: Dibromofluoromethane     | 99.8   |               | 77-123          | %REC         | 1                  | 30-Aug-2024 19:23 |
| Surr: Dibromofluoromethane     | 98.4   |               | 77-123          | %REC         | 10                 | 31-Aug-2024 13:00 |
| Surr: Toluene-d8               | 101    |               | 82-127          | %REC         | 1                  | 30-Aug-2024 19:23 |
| Surr: Toluene-d8               | 99.6   |               | 82-127          | %REC         | 10                 | 31-Aug-2024 13:00 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:DUP-02-20240820

Collection Date:20-Aug-2024 00:00

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-14

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | 0.0041   |               | 0.0010          | mg/L         | 1                  | 29-Aug-2024 19:22 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 29-Aug-2024 19:22 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 29-Aug-2024 19:22 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 29-Aug-2024 19:22 |
| Surr: 1,2-Dichloroethane-d4    | 83.2     |               | 70-126          | %REC         | 1                  | 29-Aug-2024 19:22 |
| Surr: 4-Bromofluorobenzene     | 92.6     |               | 77-113          | %REC         | 1                  | 29-Aug-2024 19:22 |
| Surr: Dibromofluoromethane     | 93.0     |               | 77-123          | %REC         | 1                  | 29-Aug-2024 19:22 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC         | 1                  | 29-Aug-2024 19:22 |

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

ALS Houston, US

Date: 03-Sep-24

Client:GHD

Project:Chevron Grayburg 6-Inch

Sample ID:TRIP BLANK

Collection Date:19-Aug-2024 00:00

ANALYTICAL REPORT

WorkOrder:HS24081403

Lab ID:HS24081403-15

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS        | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|--------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: AKP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 30-Aug-2024 18:38 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 30-Aug-2024 18:38 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L         | 1                  | 30-Aug-2024 18:38 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L         | 1                  | 30-Aug-2024 18:38 |
| Surr: 1,2-Dichloroethane-d4    | 102      |               | 70-126          | %REC         | 1                  | 30-Aug-2024 18:38 |
| Surr: 4-Bromofluorobenzene     | 95.1     |               | 77-113          | %REC         | 1                  | 30-Aug-2024 18:38 |
| Surr: Dibromofluoromethane     | 102      |               | 77-123          | %REC         | 1                  | 30-Aug-2024 18:38 |
| Surr: Toluene-d8               | 100      |               | 82-127          | %REC         | 1                  | 30-Aug-2024 18:38 |

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



ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

**DATES REPORT**

| Sample ID                      | Client Samp ID           | Collection Date                                   | Leachate Date | Prep Date | Analysis Date              | DF |
|--------------------------------|--------------------------|---------------------------------------------------|---------------|-----------|----------------------------|----|
| <b>Batch ID:</b> R475657 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24081403-01                  | 12604539-MW-2-20240819   | 19 Aug 2024 12:40                                 |               |           | 27 Aug 2024 17:20          | 1  |
| HS24081403-02                  | 12604539-MW-3-20240819   | 19 Aug 2024 13:30                                 |               |           | 27 Aug 2024 17:42          | 1  |
| HS24081403-03                  | 12604539-MW-4-20240820   | 20 Aug 2024 11:05                                 |               |           | 27 Aug 2024 18:05          | 1  |
| HS24081403-04                  | 12604539-MW-5-20240819   | 19 Aug 2024 14:40                                 |               |           | 27 Aug 2024 18:27          | 1  |
| HS24081403-05                  | 12604539-MW-13-20240820  | 20 Aug 2024 13:35                                 |               |           | 27 Aug 2024 18:49          | 1  |
| HS24081403-06                  | 12604539-MW-14-20240820  | 20 Aug 2024 12:20                                 |               |           | 27 Aug 2024 19:12          | 1  |
| HS24081403-07                  | 12604539-MW-1-20240820   | 20 Aug 2024 08:45                                 |               |           | 27 Aug 2024 19:34          | 1  |
| HS24081403-08                  | 12604539-MW-8-20240819   | 19 Aug 2024 11:55                                 |               |           | 27 Aug 2024 19:56          | 1  |
| HS24081403-09                  | MW-6-20240819            | 19 Aug 2024 15:55                                 |               |           | 27 Aug 2024 20:18          | 1  |
| <b>Batch ID:</b> R475762 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24081403-10                  | MW-9-20240820            | 20 Aug 2024 13:30                                 |               |           | 28 Aug 2024 18:49          | 1  |
| HS24081403-11                  | MW-10-20240820           | 20 Aug 2024 15:20                                 |               |           | 28 Aug 2024 19:12          | 1  |
| <b>Batch ID:</b> R475867 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24081403-12                  | MW-11-20240820           | 20 Aug 2024 11:35                                 |               |           | 29 Aug 2024 18:59          | 1  |
| HS24081403-14                  | DUP-02-20240820          | 20 Aug 2024 00:00                                 |               |           | 29 Aug 2024 19:22          | 1  |
| <b>Batch ID:</b> R476060 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24081403-13                  | 12604539-DUP-01-20240819 | 19 Aug 2024 00:00                                 |               |           | 30 Aug 2024 19:23          | 1  |
| HS24081403-15                  | TRIP BLANK               | 19 Aug 2024 00:00                                 |               |           | 30 Aug 2024 18:38          | 1  |
| <b>Batch ID:</b> R476096 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C |               |           | <b>Matrix:</b> Groundwater |    |
| HS24081403-08                  | 12604539-MW-8-20240819   | 19 Aug 2024 11:55                                 |               |           | 31 Aug 2024 12:35          | 10 |
| HS24081403-13                  | 12604539-DUP-01-20240819 | 19 Aug 2024 00:00                                 |               |           | 31 Aug 2024 13:00          | 10 |

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R475657 ( 0 )     |                         | Instrument: VOA6 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240827 | Units: ug/L      |         | Analysis Date: 27-Aug-2024 11:09       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA6_475657     | SeqNo: 8215837   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 55.57                   | 1.0              | 50      | 0                                      | 111  | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 53.46                   | 1.0              | 50      | 0                                      | 107  | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 60.5                    | 1.0              | 50      | 0                                      | 121  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 43.9                    | 1.0              | 50      | 0                                      | 87.8 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240827 | Units: ug/L    |         | Analysis Date: 27-Aug-2024 10:02 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA6_475657     | SeqNo: 8215835 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 19.01                   | 1.0            | 20      | 0                                | 95.1 | 74 - 120      |               |      |                |
| Ethylbenzene                | 17.67                   | 1.0            | 20      | 0                                | 88.3 | 77 - 117      |               |      |                |
| Toluene                     | 16.83                   | 1.0            | 20      | 0                                | 84.1 | 77 - 118      |               |      |                |
| Xylenes, Total              | 54.5                    | 3.0            | 60      | 0                                | 90.8 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 52.72                   | 1.0            | 50      | 0                                | 105  | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 52.1                    | 1.0            | 50      | 0                                | 104  | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 56.95                   | 1.0            | 50      | 0                                | 114  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 44.88                   | 1.0            | 50      | 0                                | 89.8 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240827 | Units: ug/L    |         | Analysis Date: 27-Aug-2024 10:24 |      |               |               |      |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA6_475657      | SeqNo: 8215836 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 18.04                    | 1.0            | 20      | 0                                | 90.2 | 74 - 120      | 19.01         | 5.26 | 20             |
| Ethylbenzene                | 16.11                    | 1.0            | 20      | 0                                | 80.6 | 77 - 117      | 17.67         | 9.23 | 20             |
| Toluene                     | 15.6                     | 1.0            | 20      | 0                                | 78.0 | 77 - 118      | 16.83         | 7.6  | 20             |
| Xylenes, Total              | 50.32                    | 3.0            | 60      | 0                                | 83.9 | 75 - 122      | 54.5          | 7.99 | 20             |
| Surr: 1,2-Dichloroethane-d4 | 53.66                    | 1.0            | 50      | 0                                | 107  | 70 - 123      | 52.72         | 1.78 | 20             |
| Surr: 4-Bromofluorobenzene  | 53.43                    | 1.0            | 50      | 0                                | 107  | 77 - 113      | 52.1          | 2.52 | 20             |
| Surr: Dibromofluoromethane  | 57.05                    | 1.0            | 50      | 0                                | 114  | 73 - 126      | 56.95         | 0.17 | 20             |
| Surr: Toluene-d8            | 43.47                    | 1.0            | 50      | 0                                | 86.9 | 81 - 120      | 44.88         | 3.2  | 20             |

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R475657 ( 0 )     |        | Instrument: VOA6           |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |       |                |
|-----------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|-------|----------------|
| <b>MS</b>                   |        | Sample ID: HS24081403-09MS |         | Units: ug/L                            |      | Analysis Date: 27-Aug-2024 20:41 |               |       |                |
| Client ID: MW-6-20240819    |        | Run ID: VOA6_475657        |         | SeqNo: 8216298                         |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 25.43  | 1.0                        | 20      | 0                                      | 127  | 70 - 127                         |               |       | S              |
| Ethylbenzene                | 21.81  | 1.0                        | 20      | 0                                      | 109  | 70 - 124                         |               |       |                |
| Toluene                     | 20.9   | 1.0                        | 20      | 0                                      | 105  | 70 - 123                         |               |       |                |
| Xylenes, Total              | 65.97  | 3.0                        | 60      | 0                                      | 110  | 70 - 130                         |               |       |                |
| Surr: 1,2-Dichloroethane-d4 | 53.37  | 1.0                        | 50      | 0                                      | 107  | 70 - 126                         |               |       |                |
| Surr: 4-Bromofluorobenzene  | 52.88  | 1.0                        | 50      | 0                                      | 106  | 77 - 113                         |               |       |                |
| Surr: Dibromofluoromethane  | 57.1   | 1.0                        | 50      | 0                                      | 114  | 77 - 123                         |               |       |                |
| Surr: Toluene-d8            | 42.23  | 1.0                        | 50      | 0                                      | 84.5 | 82 - 127                         |               |       |                |

| <b>MSD</b>                  |        | Sample ID: HS24081403-09MSD |         | Units: ug/L    |      | Analysis Date: 27-Aug-2024 21:03 |               |       |                |
|-----------------------------|--------|-----------------------------|---------|----------------|------|----------------------------------|---------------|-------|----------------|
| Client ID: MW-6-20240819    |        | Run ID: VOA6_475657         |         | SeqNo: 8216299 |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                         | SPK Val | SPK Ref Value  | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 23.12  | 1.0                         | 20      | 0              | 116  | 70 - 127                         | 25.43         | 9.51  | 20             |
| Ethylbenzene                | 19.49  | 1.0                         | 20      | 0              | 97.5 | 70 - 124                         | 21.81         | 11.2  | 20             |
| Toluene                     | 18.94  | 1.0                         | 20      | 0              | 94.7 | 70 - 123                         | 20.9          | 9.84  | 20             |
| Xylenes, Total              | 60.17  | 3.0                         | 60      | 0              | 100  | 70 - 130                         | 65.97         | 9.18  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 54.33  | 1.0                         | 50      | 0              | 109  | 70 - 126                         | 53.37         | 1.78  | 20             |
| Surr: 4-Bromofluorobenzene  | 53.62  | 1.0                         | 50      | 0              | 107  | 77 - 113                         | 52.88         | 1.38  | 20             |
| Surr: Dibromofluoromethane  | 58.24  | 1.0                         | 50      | 0              | 116  | 77 - 123                         | 57.1          | 1.99  | 20             |
| Surr: Toluene-d8            | 42.47  | 1.0                         | 50      | 0              | 84.9 | 82 - 127                         | 42.23         | 0.557 | 20             |

The following samples were analyzed in this batch:

|               |               |               |               |
|---------------|---------------|---------------|---------------|
| HS24081403-01 | HS24081403-02 | HS24081403-03 | HS24081403-04 |
| HS24081403-05 | HS24081403-06 | HS24081403-07 | HS24081403-08 |
| HS24081403-09 |               |               |               |

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R475762 ( 0 )     |                         | Instrument: VOA7 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240828 | Units: ug/L      |         | Analysis Date: 28-Aug-2024 11:54       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA7_475762     | SeqNo: 8217901   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 44.08                   | 1.0              | 50      | 0                                      | 88.2 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 46.48                   | 1.0              | 50      | 0                                      | 93.0 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 47.72                   | 1.0              | 50      | 0                                      | 95.4 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.49                   | 1.0              | 50      | 0                                      | 99.0 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240828 | Units: ug/L    |         | Analysis Date: 28-Aug-2024 10:43 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA7_475762     | SeqNo: 8217899 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 17.69                   | 1.0            | 20      | 0                                | 88.4 | 74 - 120      |               |      |                |
| Ethylbenzene                | 18.43                   | 1.0            | 20      | 0                                | 92.1 | 77 - 117      |               |      |                |
| Toluene                     | 17.36                   | 1.0            | 20      | 0                                | 86.8 | 77 - 118      |               |      |                |
| Xylenes, Total              | 53.66                   | 3.0            | 60      | 0                                | 89.4 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 45.89                   | 1.0            | 50      | 0                                | 91.8 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 47.98                   | 1.0            | 50      | 0                                | 96.0 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 48.56                   | 1.0            | 50      | 0                                | 97.1 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.28                   | 1.0            | 50      | 0                                | 96.6 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240828 | Units: ug/L    |         | Analysis Date: 28-Aug-2024 11:06 |      |               |               |       |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|----------------|
| Client ID:                  | Run ID: VOA7_475762      | SeqNo: 8217900 |         | PrepDate:                        |      | DF: 1         |               |       |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 17.25                    | 1.0            | 20      | 0                                | 86.3 | 74 - 120      | 17.69         | 2.49  | 20             |
| Ethylbenzene                | 18.16                    | 1.0            | 20      | 0                                | 90.8 | 77 - 117      | 18.43         | 1.45  | 20             |
| Toluene                     | 16.85                    | 1.0            | 20      | 0                                | 84.3 | 77 - 118      | 17.36         | 2.97  | 20             |
| Xylenes, Total              | 51.73                    | 3.0            | 60      | 0                                | 86.2 | 75 - 122      | 53.66         | 3.66  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 45.02                    | 1.0            | 50      | 0                                | 90.0 | 70 - 123      | 45.89         | 1.91  | 20             |
| Surr: 4-Bromofluorobenzene  | 47.48                    | 1.0            | 50      | 0                                | 95.0 | 77 - 113      | 47.98         | 1.05  | 20             |
| Surr: Dibromofluoromethane  | 49.56                    | 1.0            | 50      | 0                                | 99.1 | 73 - 126      | 48.56         | 2.03  | 20             |
| Surr: Toluene-d8            | 48.09                    | 1.0            | 50      | 0                                | 96.2 | 81 - 120      | 48.28         | 0.393 | 20             |

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R475762 ( 0 )     |        | Instrument: VOA7           |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |       |                |
|-----------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|-------|----------------|
| <b>MS</b>                   |        | Sample ID: HS24081213-03MS |         | Units: ug/L                            |      | Analysis Date: 28-Aug-2024 20:43 |               |       |                |
| Client ID:                  |        | Run ID: VOA7_475762        |         | SeqNo: 8218640                         |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 17.07  | 1.0                        | 20      | 0                                      | 85.3 | 70 - 127                         |               |       |                |
| Ethylbenzene                | 16.73  | 1.0                        | 20      | 0                                      | 83.6 | 70 - 124                         |               |       |                |
| Toluene                     | 16.68  | 1.0                        | 20      | 0                                      | 83.4 | 70 - 123                         |               |       |                |
| Xylenes, Total              | 48.63  | 3.0                        | 60      | 0                                      | 81.0 | 70 - 130                         |               |       |                |
| Surr: 1,2-Dichloroethane-d4 | 42.47  | 1.0                        | 50      | 0                                      | 84.9 | 70 - 126                         |               |       |                |
| Surr: 4-Bromofluorobenzene  | 47.42  | 1.0                        | 50      | 0                                      | 94.8 | 77 - 113                         |               |       |                |
| Surr: Dibromofluoromethane  | 47.05  | 1.0                        | 50      | 0                                      | 94.1 | 77 - 123                         |               |       |                |
| Surr: Toluene-d8            | 49.66  | 1.0                        | 50      | 0                                      | 99.3 | 82 - 127                         |               |       |                |

| <b>MSD</b>                  |        | Sample ID: HS24081213-03MSD |         | Units: ug/L    |      | Analysis Date: 28-Aug-2024 21:06 |               |       |                |
|-----------------------------|--------|-----------------------------|---------|----------------|------|----------------------------------|---------------|-------|----------------|
| Client ID:                  |        | Run ID: VOA7_475762         |         | SeqNo: 8218641 |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                         | SPK Val | SPK Ref Value  | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 16.51  | 1.0                         | 20      | 0              | 82.5 | 70 - 127                         | 17.07         | 3.33  | 20             |
| Ethylbenzene                | 16.44  | 1.0                         | 20      | 0              | 82.2 | 70 - 124                         | 16.73         | 1.74  | 20             |
| Toluene                     | 15.83  | 1.0                         | 20      | 0              | 79.2 | 70 - 123                         | 16.68         | 5.18  | 20             |
| Xylenes, Total              | 47.21  | 3.0                         | 60      | 0              | 78.7 | 70 - 130                         | 48.63         | 2.97  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 45.13  | 1.0                         | 50      | 0              | 90.3 | 70 - 126                         | 42.47         | 6.08  | 20             |
| Surr: 4-Bromofluorobenzene  | 48.17  | 1.0                         | 50      | 0              | 96.3 | 77 - 113                         | 47.42         | 1.58  | 20             |
| Surr: Dibromofluoromethane  | 50.88  | 1.0                         | 50      | 0              | 102  | 77 - 123                         | 47.05         | 7.82  | 20             |
| Surr: Toluene-d8            | 48.21  | 1.0                         | 50      | 0              | 96.4 | 82 - 127                         | 49.66         | 2.98  | 20             |

The following samples were analyzed in this batch: HS24081403-10 HS24081403-11

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R475867 ( 0 )     |                         | Instrument: VOA7 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240828 | Units: ug/L      |         | Analysis Date: 29-Aug-2024 11:39       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA7_475867     | SeqNo: 8219753   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 42.69                   | 1.0              | 50      | 0                                      | 85.4 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 45.24                   | 1.0              | 50      | 0                                      | 90.5 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 47.86                   | 1.0              | 50      | 0                                      | 95.7 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.9                    | 1.0              | 50      | 0                                      | 99.8 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240828 | Units: ug/L    |         | Analysis Date: 29-Aug-2024 10:30 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA7_475867     | SeqNo: 8219751 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 18.48                   | 1.0            | 20      | 0                                | 92.4 | 74 - 120      |               |      |                |
| Ethylbenzene                | 19.3                    | 1.0            | 20      | 0                                | 96.5 | 77 - 117      |               |      |                |
| Toluene                     | 18.33                   | 1.0            | 20      | 0                                | 91.6 | 77 - 118      |               |      |                |
| Xylenes, Total              | 56.03                   | 3.0            | 60      | 0                                | 93.4 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 45.58                   | 1.0            | 50      | 0                                | 91.2 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 47.08                   | 1.0            | 50      | 0                                | 94.2 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 50.17                   | 1.0            | 50      | 0                                | 100  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.09                   | 1.0            | 50      | 0                                | 96.2 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240828 | Units: ug/L    |         | Analysis Date: 29-Aug-2024 10:53 |      |               |               |       |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|----------------|
| Client ID:                  | Run ID: VOA7_475867      | SeqNo: 8219752 |         | PrepDate:                        |      | DF: 1         |               |       |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 17.63                    | 1.0            | 20      | 0                                | 88.1 | 74 - 120      | 18.48         | 4.73  | 20             |
| Ethylbenzene                | 19                       | 1.0            | 20      | 0                                | 95.0 | 77 - 117      | 19.3          | 1.58  | 20             |
| Toluene                     | 18.01                    | 1.0            | 20      | 0                                | 90.0 | 77 - 118      | 18.33         | 1.76  | 20             |
| Xylenes, Total              | 55.81                    | 3.0            | 60      | 0                                | 93.0 | 75 - 122      | 56.03         | 0.397 | 20             |
| Surr: 1,2-Dichloroethane-d4 | 45.24                    | 1.0            | 50      | 0                                | 90.5 | 70 - 123      | 45.58         | 0.738 | 20             |
| Surr: 4-Bromofluorobenzene  | 48.96                    | 1.0            | 50      | 0                                | 97.9 | 77 - 113      | 47.08         | 3.91  | 20             |
| Surr: Dibromofluoromethane  | 49.43                    | 1.0            | 50      | 0                                | 98.9 | 73 - 126      | 50.17         | 1.49  | 20             |
| Surr: Toluene-d8            | 48.75                    | 1.0            | 50      | 0                                | 97.5 | 81 - 120      | 48.09         | 1.36  | 20             |



## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R475867 ( 0 )     |        | Instrument: VOA7           |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |        |                |
|-----------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|--------|----------------|
| <b>MS</b>                   |        | Sample ID: HS24081360-08MS |         | Units: ug/L                            |      | Analysis Date: 29-Aug-2024 20:33 |               |        |                |
| Client ID:                  |        | Run ID: VOA7_475867        |         | SeqNo: 8221915                         |      | PrepDate:                        |               | DF: 25 |                |
| Analyte                     | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD   | RPD Limit Qual |
| Benzene                     | 434.6  | 25                         | 500     | 9.846                                  | 85.0 | 70 - 127                         |               |        |                |
| Ethylbenzene                | 450.7  | 25                         | 500     | 0                                      | 90.1 | 70 - 124                         |               |        |                |
| Toluene                     | 430.5  | 25                         | 500     | 0                                      | 86.1 | 70 - 123                         |               |        |                |
| Xylenes, Total              | 1302   | 75                         | 1500    | 0                                      | 86.8 | 70 - 130                         |               |        |                |
| Surr: 1,2-Dichloroethane-d4 | 1187   | 25                         | 1250    | 0                                      | 95.0 | 70 - 126                         |               |        |                |
| Surr: 4-Bromofluorobenzene  | 1248   | 25                         | 1250    | 0                                      | 99.8 | 77 - 113                         |               |        |                |
| Surr: Dibromofluoromethane  | 1252   | 25                         | 1250    | 0                                      | 100  | 77 - 123                         |               |        |                |
| Surr: Toluene-d8            | 1211   | 25                         | 1250    | 0                                      | 96.9 | 82 - 127                         |               |        |                |

| <b>MSD</b>                  |        | Sample ID: HS24081360-08MSD |         | Units: ug/L    |      | Analysis Date: 29-Aug-2024 20:56 |               |        |                |
|-----------------------------|--------|-----------------------------|---------|----------------|------|----------------------------------|---------------|--------|----------------|
| Client ID:                  |        | Run ID: VOA7_475867         |         | SeqNo: 8221916 |      | PrepDate:                        |               | DF: 25 |                |
| Analyte                     | Result | PQL                         | SPK Val | SPK Ref Value  | %REC | Control Limit                    | RPD Ref Value | %RPD   | RPD Limit Qual |
| Benzene                     | 423.6  | 25                          | 500     | 9.846          | 82.8 | 70 - 127                         | 434.6         | 2.57   | 20             |
| Ethylbenzene                | 443.2  | 25                          | 500     | 0              | 88.6 | 70 - 124                         | 450.7         | 1.68   | 20             |
| Toluene                     | 411.9  | 25                          | 500     | 0              | 82.4 | 70 - 123                         | 430.5         | 4.4    | 20             |
| Xylenes, Total              | 1250   | 75                          | 1500    | 0              | 83.3 | 70 - 130                         | 1302          | 4.08   | 20             |
| Surr: 1,2-Dichloroethane-d4 | 1165   | 25                          | 1250    | 0              | 93.2 | 70 - 126                         | 1187          | 1.89   | 20             |
| Surr: 4-Bromofluorobenzene  | 1243   | 25                          | 1250    | 0              | 99.4 | 77 - 113                         | 1248          | 0.4    | 20             |
| Surr: Dibromofluoromethane  | 1283   | 25                          | 1250    | 0              | 103  | 77 - 123                         | 1252          | 2.44   | 20             |
| Surr: Toluene-d8            | 1200   | 25                          | 1250    | 0              | 96.0 | 82 - 127                         | 1211          | 0.95   | 20             |

The following samples were analyzed in this batch: HS24081403-12 HS24081403-14

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R476060 ( 0 )     |                         | Instrument: VOA7 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240830 | Units: ug/L      |         | Analysis Date: 30-Aug-2024 11:29       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA7_476060     | SeqNo: 8223800   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 44.86                   | 1.0              | 50      | 0                                      | 89.7 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 46.52                   | 1.0              | 50      | 0                                      | 93.0 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 46.51                   | 1.0              | 50      | 0                                      | 93.0 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.87                   | 1.0              | 50      | 0                                      | 99.7 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240830 | Units: ug/L    |         | Analysis Date: 30-Aug-2024 10:20 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA7_476060     | SeqNo: 8223798 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 19.59                   | 1.0            | 20      | 0                                | 98.0 | 74 - 120      |               |      |                |
| Ethylbenzene                | 19.24                   | 1.0            | 20      | 0                                | 96.2 | 77 - 117      |               |      |                |
| Toluene                     | 18.48                   | 1.0            | 20      | 0                                | 92.4 | 77 - 118      |               |      |                |
| Xylenes, Total              | 55.25                   | 3.0            | 60      | 0                                | 92.1 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 46.74                   | 1.0            | 50      | 0                                | 93.5 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 49.07                   | 1.0            | 50      | 0                                | 98.1 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 49.51                   | 1.0            | 50      | 0                                | 99.0 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.19                   | 1.0            | 50      | 0                                | 98.4 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240830 | Units: ug/L    |         | Analysis Date: 30-Aug-2024 10:43 |      |               |               |        |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|--------|----------------|
| Client ID:                  | Run ID: VOA7_476060      | SeqNo: 8223799 |         | PrepDate:                        |      | DF: 1         |               |        |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD   | RPD Limit Qual |
| Benzene                     | 18.09                    | 1.0            | 20      | 0                                | 90.5 | 74 - 120      | 19.59         | 7.95   | 20             |
| Ethylbenzene                | 18.24                    | 1.0            | 20      | 0                                | 91.2 | 77 - 117      | 19.24         | 5.33   | 20             |
| Toluene                     | 18.08                    | 1.0            | 20      | 0                                | 90.4 | 77 - 118      | 18.48         | 2.18   | 20             |
| Xylenes, Total              | 53.51                    | 3.0            | 60      | 0                                | 89.2 | 75 - 122      | 55.25         | 3.21   | 20             |
| Surr: 1,2-Dichloroethane-d4 | 49.07                    | 1.0            | 50      | 0                                | 98.1 | 70 - 123      | 46.74         | 4.86   | 20             |
| Surr: 4-Bromofluorobenzene  | 49.05                    | 1.0            | 50      | 0                                | 98.1 | 77 - 113      | 49.07         | 0.0518 | 20             |
| Surr: Dibromofluoromethane  | 50.45                    | 1.0            | 50      | 0                                | 101  | 73 - 126      | 49.51         | 1.88   | 20             |
| Surr: Toluene-d8            | 49.62                    | 1.0            | 50      | 0                                | 99.2 | 81 - 120      | 49.19         | 0.869  | 20             |

ALS Houston, US

Date: 03-Sep-24

Client: GHD  
Project: Chevron Grayburg 6-Inch  
WorkOrder: HS24081403

QC BATCH REPORT

Batch ID: R476060 ( 0 )      Instrument: VOA7      Method: LOW LEVEL VOLATILES BY SW8260C

The following samples were analyzed in this batch: HS24081403-13      HS24081403-15

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R476096 ( 0 )     |                         | Instrument: VOA7 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-240831 | Units: ug/L      |         | Analysis Date: 31-Aug-2024 11:48       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA7_476096     | SeqNo: 8224530   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 42.39                   | 1.0              | 50      | 0                                      | 84.8 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 47.05                   | 1.0              | 50      | 0                                      | 94.1 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 47.16                   | 1.0              | 50      | 0                                      | 94.3 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 50.77                   | 1.0              | 50      | 0                                      | 102  | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-240831 | Units: ug/L    |         | Analysis Date: 31-Aug-2024 10:39 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA7_476096     | SeqNo: 8224528 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 19.35                   | 1.0            | 20      | 0                                | 96.7 | 74 - 120      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 45.87                   | 1.0            | 50      | 0                                | 91.7 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 48.59                   | 1.0            | 50      | 0                                | 97.2 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 52.4                    | 1.0            | 50      | 0                                | 105  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.89                   | 1.0            | 50      | 0                                | 99.8 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-240831 | Units: ug/L    |         | Analysis Date: 31-Aug-2024 11:02 |      |               |               |       |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|----------------|
| Client ID:                  | Run ID: VOA7_476096      | SeqNo: 8224529 |         | PrepDate:                        |      | DF: 1         |               |       |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 19.19                    | 1.0            | 20      | 0                                | 96.0 | 74 - 120      | 19.35         | 0.798 | 20             |
| Surr: 1,2-Dichloroethane-d4 | 46.66                    | 1.0            | 50      | 0                                | 93.3 | 70 - 123      | 45.87         | 1.71  | 20             |
| Surr: 4-Bromofluorobenzene  | 49.26                    | 1.0            | 50      | 0                                | 98.5 | 77 - 113      | 48.59         | 1.37  | 20             |
| Surr: Dibromofluoromethane  | 52                       | 1.0            | 50      | 0                                | 104  | 73 - 126      | 52.4          | 0.77  | 20             |
| Surr: Toluene-d8            | 49.13                    | 1.0            | 50      | 0                                | 98.3 | 81 - 120      | 49.89         | 1.54  | 20             |

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

## QC BATCH REPORT

| Batch ID: R476096 ( 0 )     |        | Instrument: VOA7           |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |       |           |      |
|-----------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|-------|-----------|------|
| <b>MS</b>                   |        | Sample ID: HS24081521-01MS |         | Units: ug/L                            |      | Analysis Date: 31-Aug-2024 20:18 |               |       |           |      |
| Client ID:                  |        | Run ID: VOA7_476096        |         | SeqNo: 8224551                         |      | PrepDate:                        |               | DF: 1 |           |      |
| Analyte                     | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Benzene                     | 17.17  | 1.0                        | 20      | 0                                      | 85.8 | 70 - 127                         |               |       |           |      |
| Surr: 1,2-Dichloroethane-d4 | 48.72  | 1.0                        | 50      | 0                                      | 97.4 | 70 - 126                         |               |       |           |      |
| Surr: 4-Bromofluorobenzene  | 48.73  | 1.0                        | 50      | 0                                      | 97.5 | 77 - 113                         |               |       |           |      |
| Surr: Dibromofluoromethane  | 51.62  | 1.0                        | 50      | 0                                      | 103  | 77 - 123                         |               |       |           |      |
| Surr: Toluene-d8            | 48.86  | 1.0                        | 50      | 0                                      | 97.7 | 82 - 127                         |               |       |           |      |

|                             |        |                             |         |                |      |                                  |               |       |           |      |
|-----------------------------|--------|-----------------------------|---------|----------------|------|----------------------------------|---------------|-------|-----------|------|
| <b>MSD</b>                  |        | Sample ID: HS24081521-01MSD |         | Units: ug/L    |      | Analysis Date: 31-Aug-2024 20:40 |               |       |           |      |
| Client ID:                  |        | Run ID: VOA7_476096         |         | SeqNo: 8224552 |      | PrepDate:                        |               | DF: 1 |           |      |
| Analyte                     | Result | PQL                         | SPK Val | SPK Ref Value  | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Benzene                     | 16.2   | 1.0                         | 20      | 0              | 81.0 | 70 - 127                         | 17.17         | 5.78  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 47.16  | 1.0                         | 50      | 0              | 94.3 | 70 - 126                         | 48.72         | 3.26  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 48.62  | 1.0                         | 50      | 0              | 97.2 | 77 - 113                         | 48.73         | 0.227 | 20        |      |
| Surr: Dibromofluoromethane  | 49.03  | 1.0                         | 50      | 0              | 98.1 | 77 - 123                         | 51.62         | 5.15  | 20        |      |
| Surr: Toluene-d8            | 50.31  | 1.0                         | 50      | 0              | 101  | 82 - 127                         | 48.86         | 2.91  | 20        |      |

The following samples were analyzed in this batch: HS24081403-08 HS24081403-13

## ALS Houston, US

Date: 03-Sep-24

**Client:** GHD  
**Project:** Chevron Grayburg 6-Inch  
**WorkOrder:** HS24081403

**QUALIFIERS,  
ACRONYMS, UNITS**

| <b>Qualifier</b> | <b>Description</b>                                                        |
|------------------|---------------------------------------------------------------------------|
| *                | 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                               |

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

| <b>Unit Reported</b> | <b>Description</b>   |
|----------------------|----------------------|
| mg/L                 | Milligrams per Liter |



ALS Houston, US

Date: 03-Sep-24

---

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

---

| Agency          | Number                  | Expire Date |
|-----------------|-------------------------|-------------|
| Arizona         | AZ0793                  | 27-May-2025 |
| Arkansas        | 88-00356_2024           | 27-Mar-2025 |
| California      | 2919; 2025              | 30-Apr-2025 |
| Dept of Defense | L22-90-R2               | 30-Apr-2026 |
| Florida         | E87611-38               | 30-Jun-2025 |
| Illinois        | 2000322023-11           | 31-Jul-2025 |
| Kansas          | E-10352 2023-2024       | 31-Jul-2025 |
| Kentucky        | 123043                  | 30-Apr-2025 |
| Louisiana       | 03087 2023-2024         | 30-Jun-2025 |
| Maine           | 2024017                 | 23-Jun-2026 |
| Michigan        | 9971                    | 30-Apr-2025 |
| Nebraska        | NE-OS-25-13             | 30-Apr-2025 |
| New Jersey      | TX008                   | 30-Jun-2025 |
| North Carolina  | 624 - 2024              | 31-Dec-2024 |
| North Dakota    | R-193 2023-2024         | 30-Sep-2024 |
| Pennsylvania    | 018                     | 30-Jun-2025 |
| Tennessee       | 04016                   | 30-Apr-2025 |
| Texas           | T104704231 TX-C24-00130 | 30-Apr-2025 |
| Utah            | TX026932023-14          | 31-Jul-2025 |

ALS Houston, US

Date: 03-Sep-24

## Sample Receipt Checklist

Work Order ID: HS24081403

Date/Time Received: 22-Aug-2024 09:45

Client Name: GHDHouston

Received by: Ruben Estrada-Jr

|                                    |                   |                              |                   |
|------------------------------------|-------------------|------------------------------|-------------------|
| Completed By: /S/ Ruben Estrada-Jr | 22-Aug-2024 16:38 | Reviewed by: /S/ salina zaid | 23-Aug-2024 17:22 |
| eSignature                         | Date/Time         | eSignature                   | Date/Time         |

Matrices: **WATER**Carrier name: **FedEx**

Shipping container/cooler in good condition?

Yes ☒No ☐Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐No ☐Not Present ☒

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

VOA/TX1005/TX1006 Solids in hermetically sealed vials?

Yes ☐No ☐Not Present ☒

Chain of custody present?

Yes ☒No ☐

2 Page(s)

Chain of custody signed when relinquished and received?

Yes ☒No ☐

COC IDs:320156/320155

Samplers name present on COC?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Samples in proper container/bottle?

Yes ☒No ☐

Sample containers intact?

Yes ☒No ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Container/Temp Blank temperature in compliance?

Yes ☒No ☐

Temperature(s)/Thermometer(s):

3.8C

IR34

Cooler(s)/Kit(s):

52269

Date/Time sample(s) sent to storage:

8/22/24 14:00

Water - VOA vials have zero headspace?

Yes ☒No ☐No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☐No ☐N/A ☒

pH adjusted?

Yes ☐No ☐N/A ☒

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:

Cincinnati, OH  
+1 513 733 5336Everett, WA  
+1 425 356 2600Fort Collins, CO  
+1 970 496 1511Holland, MI  
+1 616 399 6070

## Chain of Custody Form

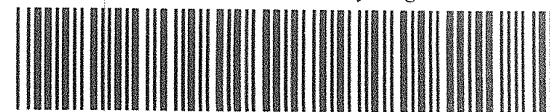
Page \_\_\_\_ of \_\_\_\_

COC ID: 320156

HS24081403

GHD

12604539- Chevron Grayburg 6-Inch



| Customer Information |                                   | Project Information |                                               | ALS Project Manager: |                       |
|----------------------|-----------------------------------|---------------------|-----------------------------------------------|----------------------|-----------------------|
| Purchase Order       | 12604539- Chevron Grayburg 6-Inch | Project Name        | 12604539- Chevron Grayburg 6-Inch             | A                    | 8260_LL_W (8260 BTEX) |
| Work Order           |                                   | Project Number      | 12604539                                      | B                    |                       |
| Company Name         | GHD                               | Bill To Company     | Plains All American Pipeline, LP              | C                    |                       |
| Send Report To       | Chris Knight                      | Invoice Attn        | Karolanne Hudgens                             | D                    |                       |
| Address              | 11451 Katy Fwy<br>Suite 400       | Address             | c/o ENV-00, Accounts Payable<br>P.O. Box 4648 | E                    |                       |
| City/State/Zip       | Houston, TX 77079                 | City/State/Zip      | Houston TX 77210-4648                         | F                    |                       |
| Phone                | (713) 734-3090                    | Phone               | (713) 646-4610                                | G                    |                       |
| Fax                  | (713) 734-3391                    | Fax                 | (713) 646-4199                                | H                    |                       |
| e-Mail Address       | Christopher.Knight@ghd.com        | e-Mail Address      | Karolanne.hudgens@plains.com                  | I                    |                       |
|                      |                                   |                     |                                               | J                    |                       |

| No. | Sample Description      | Date    | Time  | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|-------------------------|---------|-------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1   | 12604539-MW-2-20240819  | 8-19-24 | 2:40  | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 2   | 12604539-MW-3-20240819  | 8-19-24 | 3:30  | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 3   | 12604539-MW-4-20240820  | 8-20-24 | 1:05  | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 4   | 12604539-MW-5-20240819  | 8-19-24 | 14:40 | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 5   | 12604539-MW-13-20240820 | 8-20-24 | 3:35  | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 6   | 12604539-MW-14-20240820 | 8-20-24 | 12:20 | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 7   | 12604539-MW-1-20240820  | 8-20-24 | 08:45 | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 8   | 12604539-MW-8-20240819  | 8-19-24 | 1:55  | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 9   | MW-6-20240819           | 8-19-24 | 15:55 | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 0   | MW-9-20240820           | 8-20-24 | 13:30 | GW     | 1cc   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |

Sampler(s) Please Print &amp; Sign

Cristle Fitzwater KB

Shipment Method

Required Turnaround Time: (Check Box)

☒ Std. 10 Wk. Days☐ 5 Wk. Days☐ 2 Wk. Days☐ 24 Hours

Results Due Date:

Relinquished by: Cristle Fitzwater KB

Date: 8-21-24

Time: 15:00

Received by:

Relinquished by: Cristle Fitzwater KB

Date: 8/22/24

Time: 09:45

Received by (Laboratory): Julian St

Signed by (Laboratory):

Date:

Time:

Checked by (Laboratory):

Notes: 12604539- Chevron Grayburg 6-Inch Sec. 6

Cooler ID

Cooler Temp.

QC Package: (Check One Box Below)

☒ Level II Std. GC☐ Level III Std. GC/Raw Data☐ Level IV SW846/CLP☐ Other

TRRP Checklist

TRRP Level IV

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NaHSO<sub>4</sub> 7-Other 8-4°C 9-5035

1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.

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+1 513 733 5336Everett, WA  
+1 425 356 2600Fort Collins, CO  
+1 970 490 1511Holland, MI  
+1 616 390 6070

## Chain of Custody Form

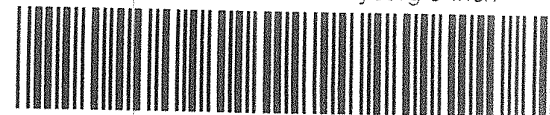
Page \_\_\_\_ of \_\_\_\_

COC ID: 320155

HS24081403

GHD

12604539- Chevron Grayburg 6-Inch



8260\_LL\_W (8260 BTEX)

| Customer Information |                                | Project Information |                                               |
|----------------------|--------------------------------|---------------------|-----------------------------------------------|
| Purchase Order       | 12604539- Chevron Grayburg 6-I | Project Name        | 12604539- Chevron Grayburg 6-Inch             |
| Work Order           |                                | Project Number      | 12604539                                      |
| Company Name         | GHD                            | Bill To Company     | Plains All American Pipeline, LP              |
| Send Report To       | Chris Knight                   | Invoice Attn        | Karolanne Hudgens                             |
| Address              | 11451 Katy Fwy<br>Suite 400    | Address             | c/o ENV-00. Accounts Payable<br>P.O. Box 4648 |
| City/State/Zip       | Houston, TX 77079              | City/State/Zip      | Houston TX 77210-4648                         |
| Phone                | (713) 734-3090                 | Phone               | (713) 646-4610                                |
| Fax                  | (713) 734-3391                 | Fax                 | (713) 646-4199                                |
| e-Mail Address       | Christopher.Knight@ghd.com     | e-Mail Address      | Karolanne.hudgens@plains.com                  |

| No. | Sample Description        | Date    | Time  | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|---------------------------|---------|-------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1   | MW-10-20240820            | 8-20-24 | 5:20  | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 2   | MW-11-20240820            | 8-20-24 | 11:35 | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 3   | 12604539- DUP-01-20240819 | 8-19-24 | —     | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 4   | DUP-02-20240820           | 8-20-24 | —     | GW     | Ice   | 3         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 5   | Trip Blank                | —       | —     | —      | Ice   | —         | ✓ |   |   |   |   |   |   |   |   |   |      |
| 6   |                           |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 7   |                           |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 8   |                           |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 9   |                           |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 0   |                           |         |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |

Sampler(s) Please Print &amp; Sign

Crystal Fitzwater KB

Relinquished by:  
Crystal Fitzwater KBDate:  
8-21-24Time:  
1500

Shipment Method

Required Turnaround Time: (Check Box)

☒ STD 10 Wk Days☐ 5 Wk Days☐ 2 Wk Days☐ 24 Hour

Results Due Date:

Notes: 12604539- Chevron Grayburg 6-Inch Sec. 6

Logged by (Laboratory):

Date:

Time:

Received by:

Received by (Laboratory):

Checked by (Laboratory):

Cooler ID

Cooler Temp.

QC Package: (Check One Box Below)

☒ Level II Site QC☐ Level III Std. QC/Raw Data☐ Level IV SWM/CLP☐ Other

TRRP Checklist

TRRP Level IV

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NaHSO<sub>4</sub> 7-Other 8-4°C 9-5035

1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

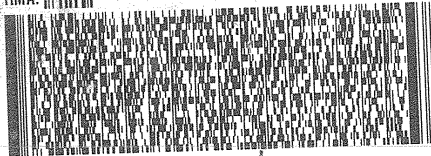
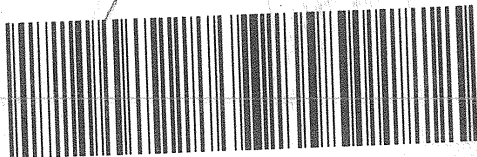
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.

3. The Chain of Custody is a legal document. All information must be completed accurately.

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B 6/24/24

|                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Seal Broken By: _____</p> <p>Date: _____</p> <p><b>JUSTODY SEAL</b></p> <p>Time: 09:30</p> <p>By: <i>[Signature]</i></p> | <div style="text-align: center;"></div> <p>ORIGIN ID:SGRA (505) 546-2198<br/>SIMON KOZIK<br/>GHD<br/>1608 NORTH 26TH ST ARTESIA<br/>ARTESIA, NM 88210<br/>UNITED STATES US</p> <p>SHIP DATE: 08AUG24<br/>ACTWGT: 1.00 LB MAN<br/>CAD: 0221247/CAFE3808</p> <p>58555/0120/0554</p> <p>TO <b>SAMPLE RECEIVING</b><br/><b>ALS GROUP USA, CORP</b><br/><b>10450 STANCLIFF ROAD</b><br/><b>SUITE 210</b><br/><b>HOUSTON TX 77099</b><br/>(281) 530-5666<br/>REF: CHEVRON GRAYBURG - BO102369 - LA</p> <p>RMA: 11111111</p> <div style="text-align: center;"></div> <p><b>FedEx</b><br/>Express</p> <div style="text-align: center;"></div> <p>J24110231122011W</p> <p>1 <b>FedEx</b><br/>TRK# 7386 7925 1503<br/>0221</p> <p><b>THU - 22 AUG 10:30A</b><br/><b>PRIORITY OVERNIGHT</b></p> <p><b>AB SGRA</b></p> <p>77099<br/>TX-US IAH</p> <div style="text-align: center;"></div> <p>08/21 58316/0120/9HE3</p> |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                 |                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <p><b>CUSTODY SEAL</b></p> <p>Date: 8/24/24 Time: 09:30</p> <p>Name: <i>[Signature]</i></p> <p>Company: GHD</p> | <p>10450 Stancliff Rd., Suite 210<br/>Houston, Texas 77099<br/>Tel. +1 281 530 5656<br/>Fax. +1 281 530 5656</p> |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|



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

December 02, 2024

Adrianna Copeland  
GHDHouston  
11451 Katy Freeway  
Suite 400  
Houston, TX 77079

Work Order: **HS24111204**

Laboratory Results for: **Chevron Grayburg 6-Inch Sec. 6 (Historical)**

Dear Adrianna Copeland,

ALS Environmental received 16 sample(s) on Nov 20, 2024 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  
Alexis Dorenbosch



## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**Work Order:** HS24111204

## SAMPLE SUMMARY

| Lab Samp ID   | Client Sample ID         | Matrix      | TagNo         | Collection Date   | Date Received     | Hold                     |
|---------------|--------------------------|-------------|---------------|-------------------|-------------------|--------------------------|
| HS24111204-01 | 12604539-MW-2-20241118   | Groundwater |               | 18-Nov-2024 10:00 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-02 | 12604539-MW-3-20241118   | Groundwater |               | 18-Nov-2024 10:40 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-03 | 12604539-MW-4-20241118   | Groundwater |               | 18-Nov-2024 13:45 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-04 | 12604539-MW-5-20241118   | Groundwater |               | 18-Nov-2024 11:04 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-05 | 12604539-MW-13-20241118  | Groundwater |               | 18-Nov-2024 11:44 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-06 | 12604539-MW-14-20241118  | Groundwater |               | 18-Nov-2024 12:40 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-07 | 12604539-MW-1-20241118   | Groundwater |               | 18-Nov-2024 11:27 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-08 | 12604539-MW-6-20241118   | Groundwater |               | 18-Nov-2024 11:10 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-09 | 12604539-MW-8-20241119   | Groundwater |               | 19-Nov-2024 08:15 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-10 | 12604539-MW-9-20241118   | Groundwater |               | 18-Nov-2024 12:08 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-11 | 12604539-MW-10-20241118  | Groundwater |               | 18-Nov-2024 13:59 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-12 | 12604539-MW-11-20241119  | Groundwater |               | 19-Nov-2024 10:53 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-13 | 12604539-MW-12-20241119  | Groundwater |               | 19-Nov-2024 09:42 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-14 | 12604539-DUP-01-20241119 | Groundwater |               | 19-Nov-2024 00:00 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-15 | 12604539-DUP-02-20241119 | Groundwater |               | 19-Nov-2024 00:00 | 20-Nov-2024 09:25 | <input type="checkbox"/> |
| HS24111204-16 | Trip Blank               | Water       | CG-091924-325 | 19-Nov-2024 00:00 | 20-Nov-2024 09:25 | <input type="checkbox"/> |

**ALS Houston, US**

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**Work Order:** HS24111204

**CASE NARRATIVE**

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**GCMS Semivolatiles by Method SW8270****Batch ID: 220929****Sample ID: LCS-220929**

- The LCS and/or LCSD recovery was above the upper control limit. All sample results in the batch were non-detect. Benzo(b) fluoranthene

**Sample ID: LCSD-220929**

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

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**GCMS Volatiles by Method SW8260****Batch ID: R501359****Sample ID: VLCSW-241202**

- Insufficient sample received to perform MS/MSD. An LCS/LCSD was performed as batch quality control.

**Batch ID: R501093****Sample ID: VLCSW-241123**

- Insufficient sample received to perform MS/MSD. An LCS/LCSD was performed as batch quality control.

**Batch ID: R500960**

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-2-20241118

Collection Date:18-Nov-2024 10:00

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-01

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: DP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 00:29 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 00:29 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 00:29 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 00:29 |
| Surr: 1,2-Dichloroethane-d4    | 102      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 00:29 |
| Surr: 4-Bromofluorobenzene     | 99.2     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 00:29 |
| Surr: Dibromofluoromethane     | 101      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 00:29 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 00:29 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-3-20241118

Collection Date:18-Nov-2024 10:40

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-02

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: DP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 00:51 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 00:51 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 00:51 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 00:51 |
| Surr: 1,2-Dichloroethane-d4    | 99.5     |               | 70-126          | %REC        | 1                  | 24-Nov-2024 00:51 |
| Surr: 4-Bromofluorobenzene     | 102      |               | 77-113          | %REC        | 1                  | 24-Nov-2024 00:51 |
| Surr: Dibromofluoromethane     | 98.7     |               | 77-123          | %REC        | 1                  | 24-Nov-2024 00:51 |
| Surr: Toluene-d8               | 94.8     |               | 82-127          | %REC        | 1                  | 24-Nov-2024 00:51 |

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

ALS Houston, US

Date: 02-Dec-24

|                  |                                             |                          |
|------------------|---------------------------------------------|--------------------------|
| Client:          | GHDHouston                                  | <b>ANALYTICAL REPORT</b> |
| Project:         | Chevron Grayburg 6-Inch Sec. 6 (Historical) | WorkOrder:HS24111204     |
| Sample ID:       | 12604539-MW-4-20241118                      | Lab ID:HS24111204-03     |
| Collection Date: | 18-Nov-2024 13:45                           | Matrix:Groundwater       |

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: DP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:12 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:12 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:12 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 01:12 |
| Surr: 1,2-Dichloroethane-d4    | 103      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 01:12 |
| Surr: 4-Bromofluorobenzene     | 96.9     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 01:12 |
| Surr: Dibromofluoromethane     | 101      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 01:12 |
| Surr: Toluene-d8               | 102      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 01:12 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-5-20241118

Collection Date:18-Nov-2024 11:04

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-04

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: DP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:33 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:33 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:33 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 01:33 |
| Surr: 1,2-Dichloroethane-d4    | 104      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 01:33 |
| Surr: 4-Bromofluorobenzene     | 96.7     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 01:33 |
| Surr: Dibromofluoromethane     | 102      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 01:33 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 01:33 |

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



ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-13-20241118

Collection Date:18-Nov-2024 11:44

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-05

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: DP |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:55 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:55 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 01:55 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 01:55 |
| Surr: 1,2-Dichloroethane-d4    | 103      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 01:55 |
| Surr: 4-Bromofluorobenzene     | 96.3     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 01:55 |
| Surr: Dibromofluoromethane     | 101      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 01:55 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 01:55 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-14-20241118

Collection Date:18-Nov-2024 12:40

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-06

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:10 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:10 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:10 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 06:10 |
| Surr: 1,2-Dichloroethane-d4    | 100      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 06:10 |
| Surr: 4-Bromofluorobenzene     | 104      |               | 77-113          | %REC        | 1                  | 24-Nov-2024 06:10 |
| Surr: Dibromofluoromethane     | 99.3     |               | 77-123          | %REC        | 1                  | 24-Nov-2024 06:10 |
| Surr: Toluene-d8               | 94.5     |               | 82-127          | %REC        | 1                  | 24-Nov-2024 06:10 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-1-20241118

Collection Date:18-Nov-2024 11:27

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-07

Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | 0.0028 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:32 |
| Ethylbenzene                   | 0.0058 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:32 |
| Toluene                        | 0.0096 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:32 |
| Xylenes, Total                 | 0.010  |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 06:32 |
| Surr: 1,2-Dichloroethane-d4    | 99.6   |               | 70-126          | %REC        | 1                  | 24-Nov-2024 06:32 |
| Surr: 4-Bromofluorobenzene     | 98.1   |               | 77-113          | %REC        | 1                  | 24-Nov-2024 06:32 |
| Surr: Dibromofluoromethane     | 98.9   |               | 77-123          | %REC        | 1                  | 24-Nov-2024 06:32 |
| Surr: Toluene-d8               | 102    |               | 82-127          | %REC        | 1                  | 24-Nov-2024 06:32 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-6-20241118

Collection Date:18-Nov-2024 11:10

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-08

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:53 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:53 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 06:53 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 06:53 |
| Surr: 1,2-Dichloroethane-d4    | 102      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 06:53 |
| Surr: 4-Bromofluorobenzene     | 97.6     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 06:53 |
| Surr: Dibromofluoromethane     | 101      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 06:53 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 06:53 |

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

## ALS Houston, US

Date: 02-Dec-24

Client: GHDHouston  
 Project: Chevron Grayburg 6-Inch Sec. 6 (Historical)  
 Sample ID: 12604539-MW-8-20241119  
 Collection Date: 19-Nov-2024 08:15

## ANALYTICAL REPORT

WorkOrder:HS24111204  
 Lab ID:HS24111204-09  
 Matrix:Groundwater

| ANALYSES                                | RESULT     | QUAL                 | REPORT<br>LIMIT | UNITS                     | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|-----------------------------------------|------------|----------------------|-----------------|---------------------------|--------------------|-------------------|
| <b>LOW LEVEL VOLATILES BY SW8260C</b>   |            | <b>Method:SW8260</b> |                 | Analyst: FT               |                    |                   |
| Benzene                                 | 0.062      |                      | 0.0010          | mg/L                      | 1                  | 24-Nov-2024 07:14 |
| Ethylbenzene                            | 0.0021     |                      | 0.0010          | mg/L                      | 1                  | 24-Nov-2024 07:14 |
| Toluene                                 | 0.018      |                      | 0.0010          | mg/L                      | 1                  | 24-Nov-2024 07:14 |
| Xylenes, Total                          | 0.016      |                      | 0.0030          | mg/L                      | 1                  | 24-Nov-2024 07:14 |
| Surr: 1,2-Dichloroethane-d4             | 103        |                      | 70-126          | %REC                      | 1                  | 24-Nov-2024 07:14 |
| Surr: 4-Bromofluorobenzene              | 98.4       |                      | 77-113          | %REC                      | 1                  | 24-Nov-2024 07:14 |
| Surr: Dibromofluoromethane              | 101        |                      | 77-123          | %REC                      | 1                  | 24-Nov-2024 07:14 |
| Surr: Toluene-d8                        | 102        |                      | 82-127          | %REC                      | 1                  | 24-Nov-2024 07:14 |
| <b>LOW-LEVEL SEMIVOLATILES BY 8270D</b> |            | <b>Method:SW8270</b> |                 | Prep:SW3510 / 21-Nov-2024 |                    | Analyst: ML       |
| Acenaphthene                            | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Acenaphthylene                          | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Anthracene                              | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Benz(a)anthracene                       | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Benzo(a)pyrene                          | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Benzo(b)fluoranthene                    | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Benzo(g,h,i)perylene                    | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Benzo(k)fluoranthene                    | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Chrysene                                | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Dibenz(a,h)anthracene                   | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Dibenzofuran                            | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Fluoranthene                            | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Fluorene                                | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Indeno(1,2,3-cd)pyrene                  | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| <b>Naphthalene</b>                      | <b>3.4</b> |                      | <b>1.0</b>      | <b>ug/L</b>               | 10                 | 26-Nov-2024 22:06 |
| Phenanthrene                            | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Pyrene                                  | < 1.0      |                      | 1.0             | ug/L                      | 10                 | 26-Nov-2024 22:06 |
| Surr: 2-Fluorobiphenyl                  | 99.2       |                      | 40-125          | %REC                      | 10                 | 26-Nov-2024 22:06 |
| Surr: 4-Terphenyl-d14                   | 121        |                      | 40-135          | %REC                      | 10                 | 26-Nov-2024 22:06 |
| Surr: Nitrobenzene-d5                   | 95.2       |                      | 41-120          | %REC                      | 10                 | 26-Nov-2024 22:06 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-9-20241118

Collection Date:18-Nov-2024 12:08

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-10

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 07:36 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 07:36 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 07:36 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 07:36 |
| Surr: 1,2-Dichloroethane-d4    | 99.0     |               | 70-126          | %REC        | 1                  | 24-Nov-2024 07:36 |
| Surr: 4-Bromofluorobenzene     | 99.0     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 07:36 |
| Surr: Dibromofluoromethane     | 99.8     |               | 77-123          | %REC        | 1                  | 24-Nov-2024 07:36 |
| Surr: Toluene-d8               | 97.9     |               | 82-127          | %REC        | 1                  | 24-Nov-2024 07:36 |

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



ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-10-20241118

Collection Date:18-Nov-2024 13:59

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-11

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 07:57 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 07:57 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 07:57 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 07:57 |
| Surr: 1,2-Dichloroethane-d4    | 102      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 07:57 |
| Surr: 4-Bromofluorobenzene     | 99.4     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 07:57 |
| Surr: Dibromofluoromethane     | 101      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 07:57 |
| Surr: Toluene-d8               | 99.4     |               | 82-127          | %REC        | 1                  | 24-Nov-2024 07:57 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-11-20241119

Collection Date:19-Nov-2024 10:53

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-12

Matrix:Groundwater

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | 0.017    |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 08:18 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 08:18 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 08:18 |
| Xylenes, Total                 | 0.0045   |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 08:18 |
| Surr: 1,2-Dichloroethane-d4    | 102      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 08:18 |
| Surr: 4-Bromofluorobenzene     | 98.9     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 08:18 |
| Surr: Dibromofluoromethane     | 101      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 08:18 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 08:18 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-MW-12-20241119

Collection Date:19-Nov-2024 09:42

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-13

Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|-------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 |       |                    | Analyst: DP       |
| Benzene                        | 0.46   |               | 0.010           | mg/L  | 10                 | 02-Dec-2024 12:22 |
| Ethylbenzene                   | 0.015  |               | 0.0010          | mg/L  | 1                  | 24-Nov-2024 08:40 |
| Toluene                        | 0.052  |               | 0.0010          | mg/L  | 1                  | 24-Nov-2024 08:40 |
| Xylenes, Total                 | 0.055  |               | 0.0030          | mg/L  | 1                  | 24-Nov-2024 08:40 |
| Surr: 1,2-Dichloroethane-d4    | 102    |               | 70-126          | %REC  | 1                  | 24-Nov-2024 08:40 |
| Surr: 1,2-Dichloroethane-d4    | 93.7   |               | 70-126          | %REC  | 10                 | 02-Dec-2024 12:22 |
| Surr: 4-Bromofluorobenzene     | 97.8   |               | 77-113          | %REC  | 1                  | 24-Nov-2024 08:40 |
| Surr: 4-Bromofluorobenzene     | 98.8   |               | 77-113          | %REC  | 10                 | 02-Dec-2024 12:22 |
| Surr: Dibromofluoromethane     | 101    |               | 77-123          | %REC  | 1                  | 24-Nov-2024 08:40 |
| Surr: Dibromofluoromethane     | 103    |               | 77-123          | %REC  | 10                 | 02-Dec-2024 12:22 |
| Surr: Toluene-d8               | 101    |               | 82-127          | %REC  | 1                  | 24-Nov-2024 08:40 |
| Surr: Toluene-d8               | 94.1   |               | 82-127          | %REC  | 10                 | 02-Dec-2024 12:22 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:12604539-DUP-01-20241119

Collection Date:19-Nov-2024 00:00

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-14

Matrix:Groundwater

| ANALYSES                       | RESULT | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|--------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |        | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | 0.066  |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 09:01 |
| Ethylbenzene                   | 0.0023 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 09:01 |
| Toluene                        | 0.020  |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 09:01 |
| Xylenes, Total                 | 0.018  |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 09:01 |
| Surr: 1,2-Dichloroethane-d4    | 102    |               | 70-126          | %REC        | 1                  | 24-Nov-2024 09:01 |
| Surr: 4-Bromofluorobenzene     | 99.1   |               | 77-113          | %REC        | 1                  | 24-Nov-2024 09:01 |
| Surr: Dibromofluoromethane     | 101    |               | 77-123          | %REC        | 1                  | 24-Nov-2024 09:01 |
| Surr: Toluene-d8               | 102    |               | 82-127          | %REC        | 1                  | 24-Nov-2024 09:01 |

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

ALS Houston, US

Date: 02-Dec-24

|                  |                                             |                          |
|------------------|---------------------------------------------|--------------------------|
| Client:          | GHDHouston                                  | <b>ANALYTICAL REPORT</b> |
| Project:         | Chevron Grayburg 6-Inch Sec. 6 (Historical) | WorkOrder:HS24111204     |
| Sample ID:       | 12604539-DUP-02-20241119                    | Lab ID:HS24111204-15     |
| Collection Date: | 19-Nov-2024 00:00                           | Matrix:Groundwater       |

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | 0.018    |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 09:22 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 09:22 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 09:22 |
| Xylenes, Total                 | 0.0045   |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 09:22 |
| Surr: 1,2-Dichloroethane-d4    | 101      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 09:22 |
| Surr: 4-Bromofluorobenzene     | 99.7     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 09:22 |
| Surr: Dibromofluoromethane     | 99.2     |               | 77-123          | %REC        | 1                  | 24-Nov-2024 09:22 |
| Surr: Toluene-d8               | 99.3     |               | 82-127          | %REC        | 1                  | 24-Nov-2024 09:22 |

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

ALS Houston, US

Date: 02-Dec-24

Client:GHDHouston

Project:Chevron Grayburg 6-Inch Sec. 6 (Historical)

Sample ID:Trip Blank

Collection Date:19-Nov-2024 00:00

ANALYTICAL REPORT

WorkOrder:HS24111204

Lab ID:HS24111204-16

Matrix:Water

| ANALYSES                       | RESULT   | QUAL          | REPORT<br>LIMIT | UNITS       | DILUTION<br>FACTOR | DATE<br>ANALYZED  |
|--------------------------------|----------|---------------|-----------------|-------------|--------------------|-------------------|
| LOW LEVEL VOLATILES BY SW8260C |          | Method:SW8260 |                 | Analyst: FT |                    |                   |
| Benzene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 05:49 |
| Ethylbenzene                   | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 05:49 |
| Toluene                        | < 0.0010 |               | 0.0010          | mg/L        | 1                  | 24-Nov-2024 05:49 |
| Xylenes, Total                 | < 0.0030 |               | 0.0030          | mg/L        | 1                  | 24-Nov-2024 05:49 |
| Surr: 1,2-Dichloroethane-d4    | 103      |               | 70-126          | %REC        | 1                  | 24-Nov-2024 05:49 |
| Surr: 4-Bromofluorobenzene     | 98.1     |               | 77-113          | %REC        | 1                  | 24-Nov-2024 05:49 |
| Surr: Dibromofluoromethane     | 100      |               | 77-123          | %REC        | 1                  | 24-Nov-2024 05:49 |
| Surr: Toluene-d8               | 101      |               | 82-127          | %REC        | 1                  | 24-Nov-2024 05:49 |

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



Weight / Prep Log

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

|                                                     |                                      |                                    |
|-----------------------------------------------------|--------------------------------------|------------------------------------|
| <b>Batch ID:</b> 220929                             | <b>Start Date:</b> 21 Nov 2024 14:13 | <b>End Date:</b> 21 Nov 2024 14:13 |
| <b>Method:</b> SV AQ SEP FUN EXTRACT-LOWLEV - 3510C |                                      | <b>Prep Code:</b> 3510_B_LOW       |

| Sample ID     | Container | Sample Wt/Vol | Final Volume | Prep Factor |                           |
|---------------|-----------|---------------|--------------|-------------|---------------------------|
| HS24111204-09 | 1         | 1000 (mL)     | 1 (mL)       | 0.001       | 1-liter amber glass, Neat |

ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

**DATES REPORT**

| Sample ID                      | Client Samp ID           | Collection Date                                     | Leachate Date | Prep Date         | Analysis Date              | DF |
|--------------------------------|--------------------------|-----------------------------------------------------|---------------|-------------------|----------------------------|----|
| <b>Batch ID:</b> 220929 ( 0 )  |                          | <b>Test Name :</b> LOW-LEVEL SEMIVOLATILES BY 8270D |               |                   | <b>Matrix:</b> Groundwater |    |
| HS24111204-09                  | 12604539-MW-8-20241119   | 19 Nov 2024 08:15                                   |               | 21 Nov 2024 14:13 | 26 Nov 2024 22:06          | 10 |
| <b>Batch ID:</b> R500960 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C   |               |                   | <b>Matrix:</b> Groundwater |    |
| HS24111204-01                  | 12604539-MW-2-20241118   | 18 Nov 2024 10:00                                   |               |                   | 24 Nov 2024 00:29          | 1  |
| HS24111204-02                  | 12604539-MW-3-20241118   | 18 Nov 2024 10:40                                   |               |                   | 24 Nov 2024 00:51          | 1  |
| HS24111204-03                  | 12604539-MW-4-20241118   | 18 Nov 2024 13:45                                   |               |                   | 24 Nov 2024 01:12          | 1  |
| HS24111204-04                  | 12604539-MW-5-20241118   | 18 Nov 2024 11:04                                   |               |                   | 24 Nov 2024 01:33          | 1  |
| HS24111204-05                  | 12604539-MW-13-20241118  | 18 Nov 2024 11:44                                   |               |                   | 24 Nov 2024 01:55          | 1  |
| <b>Batch ID:</b> R501093 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C   |               |                   | <b>Matrix:</b> Water       |    |
| HS24111204-16                  | Trip Blank               | 19 Nov 2024 00:00                                   |               |                   | 24 Nov 2024 05:49          | 1  |
| <b>Batch ID:</b> R501093 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C   |               |                   | <b>Matrix:</b> Groundwater |    |
| HS24111204-06                  | 12604539-MW-14-20241118  | 18 Nov 2024 12:40                                   |               |                   | 24 Nov 2024 06:10          | 1  |
| HS24111204-07                  | 12604539-MW-1-20241118   | 18 Nov 2024 11:27                                   |               |                   | 24 Nov 2024 06:32          | 1  |
| HS24111204-08                  | 12604539-MW-6-20241118   | 18 Nov 2024 11:10                                   |               |                   | 24 Nov 2024 06:53          | 1  |
| HS24111204-09                  | 12604539-MW-8-20241119   | 19 Nov 2024 08:15                                   |               |                   | 24 Nov 2024 07:14          | 1  |
| HS24111204-10                  | 12604539-MW-9-20241118   | 18 Nov 2024 12:08                                   |               |                   | 24 Nov 2024 07:36          | 1  |
| HS24111204-11                  | 12604539-MW-10-20241118  | 18 Nov 2024 13:59                                   |               |                   | 24 Nov 2024 07:57          | 1  |
| HS24111204-12                  | 12604539-MW-11-20241119  | 19 Nov 2024 10:53                                   |               |                   | 24 Nov 2024 08:18          | 1  |
| HS24111204-13                  | 12604539-MW-12-20241119  | 19 Nov 2024 09:42                                   |               |                   | 24 Nov 2024 08:40          | 1  |
| HS24111204-14                  | 12604539-DUP-01-20241119 | 19 Nov 2024 00:00                                   |               |                   | 24 Nov 2024 09:01          | 1  |
| HS24111204-15                  | 12604539-DUP-02-20241119 | 19 Nov 2024 00:00                                   |               |                   | 24 Nov 2024 09:22          | 1  |
| <b>Batch ID:</b> R501359 ( 0 ) |                          | <b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C   |               |                   | <b>Matrix:</b> Groundwater |    |
| HS24111204-13                  | 12604539-MW-12-20241119  | 19 Nov 2024 09:42                                   |               |                   | 02 Dec 2024 12:22          | 10 |

## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: 220929 ( 0 ) |                               | Instrument: SV-10     |         | Method: LOW-LEVEL SEMIVOLATILES BY 8270D |      |               |               |      |           |      |
|------------------------|-------------------------------|-----------------------|---------|------------------------------------------|------|---------------|---------------|------|-----------|------|
| <b>MBLK</b>            | Sample ID: <b>MBLK-220929</b> | Units: <b>ug/L</b>    |         | Analysis Date: <b>26-Nov-2024 13:31</b>  |      |               |               |      |           |      |
| Client ID:             | Run ID: <b>SV-10_501084</b>   | SeqNo: <b>8553898</b> |         | PrepDate: <b>21-Nov-2024</b>             |      | DF: <b>1</b>  |               |      |           |      |
| Analyte                | Result                        | PQL                   | SPK Val | SPK Ref Value                            | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Acenaphthene           | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Acenaphthylene         | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Anthracene             | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Benz(a)anthracene      | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Benzo(a)pyrene         | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Benzo(b)fluoranthene   | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Benzo(g,h,i)perylene   | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Benzo(k)fluoranthene   | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Chrysene               | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Dibenz(a,h)anthracene  | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Dibenzofuran           | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Fluoranthene           | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Fluorene               | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Indeno(1,2,3-cd)pyrene | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Naphthalene            | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Phenanthrene           | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Pyrene                 | < 0.10                        | 0.10                  |         |                                          |      |               |               |      |           |      |
| Surr: 2-Fluorobiphenyl | 4.559                         | 0.20                  | 5       | 0                                        | 91.2 | 40 - 125      |               |      |           |      |
| Surr: 4-Terphenyl-d14  | 5.838                         | 0.20                  | 5       | 0                                        | 117  | 40 - 135      |               |      |           |      |
| Surr: Nitrobenzene-d5  | 4.273                         | 0.20                  | 5       | 0                                        | 85.5 | 41 - 120      |               |      |           |      |

## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: 220929 ( 0 ) |        | Instrument: SV-10     |         | Method: LOW-LEVEL SEMIVOLATILES BY 8270D |      |                                  |               |       |           |      |
|------------------------|--------|-----------------------|---------|------------------------------------------|------|----------------------------------|---------------|-------|-----------|------|
| <b>LCS</b>             |        | Sample ID: LCS-220929 |         | Units: ug/L                              |      | Analysis Date: 25-Nov-2024 15:11 |               |       |           |      |
| Client ID:             |        | Run ID: SV-10_500965  |         | SeqNo: 8553958                           |      | PrepDate: 21-Nov-2024            |               | DF: 1 |           |      |
| Analyte                | Result | PQL                   | SPK Val | SPK Ref Value                            | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Acenaphthene           | 5.168  | 0.10                  | 5       | 0                                        | 103  | 45 - 120                         |               |       |           |      |
| Acenaphthylene         | 5.146  | 0.10                  | 5       | 0                                        | 103  | 47 - 120                         |               |       |           |      |
| Anthracene             | 5.772  | 0.10                  | 5       | 0                                        | 115  | 45 - 120                         |               |       |           |      |
| Benz(a)anthracene      | 5.649  | 0.10                  | 5       | 0                                        | 113  | 40 - 120                         |               |       |           |      |
| Benzo(a)pyrene         | 5.758  | 0.10                  | 5       | 0                                        | 115  | 45 - 120                         |               |       |           |      |
| Benzo(b)fluoranthene   | 6.096  | 0.10                  | 5       | 0                                        | 122  | 50 - 120                         |               |       |           | S    |
| Benzo(g,h,i)perylene   | 5.659  | 0.10                  | 5       | 0                                        | 113  | 42 - 127                         |               |       |           |      |
| Benzo(k)fluoranthene   | 5.619  | 0.10                  | 5       | 0                                        | 112  | 45 - 127                         |               |       |           |      |
| Chrysene               | 5.658  | 0.10                  | 5       | 0                                        | 113  | 43 - 120                         |               |       |           |      |
| Dibenz(a,h)anthracene  | 5.573  | 0.10                  | 5       | 0                                        | 111  | 45 - 125                         |               |       |           |      |
| Dibenzofuran           | 5.506  | 0.10                  | 5       | 0                                        | 110  | 50 - 120                         |               |       |           |      |
| Fluoranthene           | 6.072  | 0.10                  | 5       | 0                                        | 121  | 45 - 125                         |               |       |           |      |
| Fluorene               | 5.385  | 0.10                  | 5       | 0                                        | 108  | 49 - 120                         |               |       |           |      |
| Indeno(1,2,3-cd)pyrene | 5.605  | 0.10                  | 5       | 0                                        | 112  | 41 - 128                         |               |       |           |      |
| Naphthalene            | 4.985  | 0.10                  | 5       | 0                                        | 99.7 | 45 - 120                         |               |       |           |      |
| Phenanthrene           | 5.671  | 0.10                  | 5       | 0                                        | 113  | 45 - 121                         |               |       |           |      |
| Pyrene                 | 5.936  | 0.10                  | 5       | 0                                        | 119  | 40 - 130                         |               |       |           |      |
| Surr: 2-Fluorobiphenyl | 5.519  | 0.20                  | 5       | 0                                        | 110  | 40 - 125                         |               |       |           |      |
| Surr: 4-Terphenyl-d14  | 5.975  | 0.20                  | 5       | 0                                        | 119  | 40 - 135                         |               |       |           |      |
| Surr: Nitrobenzene-d5  | 5.002  | 0.20                  | 5       | 0                                        | 100  | 41 - 120                         |               |       |           |      |

## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: 220929 ( 0 ) |        | Instrument: SV-10      |         | Method: LOW-LEVEL SEMIVOLATILES BY 8270D |      |                                  |               |       |           |      |
|------------------------|--------|------------------------|---------|------------------------------------------|------|----------------------------------|---------------|-------|-----------|------|
| LCSD                   |        | Sample ID: LCSD-220929 |         | Units: ug/L                              |      | Analysis Date: 25-Nov-2024 15:34 |               |       |           |      |
| Client ID:             |        | Run ID: SV-10_500965   |         | SeqNo: 8553959                           |      | PrepDate: 21-Nov-2024            |               | DF: 1 |           |      |
| Analyte                | Result | PQL                    | SPK Val | SPK Ref Value                            | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Acenaphthene           | 5.396  | 0.10                   | 5       | 0                                        | 108  | 45 - 120                         | 5.168         | 4.33  | 20        |      |
| Acenaphthylene         | 5.422  | 0.10                   | 5       | 0                                        | 108  | 47 - 120                         | 5.146         | 5.23  | 20        |      |
| Anthracene             | 5.95   | 0.10                   | 5       | 0                                        | 119  | 45 - 120                         | 5.772         | 3.05  | 20        |      |
| Benz(a)anthracene      | 5.37   | 0.10                   | 5       | 0                                        | 107  | 40 - 120                         | 5.649         | 5.06  | 20        |      |
| Benzo(a)pyrene         | 5.913  | 0.10                   | 5       | 0                                        | 118  | 45 - 120                         | 5.758         | 2.66  | 20        |      |
| Benzo(b)fluoranthene   | 6.578  | 0.10                   | 5       | 0                                        | 132  | 50 - 120                         | 6.096         | 7.61  | 20        | S    |
| Benzo(g,h,i)perylene   | 5.916  | 0.10                   | 5       | 0                                        | 118  | 42 - 127                         | 5.659         | 4.44  | 20        |      |
| Benzo(k)fluoranthene   | 5.908  | 0.10                   | 5       | 0                                        | 118  | 45 - 127                         | 5.619         | 5.02  | 20        |      |
| Chrysene               | 5.777  | 0.10                   | 5       | 0                                        | 116  | 43 - 120                         | 5.658         | 2.1   | 20        |      |
| Dibenz(a,h)anthracene  | 5.675  | 0.10                   | 5       | 0                                        | 113  | 45 - 125                         | 5.573         | 1.81  | 20        |      |
| Dibenzofuran           | 5.581  | 0.10                   | 5       | 0                                        | 112  | 50 - 120                         | 5.506         | 1.35  | 20        |      |
| Fluoranthene           | 6.096  | 0.10                   | 5       | 0                                        | 122  | 45 - 125                         | 6.072         | 0.389 | 20        |      |
| Fluorene               | 5.658  | 0.10                   | 5       | 0                                        | 113  | 49 - 120                         | 5.385         | 4.94  | 20        |      |
| Indeno(1,2,3-cd)pyrene | 5.619  | 0.10                   | 5       | 0                                        | 112  | 41 - 128                         | 5.605         | 0.255 | 20        |      |
| Naphthalene            | 5.051  | 0.10                   | 5       | 0                                        | 101  | 45 - 120                         | 4.985         | 1.31  | 20        |      |
| Phenanthrene           | 5.833  | 0.10                   | 5       | 0                                        | 117  | 45 - 121                         | 5.671         | 2.8   | 20        |      |
| Pyrene                 | 5.957  | 0.10                   | 5       | 0                                        | 119  | 40 - 130                         | 5.936         | 0.359 | 20        |      |
| Surr: 2-Fluorobiphenyl | 5.642  | 0.20                   | 5       | 0                                        | 113  | 40 - 125                         | 5.519         | 2.21  | 20        |      |
| Surr: 4-Terphenyl-d14  | 5.982  | 0.20                   | 5       | 0                                        | 120  | 40 - 135                         | 5.975         | 0.124 | 20        |      |
| Surr: Nitrobenzene-d5  | 5.091  | 0.20                   | 5       | 0                                        | 102  | 41 - 120                         | 5.002         | 1.77  | 20        |      |

The following samples were analyzed in this batch: HS24111204-09

## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: R500960 ( 0 )     |                         | Instrument: VOA6 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-241123 | Units: ug/L      |         | Analysis Date: 23-Nov-2024 19:10       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA6_500960     | SeqNo: 8551179   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 49.56                   | 1.0              | 50      | 0                                      | 99.1 | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 49.25                   | 1.0              | 50      | 0                                      | 98.5 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 49.48                   | 1.0              | 50      | 0                                      | 99.0 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.53                   | 1.0              | 50      | 0                                      | 97.1 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-241123 | Units: ug/L    |         | Analysis Date: 23-Nov-2024 18:06 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA6_500960     | SeqNo: 8551177 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 18.81                   | 1.0            | 20      | 0                                | 94.1 | 74 - 120      |               |      |                |
| Ethylbenzene                | 19.05                   | 1.0            | 20      | 0                                | 95.3 | 77 - 117      |               |      |                |
| Toluene                     | 19.18                   | 1.0            | 20      | 0                                | 95.9 | 77 - 118      |               |      |                |
| Xylenes, Total              | 56.74                   | 3.0            | 60      | 0                                | 94.6 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 50.43                   | 1.0            | 50      | 0                                | 101  | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 48.97                   | 1.0            | 50      | 0                                | 97.9 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 50.03                   | 1.0            | 50      | 0                                | 100  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 51.1                    | 1.0            | 50      | 0                                | 102  | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-241123 | Units: ug/L    |         | Analysis Date: 23-Nov-2024 18:27 |      |               |               |       |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|----------------|
| Client ID:                  | Run ID: VOA6_500960      | SeqNo: 8551178 |         | PrepDate:                        |      | DF: 1         |               |       |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 19.55                    | 1.0            | 20      | 0                                | 97.7 | 74 - 120      | 18.81         | 3.82  | 20             |
| Ethylbenzene                | 19.56                    | 1.0            | 20      | 0                                | 97.8 | 77 - 117      | 19.05         | 2.66  | 20             |
| Toluene                     | 19.77                    | 1.0            | 20      | 0                                | 98.9 | 77 - 118      | 19.18         | 3.06  | 20             |
| Xylenes, Total              | 58.29                    | 3.0            | 60      | 0                                | 97.2 | 75 - 122      | 56.74         | 2.69  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 50.51                    | 1.0            | 50      | 0                                | 101  | 70 - 123      | 50.43         | 0.171 | 20             |
| Surr: 4-Bromofluorobenzene  | 49.62                    | 1.0            | 50      | 0                                | 99.2 | 77 - 113      | 48.97         | 1.3   | 20             |
| Surr: Dibromofluoromethane  | 50.22                    | 1.0            | 50      | 0                                | 100  | 73 - 126      | 50.03         | 0.377 | 20             |
| Surr: Toluene-d8            | 50.85                    | 1.0            | 50      | 0                                | 102  | 81 - 120      | 51.1          | 0.491 | 20             |



## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: R500960 ( 0 )     |        | Instrument: VOA6           |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |                                  |               |       |                |
|-----------------------------|--------|----------------------------|---------|----------------------------------------|------|----------------------------------|---------------|-------|----------------|
| <b>MS</b>                   |        | Sample ID: HS24111185-07MS |         | Units: ug/L                            |      | Analysis Date: 24-Nov-2024 02:37 |               |       |                |
| Client ID:                  |        | Run ID: VOA6_500960        |         | SeqNo: 8551198                         |      | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                        | SPK Val | SPK Ref Value                          | %REC | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 21.26  | 1.0                        | 20      | 0                                      | 106  | 70 - 127                         |               |       |                |
| Ethylbenzene                | 20.37  | 1.0                        | 20      | 0                                      | 102  | 70 - 124                         |               |       |                |
| Toluene                     | 20.09  | 1.0                        | 20      | 0                                      | 100  | 70 - 123                         |               |       |                |
| Xylenes, Total              | 59.92  | 3.0                        | 60      | 0                                      | 99.9 | 70 - 130                         |               |       |                |
| Surr: 1,2-Dichloroethane-d4 | 49.6   | 1.0                        | 50      | 0                                      | 99.2 | 70 - 126                         |               |       |                |
| Surr: 4-Bromofluorobenzene  | 50.31  | 1.0                        | 50      | 0                                      | 101  | 77 - 113                         |               |       |                |
| Surr: Dibromofluoromethane  | 48.84  | 1.0                        | 50      | 0                                      | 97.7 | 77 - 123                         |               |       |                |
| Surr: Toluene-d8            | 48.99  | 1.0                        | 50      | 0                                      | 98.0 | 82 - 127                         |               |       |                |

|                             |        |                             |         |                |       |                                  |               |       |                |
|-----------------------------|--------|-----------------------------|---------|----------------|-------|----------------------------------|---------------|-------|----------------|
| <b>MSD</b>                  |        | Sample ID: HS24111185-07MSD |         | Units: ug/L    |       | Analysis Date: 24-Nov-2024 02:59 |               |       |                |
| Client ID:                  |        | Run ID: VOA6_500960         |         | SeqNo: 8551199 |       | PrepDate:                        |               | DF: 1 |                |
| Analyte                     | Result | PQL                         | SPK Val | SPK Ref Value  | %REC  | Control Limit                    | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 21.53  | 1.0                         | 20      | 0              | 108   | 70 - 127                         | 21.26         | 1.27  | 20             |
| Ethylbenzene                | 21.7   | 1.0                         | 20      | 0              | 108   | 70 - 124                         | 20.37         | 6.29  | 20             |
| Toluene                     | 21.15  | 1.0                         | 20      | 0              | 106   | 70 - 123                         | 20.09         | 5.13  | 20             |
| Xylenes, Total              | 62.96  | 3.0                         | 60      | 0              | 105   | 70 - 130                         | 59.92         | 4.96  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 50.07  | 1.0                         | 50      | 0              | 100   | 70 - 126                         | 49.6          | 0.937 | 20             |
| Surr: 4-Bromofluorobenzene  | 48.82  | 1.0                         | 50      | 0              | 97.6  | 77 - 113                         | 50.31         | 2.99  | 20             |
| Surr: Dibromofluoromethane  | 50.06  | 1.0                         | 50      | 0              | 100   | 77 - 123                         | 48.84         | 2.46  | 20             |
| Surr: Toluene-d8            | 49.98  | 1.0                         | 50      | 0              | 100.0 | 82 - 127                         | 48.99         | 2     | 20             |

The following samples were analyzed in this batch:

|               |               |               |               |
|---------------|---------------|---------------|---------------|
| HS24111204-01 | HS24111204-02 | HS24111204-03 | HS24111204-04 |
| HS24111204-05 |               |               |               |

## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: R501093 ( 0 )     |                         | Instrument: VOA6 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |                |
|-----------------------------|-------------------------|------------------|---------|----------------------------------------|------|---------------|---------------|------|----------------|
| <b>MBLK</b>                 | Sample ID: VBLKW-241123 | Units: ug/L      |         | Analysis Date: 24-Nov-2024 05:28       |      |               |               |      |                |
| Client ID:                  | Run ID: VOA6_501093     | SeqNo: 8554007   |         | PrepDate:                              |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL              | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Ethylbenzene                | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Toluene                     | < 1.0                   | 1.0              |         |                                        |      |               |               |      |                |
| Xylenes, Total              | < 3.0                   | 3.0              |         |                                        |      |               |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 50.23                   | 1.0              | 50      | 0                                      | 100  | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 50.87                   | 1.0              | 50      | 0                                      | 102  | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 50.57                   | 1.0              | 50      | 0                                      | 101  | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 48.05                   | 1.0              | 50      | 0                                      | 96.1 | 81 - 120      |               |      |                |

| <b>LCS</b>                  | Sample ID: VLCSW-241123 | Units: ug/L    |         | Analysis Date: 24-Nov-2024 04:24 |      |               |               |      |                |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|----------------|
| Client ID:                  | Run ID: VOA6_501093     | SeqNo: 8554005 |         | PrepDate:                        |      | DF: 1         |               |      |                |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit Qual |
| Benzene                     | 18.74                   | 1.0            | 20      | 0                                | 93.7 | 74 - 120      |               |      |                |
| Ethylbenzene                | 18.96                   | 1.0            | 20      | 0                                | 94.8 | 77 - 117      |               |      |                |
| Toluene                     | 18.52                   | 1.0            | 20      | 0                                | 92.6 | 77 - 118      |               |      |                |
| Xylenes, Total              | 55.24                   | 3.0            | 60      | 0                                | 92.1 | 75 - 122      |               |      |                |
| Surr: 1,2-Dichloroethane-d4 | 50.9                    | 1.0            | 50      | 0                                | 102  | 70 - 123      |               |      |                |
| Surr: 4-Bromofluorobenzene  | 49.09                   | 1.0            | 50      | 0                                | 98.2 | 77 - 113      |               |      |                |
| Surr: Dibromofluoromethane  | 49.66                   | 1.0            | 50      | 0                                | 99.3 | 73 - 126      |               |      |                |
| Surr: Toluene-d8            | 49.42                   | 1.0            | 50      | 0                                | 98.8 | 81 - 120      |               |      |                |

| <b>LCSD</b>                 | Sample ID: VLCSDW-241123 | Units: ug/L    |         | Analysis Date: 24-Nov-2024 04:45 |      |               |               |       |                |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|----------------|
| Client ID:                  | Run ID: VOA6_501093      | SeqNo: 8554006 |         | PrepDate:                        |      | DF: 1         |               |       |                |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit Qual |
| Benzene                     | 19.12                    | 1.0            | 20      | 0                                | 95.6 | 74 - 120      | 18.74         | 2.02  | 20             |
| Ethylbenzene                | 19.3                     | 1.0            | 20      | 0                                | 96.5 | 77 - 117      | 18.96         | 1.82  | 20             |
| Toluene                     | 19.01                    | 1.0            | 20      | 0                                | 95.1 | 77 - 118      | 18.52         | 2.64  | 20             |
| Xylenes, Total              | 56.89                    | 3.0            | 60      | 0                                | 94.8 | 75 - 122      | 55.24         | 2.94  | 20             |
| Surr: 1,2-Dichloroethane-d4 | 50.19                    | 1.0            | 50      | 0                                | 100  | 70 - 123      | 50.9          | 1.4   | 20             |
| Surr: 4-Bromofluorobenzene  | 48.98                    | 1.0            | 50      | 0                                | 98.0 | 77 - 113      | 49.09         | 0.224 | 20             |
| Surr: Dibromofluoromethane  | 50.34                    | 1.0            | 50      | 0                                | 101  | 73 - 126      | 49.66         | 1.36  | 20             |
| Surr: Toluene-d8            | 49.96                    | 1.0            | 50      | 0                                | 99.9 | 81 - 120      | 49.42         | 1.09  | 20             |

ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

**QC BATCH REPORT**

|                                                    |  |                  |                                        |               |
|----------------------------------------------------|--|------------------|----------------------------------------|---------------|
| Batch ID: R501093 ( 0 )                            |  | Instrument: VOA6 | Method: LOW LEVEL VOLATILES BY SW8260C |               |
| The following samples were analyzed in this batch: |  | HS24111204-06    | HS24111204-07                          | HS24111204-08 |
|                                                    |  | HS24111204-10    | HS24111204-11                          | HS24111204-12 |
|                                                    |  | HS24111204-14    | HS24111204-15                          | HS24111204-16 |

## ALS Houston, US

Date: 02-Dec-24

**Client:** GHDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

## QC BATCH REPORT

| Batch ID: R501359 ( 0 )     |                         | Instrument: VOA14 |         | Method: LOW LEVEL VOLATILES BY SW8260C |      |               |               |      |           |      |
|-----------------------------|-------------------------|-------------------|---------|----------------------------------------|------|---------------|---------------|------|-----------|------|
| <b>MBLK</b>                 | Sample ID: VBLKW-241202 | Units: ug/L       |         | Analysis Date: 02-Dec-2024 11:58       |      |               |               |      |           |      |
| Client ID:                  | Run ID: VOA14_501359    | SeqNo: 8559849    |         | PrepDate:                              |      | DF: 1         |               |      |           |      |
| Analyte                     | Result                  | PQL               | SPK Val | SPK Ref Value                          | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene                     | < 1.0                   | 1.0               |         |                                        |      |               |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 44.73                   | 1.0               | 50      | 0                                      | 89.5 | 70 - 123      |               |      |           |      |
| Surr: 4-Bromofluorobenzene  | 49.81                   | 1.0               | 50      | 0                                      | 99.6 | 77 - 113      |               |      |           |      |
| Surr: Dibromofluoromethane  | 49.9                    | 1.0               | 50      | 0                                      | 99.8 | 73 - 126      |               |      |           |      |
| Surr: Toluene-d8            | 47.45                   | 1.0               | 50      | 0                                      | 94.9 | 81 - 120      |               |      |           |      |

|                             |                         |                |         |                                  |      |               |               |      |           |      |
|-----------------------------|-------------------------|----------------|---------|----------------------------------|------|---------------|---------------|------|-----------|------|
| <b>LCS</b>                  | Sample ID: VLCSW-241202 | Units: ug/L    |         | Analysis Date: 02-Dec-2024 10:46 |      |               |               |      |           |      |
| Client ID:                  | Run ID: VOA14_501359    | SeqNo: 8559847 |         | PrepDate:                        |      | DF: 1         |               |      |           |      |
| Analyte                     | Result                  | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD | RPD Limit | Qual |
| Benzene                     | 17.62                   | 1.0            | 20      | 0                                | 88.1 | 74 - 120      |               |      |           |      |
| Surr: 1,2-Dichloroethane-d4 | 46.72                   | 1.0            | 50      | 0                                | 93.4 | 70 - 123      |               |      |           |      |
| Surr: 4-Bromofluorobenzene  | 49.94                   | 1.0            | 50      | 0                                | 99.9 | 77 - 113      |               |      |           |      |
| Surr: Dibromofluoromethane  | 48.78                   | 1.0            | 50      | 0                                | 97.6 | 73 - 126      |               |      |           |      |
| Surr: Toluene-d8            | 47.6                    | 1.0            | 50      | 0                                | 95.2 | 81 - 120      |               |      |           |      |

|                             |                          |                |         |                                  |      |               |               |       |           |      |
|-----------------------------|--------------------------|----------------|---------|----------------------------------|------|---------------|---------------|-------|-----------|------|
| <b>LCSD</b>                 | Sample ID: VLCSDW-241202 | Units: ug/L    |         | Analysis Date: 02-Dec-2024 11:10 |      |               |               |       |           |      |
| Client ID:                  | Run ID: VOA14_501359     | SeqNo: 8559848 |         | PrepDate:                        |      | DF: 1         |               |       |           |      |
| Analyte                     | Result                   | PQL            | SPK Val | SPK Ref Value                    | %REC | Control Limit | RPD Ref Value | %RPD  | RPD Limit | Qual |
| Benzene                     | 16.87                    | 1.0            | 20      | 0                                | 84.3 | 74 - 120      | 17.62         | 4.35  | 20        |      |
| Surr: 1,2-Dichloroethane-d4 | 47.51                    | 1.0            | 50      | 0                                | 95.0 | 70 - 123      | 46.72         | 1.67  | 20        |      |
| Surr: 4-Bromofluorobenzene  | 50.45                    | 1.0            | 50      | 0                                | 101  | 77 - 113      | 49.94         | 1.03  | 20        |      |
| Surr: Dibromofluoromethane  | 50.3                     | 1.0            | 50      | 0                                | 101  | 73 - 126      | 48.78         | 3.08  | 20        |      |
| Surr: Toluene-d8            | 47.93                    | 1.0            | 50      | 0                                | 95.9 | 81 - 120      | 47.6          | 0.682 | 20        |      |

The following samples were analyzed in this batch: HS24111204-13

**ALS Houston, US**

Date: 02-Dec-24

**Client:** GHDDHouston  
**Project:** Chevron Grayburg 6-Inch Sec. 6 (Historical)  
**WorkOrder:** HS24111204

**QUALIFIERS,  
ACRONYMS, UNITS**

| <b>Qualifier</b> | <b>Description</b>                                                        |
|------------------|---------------------------------------------------------------------------|
| *                | 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                               |

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

| <b>Unit Reported</b> | <b>Description</b>   |
|----------------------|----------------------|
| mg/L                 | Milligrams per Liter |

ALS Houston, US

Date: 02-Dec-24

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**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

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| Agency          | Number                  | Expire Date |
|-----------------|-------------------------|-------------|
| Arizona         | AZ0793                  | 27-May-2025 |
| Arkansas        | 88-00356_2024           | 27-Mar-2025 |
| California      | 2919; 2025              | 30-Apr-2025 |
| Dept of Defense | L24-240                 | 30-Apr-2026 |
| Dept of Defense | L24-239                 | 30-Apr-2026 |
| Florida         | E87611-38               | 30-Jun-2025 |
| Illinois        | 2000322023-11           | 31-Jul-2025 |
| Kansas          | E-10352 2023-2024       | 31-Jul-2025 |
| Kentucky        | 123043                  | 30-Apr-2025 |
| Louisiana       | 03087 2023-2024         | 30-Jun-2025 |
| Maine           | 2024017                 | 23-Jun-2026 |
| Michigan        | 9971                    | 30-Apr-2025 |
| Nebraska        | NE-OS-25-13             | 30-Apr-2025 |
| New Jersey      | TX008                   | 30-Jun-2025 |
| North Carolina  | 624 - 2024              | 31-Dec-2024 |
| Pennsylvania    | 018                     | 30-Jun-2025 |
| Tennessee       | 04016                   | 30-Apr-2025 |
| Texas           | T104704231 TX-C24-00130 | 30-Apr-2025 |
| Utah            | TX026932023-14          | 31-Jul-2025 |



ALS Houston, US

Date: 02-Dec-24

## Sample Receipt Checklist

Work Order ID: HS24111204

Date/Time Received: 20-Nov-2024 09:25

Client Name: GHDHouston

Received by: Jacob Coronado

|                                 |                   |                                    |                   |
|---------------------------------|-------------------|------------------------------------|-------------------|
| Completed By: /S/ Michael Lucio | 20-Nov-2024 14:02 | Reviewed by: /S/ Alexis Dorenbosch | 20-Nov-2024 16:19 |
| eSignature                      | Date/Time         | eSignature                         | Date/Time         |

Matrices: WCarrier name: FedEx

Shipping container/cooler in good condition?

Yes ☒No ☐Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒No ☐Not Present ☐

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

VOA/TX1005/TX1006 Solids in hermetically sealed vials?

Yes ☐No ☐Not Present ☒

Chain of custody present?

Yes ☒No ☐

2 Page(s)

Chain of custody signed when relinquished and received?

Yes ☒No ☐

COC IDs:327517/327516

Samplers name present on COC?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Samples in proper container/bottle?

Yes ☒No ☐

Sample containers intact?

Yes ☒No ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Container/Temp Blank temperature in compliance?

Yes ☒No ☐

Temperature(s)/Thermometer(s):

2.7uc/2.7c

IR34

Cooler(s)/Kit(s):

Blue

Date/Time sample(s) sent to storage:

11/20/2024 1403

Water - VOA vials have zero headspace?

Yes ☒No ☐No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☐No ☐N/A ☒

pH adjusted?

Yes ☐No ☐N/A ☒

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:

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

## Chain of Custody Form

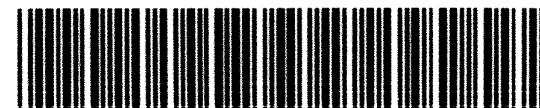
Page 1 of 2

COC ID: 327517

HS24111204

GHDHouston

Chevron Grayburg 6-Inch Sec. 6



| Customer Information |                                 | Project Information |                                               | ALS Project Manager: |                             |
|----------------------|---------------------------------|---------------------|-----------------------------------------------|----------------------|-----------------------------|
| Purchase Order       | SRS Chevron Grayburg 6-Inch Hi  | Project Name        | Chevron Grayburg 6-Inch Sec. 6                | A                    | 8260_LL_W (8260 31EX)       |
| Work Order           |                                 | Project Number      | SRS Chevron Grayburg 6-Inch Histo             | B                    | 8270_LOW_W (8270 PAHs (17)) |
| Company Name         | GHDHouston                      | Bill To Company     | Plains All American Pipeline, LP              | C                    |                             |
| Send Report To       | Achanna Copeland                | Invoice Attn        | Kerolanne Hudgens                             | D                    |                             |
| Address              | 11451 Katy Freeway<br>Suite 400 | Address             | c/o ENV-00, Accounts Payable<br>P.O. Box 4648 | E                    |                             |
|                      |                                 |                     |                                               | F                    |                             |
| City/State/Zip       | Houston, TX 77079               | City/State/Zip      | Houston TX 77210-4648                         | G                    |                             |
| Phone                |                                 | Phone               | (713) 646-4610                                | H                    |                             |
| Fax                  |                                 | Fax                 | (713) 646-4199                                | I                    |                             |
| e-Mail Address       | Achanna.Copeland@ghd.com        | e-Mail Address      | Kerolanne.hudgens@plains.com                  | J                    |                             |

| No. | Sample Description      | Date     | Time  | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|-------------------------|----------|-------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1   | 12604539-MW-2-20241118  | 11-18-24 | 10:00 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 2   | 12604539-MW-3-20241118  | 11-18-24 | 10:40 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 3   | 12604539-MW-4-20241118  | 11-18-24 | 13:45 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 4   | 12604539-MW-5-20241118  | 11-18-24 | 11:04 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 5   | 12604539-MW-13-20241118 | 11-18-24 | 11:44 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 6   | 12604539-MW-14-20241118 | 11-18-24 | 12:40 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 7   | 12604539-MW-1-20241118  | 11-18-24 | 11:27 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 8   | 12604539-MW-6-20241118  | 11-18-24 | 11:10 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 9   | 12604539-MW-8-20241119  | 11-19-24 | 08:15 | GW     | Ice   | 3.5       | X | X |   |   |   |   |   |   |   |   |      |
| 10  | 12604539-MW-9-20241118  | 11-18-24 | 12:08 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |

|                                |  |                 |       |                                                                                                                                                           |  |                                                  |              |                                                                                                                                                                                                 |  |  |  |  |  |
|--------------------------------|--|-----------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Sampler(s) Please Print & Sign |  | Shipment Method |       | Required Turnaround Time: (Check Box)                                                                                                                     |  |                                                  |              | Results Due Date:                                                                                                                                                                               |  |  |  |  |  |
| Jairo Flores                   |  |                 |       | <input checked="" type="checkbox"/> 10-15 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hours |  |                                                  |              |                                                                                                                                                                                                 |  |  |  |  |  |
| Relinquished by:               |  | Date:           | Time: | Received by:                                                                                                                                              |  | Notes: 12604539 - Chevron Grayburg 6-Inch Sec. 6 |              |                                                                                                                                                                                                 |  |  |  |  |  |
|                                |  | 11-19-24        | 14:00 |                                                                                                                                                           |  |                                                  |              |                                                                                                                                                                                                 |  |  |  |  |  |
| Relinquished by:               |  | Date:           | Time: | Received by (Laboratory):                                                                                                                                 |  | Cooler ID                                        | Cooler Temp. | QC Package: (Check One Box Below)                                                                                                                                                               |  |  |  |  |  |
|                                |  | 11/20/24        | 0925  |                                                                                                                                                           |  | B16C                                             | 2.7          | <input checked="" type="checkbox"/> Level 1: Std. Qc<br><input type="checkbox"/> Level 2: Std. Qc/Field Data<br><input type="checkbox"/> Level 3: SW-846/CLP<br><input type="checkbox"/> Other: |  |  |  |  |  |
| Logged by (Laboratory):        |  | Date:           | Time: | Checked by (Laboratory):                                                                                                                                  |  |                                                  |              |                                                                                                                                                                                                 |  |  |  |  |  |
|                                |  |                 |       |                                                                                                                                                           |  |                                                  |              |                                                                                                                                                                                                 |  |  |  |  |  |

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NaHSO<sub>4</sub> 7-Other 8-4°C 9-5035

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## Chain of Custody Form

Page 2 of 2

COC ID: 327516

GHDHouston

Chevron Grayburg 6-Inch Sec. 6



| Customer Information |                                |  |  |  |  | Project Information |                                   |  |  |  |  | ALS Project Manager: |                             |  |  |  |  |  |  |  |  |  |
|----------------------|--------------------------------|--|--|--|--|---------------------|-----------------------------------|--|--|--|--|----------------------|-----------------------------|--|--|--|--|--|--|--|--|--|
| Purchase Order       | SRS Chevron Grayburg 6-Inch Hi |  |  |  |  | Project Name        | Chevron Grayburg 6-Inch Sec. 6    |  |  |  |  | A                    | 8260_LL_W (8260 BTEX)       |  |  |  |  |  |  |  |  |  |
| Work Order           |                                |  |  |  |  | Project Number      | SRS Chevron Grayburg 6-Inch Histo |  |  |  |  | B                    | 8270_LOW_W (8270 PAHs (17)) |  |  |  |  |  |  |  |  |  |
| Company Name         | GHDHouston                     |  |  |  |  | Bill To Company     | Plains All American Pipeline, LP  |  |  |  |  | C                    |                             |  |  |  |  |  |  |  |  |  |
| Send Report To       | Adrianna Copeland              |  |  |  |  | Invoice Attn        | Kerolanne Hudgens                 |  |  |  |  | D                    |                             |  |  |  |  |  |  |  |  |  |
| Address              | 11451 Katy Freeway             |  |  |  |  | Address             | c/o ENV-00, Accounts Payable      |  |  |  |  | E                    |                             |  |  |  |  |  |  |  |  |  |
|                      | Suite 400                      |  |  |  |  |                     | P.O. Box 4648                     |  |  |  |  | F                    |                             |  |  |  |  |  |  |  |  |  |
| City/State/Zip       | Houston, TX 77079              |  |  |  |  | City/State/Zip      | Houston TX 77210-4648             |  |  |  |  | G                    |                             |  |  |  |  |  |  |  |  |  |
| Phone                |                                |  |  |  |  | Phone               | (713) 646-4610                    |  |  |  |  | H                    |                             |  |  |  |  |  |  |  |  |  |
| Fax                  |                                |  |  |  |  | Fax                 | (713) 646-4199                    |  |  |  |  | I                    |                             |  |  |  |  |  |  |  |  |  |
| e-Mail Address       | Adrianna.Copeland@ghd.com      |  |  |  |  | e-Mail Address      | Kerolanne.hudgens@plains.com      |  |  |  |  | J                    |                             |  |  |  |  |  |  |  |  |  |

| No. | Sample Description        | Date     | Time  | Matrix | Pres. | # Bottles | A | B | C | D | E | F | G | H | I | J | Hold |
|-----|---------------------------|----------|-------|--------|-------|-----------|---|---|---|---|---|---|---|---|---|---|------|
| 1   | 12604539-MW-10-20241118   | 11-19-24 | 13:59 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 2   | 12604539-MW-11-20241119   | 11-19-24 | 10:53 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 3   | 12604539-MW-12-20241119   | 11-19-24 | 09:42 | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 4   | B12604539-DUP-01-20241119 | 11-19-24 | -     | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 5   | 12604539-DUP-02-20241119  | 11-19-24 | -     | GW     | Ice   | 3         | X |   |   |   |   |   |   |   |   |   |      |
| 6   | Trip Blank.               | -        | -     | -      | Ice   | 2         | X |   |   |   |   |   |   |   |   |   |      |
| 7   |                           |          |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 8   |                           |          |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 9   |                           |          |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |
| 10  |                           |          |       |        |       |           |   |   |   |   |   |   |   |   |   |   |      |

|                                                                                                                                                                                                                       |  |                                                                       |  |                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                       |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Sampler(s) Please Print & Sign                                                                                                                                                                                        |  | Shipment Method                                                       |  | Required Turnaround Time: (Check Box)                                                                                                                               |  | Results Due Date:                                                                                                                                                                                                                                                                                                     |  |
| Tairo Flores <i>Tairo Flores</i><br>Relinquished by: <i>Tairo Flores</i><br>Date: 11-19-24 Time: 14:00<br>Relinquished by: <i>Tairo Flores</i><br>Date: 11/20/24 Time: 0925<br>Logged by (Laboratory):<br>Date: Time: |  | Received by:<br>Received by (Laboratory):<br>Checked by (Laboratory): |  | <input checked="" type="checkbox"/> STD 10 Wk Days<br><input type="checkbox"/> 5 Wk Days<br><input type="checkbox"/> 2 Wk Days<br><input type="checkbox"/> 24 Hours |  | Notes: 12604539- Chevron Grayburg 6-Inch Sec 6<br>Cooler ID: B166 Cooler Temp: 2.7<br>QC Package: (Check One Box Below)<br><input checked="" type="checkbox"/> Level II Std QC<br><input type="checkbox"/> Level II Std QC/Rpt Data<br><input type="checkbox"/> Level IV SWAKS/CLP<br><input type="checkbox"/> Other: |  |

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NaHSO<sub>4</sub> 7-Other 8-4°C 9-5035

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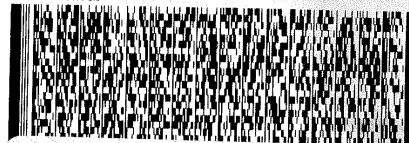


**Do not lift using this tag.****Must Deliver Next Business Day  
Time and Temperature Sensitive!**ORIGIN ID: SGRA (505) 546-2198  
HANK MCCONNELL  
GHD  
2135 S LOOP 250 WEST  
MIDLAND, TX 79703  
UNITED STATES USSHIP DATE: 14NOV24  
ACTWGT: 1.00 LB HAN  
CAD: 0221247/CAFE3855**TO SAMPLE RECEIVING  
ALS GROUP USA, CORP  
10450 STANCLIFF ROAD  
SUITE 210  
HOUSTON TX 77099**

(281) 530-5656

REF: CHEVRON GRAYBURG - BO104470 - AN

RMA: ||| ||| |||

**FedEx  
Express****FedEx**  
TRK# 7386 7929 1069  
0221**WED - 20 NOV 10:30A  
PRIORITY OVERNIGHT****AB SGRA****77099**

TX - US IAT



\*20265 11/19 58CJ8/3903/C6C4

Part # 159459-034 MTW EXP 08/25 546

58CJ8/3903/C6C4

14NOV24 10:30A

|                     |  |
|---------------------|--|
| Seal Broken By:     |  |
| Date:               |  |
| Time:               |  |
| Name: <u>SGRA</u>   |  |
| Company: <u>ALS</u> |  |

|                                |
|--------------------------------|
|                                |
| <b>ALS</b>                     |
| 10450 Stancliff Rd., Suite 210 |
| Houston, Texas 77099           |
| Tel. +1 281 530 5656           |
| Fax. +1 281 530 5657           |

# **Appendix C**

## **LNAPL Transmissivity Technical Memorandum (May 2024)**

# Technical Memorandum

July 26, 2024

|                     |                                                    |                    |                              |
|---------------------|----------------------------------------------------|--------------------|------------------------------|
| <b>To</b>           | Karolanne Hudgens                                  | <b>Contact No.</b> | 575.200.5517                 |
| <b>Copy to</b>      |                                                    | <b>Email</b>       | Karolanne.Hudgens@plains.com |
| <b>From</b>         | Matt Rousseau/Mailyng Aviles                       | <b>Project No.</b> | 12604539                     |
| <b>Project Name</b> | Chevron Grayburg 6-Inch Sec. 6 (Historical)        |                    |                              |
| <b>Subject</b>      | LNAPL Transmissivity Testing Chevron Grayburg Site |                    |                              |

## 1. Introduction

This memorandum presents the results of an evaluation of light non-aqueous phase liquid (LNAPL) transmissivity ( $T_n$ ) at the subject site. The evaluation of  $T_n$  provides a standardized science-based way to quantify the potential mobility and recoverability of LNAPL at a given site. Results can be compared against widely accepted de minimis criteria to assess whether LNAPL may be considered to be sufficiently mobile such that hydraulic recovery may be feasible and/or provide some technical benefit in terms of mitigating migration potential via a tangible reduction in the amount of LNAPL in the pore space (i.e., reduction in 'LNAPL saturation' levels). Where  $T_n$  is found to be of de minimis magnitude, LNAPL is considered to be largely present at residual levels and hydraulically immobile/unrecoverable. Where this is the case, LNAPL mass recovery efforts will not provide a meaningful reduction in LNAPL saturation and, therefore, will provide no technical benefit (since the LNAPL is already largely immobile). Where LNAPL recovery is being performed, low or de minimis  $T_n$  is commonly used as a primary metric to demonstrate when LNAPL has been recovered to the maximum extent practicable.

## 2. Methodology

The testing was performed pursuant to the methodology contained in ASTM International (ASTM) Standard E2856-13 *Standard Guide for Estimation of LNAPL Transmissivity* (May 2013) using the baildown technique at a select well with recent static/equilibrium in-well LNAPL thickness of at least 0.5 feet. Well MW-7 was selected for transmissivity testing as it meets this minimum in-well LNAPL thickness requirement.

The LNAPL baildown test involved the rapid removal of LNAPL from each well using a peristaltic pump. Care was taken to minimize the removal or drawdown of groundwater during this effort. Following the removal of the LNAPL, each well was monitored for LNAPL recharge using an oil-water interface probe. The LNAPL monitoring continued until the observed in-well LNAPL recharge (or lack thereof) provided sufficient information to estimate  $T_n$ . The LNAPL transmissivity was then estimated based on the observed LNAPL recharge rates and/or LNAPL drawdown recovery (depending on the analytical solution selected) using the American Petroleum Institute (API) *LNAPL Transmissivity Workbook: Calculation of LNAPL Transmissivity from Baildown*.

This Technical Memorandum is provided as an interim output under our agreement with Chevron Grayburg 6-Inch Sec. 6 (Historical). It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.



**Test Data** (September 2012). The API workbook uses the field data from a baildown test to estimate LNAPL transmissivities using three different solutions for unconfined conditions: Bouwer & Rice; Cooper & Jacob; and Cooper-Bredehoeft-Papadopoulos. The detailed field methodology and data treatment techniques associated with LNAPL transmissivity estimations are detailed in ASTM E2856-13. Results were then compared against de minimis recoverability guideline values ( $T_n \leq 0.8 \text{ ft}^2/\text{day}$ ) that represent a limit to the practicability and/or benefit of LNAPL recovery recommended by the Interstate Technology & Regulatory Council (ITRC) in their Publication No. LNAPL-3 *LNAPL Site Management: LCSM Evolution, Decision Process, and Remedial Technologies* (2018).

### 3. Results

LNAPL baildown testing at MW-7 was conducted on May 21, 2024, and the resulting mean  $T_n$  estimate using the unconfined solution was  $0.05 \text{ ft}^2/\text{day}$ . Results for each of the solutions along with the mean result are shown in the table below. This mean result is an order of magnitude lower than the adopted a de minimis LNAPL recoverability criterion of  $T_n \leq 0.8 \text{ ft}^2/\text{day}$ . The relevant parts of API workbook input and output screens are provided as Attachment A.

| Location ID | Unconfined solution   |                         |                                             |                                                        |                                                 | Confined solution<br>( $\text{ft}^2/\text{day}$ ) |
|-------------|-----------------------|-------------------------|---------------------------------------------|--------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|
|             | Bower and Rice (1976) | Cooper and Jacob (1946) | Cooper, Beredehoeft and Papadopoulos (1967) | Mean LNAPL Transmissivity ( $\text{ft}^2/\text{day}$ ) | Standard Deviation ( $\text{ft}^2/\text{day}$ ) |                                                   |
| MW-7        | 0.04                  | 0.06                    | 0.06                                        | <b>0.05</b>                                            | 0.01                                            | —                                                 |

### 4. Discussion

The evaluation of  $T_n$  represents a science-based metric that can be used to assess the need for and potential benefit of LNAPL mass recovery efforts, and the  $T_n$  metric is often applied to determine a practical end-point to LNAPL mass recovery (i.e., de minimis LNAPL transmissivity equates to LNAPL recovered to the maximum extent practicable). Where  $T_n$  results are of comparable magnitude or less than the ITRC de minimis criterion discussed above, LNAPL can be assumed to predominantly exist at residual saturation levels that are effectively immobile and unrecoverable.

Results from MW-7 indicate that the magnitude of the recoverability of the LNAPL (or  $T_n$ ) is consistent with what ITRC recommends as a de minimis level. As such, these results support that the LNAPL remaining at the site is predominantly immobile residual and there would be no practical benefit expected from LNAPL recovery efforts.



**Matt Rousseau**  
Technical Director

MR/mss/1

Encl.: Attachment A – API Transmissivity



**Mailyng Aviles**  
Geochemist

This Technical Memorandum is provided as an interim output under our agreement with Chevron Grayburg 6-Inch Sec. 6 (Historical). It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

# **Attachment A**

## **API Transmissivity**

Date:

21-May-24

|                                   |       |                       |                                                             |
|-----------------------------------|-------|-----------------------|-------------------------------------------------------------|
| Ground Surface Elev (ft msl)      | 0.0   | Enter These Data      | <div>Drawdown Adjustment</div> <div>(ft)</div> <div>0</div> |
| Top of Casing Elev (ft msl)       | 0.0   |                       |                                                             |
| Well Casing Radius, $r_c$ (ft):   | 0.167 |                       |                                                             |
| Well Radius, $r_w$ (ft):          | 0.333 |                       |                                                             |
| LNAPL Specific Yield, $S_y$ :     | 0.175 |                       |                                                             |
| LNAPL Density Ratio, $\rho_r$ :   | 0.800 |                       |                                                             |
| Top of Screen (ft bgs):           | 106.0 |                       |                                                             |
| Bottom of Screen (ft bgs):        | 140.0 | Calculated Parameters |                                                             |
| LNAPL Baildown Vol. (gal.):       | 2.5   |                       |                                                             |
| Effective Radius, $r_{e3}$ (ft):  | 0.206 |                       |                                                             |
| Effective Radius, $r_{e2}$ (ft):  | 0.156 |                       |                                                             |
| Initial Casing LNAPL Vol. (gal.): | 2.20  |                       |                                                             |
| Initial Filter LNAPL Vol. (gal.): | 1.15  |                       |                                                             |

| Enter Data Here       |  |               |               |              |              |        | Water Table |               | LNAPL              |                                               | LNAPL               |                     |                     |       |              | DTP          |                  | DTW                 |        | LNAPL  |      | Ave.   |
|-----------------------|--|---------------|---------------|--------------|--------------|--------|-------------|---------------|--------------------|-----------------------------------------------|---------------------|---------------------|---------------------|-------|--------------|--------------|------------------|---------------------|--------|--------|------|--------|
| Time (min)            |  | DTP (ft btoc) | DTW (ft btoc) | DTP (ft bgs) | DTW (ft bgs) |        | Depth (ft)  | Drawdown (ft) | Average Time (min) | Discharge Q <sub>a</sub> (ft <sup>3</sup> /d) | S <sub>n</sub> (ft) | b <sub>n</sub> (ft) | r <sub>e</sub> (ft) |       | DTP (ft bgs) | DTW (ft bgs) | Volume (gallons) | r <sub>e</sub> (ft) |        |        |      |        |
| Initial Fluid Levels: |  |               |               |              |              | 0      | 124.26      | 127.62        | 124.26             | 127.62                                        | 124.93              | S <sub>n</sub> (ft) | 3.36                |       |              |              |                  |                     |        |        |      |        |
| Enter Test Data:      |  |               |               |              |              | 0.0    | 124.94      | 124.96        | 124.94             | 124.96                                        | 124.94              | 0.68                |                     | 0.02  |              |              |                  | 0.0                 | 0.206  |        |      |        |
|                       |  |               |               |              |              | 1.0    | 124.84      | 124.90        | 124.84             | 124.90                                        | 124.85              | 0.58                |                     | 0.06  | 0.206        | 124.89       | 124.93           | 0.04                | 0      |        |      |        |
|                       |  |               |               |              |              | 2.0    | 124.78      | 124.86        | 124.78             | 124.86                                        | 124.80              | 0.52                |                     | 1.5   | 3.838        | 0.55         | 0.08             | 0.206               | 124.81 | 124.88 | 0.06 | 0.205  |
|                       |  |               |               |              |              | 3.0    | 124.77      | 124.85        | 124.77             | 124.85                                        | 124.79              | 0.51                |                     | 2.5   | 0.000        | 0.51         | 0.08             | 0.206               | 124.78 | 124.86 | 0.06 | 0.411  |
|                       |  |               |               |              |              | 4.0    | 124.75      | 124.84        | 124.75             | 124.84                                        | 124.77              | 0.49                |                     | 3.5   | 1.919        | 0.50         | 0.09             | 0.206               | 124.76 | 124.85 | 0.07 | 0.617  |
|                       |  |               |               |              |              | 5.0    | 124.75      | 124.84        | 124.75             | 124.84                                        | 124.77              | 0.49                |                     | 4.5   | 0.000        | 0.49         | 0.09             | 0.206               | 124.75 | 124.84 | 0.07 | 0.823  |
|                       |  |               |               |              |              | 6.0    | 124.75      | 124.85        | 124.75             | 124.85                                        | 124.77              | 0.49                |                     | 5.5   | 1.919        | 0.49         | 0.10             | 0.206               | 124.75 | 124.85 | 0.08 | 1.029  |
|                       |  |               |               |              |              | 7.0    | 124.74      | 124.85        | 124.74             | 124.85                                        | 124.76              | 0.48                |                     | 6.5   | 1.919        | 0.48         | 0.11             | 0.206               | 124.75 | 124.85 | 0.09 | 1.235  |
|                       |  |               |               |              |              | 8.0    | 124.74      | 124.85        | 124.74             | 124.85                                        | 124.76              | 0.48                |                     | 7.5   | 0.000        | 0.48         | 0.11             | 0.206               | 124.74 | 124.85 | 0.09 | 1.441  |
|                       |  |               |               |              |              | 9.0    | 124.74      | 124.85        | 124.74             | 124.85                                        | 124.76              | 0.48                |                     | 8.5   | 0.000        | 0.48         | 0.11             | 0.206               | 124.74 | 124.85 | 0.09 | 1.647  |
|                       |  |               |               |              |              | 14.0   | 124.73      | 124.85        | 124.73             | 124.85                                        | 124.75              | 0.47                |                     | 11.5  | 0.384        | 0.47         | 0.12             | 0.206               | 124.74 | 124.85 | 0.10 | 2.264  |
|                       |  |               |               |              |              | 19.0   | 124.73      | 124.85        | 124.73             | 124.85                                        | 124.75              | 0.47                |                     | 16.5  | 0.000        | 0.47         | 0.12             | 0.206               | 124.73 | 124.85 | 0.10 | 3.294  |
|                       |  |               |               |              |              | 24.0   | 124.73      | 124.85        | 124.73             | 124.85                                        | 124.75              | 0.47                |                     | 21.5  | 0.000        | 0.47         | 0.12             | 0.206               | 124.73 | 124.85 | 0.10 | 4.324  |
|                       |  |               |               |              |              | 29.0   | 124.72      | 124.84        | 124.72             | 124.84                                        | 124.74              | 0.46                |                     | 26.5  | 0.000        | 0.46         | 0.12             | 0.206               | 124.73 | 124.85 | 0.10 | 5.354  |
|                       |  |               |               |              |              | 34.0   | 124.72      | 124.84        | 124.72             | 124.84                                        | 124.74              | 0.46                |                     | 31.5  | 0.000        | 0.46         | 0.12             | 0.206               | 124.72 | 124.84 | 0.10 | 6.383  |
|                       |  |               |               |              |              | 39.0   | 124.72      | 124.85        | 124.72             | 124.85                                        | 124.75              | 0.46                |                     | 36.5  | 0.384        | 0.46         | 0.13             | 0.206               | 124.72 | 124.85 | 0.11 | 7.413  |
|                       |  |               |               |              |              | 54.0   | 124.71      | 124.84        | 124.71             | 124.84                                        | 124.74              | 0.45                |                     | 46.5  | 0.000        | 0.45         | 0.13             | 0.206               | 124.72 | 124.85 | 0.11 | 9.473  |
|                       |  |               |               |              |              | 59.0   | 124.84      | 124.84        | 124.71             | 124.84                                        | 124.74              | 0.45                |                     | 56.5  | 0.000        | 0.45         | 0.13             | 0.206               | 124.71 | 124.84 | 0.11 | 11.532 |
|                       |  |               |               |              |              | 64.0   | 124.7       | 124.84        | 124.70             | 124.84                                        | 124.73              | 0.44                |                     | 61.5  | 0.384        | 0.44         | 0.14             | 0.206               | 124.71 | 124.84 | 0.12 | 12.562 |
|                       |  |               |               |              |              | 74.0   | 124.7       | 124.84        | 124.70             | 124.84                                        | 124.73              | 0.44                |                     | 69.0  | 0.000        | 0.44         | 0.14             | 0.206               | 124.70 | 124.84 | 0.12 | 14.106 |
|                       |  |               |               |              |              | 134.0  | 124.68      | 124.84        | 124.68             | 124.84                                        | 124.71              | 0.42                |                     | 104.0 | 0.064        | 0.43         | 0.16             | 0.206               | 124.69 | 124.84 | 0.14 | 21.314 |
|                       |  |               |               |              |              | 194.0  | 124.66      | 124.82        | 124.66             | 124.82                                        | 124.69              | 0.40                |                     | 164.0 | 0.000        | 0.41         | 0.16             | 0.206               | 124.67 | 124.83 | 0.14 | 33.671 |
|                       |  |               |               |              |              | 254.0  | 124.64      | 124.80        | 124.64             | 124.80                                        | 124.67              | 0.38                |                     | 224.0 | 0.000        | 0.39         | 0.16             | 0.206               | 124.65 | 124.81 | 0.14 | 46.028 |
|                       |  |               |               |              |              | 344.00 | 124.62      | 124.78        | 124.62             | 124.78                                        | 124.65              | 0.36                |                     | 299.0 | 0.000        | 0.37         | 0.16             | 0.206               | 124.63 | 124.79 | 0.14 | 61.474 |
|                       |  |               |               |              |              | 374.00 | 124.6       | 124.77        | 124.60             | 124.77                                        | 124.63              | 0.34                |                     | 359.0 | 0.064        | 0.35         | 0.17             | 0.206               | 124.61 | 124.78 | 0.15 | 73.831 |
|                       |  |               |               |              |              | 464.00 | 124.6       | 124.78        | 124.60             | 124.78                                        | 124.64              | 0.34                |                     | 419.0 | 0.021        | 0.34         | 0.18             | 0.206               | 124.60 | 124.78 | 0.16 | 86.188 |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          | #N/A               | #N/A                                          | #N/A                | #N/A                | #N/A                | 0.0   | #N/A         | #N/A         | #N/A             | 0.000               | #N/A   | #N/A   | #N/A | 0.000  |
|                       |  |               |               |              |              | #N/A   | #N/A        | #N/A          |                    |                                               |                     |                     |                     |       |              |              |                  |                     |        |        |      |        |

0.089

Figure 1

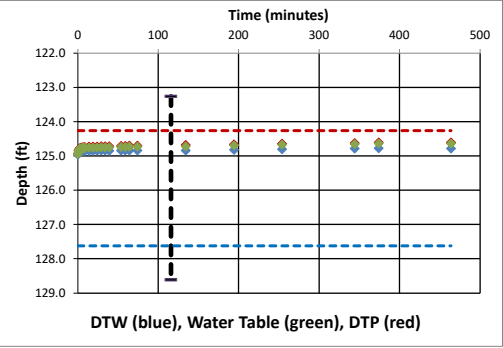
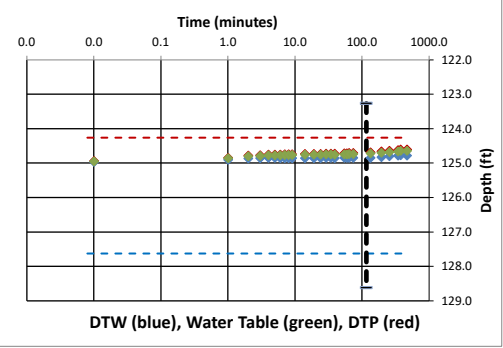


Figure 2



|       |        |       |
|-------|--------|-------|
| 0.0   | 124.26 |       |
| 464   | 124.26 |       |
| 0.0   | 127.62 |       |
| 464   | 127.62 |       |
| 116.0 | 123.26 | 123.3 |
| 116.0 | 128.6  | 128.6 |

Figure 3

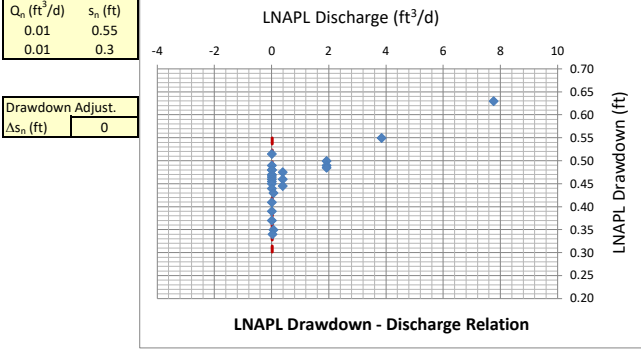


Figure 4

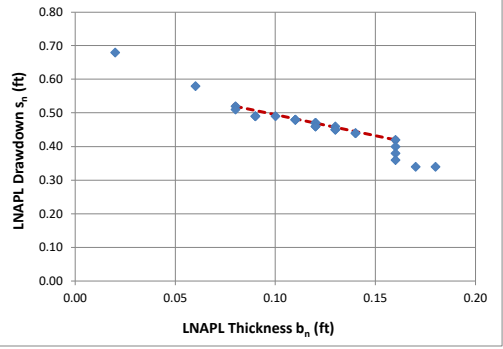


Figure 5

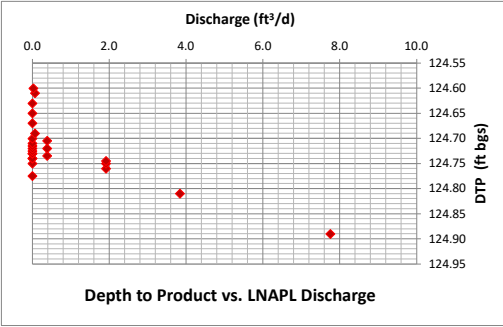


Figure 6

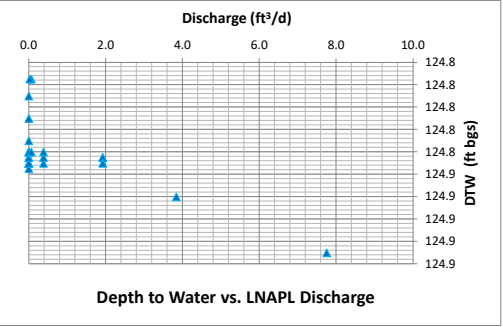


Figure 7

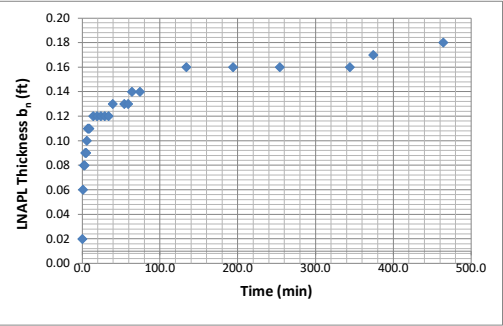


Figure 8

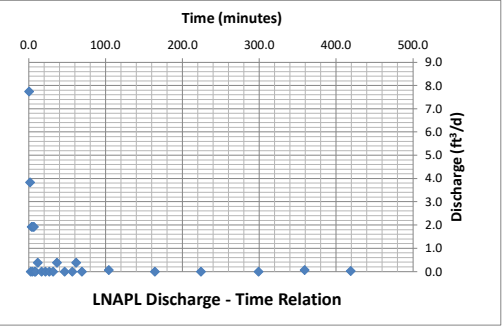


Figure 9

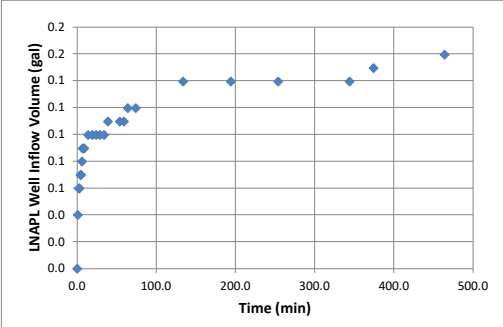
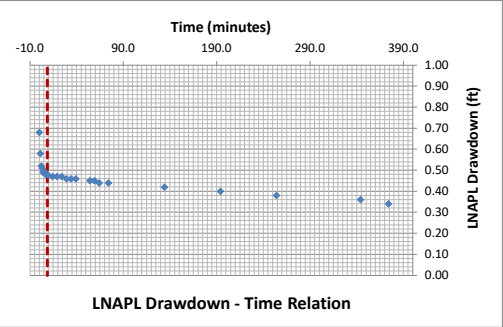


Figure 10



Generalized Bouwer and Rice (1976)

|                   |           |
|-------------------|-----------|
| Well Designation: | MW-7      |
| Date:             | 21-May-24 |

$$T_n = \frac{r_e^2 \ln(R/r_e) \ln(s_n(t_1)/s_n(t))}{2(-J)(t-t_1)}$$

Enter early time cut-off for least-squares model fit

Time<sub>cut</sub>

8.5

<- Enter or change value here

Model Results:

T<sub>n</sub> (ft<sup>2</sup>/d) =

0.04

+/-

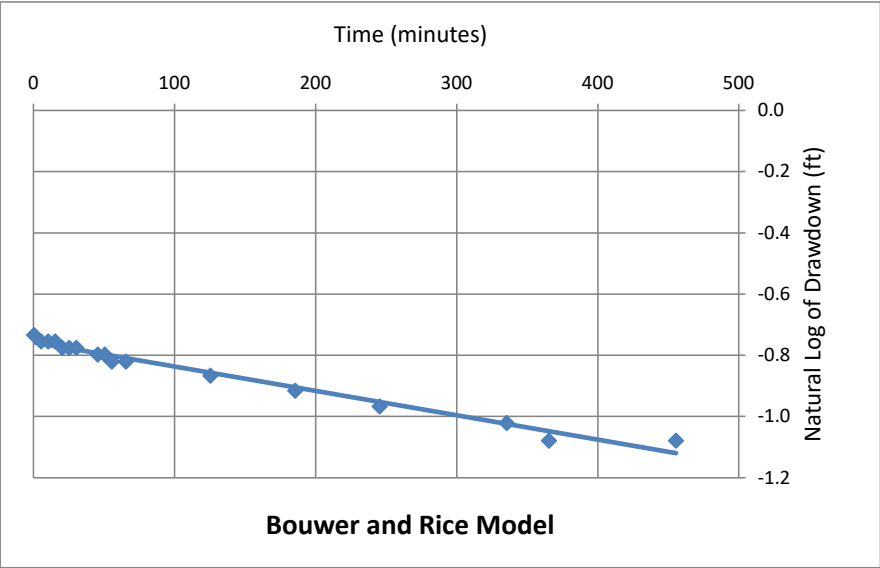
0.00

ft<sup>2</sup>/d

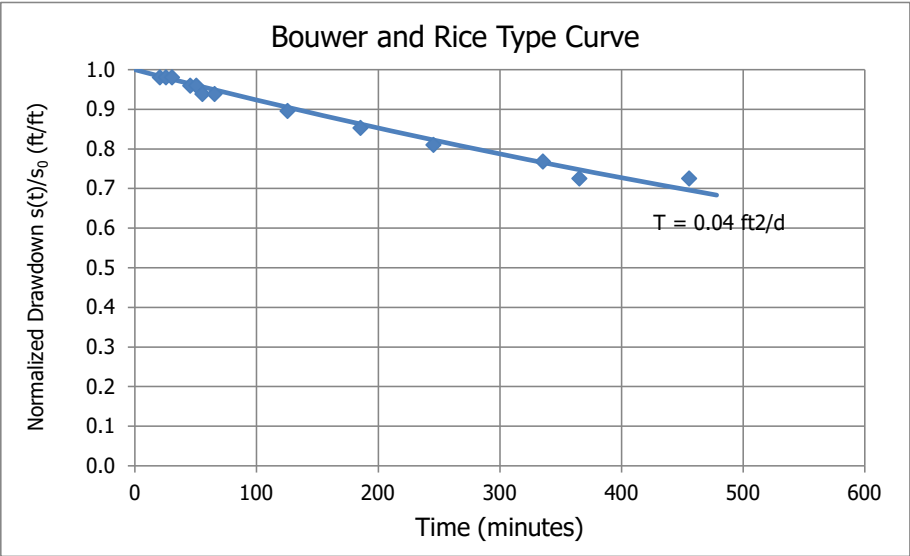
|                                |
|--------------------------------|
| L <sub>e</sub> /r <sub>e</sub> |
| 16.3                           |
| C                              |
| 1.44                           |
| R/r <sub>e</sub>               |
| 7.95                           |

|         |
|---------|
| J-Ratio |
| -1.250  |

|                    |
|--------------------|
| Coef. Of Variation |
| 0.04               |



C coefficient calculated from Eq. 6.5(c) of Butler, The Design, Performance, and Analysis of Slug Tests, CRC Press, 2000.



Cooper and Jacob (1946)

|                   |           |
|-------------------|-----------|
| Well Designation: | MW-7      |
| Date:             | 21-May-24 |

$$V_n(t_i) = \sum_j^i \frac{4\pi T_n s_j}{\ln\left(\frac{2.25 T_n t_j}{r_e^2 S_n}\right)} \Delta t_j$$

Enter early time cut-off for least-squares model fit

Time<sub>cut</sub> (min):

8.5

<- Enter or change values here

Time Adjustment (min):

5

Trial S<sub>n</sub>:

d

<-- Enter d for default or enter S<sub>n</sub> value

Root-Mean-Square Error:

0.025

<-- Minimize this using "Solver"

0.003

<-- Working S<sub>n</sub>

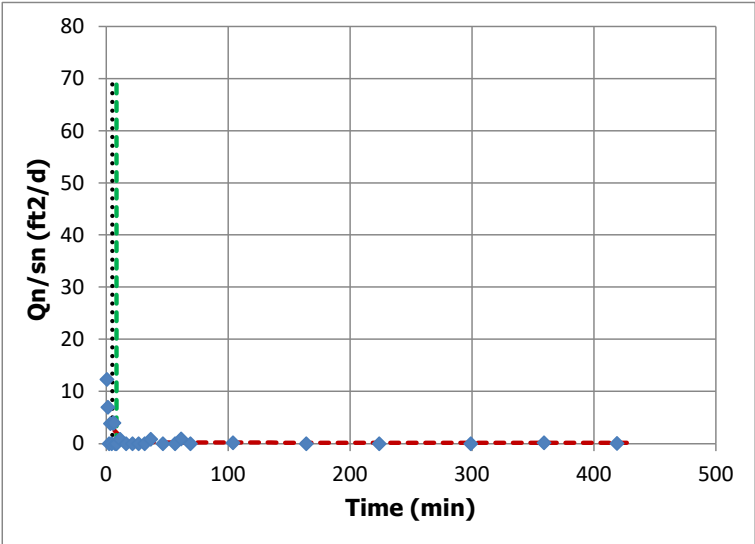
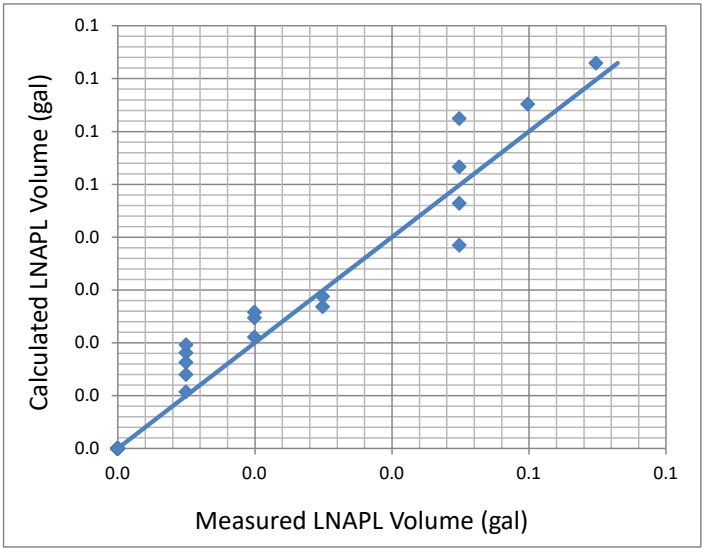
Trial T<sub>n</sub> (ft<sup>2</sup>/d):

0.017

<-- By changing T<sub>n</sub> through "Solver"

Add constraint T<sub>n</sub> > 0.00001

Model Result: T<sub>n</sub> (ft<sup>2</sup>/d) = 0.060





Cooper, Bredehoeft and Papadopoulos (1967)

|                   |           |
|-------------------|-----------|
| Well Designation: | MW-7      |
| Date:             | 21-May-24 |

Enter early time cut-off for least-squares model fit

|                                       |      |                                |
|---------------------------------------|------|--------------------------------|
| Time <sub>cut</sub> (min):            | 8.5  | <- Enter or change values here |
| Initial Drawdown s <sub>n</sub> (ft): | 0.48 |                                |

|                        |   |                         |
|------------------------|---|-------------------------|
| Trial S <sub>n</sub> : | d | <-- Enter d for default |
|------------------------|---|-------------------------|

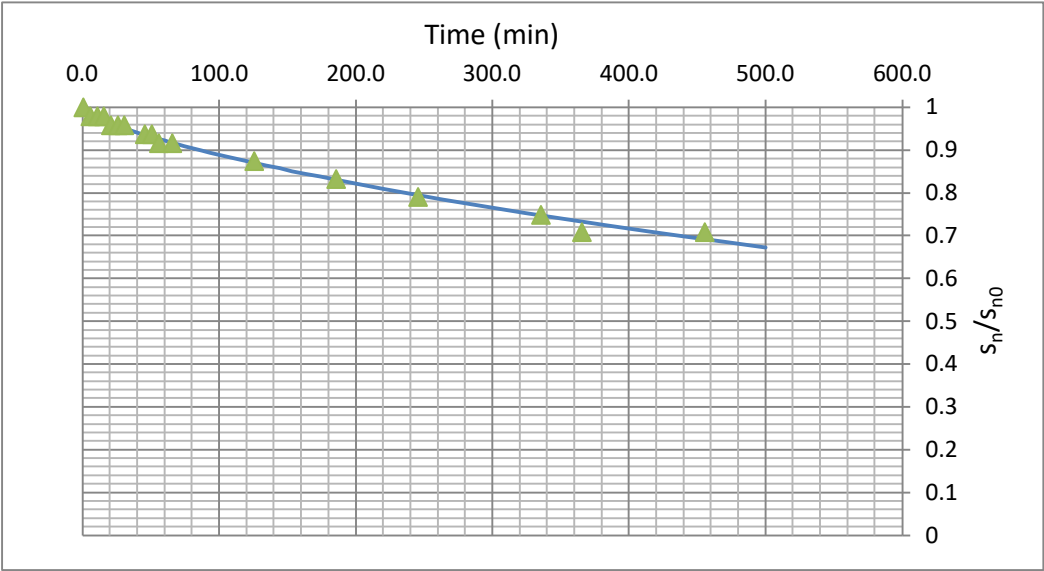
|                         |       |                                  |
|-------------------------|-------|----------------------------------|
| Root-Mean-Square Error: | 0.036 | <-- Minimize this using "Solver" |
|-------------------------|-------|----------------------------------|

|                                            |       |                                                 |
|--------------------------------------------|-------|-------------------------------------------------|
| Trial T <sub>n</sub> (ft <sup>2</sup> /d): | 0.046 | <-- By changing T <sub>n</sub> through "Solver" |
|                                            | 0.005 | <-- Working S <sub>n</sub>                      |

Add constraint Tn > 0.00001

|                      |                                       |      |
|----------------------|---------------------------------------|------|
| <b>Model Result:</b> | T <sub>n</sub> (ft <sup>2</sup> /d) = | 0.06 |
|----------------------|---------------------------------------|------|

|                  |     |
|------------------|-----|
| T <sub>min</sub> | 1   |
| T <sub>max</sub> | 500 |



|         |        |
|---------|--------|
| J-Ratio | -1.250 |
|---------|--------|

# Appendix D

## LNAPL Transmissivity Memorandum (November 2024)

# Technical Memorandum – DRAFT

December 18, 2024

|                     |                                                    |                    |                           |
|---------------------|----------------------------------------------------|--------------------|---------------------------|
| <b>To</b>           | Adrianna Copeland                                  | <b>Contact No.</b> | 713.731.6634              |
| <b>Copy to</b>      | [Enter text]                                       | <b>Email</b>       | adrianna.copeland@ghd.com |
| <b>From</b>         | Joann Dyson                                        | <b>Project No.</b> | 12604539                  |
| <b>Project Name</b> | Chevron Grayburg 6-Inch Sec. 6 (Historical)        |                    |                           |
| <b>Subject</b>      | LNAPL Transmissivity Testing Chevron Grayburg Site |                    |                           |

## 1. Introduction

This memorandum presents the results of an evaluation of light non-aqueous phase liquid (LNAPL) transmissivity ( $T_n$ ) at the subject site. The evaluation of LNAPL  $T_n$  provides a standardized science-based way to quantify the potential mobility and recoverability of LNAPL at a given site. Results can be compared against widely accepted de minimis criteria to assess whether LNAPL may be considered to be sufficiently mobile such that hydraulic recovery may be feasible and/or provide some technical benefit in terms of mitigating migration potential via a tangible reduction in the amount of LNAPL in the pore space (i.e., reduction in 'LNAPL saturation' levels). Where  $T_n$  is found to be of de minimis magnitude, LNAPL is considered to be largely present at residual levels and hydraulically immobile/unrecoverable. Where this is the case, LNAPL mass recovery efforts will not provide a meaningful reduction in LNAPL saturation and, therefore, will provide no technical benefit (since the LNAPL is already largely immobile). Where LNAPL recovery is being performed or considered, low or de minimis  $T_n$  is commonly used as a primary metric to demonstrate when LNAPL has been recovered to the maximum extent practicable.

## 2. Methodology

The testing was performed pursuant to the methodology contained in ASTM International (ASTM) Standard E2856-13 *Standard Guide for Estimation of LNAPL Transmissivity* (May 2013) using the baildown technique at a select well with recent static/equilibrium in-well LNAPL thickness of at least 0.5 feet. Well MW-7 was selected for transmissivity testing as it meets this minimum in-well LNAPL thickness requirement.

The LNAPL baildown test involved the rapid removal of LNAPL from the test well using a bailer. Care was taken to minimize the removal or drawdown of groundwater during this effort. Following the removal of the LNAPL, the well was monitored for LNAPL recharge using an oil-water interface probe. The LNAPL monitoring continued until the observed in-well LNAPL recharge provided sufficient information to estimate  $T_n$ . The LNAPL transmissivity was then estimated based on the observed LNAPL recharge rates and/or LNAPL drawdown

This Technical Memorandum is provided as an interim output under our agreement with Chevron. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

recovery (depending on the analytical solution selected) using the American Petroleum Institute (API) *LNAPL Transmissivity Workbook: Calculation of LNAPL Transmissivity from Baildown Test Data* (September 2012). The API workbook uses the field data from a baildown test to estimate LNAPL transmissivities using three different solutions for unconfined conditions: Bouwer & Rice; Cooper & Jacob; and Cooper-Bredehoeft-Papadopoulos. The detailed field methodology and data treatment techniques associated with LNAPL transmissivity estimations are detailed in ASTM E2856-13. Results were then compared against de minimis recoverability guideline values ( $T_n \leq 0.8 \text{ ft}^2/\text{day}$ ) that represent a limit to the practicability and/or benefit of LNAPL recovery recommended by the Interstate Technology & Regulatory Council (ITRC) in their Publication No. LNAPL-3 *LNAPL Site Management: LCSM Evolution, Decision Process, and Remedial Technologies* (2018).

### 3. Results

LNAPL baildown testing at MW-7 was conducted on November 19, 2024, and the resulting mean  $T_n$  estimate using the unconfined solution was  $0.02 \text{ ft}^2/\text{day}$ . Results for each of the solutions along with the mean result are shown in the table below. This mean result is an order of magnitude lower than the adopted de minimis LNAPL recoverability criterion of  $T_n \leq 0.8 \text{ ft}^2/\text{day}$ . The relevant parts of the API workbook input and output screens are provided as Attachment 1.

These results confirm results from the May 2024 LNAPL transmissivity test for well MW-7, which are also included in the table below.

| Location ID | Date     | Unconfined solutions ( $\text{ft}^2/\text{day}$ ) |                         |                                            |                           |                    | Confined solution ( $\text{ft}^2/\text{day}$ ) |
|-------------|----------|---------------------------------------------------|-------------------------|--------------------------------------------|---------------------------|--------------------|------------------------------------------------|
|             |          | Bower and Rice (1976)                             | Cooper and Jacob (1946) | Cooper, Bredehoeft and Papadopoulos (1967) | Mean LNAPL Transmissivity | Standard Deviation |                                                |
| MW-7        | May 2024 | 0.04                                              | 0.06                    | 0.06                                       | <b>0.05</b>               | 0.01               | —                                              |
| MW-7        | Nov 2024 | 0.02                                              | 0.03                    | 0.02                                       | <b>0.02</b>               | 0.00               | —                                              |

### 4. Discussion

The evaluation of  $T_n$  represents a science-based metric that can be used to assess the need for and potential benefit of LNAPL mass recovery efforts, and the  $T_n$  metric is considered best practice to determine when a practical end-point to LNAPL mass recovery has been reached (i.e., de minimis LNAPL transmissivity equates to LNAPL recovered to the maximum extent practicable). Where  $T_n$  results are of comparable magnitude or less than the ITRC de minimis criterion discussed above, LNAPL can be assumed to predominantly exist at residual saturation levels that are effectively immobile and unrecoverable.

Results from MW-7 indicate that the magnitude of the recoverability of the LNAPL (or  $T_n$ ) is consistent with what ITRC recommends as a de minimis level. As such, these results support that the LNAPL remaining at the site is predominantly immobile residual and the magnitude of LNAPL recoverability is already less than what would be considered a practical endpoint to LNAPL recovery (i.e., recovery to the maximum extent practical).

# Attachments

This Technical Memorandum is provided as an interim output under our agreement with Chevron. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.

# Attachment 1

## MW-7 API Workbook



This Technical Memorandum is provided as an interim output under our agreement with Chevron. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way.



Figure 1

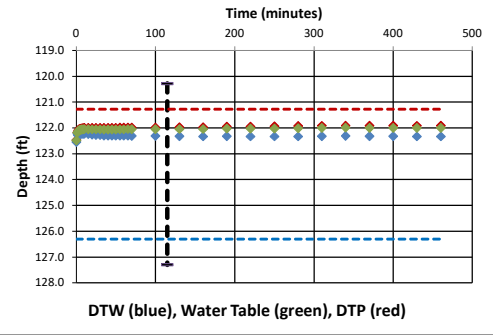


Figure 2

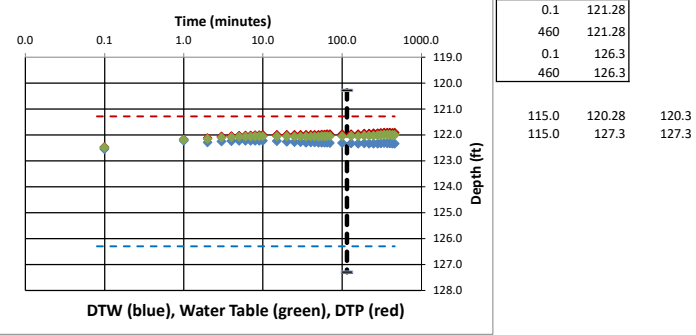


Figure 3

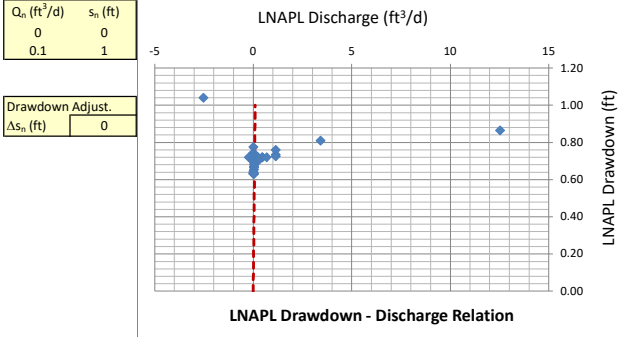


Figure 4

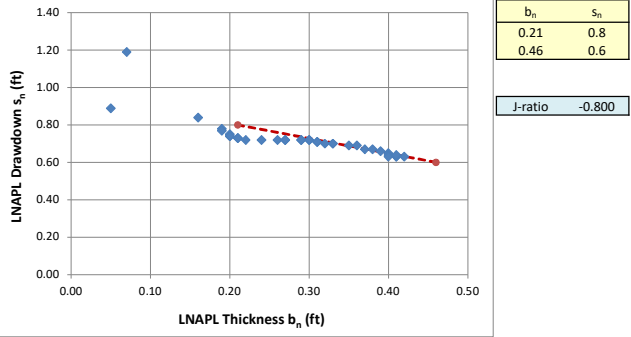


Figure 5

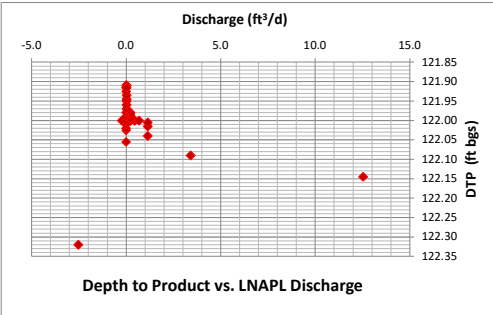


Figure 6

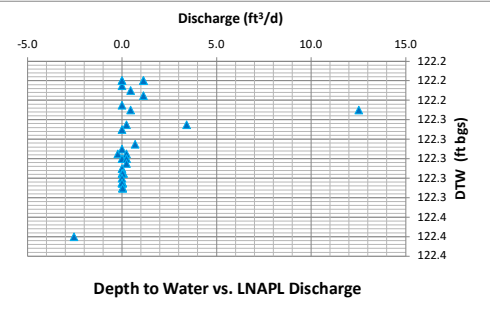


Figure 7

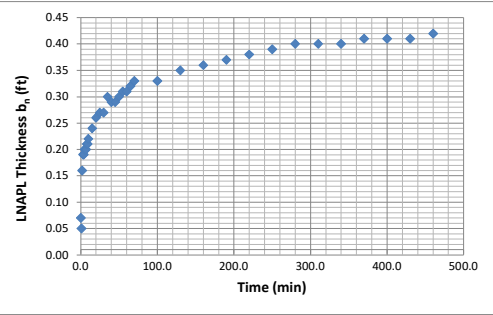


Figure 8

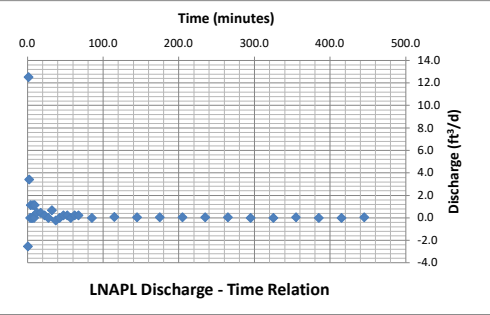


Figure 9

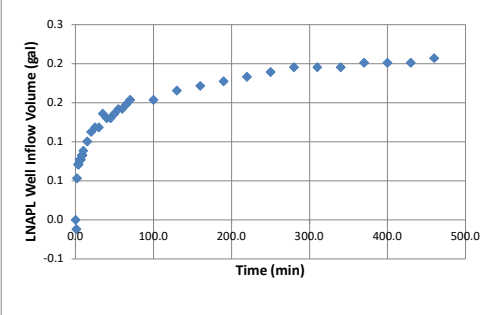
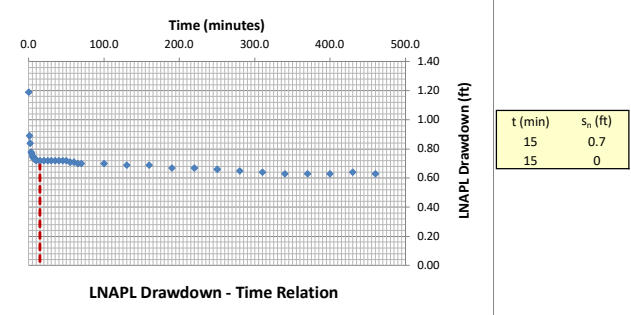


Figure 10



Generalized Bouwer and Rice (1976)

|                   |           |
|-------------------|-----------|
| Well Designation: | MW-7      |
| Date:             | 19-Nov-24 |

$$T_n = \frac{r_e^2 \ln(R/r_e) \ln(s_n(t_1)/s_n(t))}{2(-J)(t-t_1)}$$

Enter early time cut-off for least-squares model fit

Time<sub>cut</sub>

15

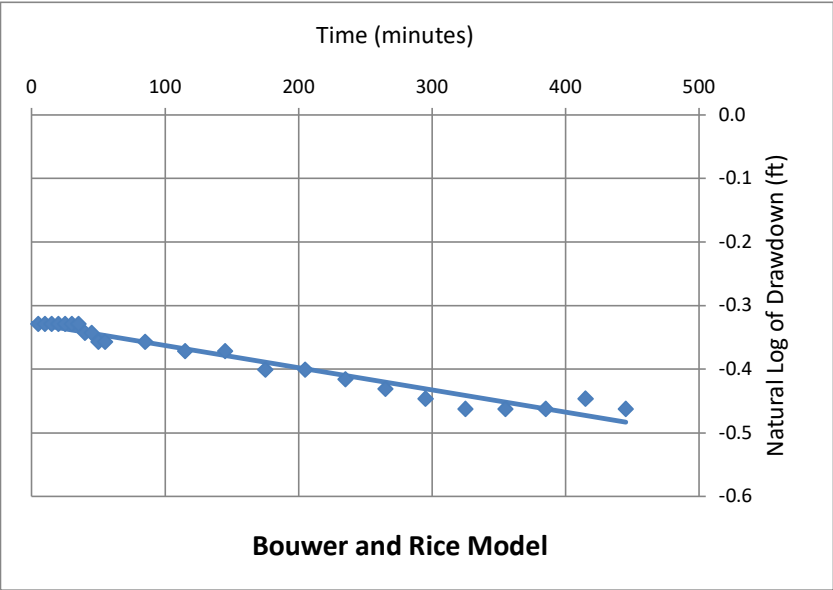
<- Enter or change value here

Model Results:  $T_n$  (ft<sup>2</sup>/d) = 0.02 +/- 0.00 ft<sup>2</sup>/d

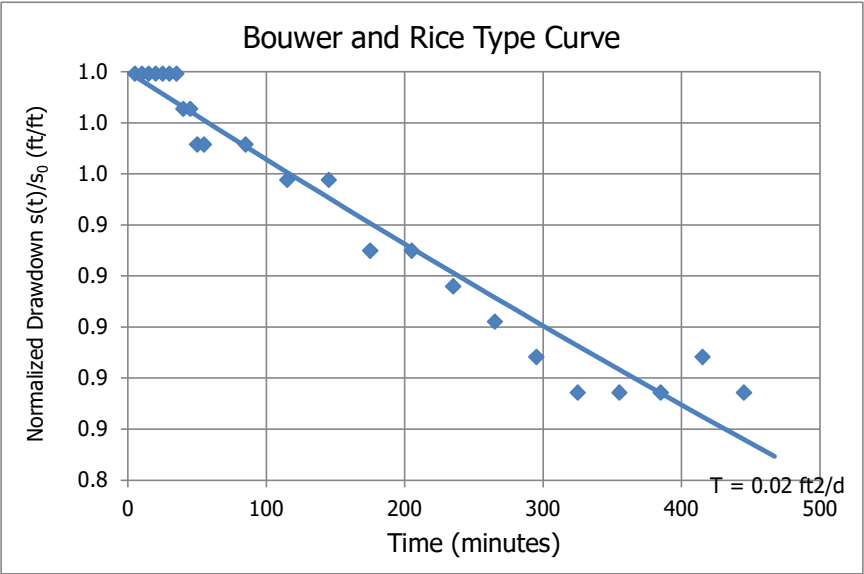
|           |
|-----------|
| $L_e/r_e$ |
| 31.6      |
| C         |
| 2.06      |
| $R/r_e$   |
| 13.57     |

|         |
|---------|
| J-Ratio |
| -0.800  |

|                    |
|--------------------|
| Coef. Of Variation |
| 0.05               |



C coefficient calculated from Eq. 6.5(c) of Butler, The Design, Performance, and Analysis of Slug Tests, CRC Press, 2000.



Cooper and Jacob (1946)

|                   |           |
|-------------------|-----------|
| Well Designation: | MW-7      |
| Date:             | 19-Nov-24 |

$$V_n(t_i) = \sum_j^i \frac{4\pi T_n S_j}{\ln\left(\frac{2.25 T_n t_j}{r_e^2 S_n}\right)} \Delta t_j$$

Enter early time cut-off for least-squares model fit

|                            |    |
|----------------------------|----|
| Time <sub>cut</sub> (min): | 15 |
| Time Adjustment (min):     | 10 |

<- Enter or change values here

Trial S<sub>n</sub>:

d

<- Enter d for default or enter S<sub>n</sub> value

Root-Mean-Square Error:

0.066  
0.004

<- Minimize this using "Solver"

<- Working S<sub>n</sub>

Trial T<sub>n</sub> (ft<sup>2</sup>/d):

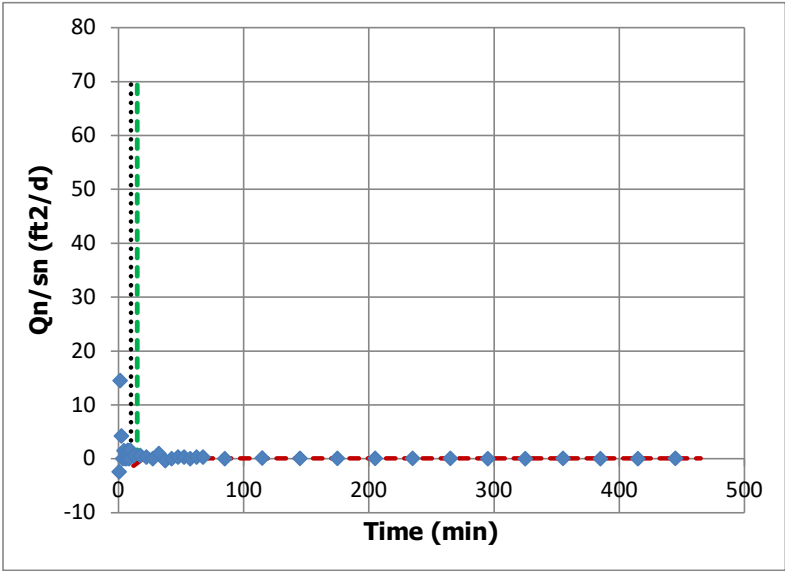
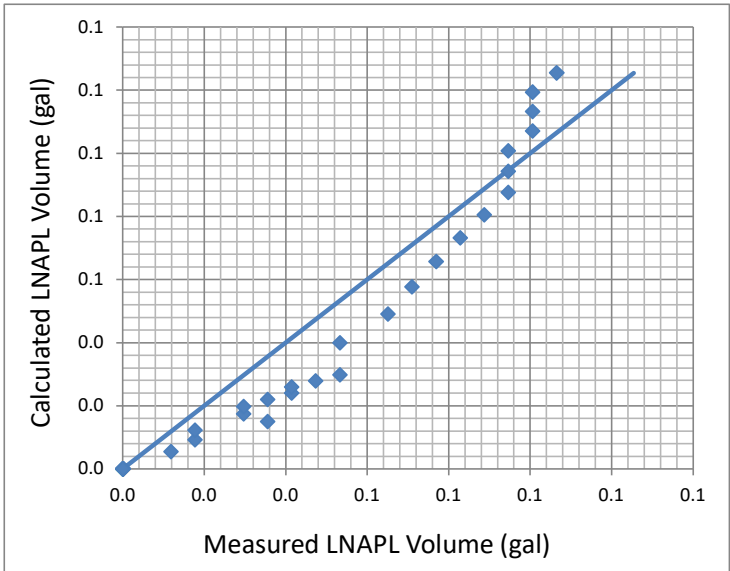
0.025

<- By changing T<sub>n</sub> through "Solver"

Add constraint T<sub>n</sub> > 0.00001

Model Result:

T<sub>n</sub> (ft<sup>2</sup>/d) = 0.025



Height  
70

Cooper, Bredehoeft and Papadopoulos (1967)

|                   |           |
|-------------------|-----------|
| Well Designation: | MW-7      |
| Date:             | 19-Nov-24 |

Enter early time cut-off for least-squares model fit

|                                       |      |                                |
|---------------------------------------|------|--------------------------------|
| Time <sub>cut</sub> (min):            | 15   | <- Enter or change values here |
| Initial Drawdown s <sub>n</sub> (ft): | 0.73 |                                |

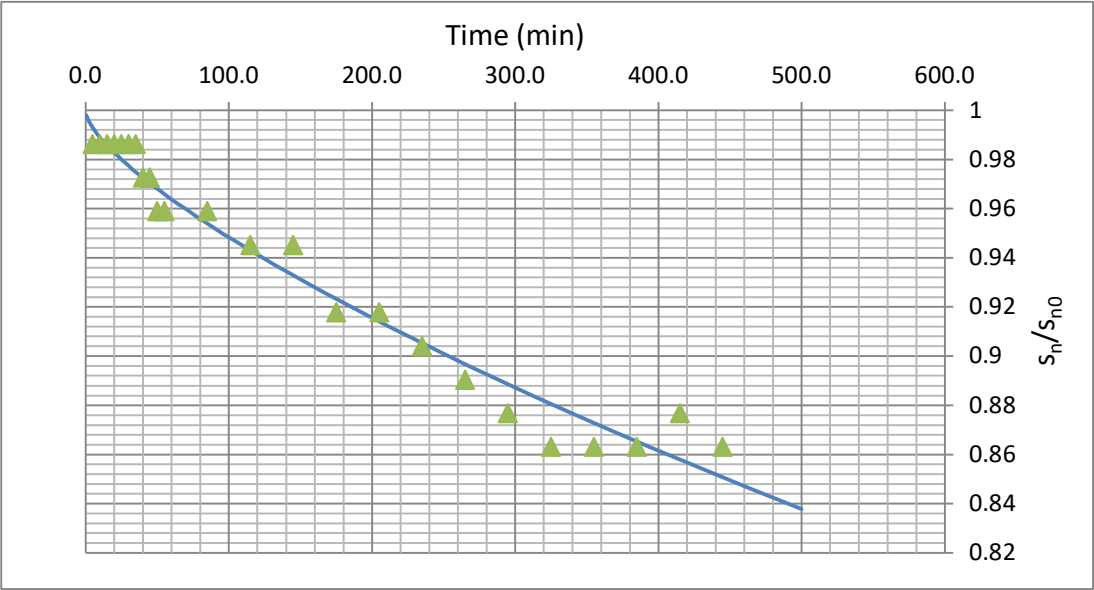
Trial S<sub>n</sub>: d <-- Enter d for default

Root-Mean-Square Error: 0.042 <-- Minimize this using "Solver"

Trial T<sub>n</sub> (ft<sup>2</sup>/d): 0.017 <-- By changing T<sub>n</sub> through "Solver"

0.003 <-- Working S<sub>n</sub> Add constraint Tn > 0.00001

|                      |                                       |      |                  |     |
|----------------------|---------------------------------------|------|------------------|-----|
| <b>Model Result:</b> | T <sub>n</sub> (ft <sup>2</sup> /d) = | 0.02 | T <sub>min</sub> | 0.2 |
|                      |                                       |      | T <sub>max</sub> | 500 |



|         |
|---------|
| J-Ratio |
| -0.800  |



# Appendix E

## LNAPL Stability Memorandum

# Technical Memorandum

December 20, 2024

|                     |                                                          |                    |                              |
|---------------------|----------------------------------------------------------|--------------------|------------------------------|
| <b>To</b>           | Karolanne Hudgens                                        | <b>Contact No.</b> | (575) 200-5517               |
| <b>Copy to</b>      | J.T. Murrey, Adrianna Copeland                           | <b>Email</b>       | Karolanne.Hudgens@plains.com |
| <b>From</b>         | Matt Rousseau                                            | <b>Project No.</b> | 12604539                     |
| <b>Project Name</b> | PAA-CAR-PERM-Chevron Grayburg 6-Inch Sec. 6 (Historical) |                    |                              |
| <b>Subject</b>      | Stability of Remaining Contaminants                      |                    |                              |

## 1. Introduction

Petroleum hydrocarbon contamination remains at the subject site in the form of both light non-aqueous phase liquid (LNAPL) and associated dissolved phase impacts. This memorandum is part of GHD's ongoing evaluation of the mobility and stability of the remaining contaminants in order to inform a more sustainable risk-based approach to site remedial/management strategy.

### 1.1 Purpose of this Memorandum

This memorandum provides an evaluation of the stability of LNAPL and associated dissolved plumes remaining at the site. The evaluation relies on multiple line of evidence including LNAPL transmissivity test results that quantify the mobility of the remaining LNAPL and statistical trend analysis (Mann-Kendall test) of the historical groundwater analytical results to provide a holistic assessment of contaminant stability.

### 1.2 Scope and limitations

*This technical memorandum has been prepared by GHD for Plains. It is not prepared as, and is not represented to be, a deliverable suitable for reliance by any person for any purpose. It is not intended for circulation or incorporation into other documents. The matters discussed in this memorandum are limited to those specifically detailed in the memorandum and are subject to any limitations or assumptions specially set out.*

#### Accessibility of documents

*If this Technical Memorandum is required to be accessible in any other format this can be provided by GHD upon request and at an additional cost if necessary.*

## 2. Dissolved Plume

A step-wise approach was taken to the assessment of plume stability as follows:

1. **Evaluation of dissolved petroleum hydrocarbon constituents that have consistently been detected:** these include benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX). While

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numerous other parameters have been analyzed for historically, they have either never or only sporadically been detected.

2. **Selection of wells for trend analysis:** Wells selected for trend analysis were those that have historically and consistently exhibited dissolved BTEX concentrations exceeding the relevant regulatory criteria. These include MW-1, MW-2, MW-3, MW-10, MW-11, and MW-12. The historical data sets for all site wells were plotted and included as Attachment A.
3. **Assessment of the potential effect of water table elevation on groundwater analytical results:** It is common at petroleum release sites that there is some correlation between the concentrations of dissolved petroleum hydrocarbon constituents detected and the elevation of the water table. To assess this on a site-specific level, the historical groundwater analytical data sets for each well were plotted along with the corresponding water table elevations over time (Attachment B). As illustrated in the plots in Attachment B, there is an apparent correlation between a progressively declining water table elevation over time and declining dissolved petroleum hydrocarbon constituents detected in groundwater. However, given that the timeframes involved in this analysis are on the order of 10+ years, the readily biodegradable dissolved petroleum hydrocarbons would be expected to significantly decline regardless of what the water table is doing. It is therefore likely that this apparent correlation is not causal and that significant declines in dissolved petroleum hydrocarbons observed at the site are due to natural attenuation (as opposed to a function of water table elevation). This is supported by the fact that we now understand that natural attenuation will be active to some extent at all petroleum releases sites and typically result in significant depletion of both LNAPL and dissolved phase contamination over time.
4. **Mann-Kendall trend analysis:** The Mann-Kendall statistical test was run for the wells highlighted above for each of the BTEX constituents individually for a total of 24 tests. The results are provided in Attachment C and indicate that all trend analyses arrive at one of the following conclusions with respect to individual dissolved constituents at each well evaluated:
  - a. **Declining trend:** this indicates a statistically significant declining trend with a high confidence level.
  - b. **No trend:** this indicates a stable trend that is not increasing or decreasing.
  - c. **>50 non-detect results:** in this case there was not enough actual detections to perform a statistically significant trend analysis.

Therefore, all results indicate a stable or decreasing trend in the dissolved plumes. It is also notable that many of the wells, regardless of trends, have exhibited largely low or non-detect results for years. A site plan showing the trends spatially is provided as Attachment D.

### 3. LNAPL

There are different lines of evidence indicating that the LNAPL is also stable:

1. **Age of the LNAPL:** GHD understands that the LNAPL has been in the ground for many years. Where this is the case, LNAPL will overwhelmingly be found to have lost its ability to migrate or expand into areas that are not already contaminated. The force that drives LNAPL migration is the head/pressure of the release, and this will dissipate relatively quickly following the cessation of a release. This natural dissipation of the LNAPL head, coupled with natural attenuation processes, serve to stabilize LNAPL footprints on timescales of week to years and it is generally accepted that LNAPL that has been in the ground for many years will typically already be stable.
2. **Dissolved plume stability:** The dissolved plume stability also provides a line of evidence that the same is true of the remaining LNAPL source material since the dissolved plume can only be stable spatially if the same is true of the parent LNAPL.

3. **LNAPL transmissivity test results:** LNAPL transmissivity test results to date indicate that the mobility and recoverability of the remaining LNAPL is very low. Relatively recent results over different seasons demonstrate that the magnitude of LNAPL transmissivity is an order of magnitude lower than commonly accepted de minimis levels/guideline values. This indicates that the recoverability of the remaining LNAPL is less than what is considered a practical end-point to LNAPL recovery and/or a demonstration that LNAPL has been recovered to the maximum extent practicable. As such, this provides a line of evidence that the LNAPL will be stable as a whole.

## 4. Conclusion

This evaluation has therefore demonstrated that the remaining contaminants at the site are stable and naturally attenuating based on the following lines of evidence:

- Age of the LNAPL
- LNAPL transmissivity results
- Statistical analysis of groundwater plume data

Regards

**Matthew Rousseau, B.A.Sc., M.A.Sc., P.Eng**  
Senior Technical Director (NAPL sites)

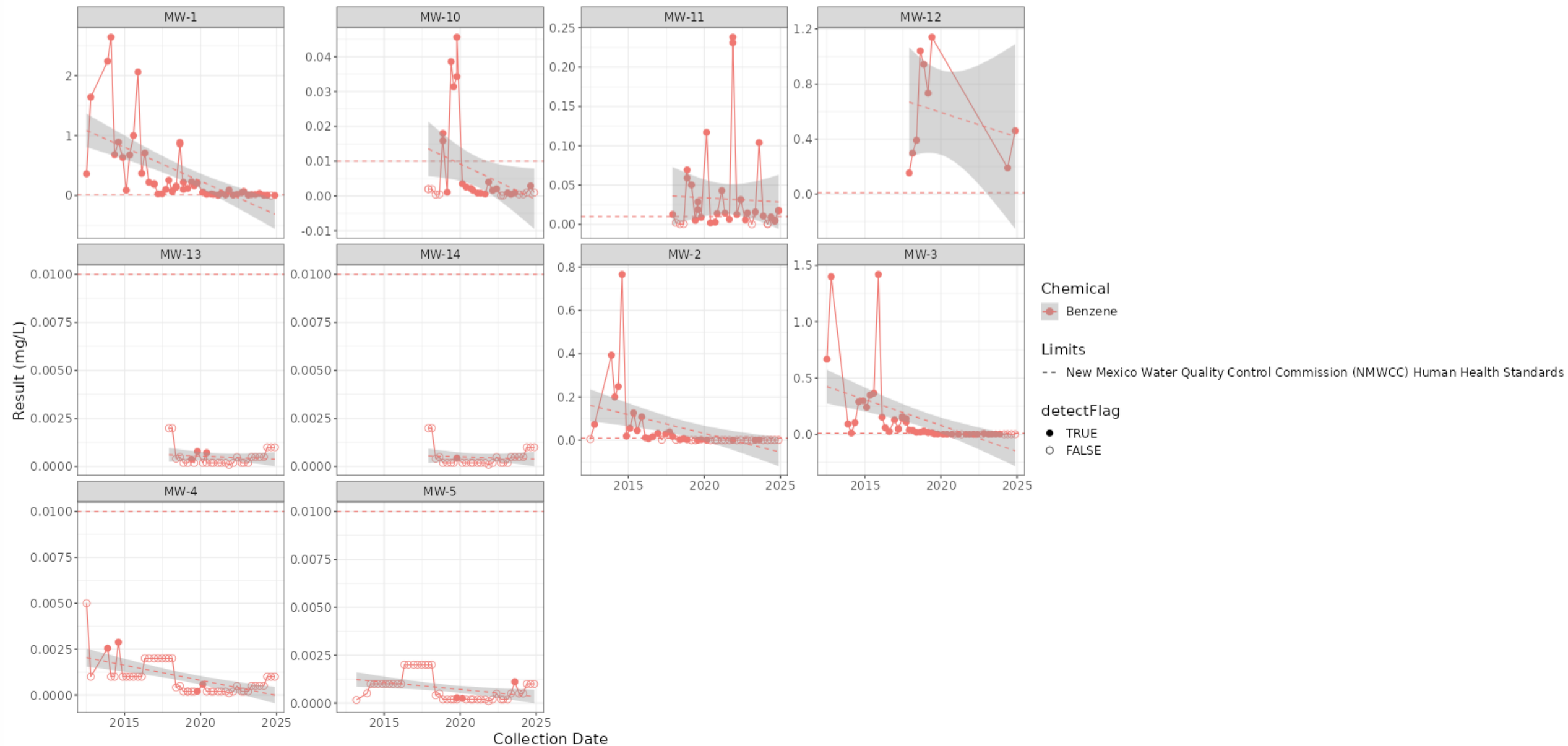
Encl: Attachment A - BTEX Time Series  
Attachment B - BTEX Trend Reports  
Attachment C - M-K Trends  
Attachment D - M-K Site Plan

# Attachments

# **Attachment A**

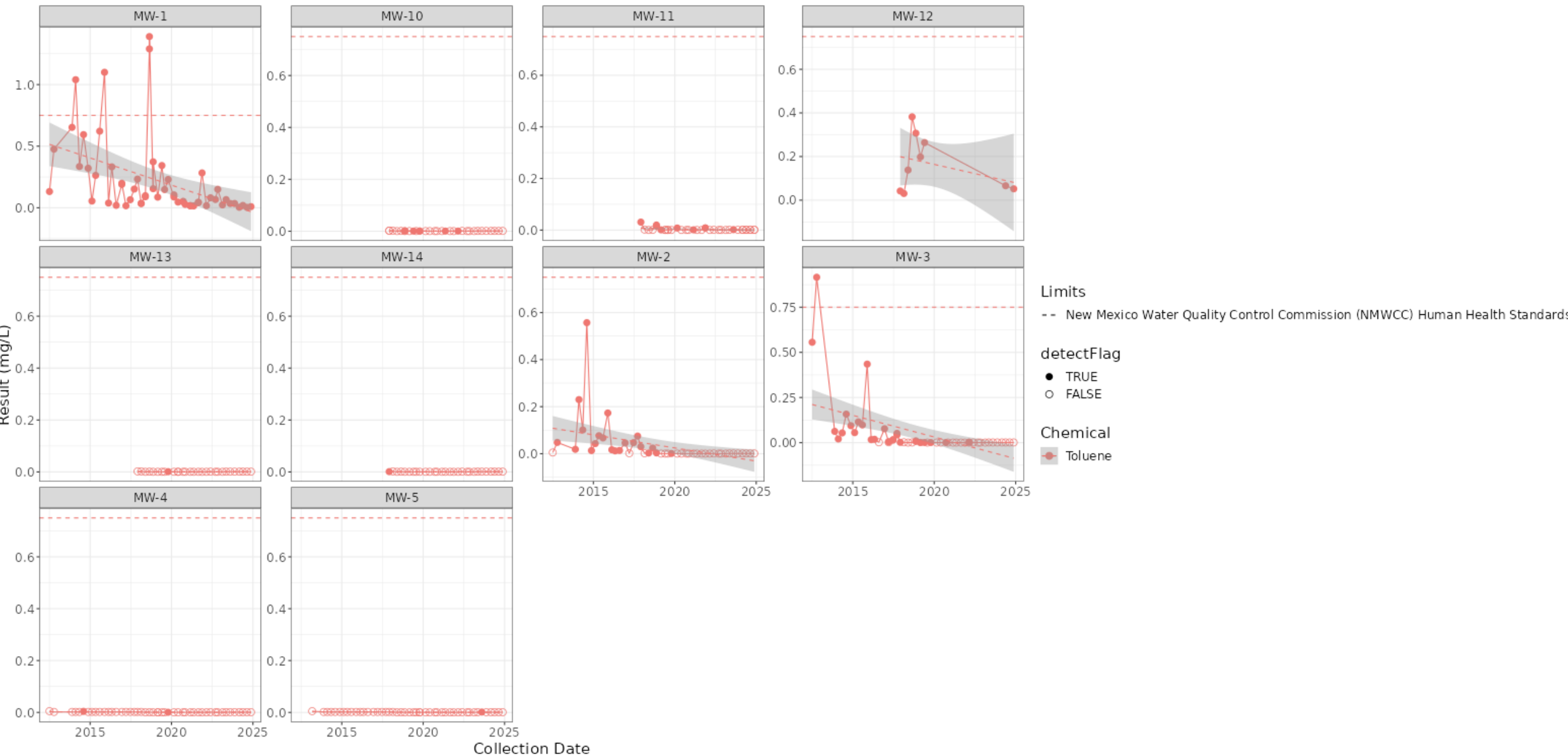
## **BTEX Time Series**

Time Series by Test and Location

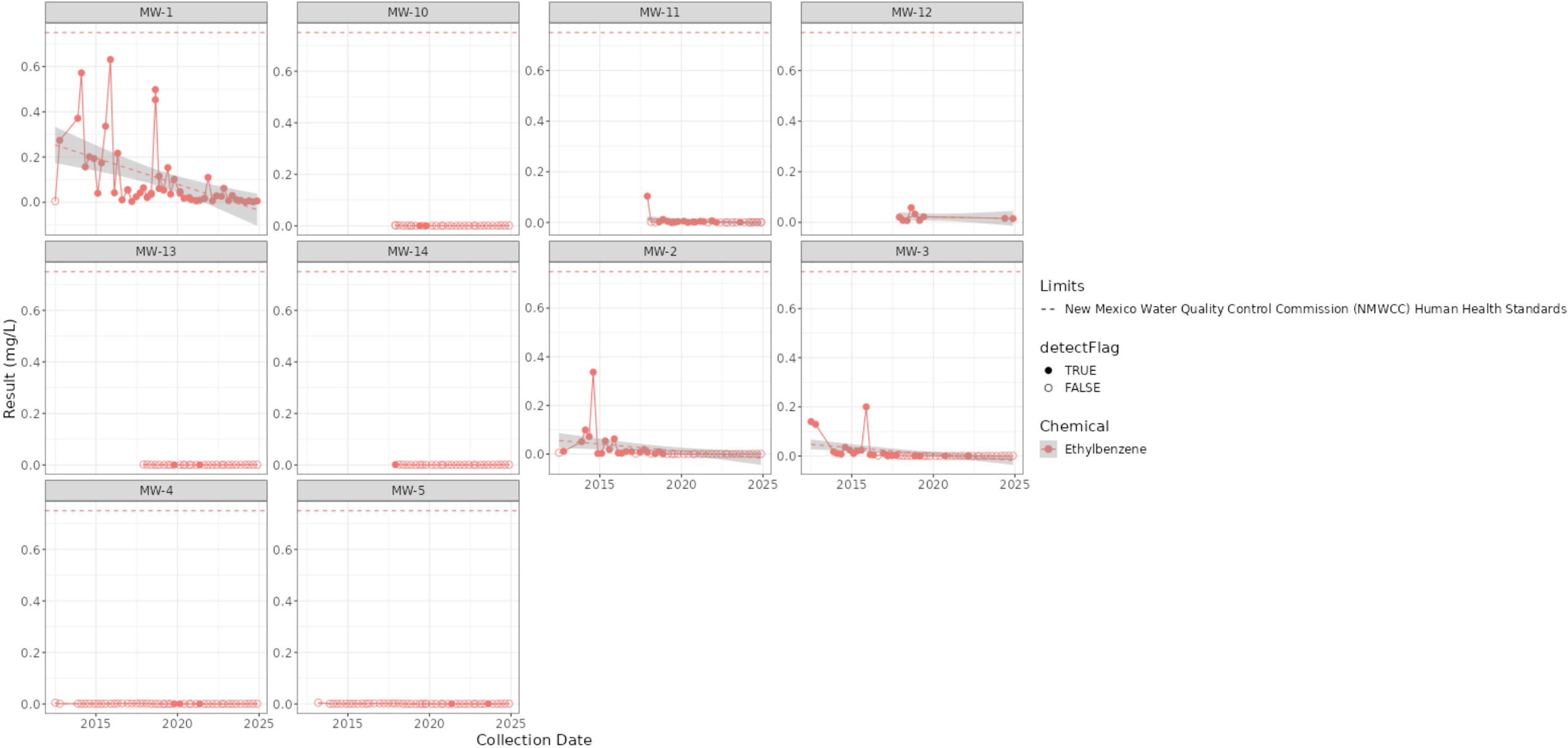




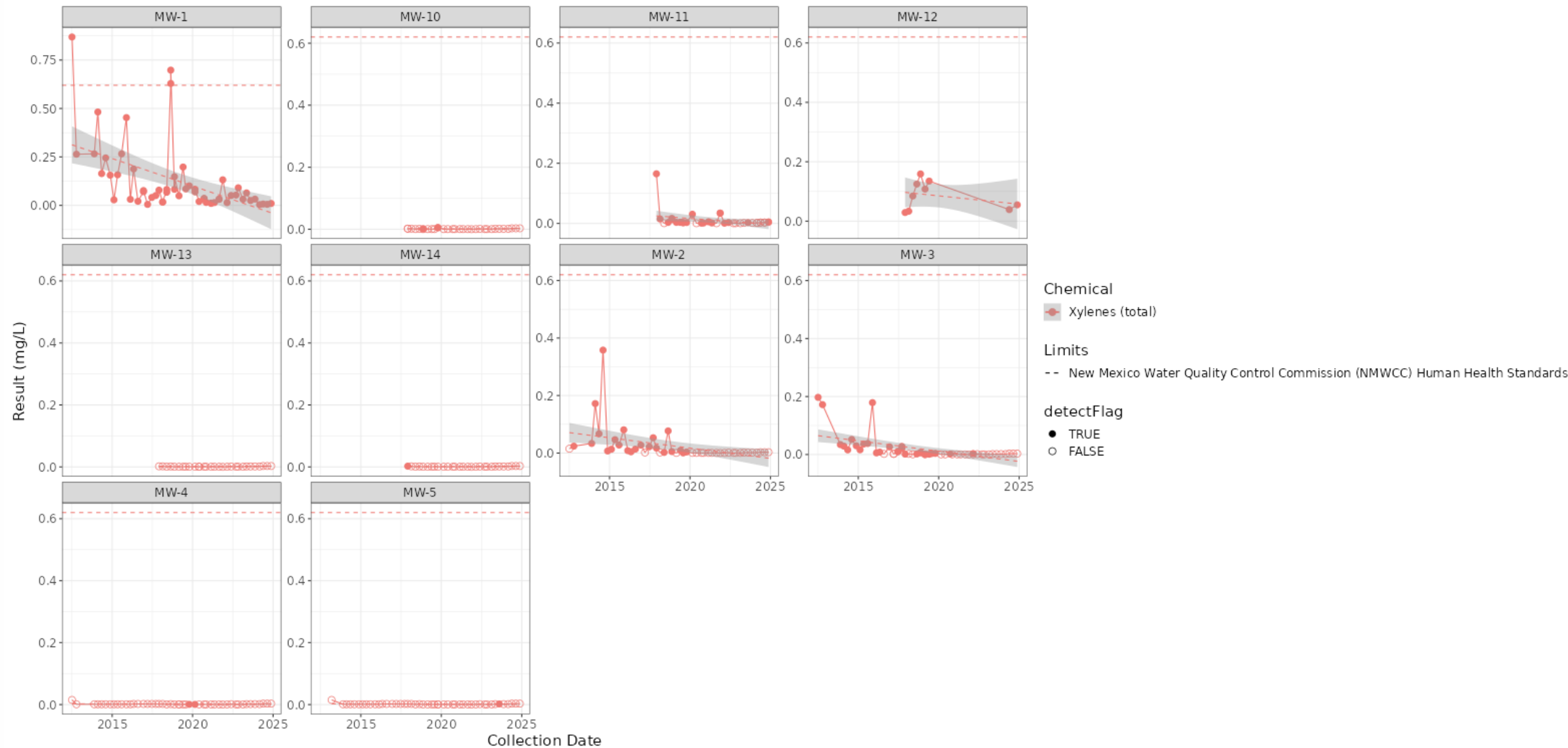
Time Series by Test and Location



Time Series by Test and Location

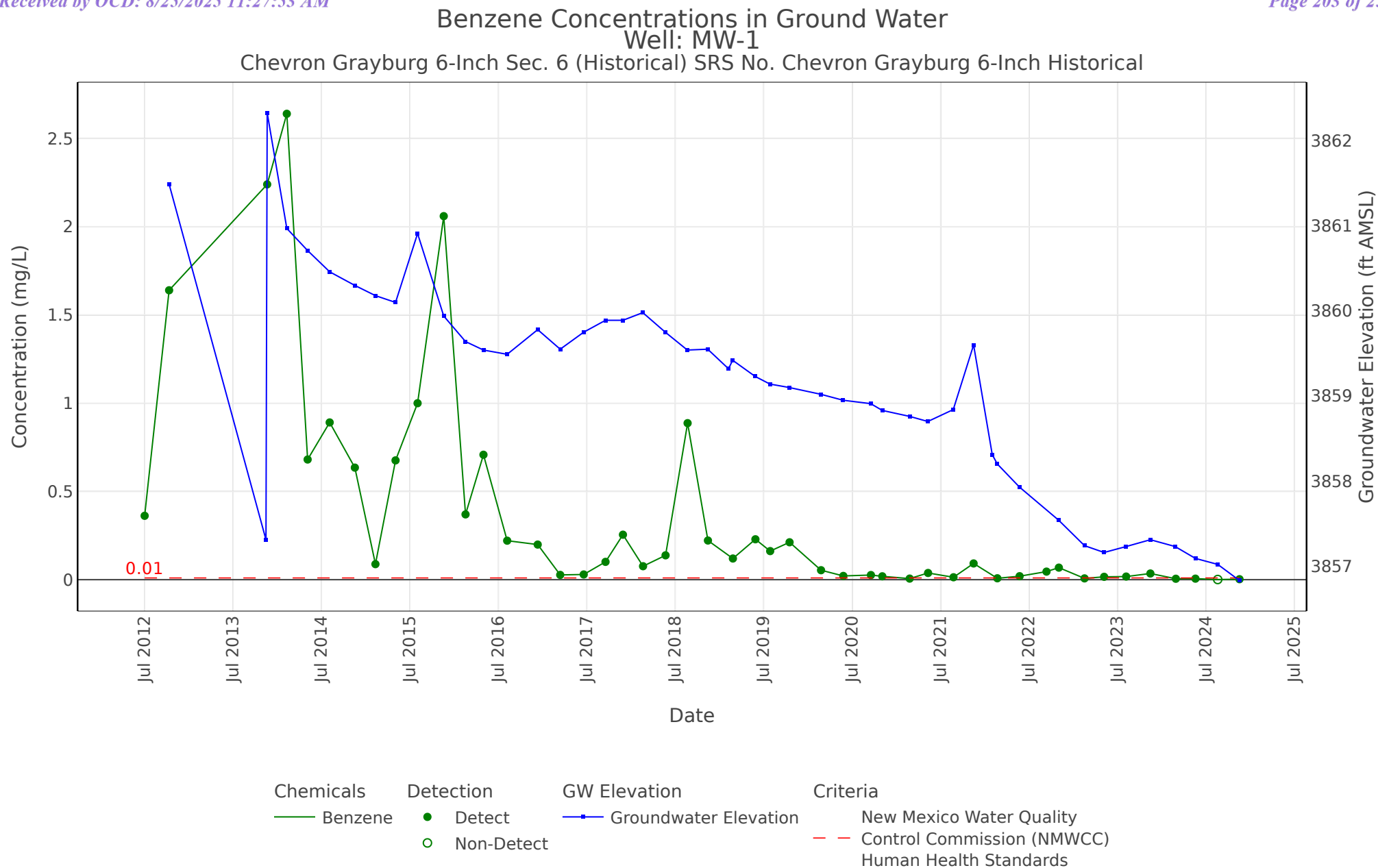


Time Series by Test and Location

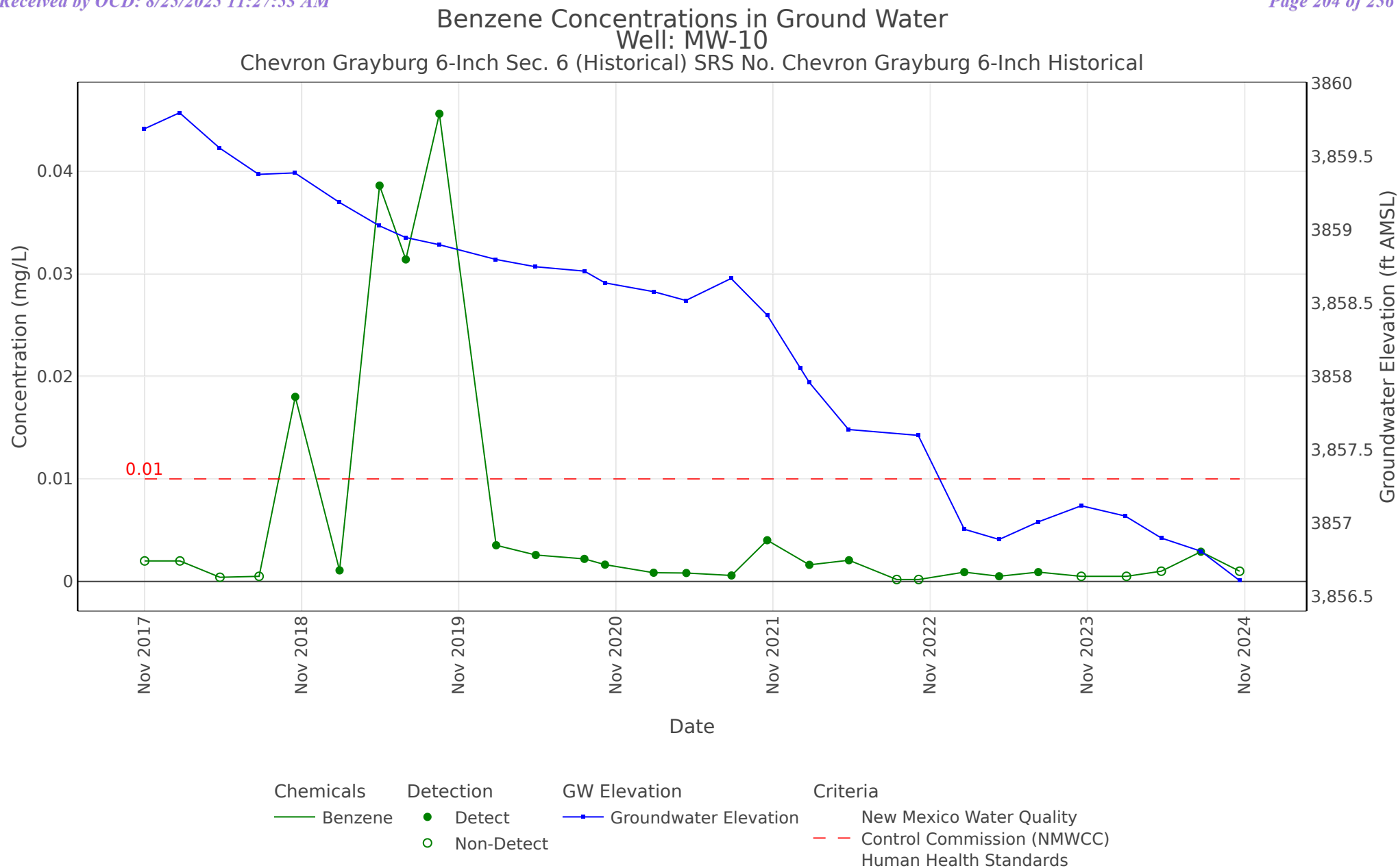


# **Attachment B**

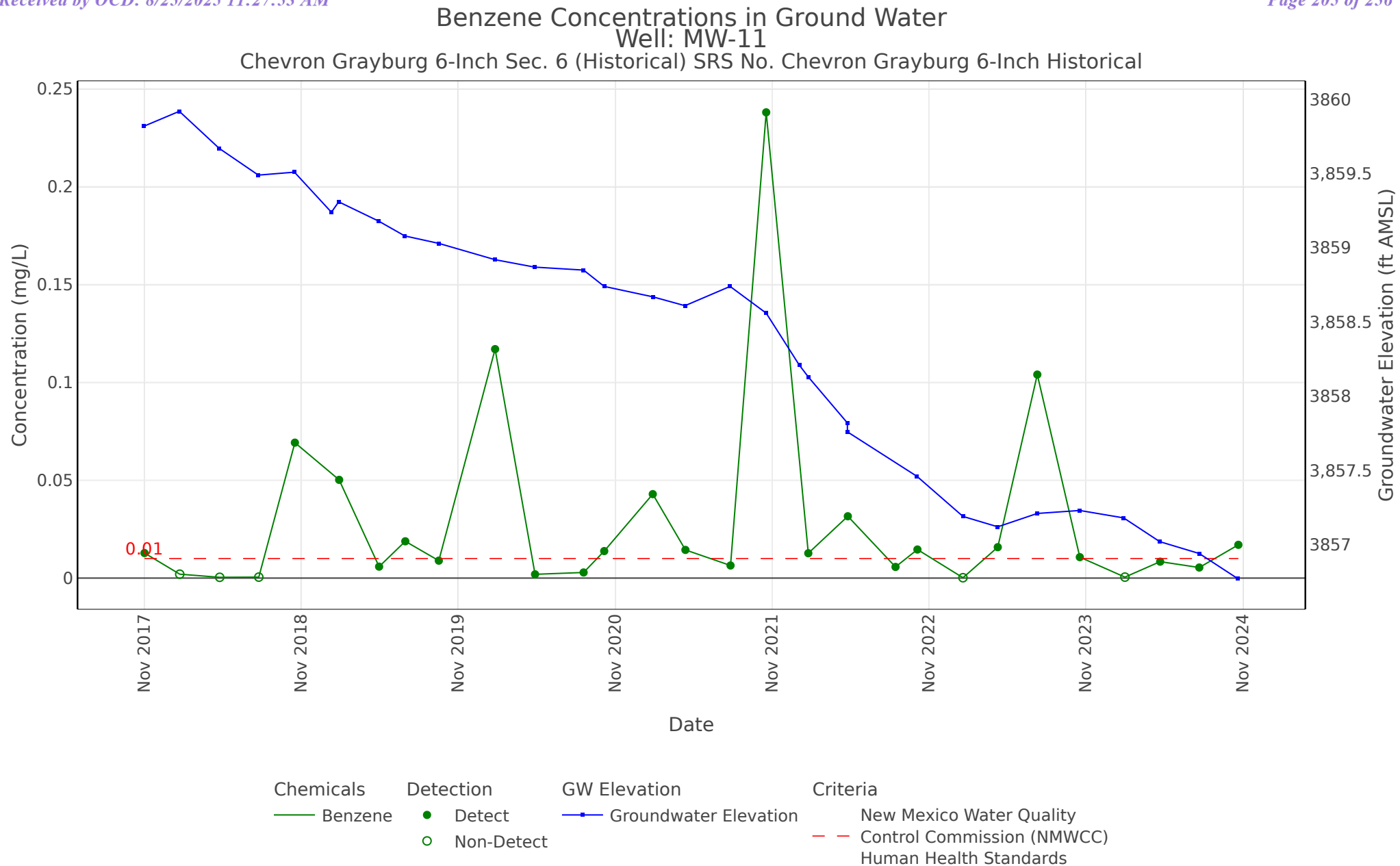
## **BTEX Trend Reports**



Note: Non-Detects are plotted as is the associated detection limit

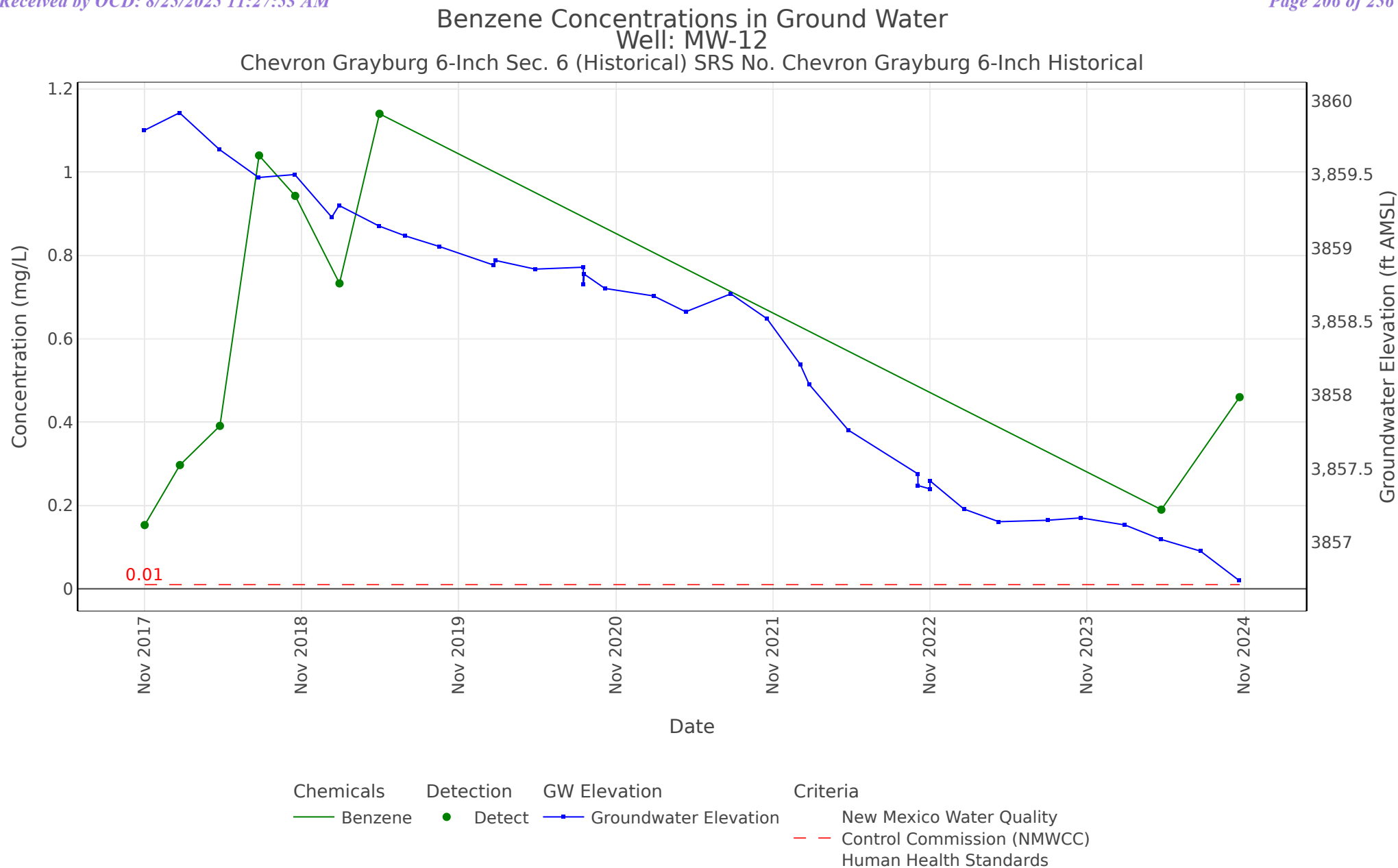


Note: Non-Detects are plotted as is the associated detection limit

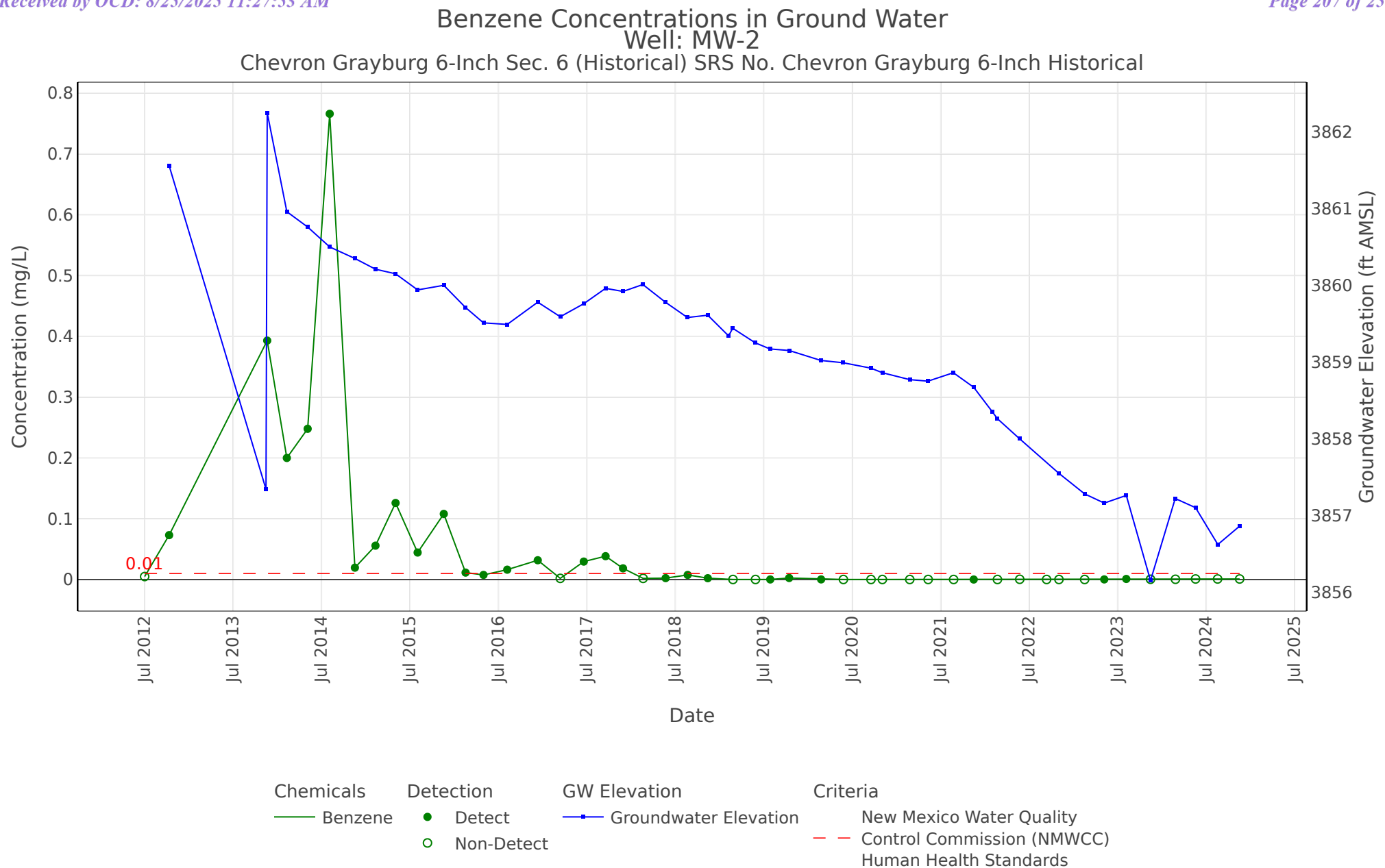


Note: Non-Detects are plotted as is the associated detection limit

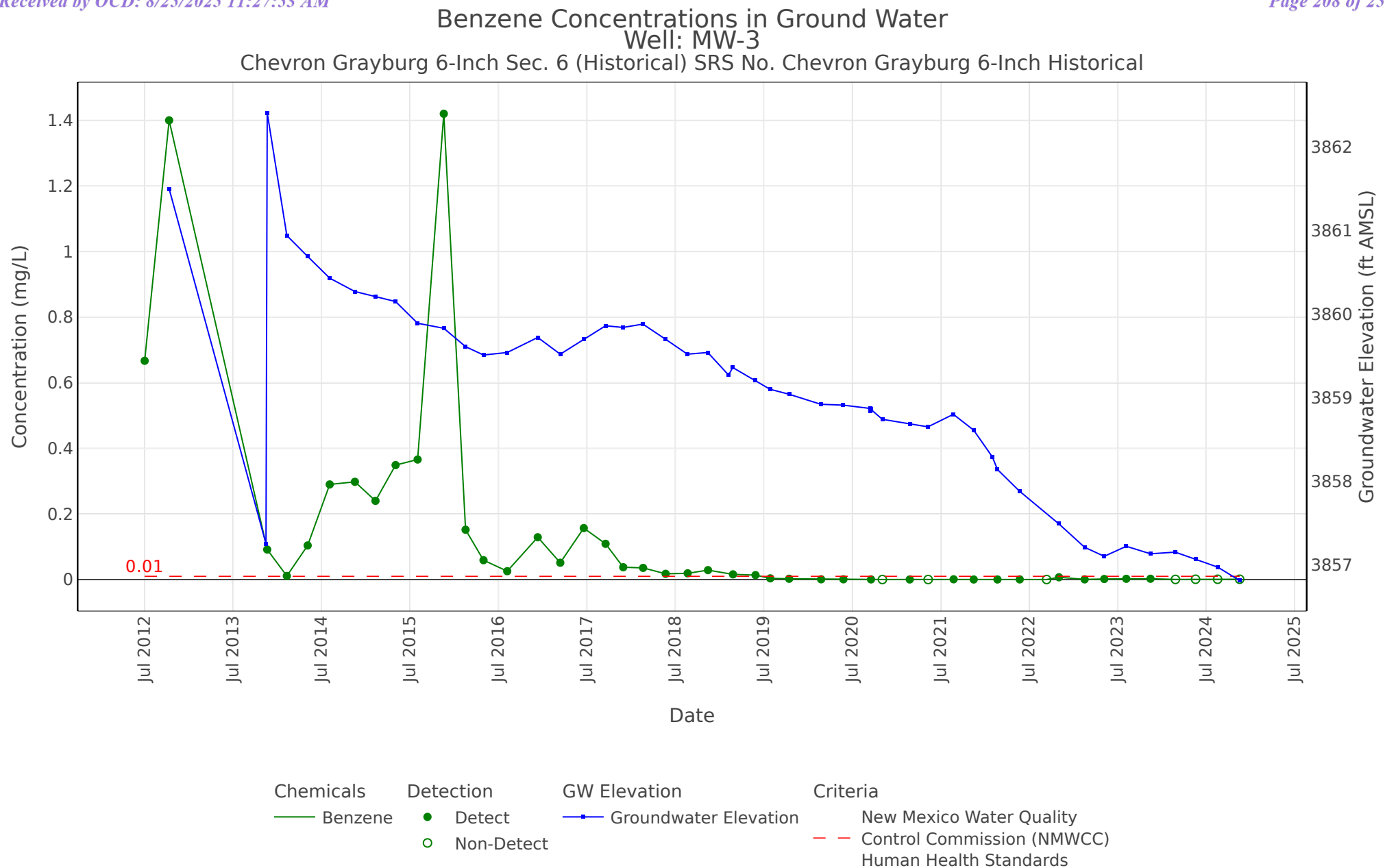




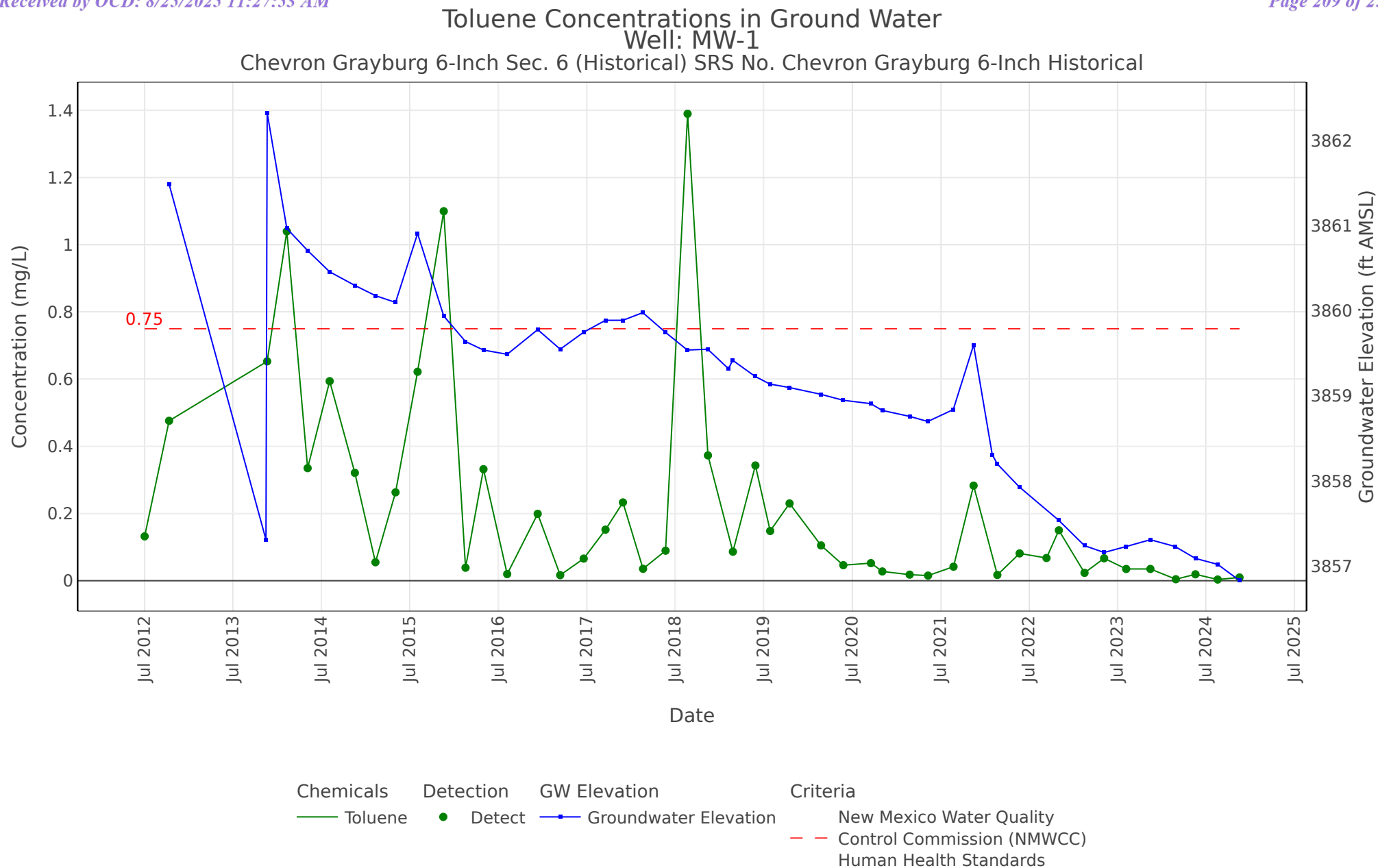
Note: Non-Detects are plotted as is the associated detection limit



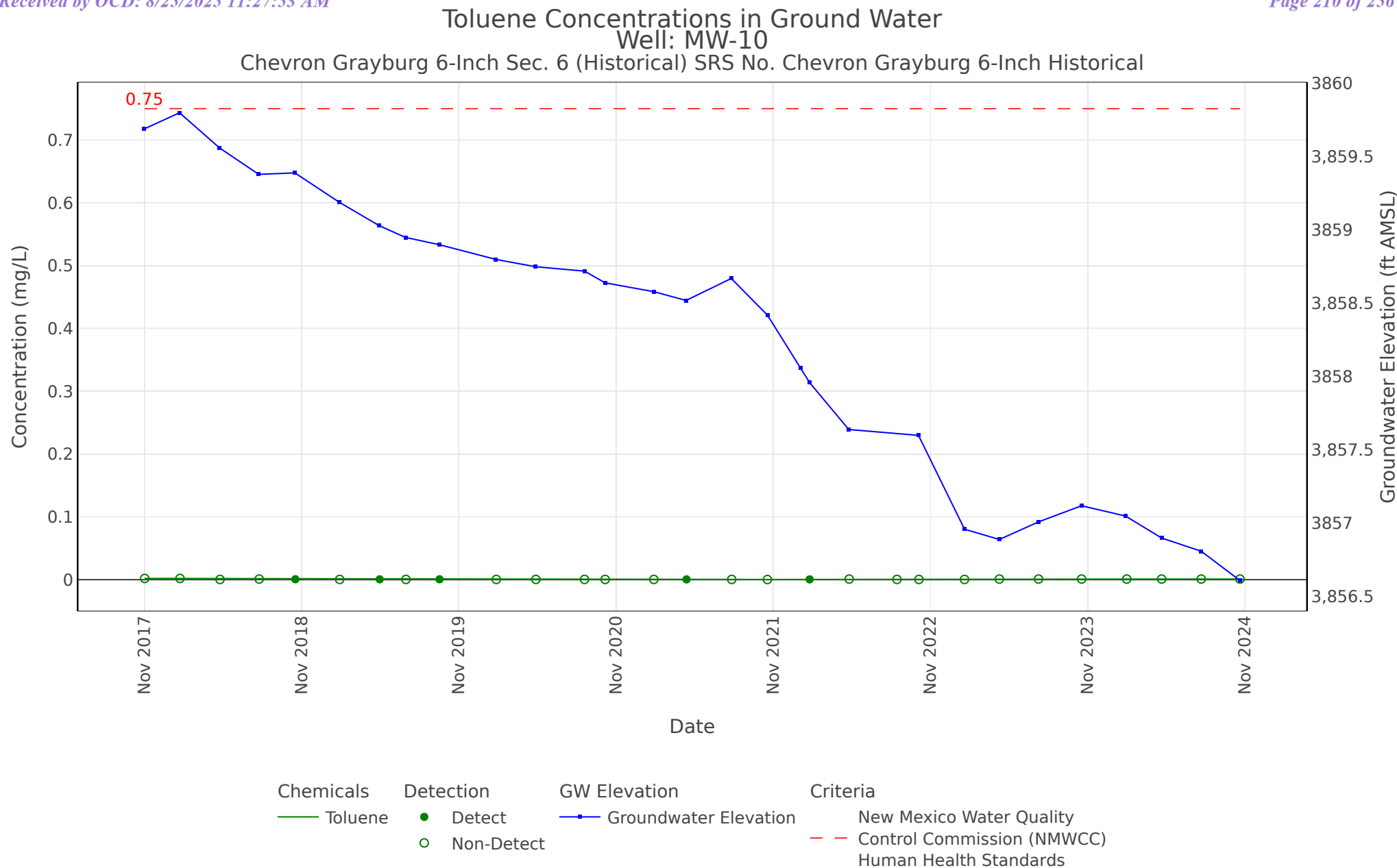
Note: Non-Detects are plotted as is the associated detection limit



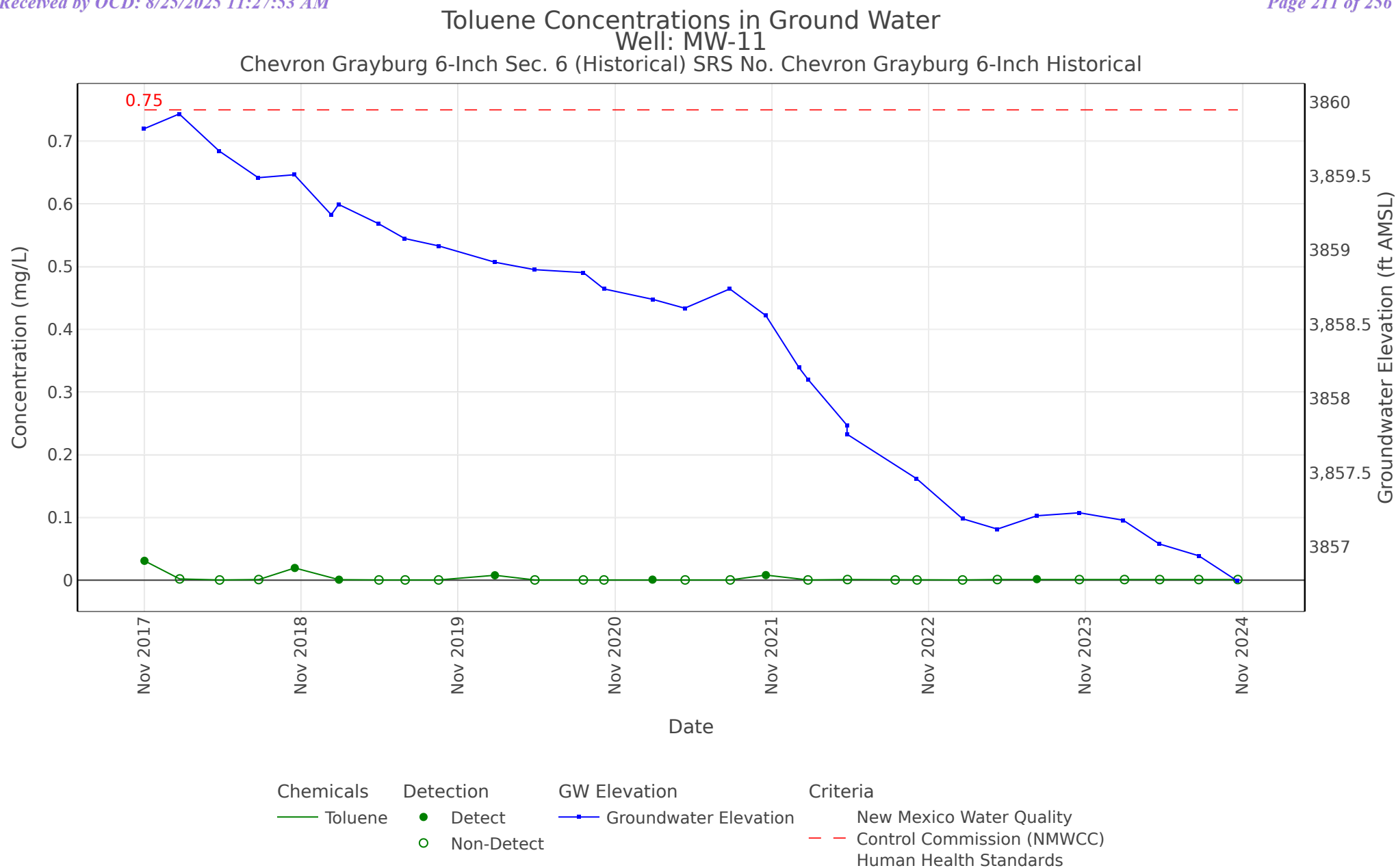
Note: Non-Detects are plotted as is the associated detection limit



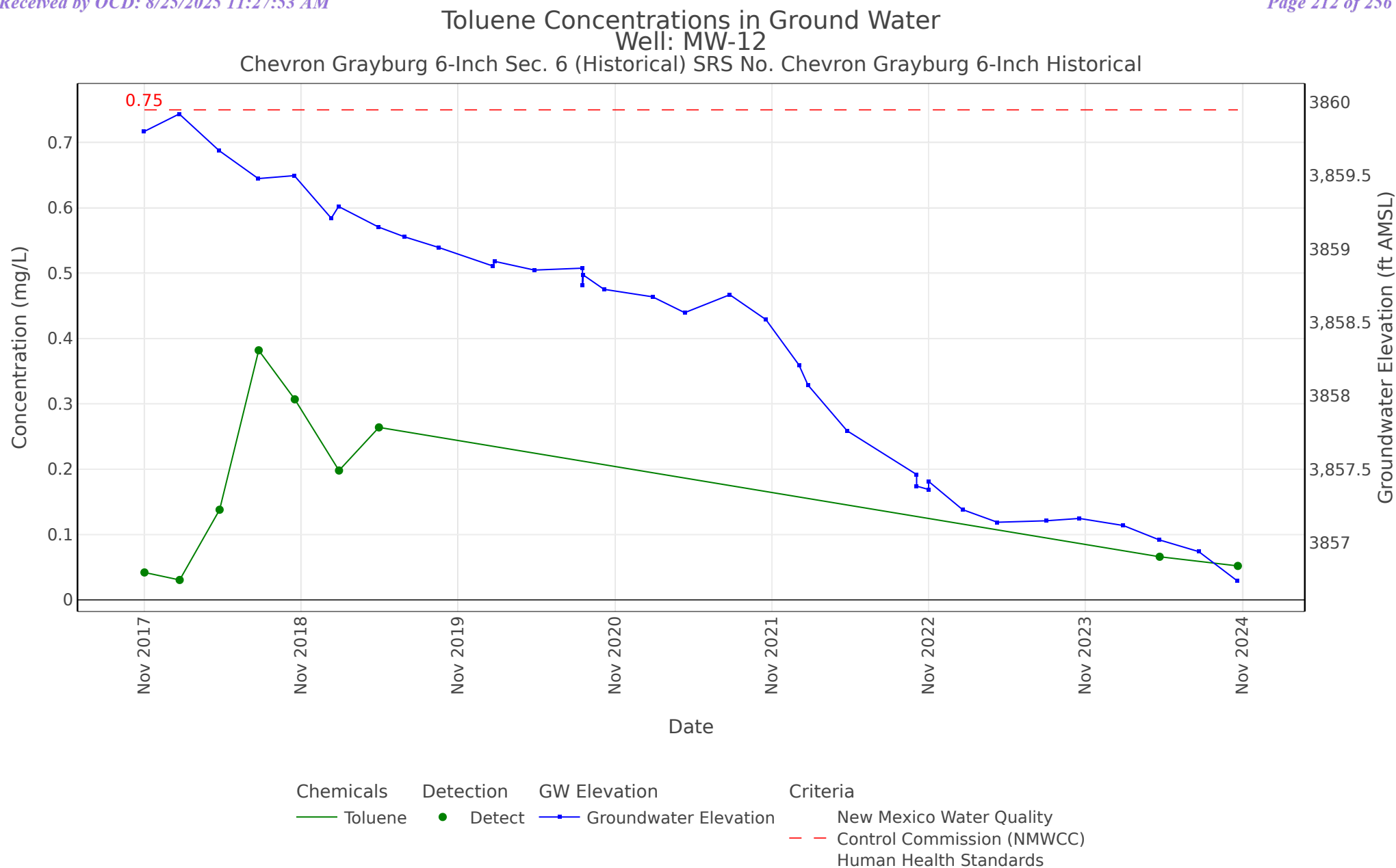
Note: Non-Detects are plotted as is the associated detection limit



Note: Non-Detects are plotted as is the associated detection limit

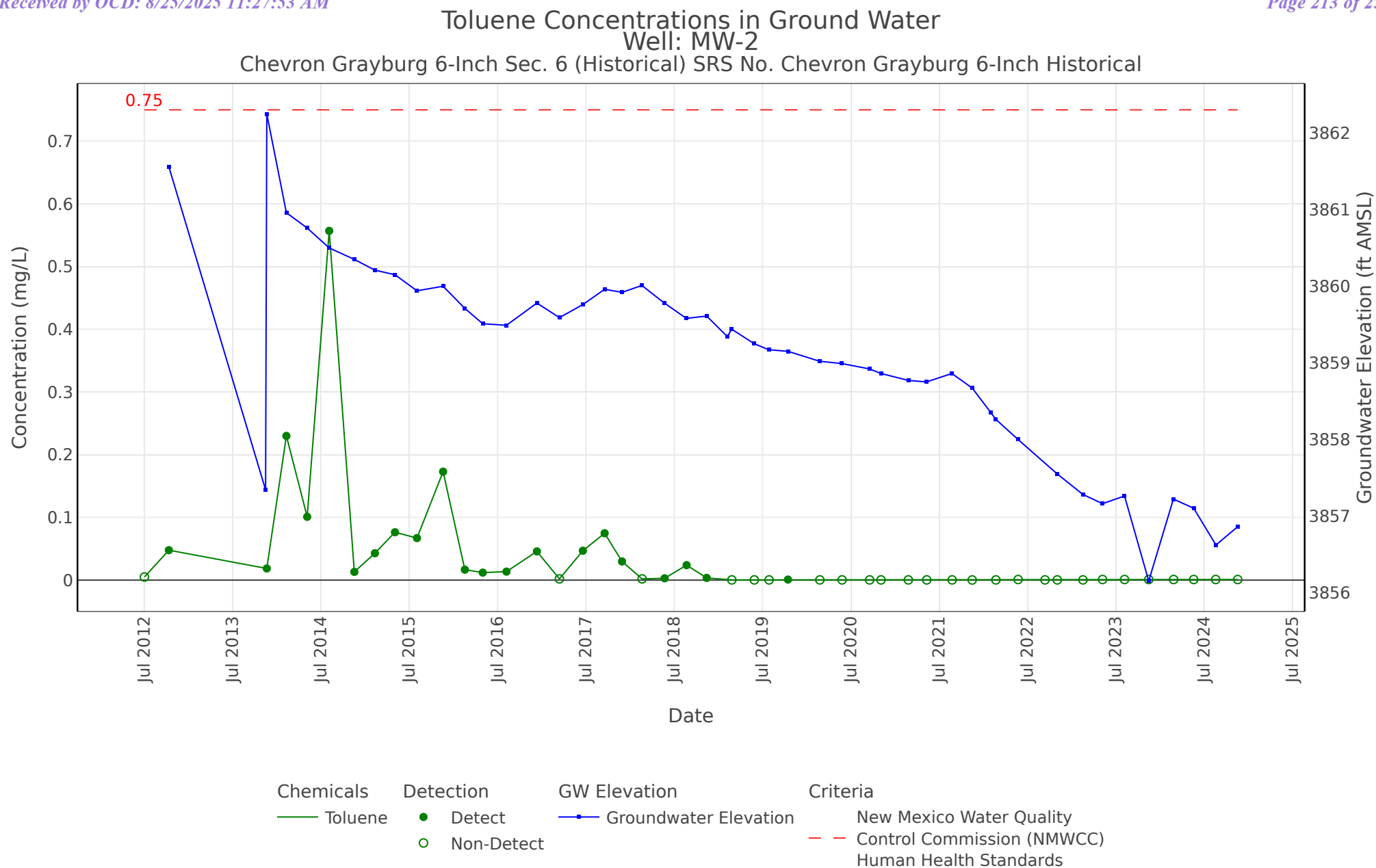


Note: Non-Detects are plotted as is the associated detection limit

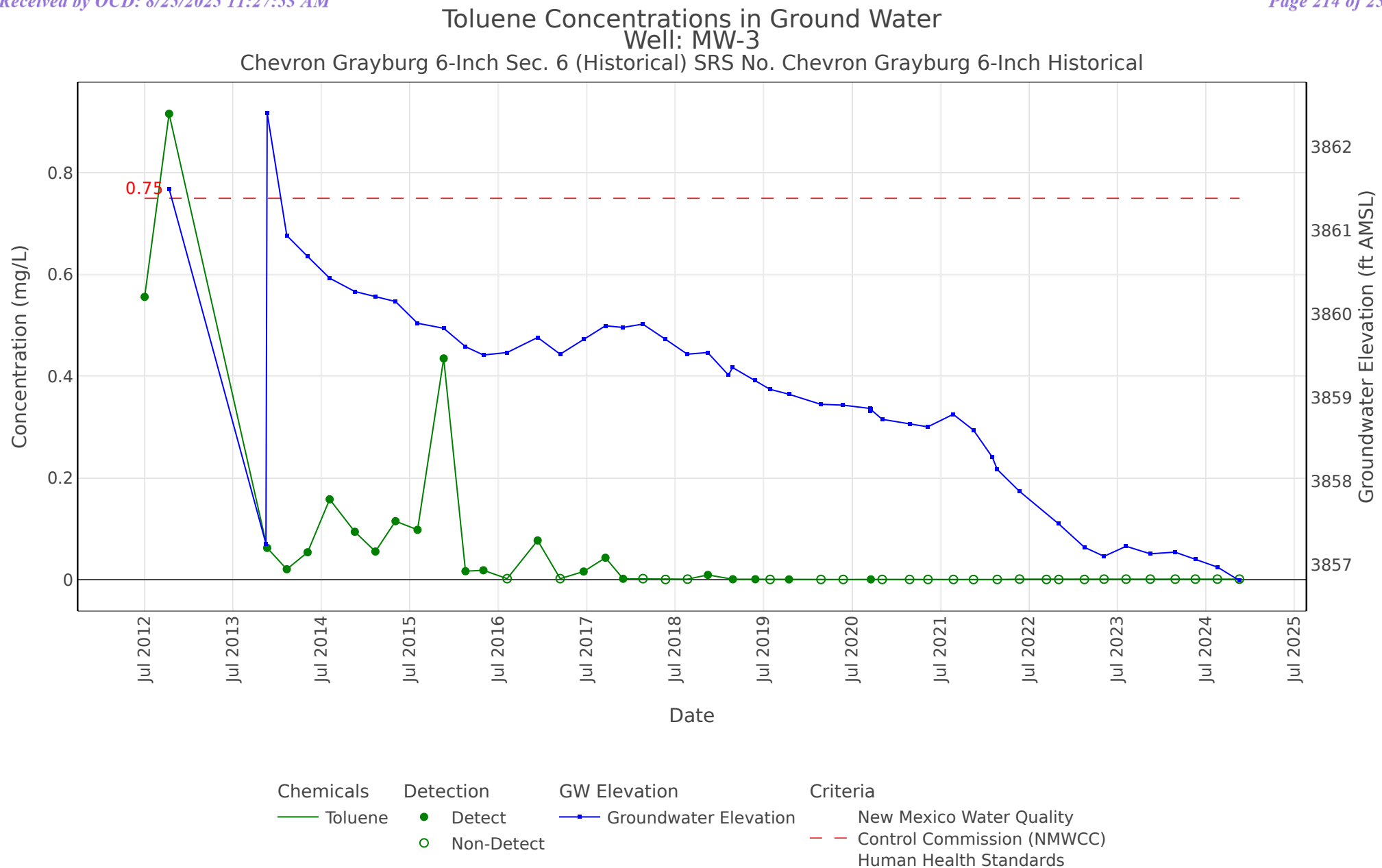


Note: Non-Detects are plotted as is the associated detection limit





Note: Non-Detects are plotted as is the associated detection limit

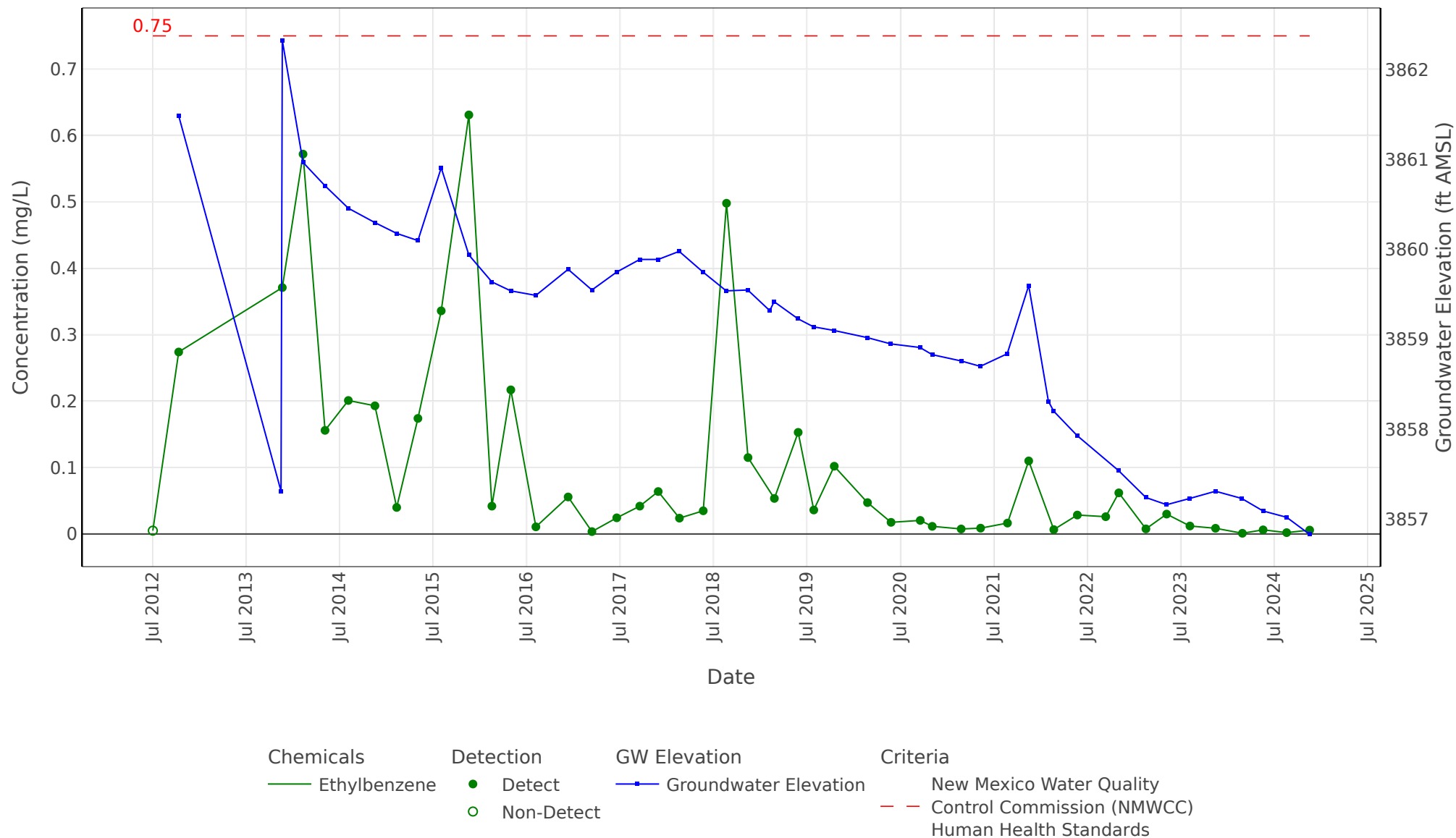


Note: Non-Detects are plotted as is the associated detection limit

## Ethylbenzene Concentrations in Ground Water

Well: MW-1

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

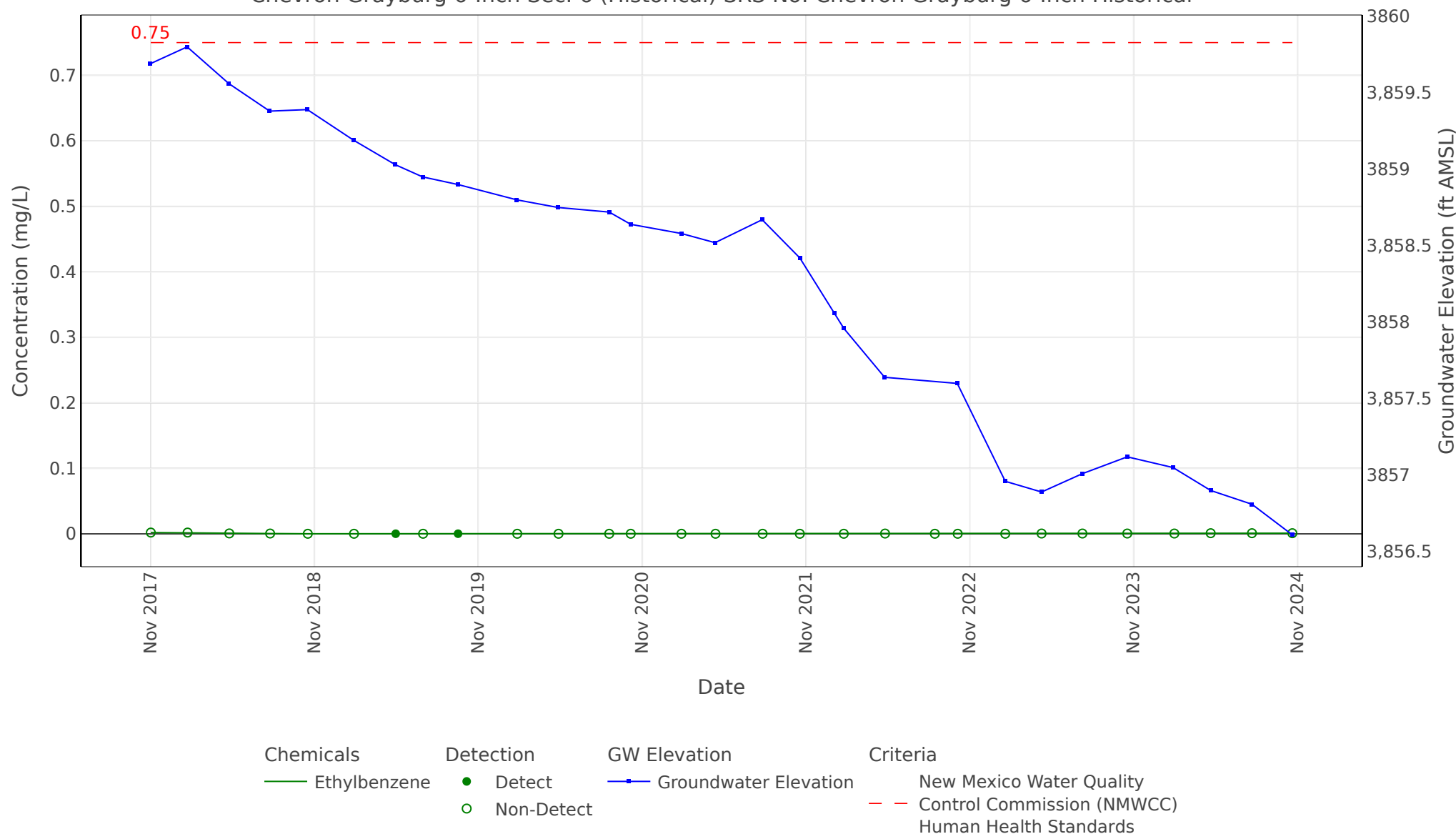


Note: Non-Detects are plotted as is the associated detection limit

## Ethylbenzene Concentrations in Ground Water

Well: MW-10

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

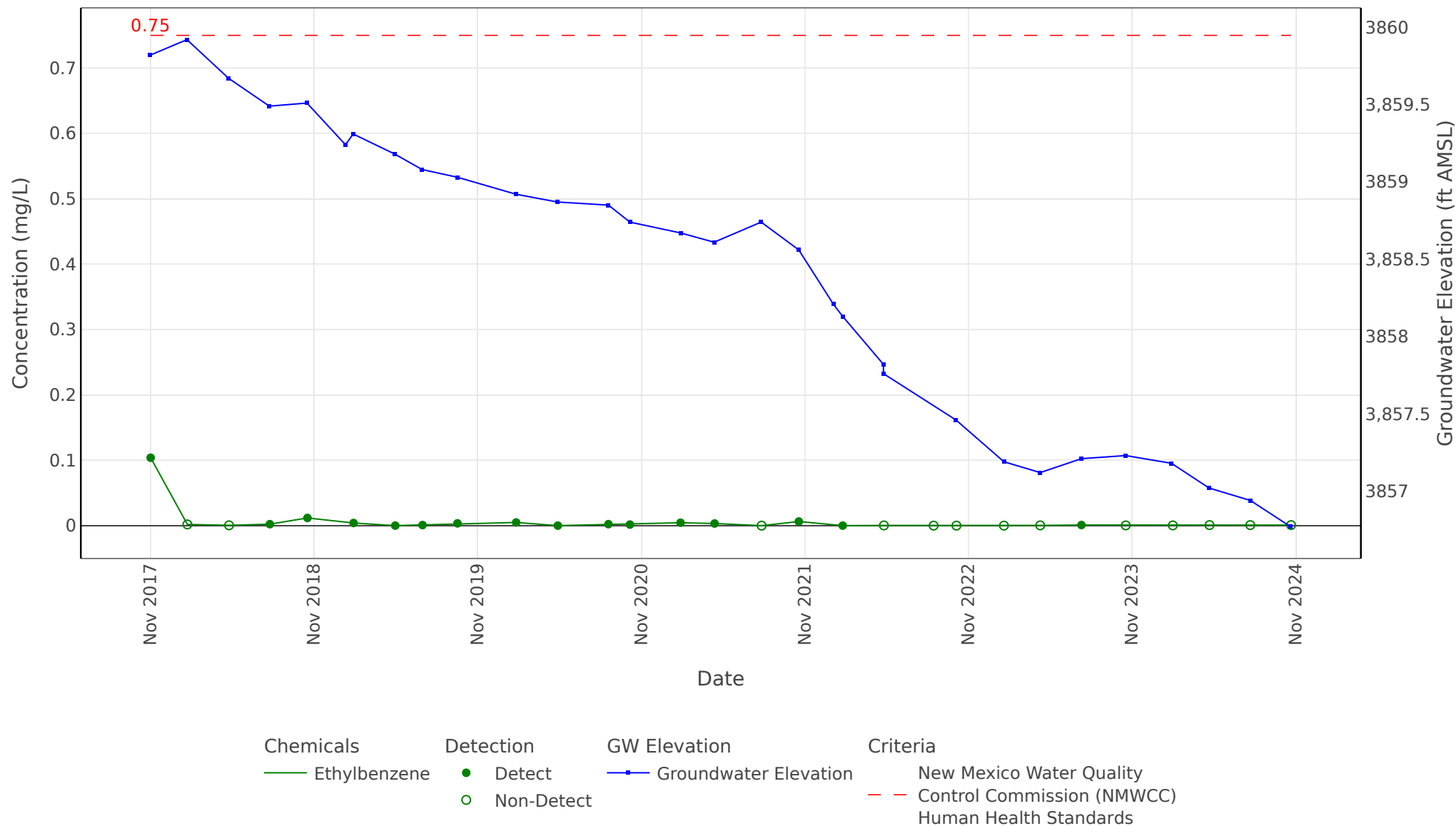


Note: Non-Detects are plotted as is the associated detection limit

## Ethylbenzene Concentrations in Ground Water

Well: MW-11

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

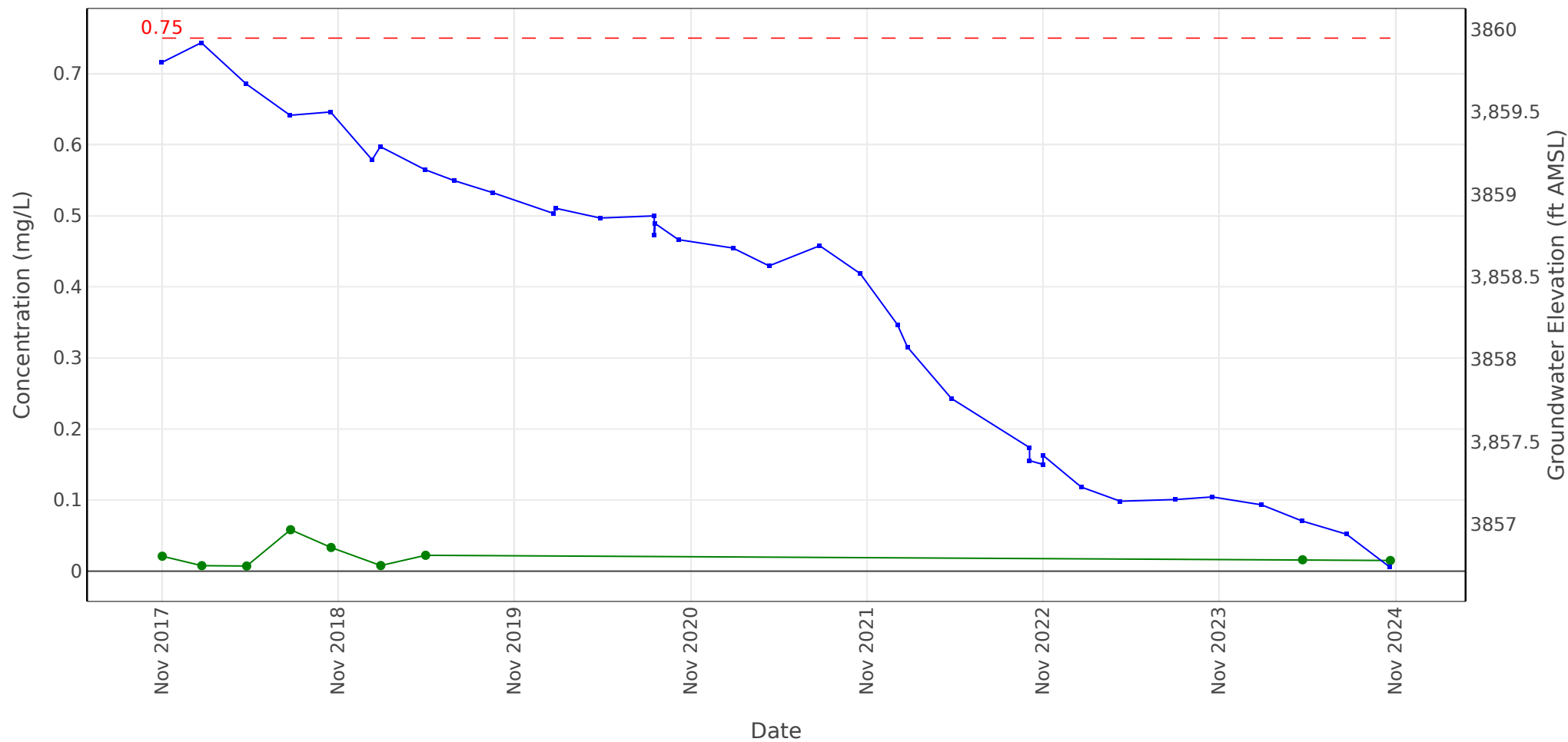


Note: Non-Detects are plotted as is the associated detection limit

## Ethylbenzene Concentrations in Ground Water

Well: MW-12

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

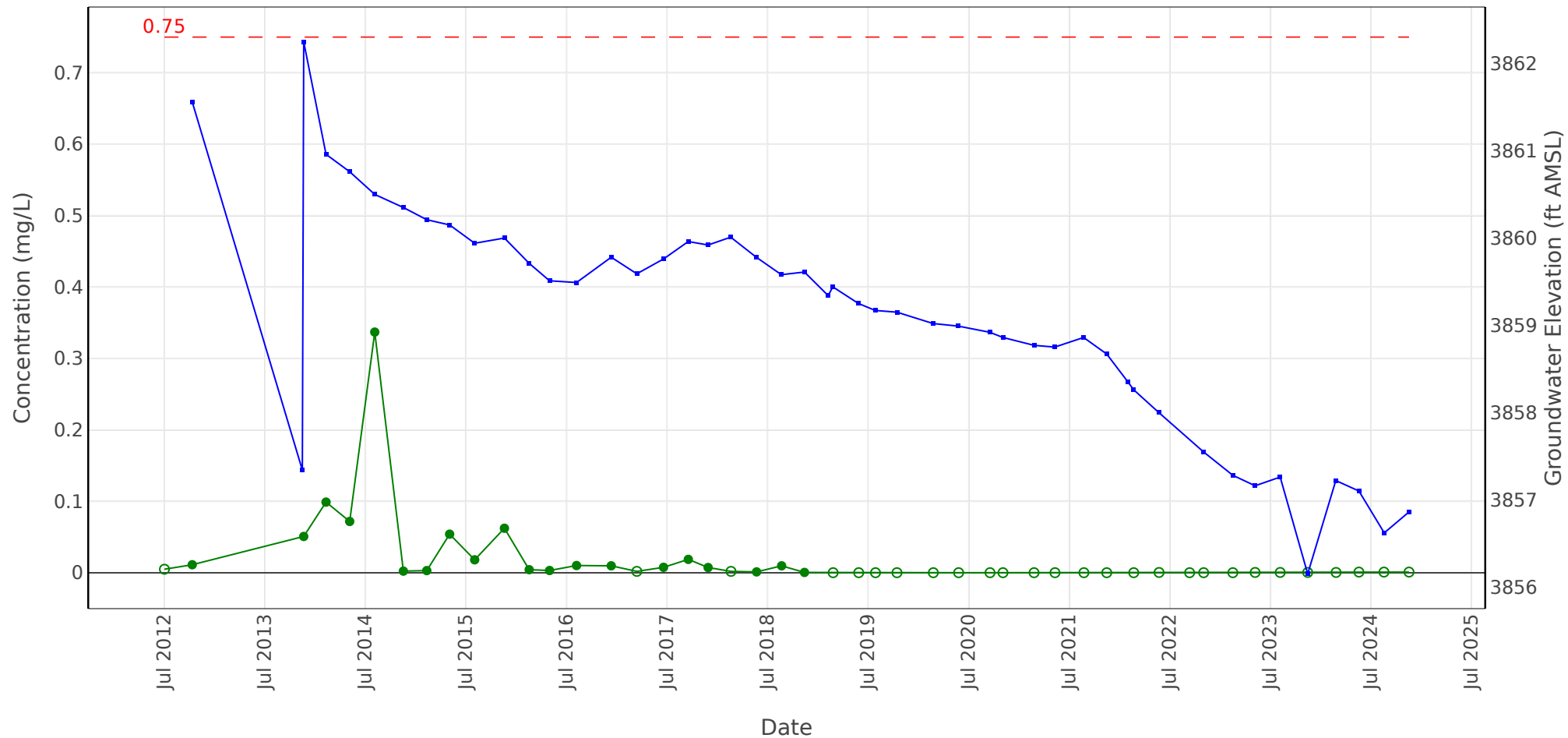


Note: Non-Detects are plotted as is the associated detection limit

## Ethylbenzene Concentrations in Ground Water

Well: MW-2

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical



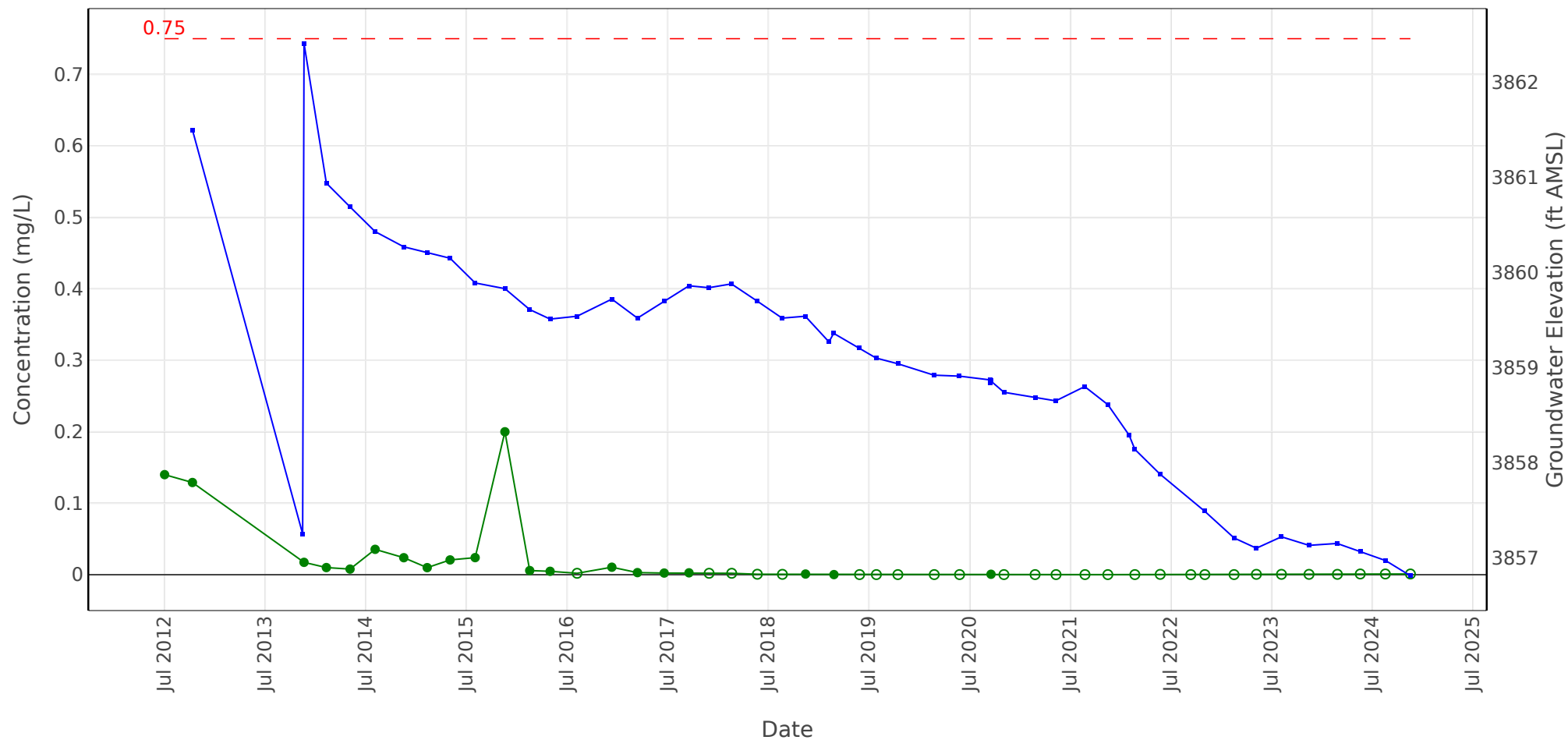
Note: Non-Detects are plotted as is the associated detection limit



## Ethylbenzene Concentrations in Ground Water

Well: MW-3

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

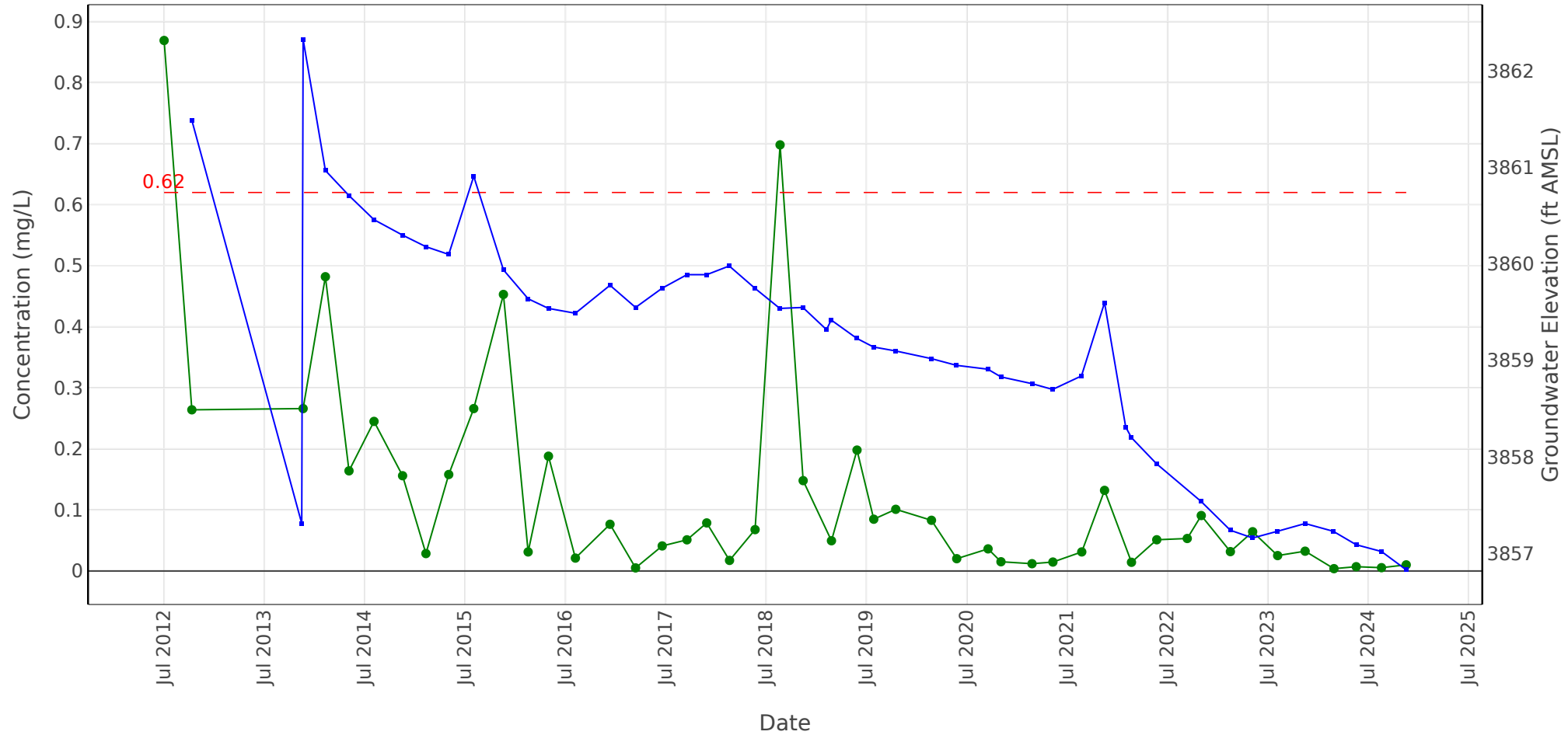


Note: Non-Detects are plotted as is the associated detection limit

## Xylenes (total) Concentrations in Ground Water

Well: MW-1

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

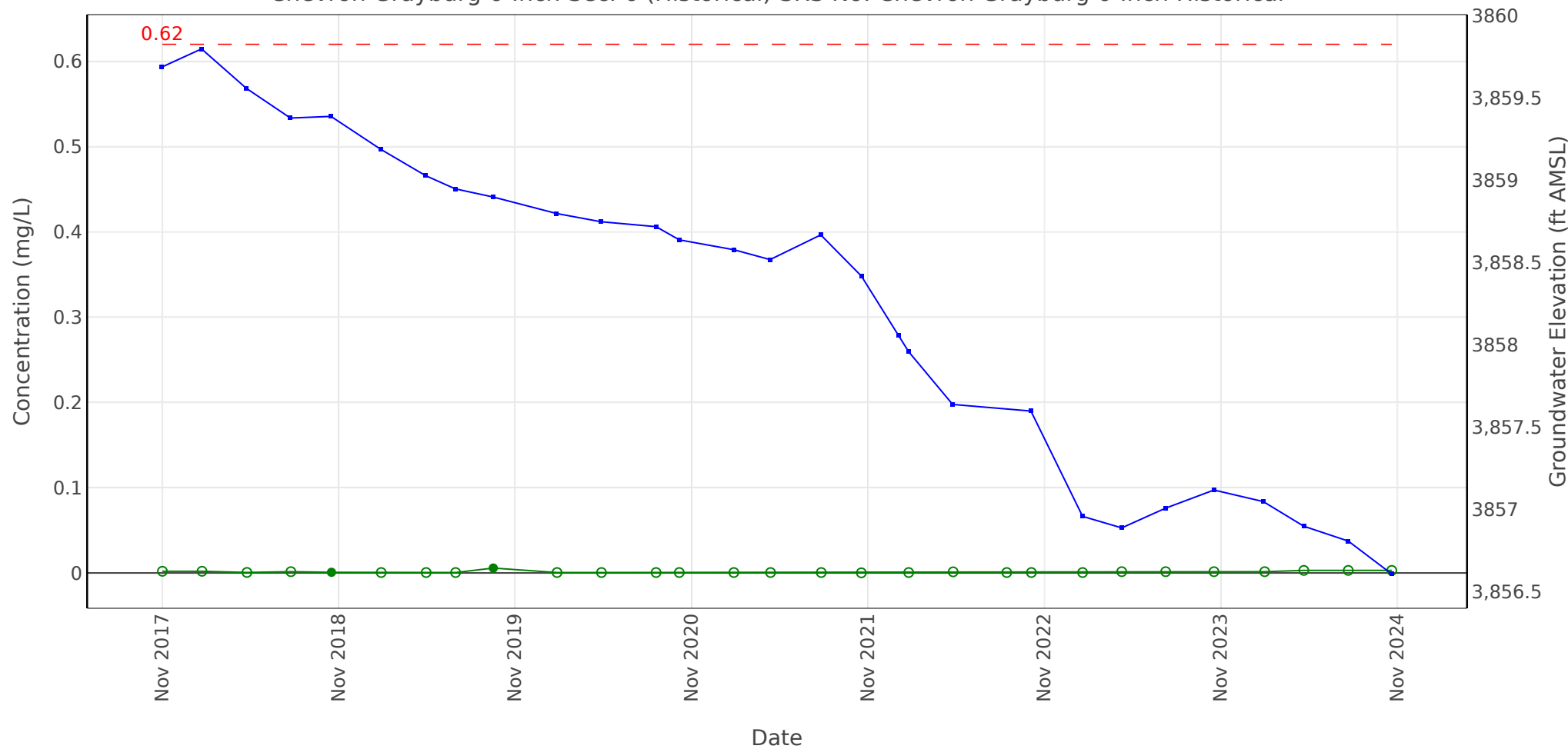


Note: Non-Detects are plotted as is the associated detection limit

## Xylenes (total) Concentrations in Ground Water

Well: MW-10

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical



## Chemicals

Xylenes (total)

## Detection

Detect

Non-Detect

## GW Elevation

Groundwater Elevation

## Criteria

New Mexico Water Quality

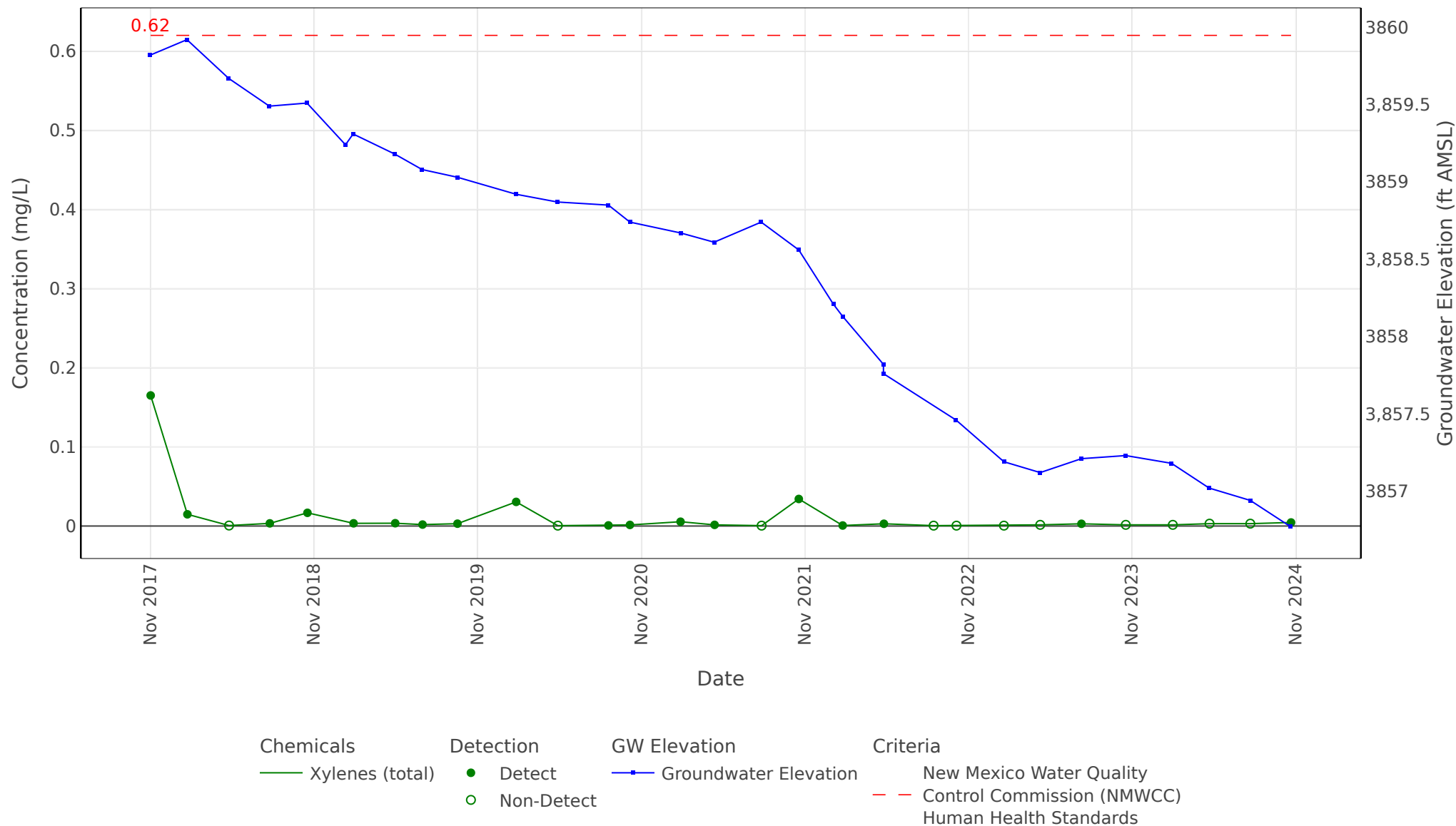
Control Commission (NMWCC)  
Human Health Standards

Note: Non-Detects are plotted as is the associated detection limit

## Xylenes (total) Concentrations in Ground Water

Well: MW-11

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

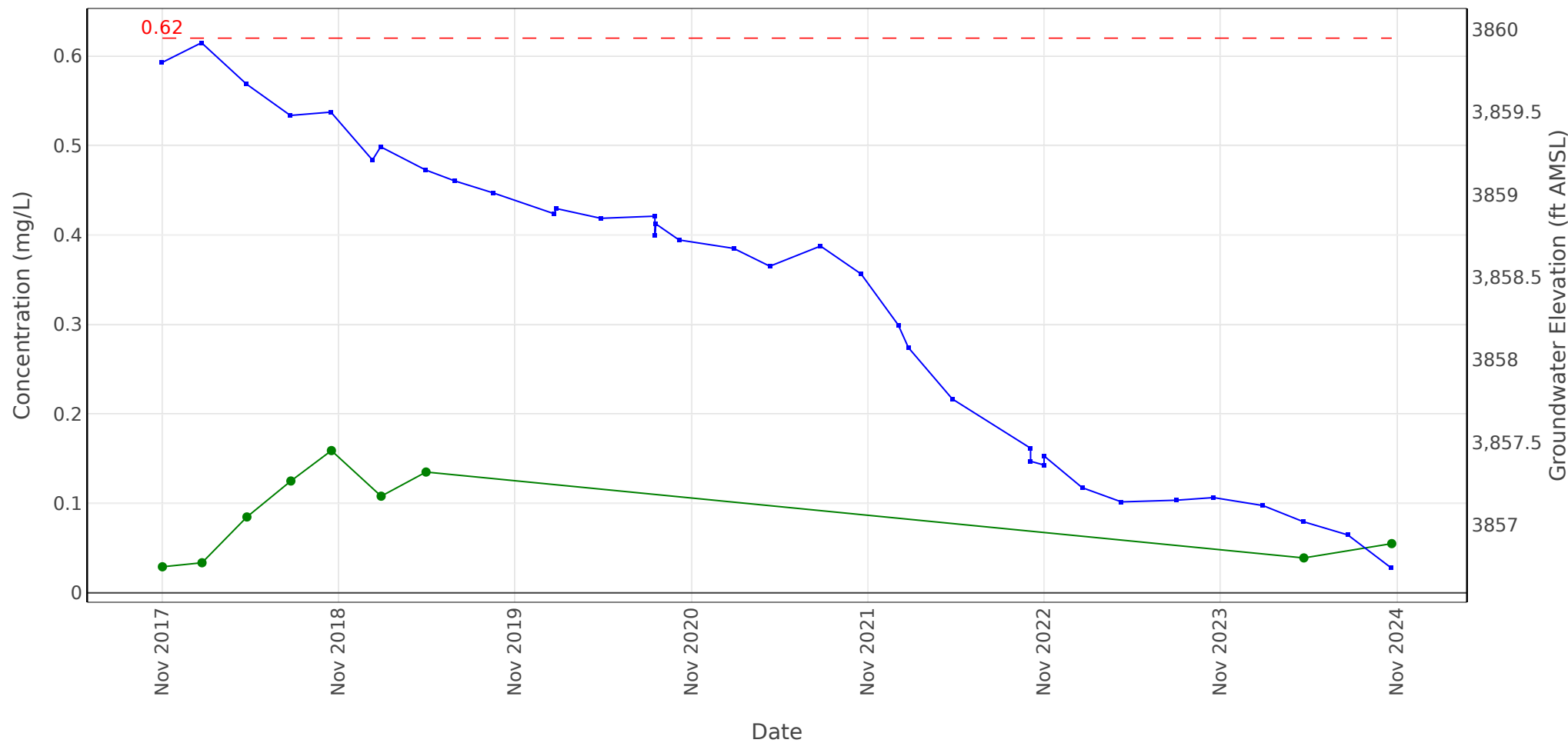


Note: Non-Detects are plotted as is the associated detection limit

## Xylenes (total) Concentrations in Ground Water

Well: MW-12

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical

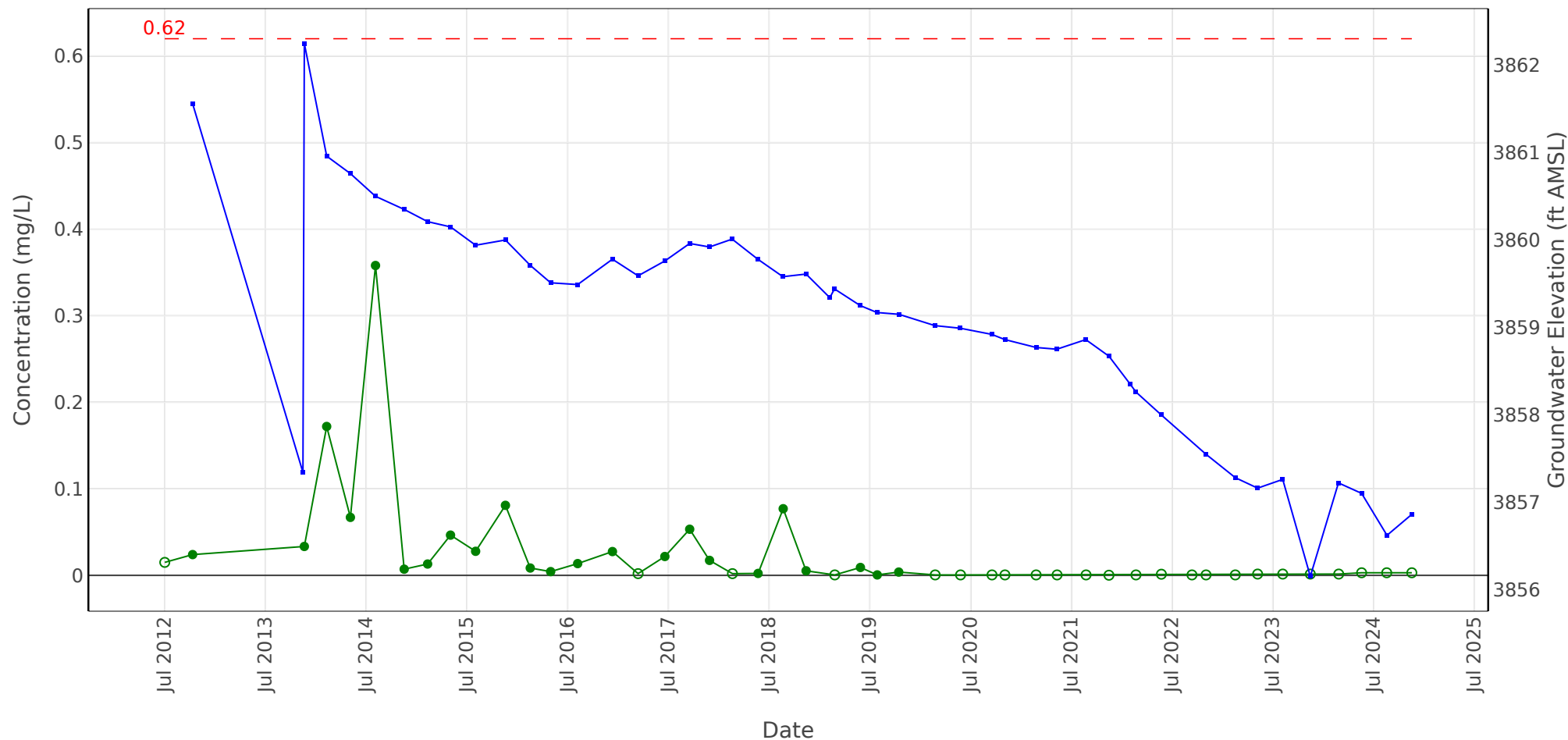


Note: Non-Detects are plotted as is the associated detection limit

## Xylenes (total) Concentrations in Ground Water

Well: MW-2

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical



## Chemicals

— Xylenes (total)

## Detection

● Detect

○ Non-Detect

## GW Elevation

—● Groundwater Elevation

## Criteria

— New Mexico Water Quality

— Control Commission (NMWCC)

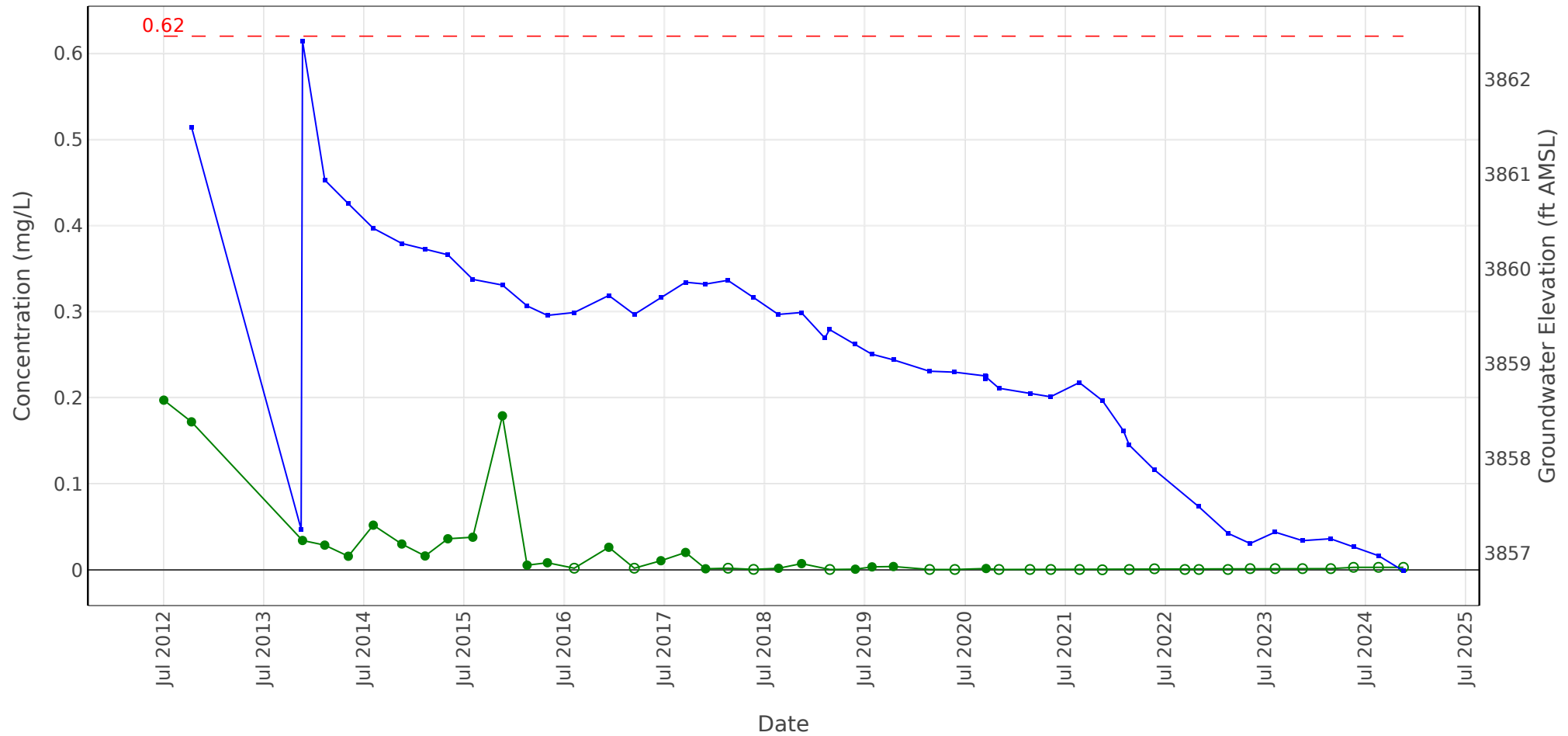
— Human Health Standards

Note: Non-Detects are plotted as is the associated detection limit

## Xylenes (total) Concentrations in Ground Water

Well: MW-3

Chevron Grayburg 6-Inch Sec. 6 (Historical) SRS No. Chevron Grayburg 6-Inch Historical



Chemicals

— Xylenes (total)

Detection

● Detect

○ Non-Detect

GW Elevation

— Groundwater Elevation

Criteria

New Mexico Water Quality

Control Commission (NMWCC)

Human Health Standards

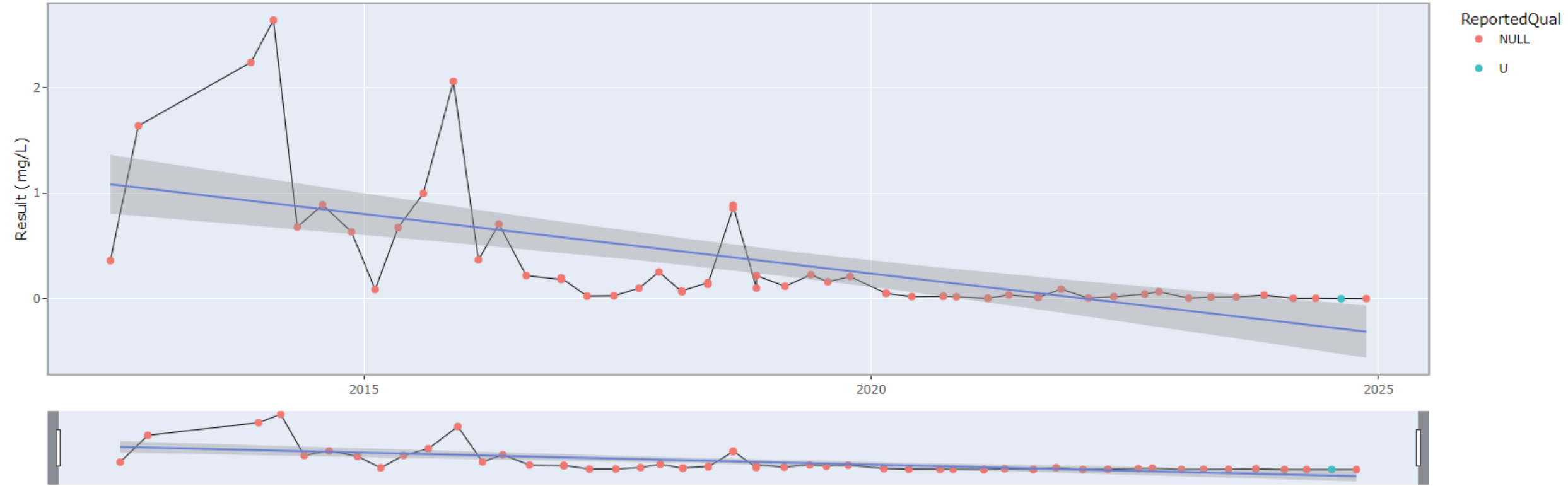
Note: Non-Detects are plotted as is the associated detection limit



# Attachment C

**M-K Trends**

Trend test for Benzene at MW-1



Statistical Summary

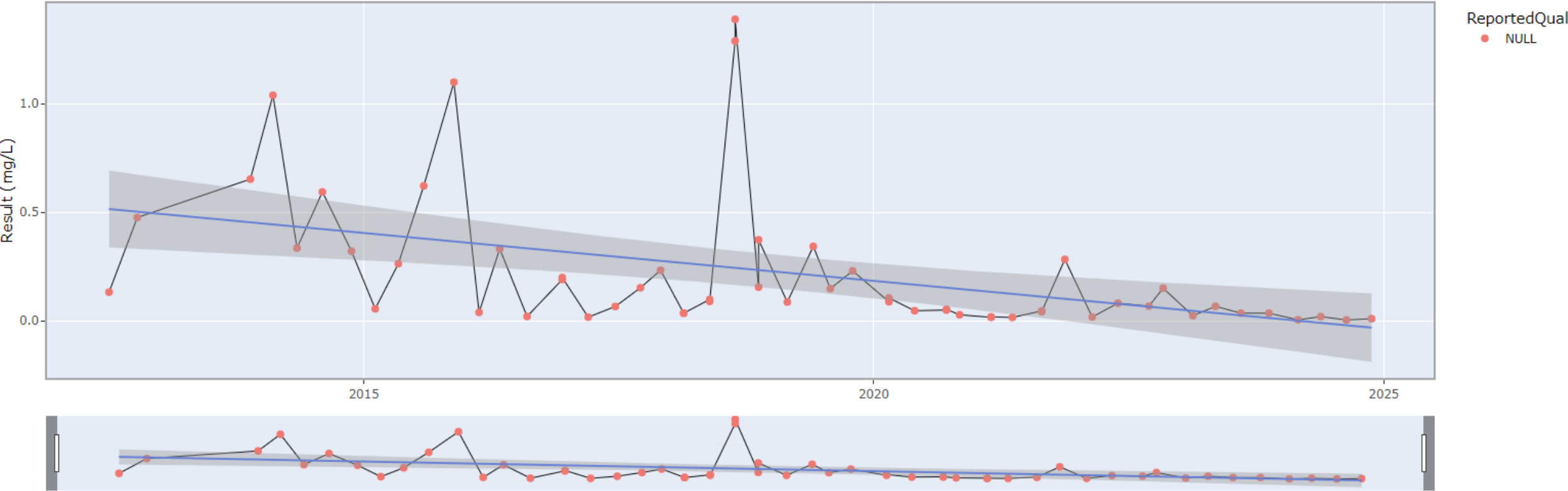
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -6.99     | 0.00    | 56        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 5.87     | 0.92      | 6.36      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -6.01     | 0.00    |

Trend test for Toluene at MW-1



Statistical Summary

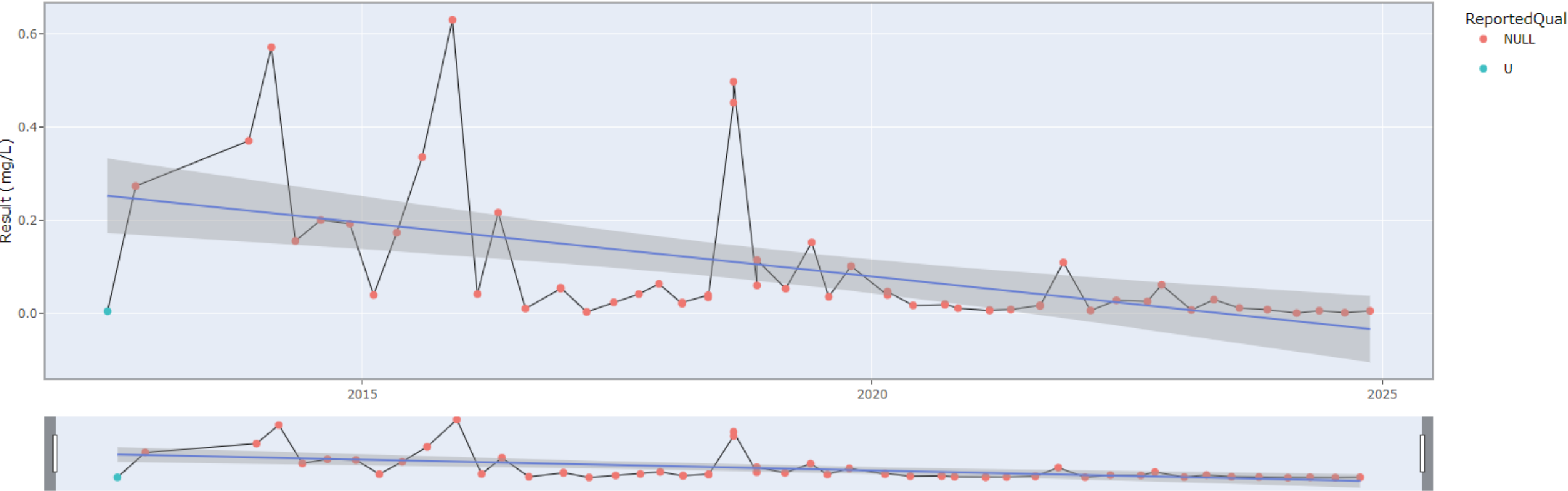
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -4.99     | 0.00    | 56        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 2.39     | 0.59      | 4.06      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -3.69     | 0.00    |

Trend test for Ethylbenzene at MW-1



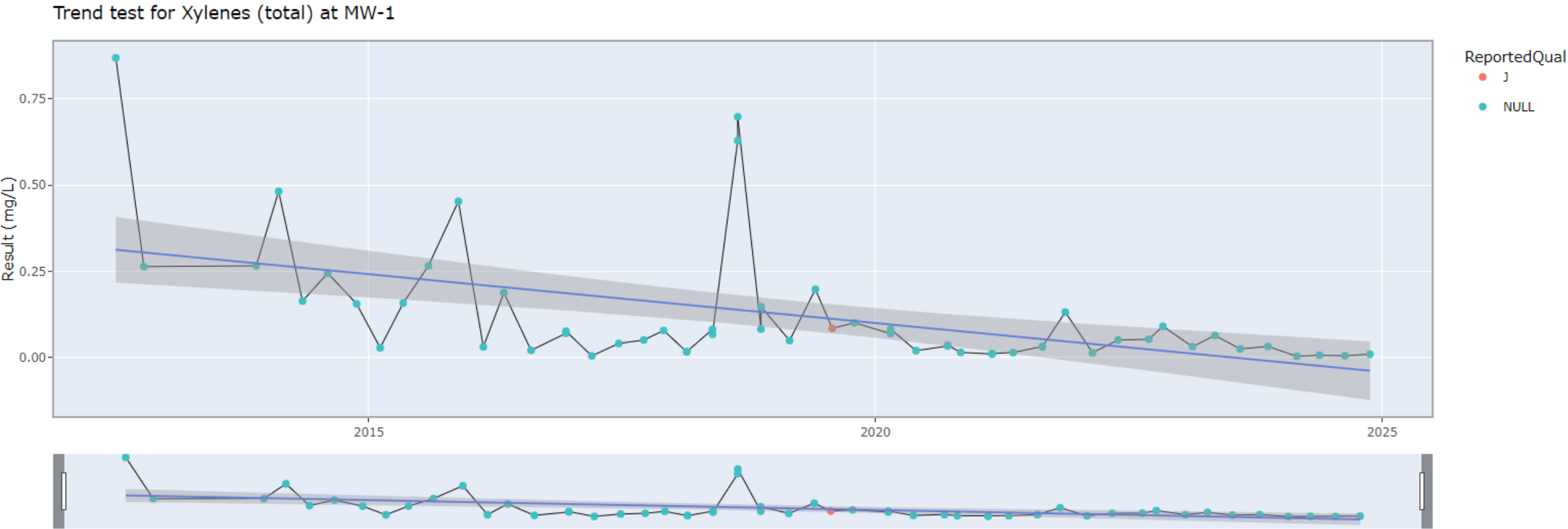
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -5.01     | 0.00    | 56        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 1.24     | 0.27      | 4.65      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -4.29     | 0.00    |



Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -4.59     | 0.00    | 56        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 1.52     | 0.32      | 4.79      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -4.41     | 0.00    |

Trend test for Benzene at MW-10



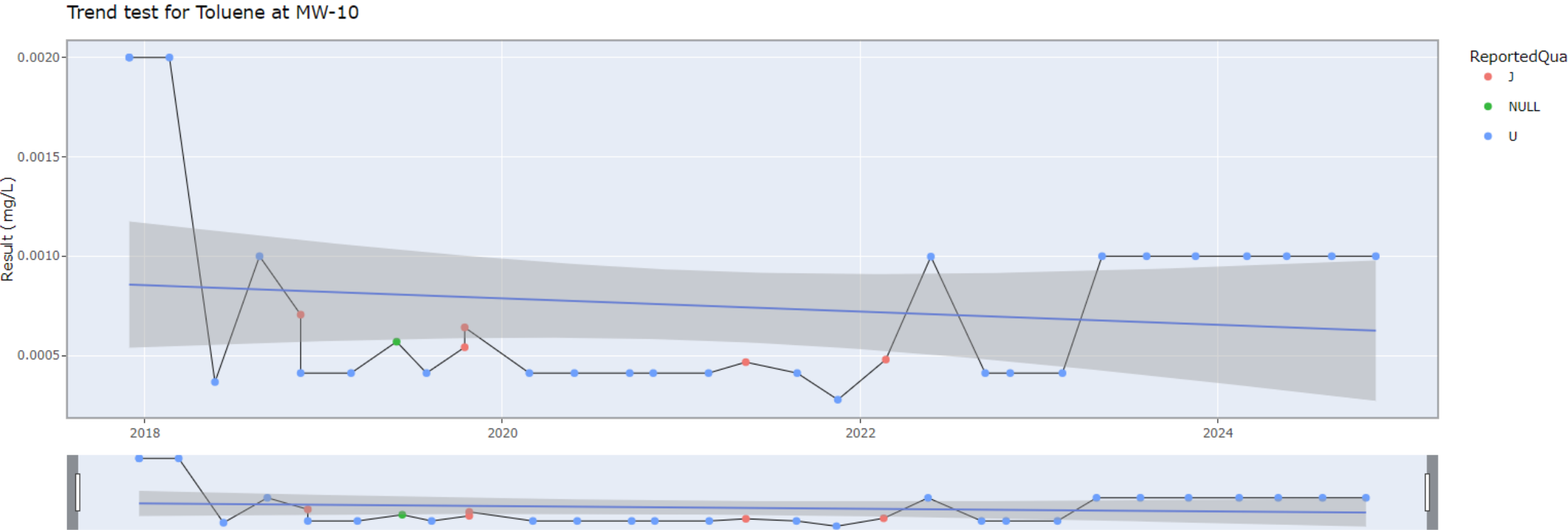
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -2.13     | 0.03    | 32        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.11     | 0.05      | 2.21      | 0.03    |
| CollectionDate | -0.00    | 0.00      | -2.08     | 0.05    |



Statistical Summary

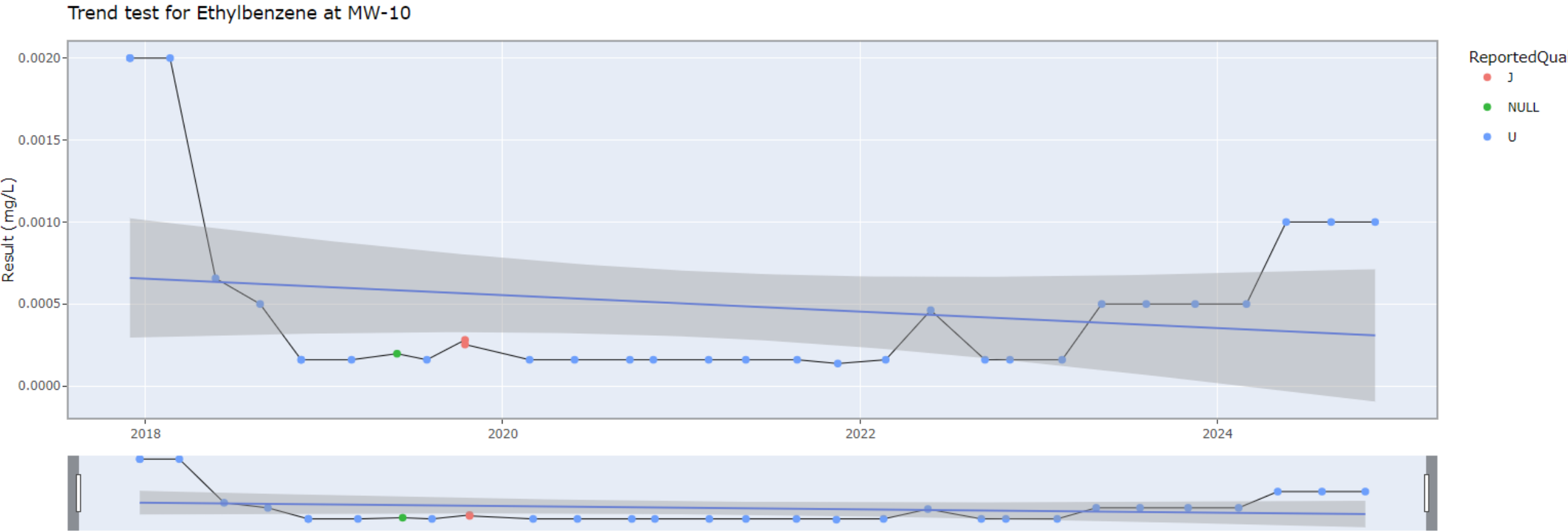
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.51      | 0.61    | 32        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.00     | 0.00      | 1.19      | 0.24    |
| CollectionDate | -0.00    | 0.00      | -0.83     | 0.41    |





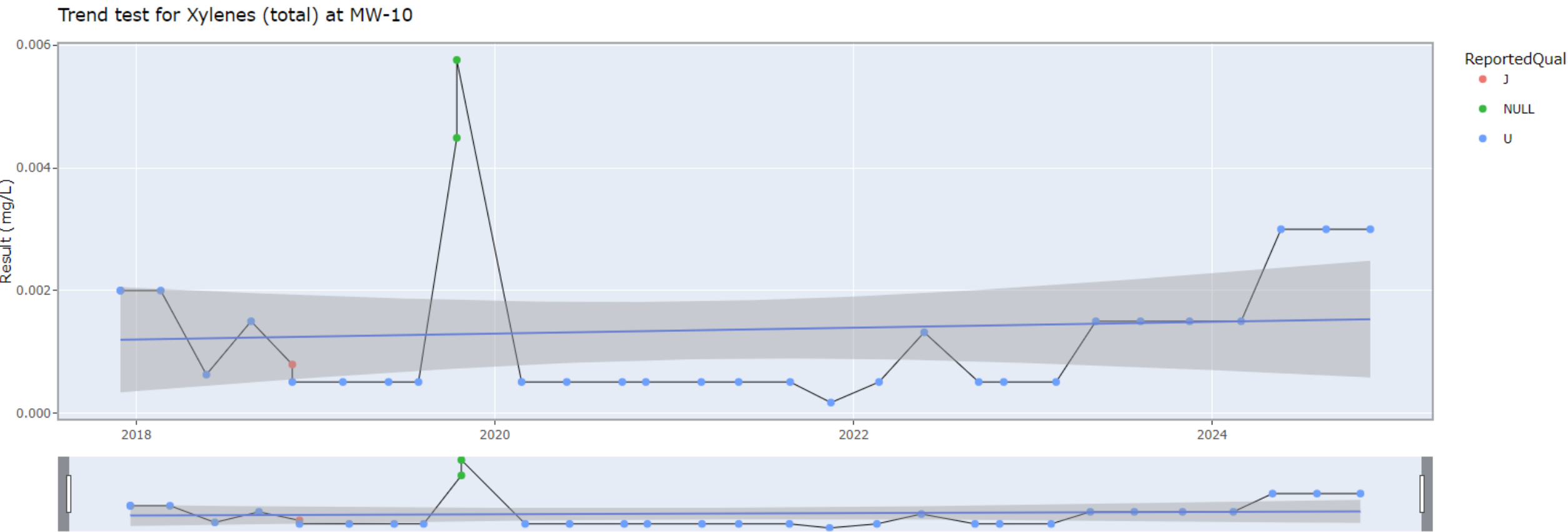
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.10      | 0.92    | 32        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.00     | 0.00      | 1.30      | 0.20    |
| CollectionDate | -0.00    | 0.00      | -1.09     | 0.28    |



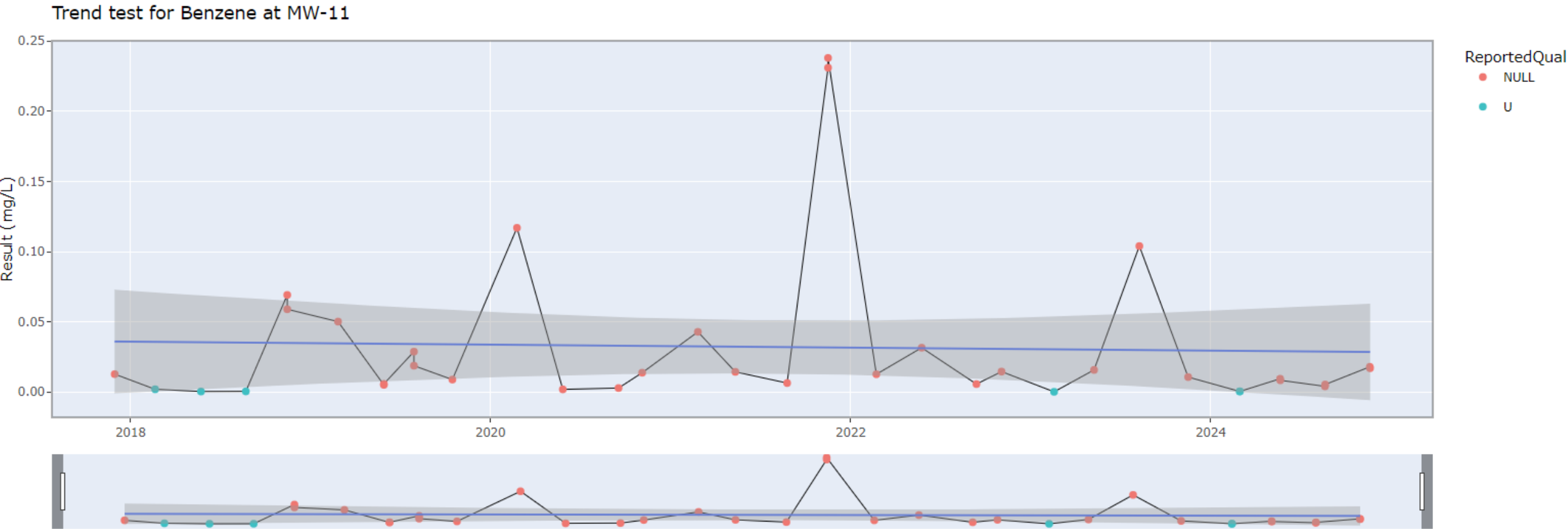
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.38      | 0.70    | 32        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | -0.00    | 0.01      | -0.20     | 0.84    |
| CollectionDate | 0.00     | 0.00      | 0.44      | 0.66    |



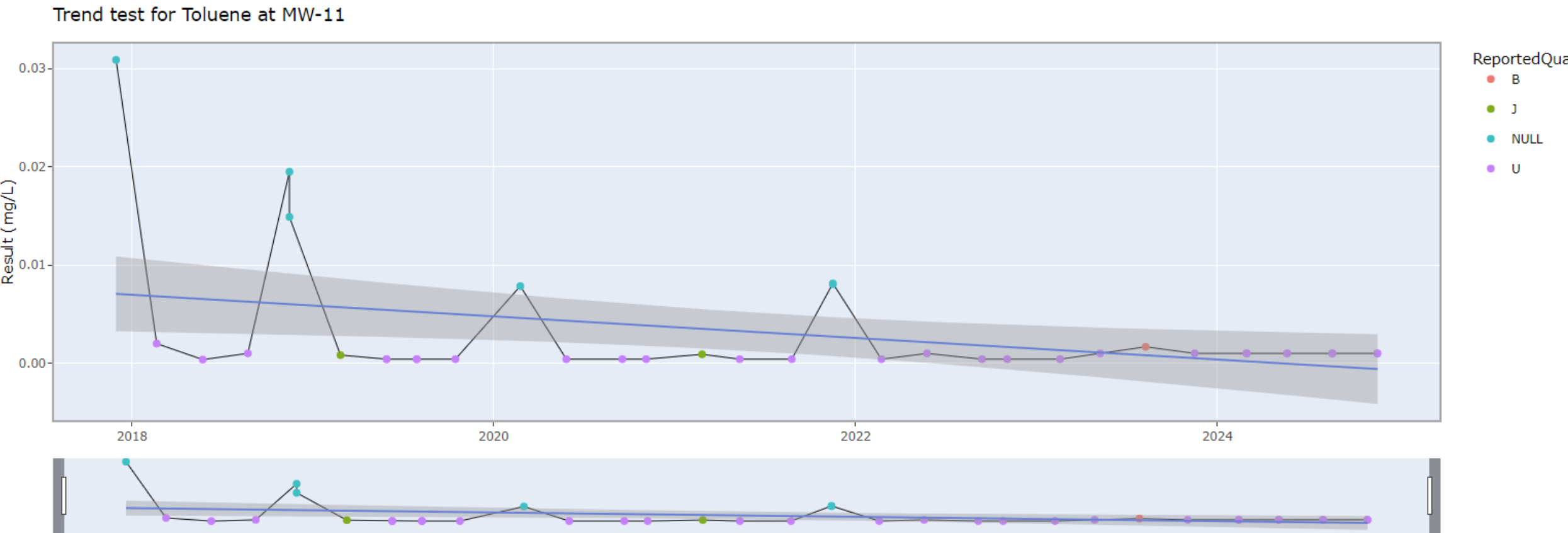
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -0.24     | 0.81    | 37        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.09     | 0.22      | 0.40      | 0.69    |
| CollectionDate | -0.00    | 0.00      | -0.25     | 0.80    |



Statistical Summary

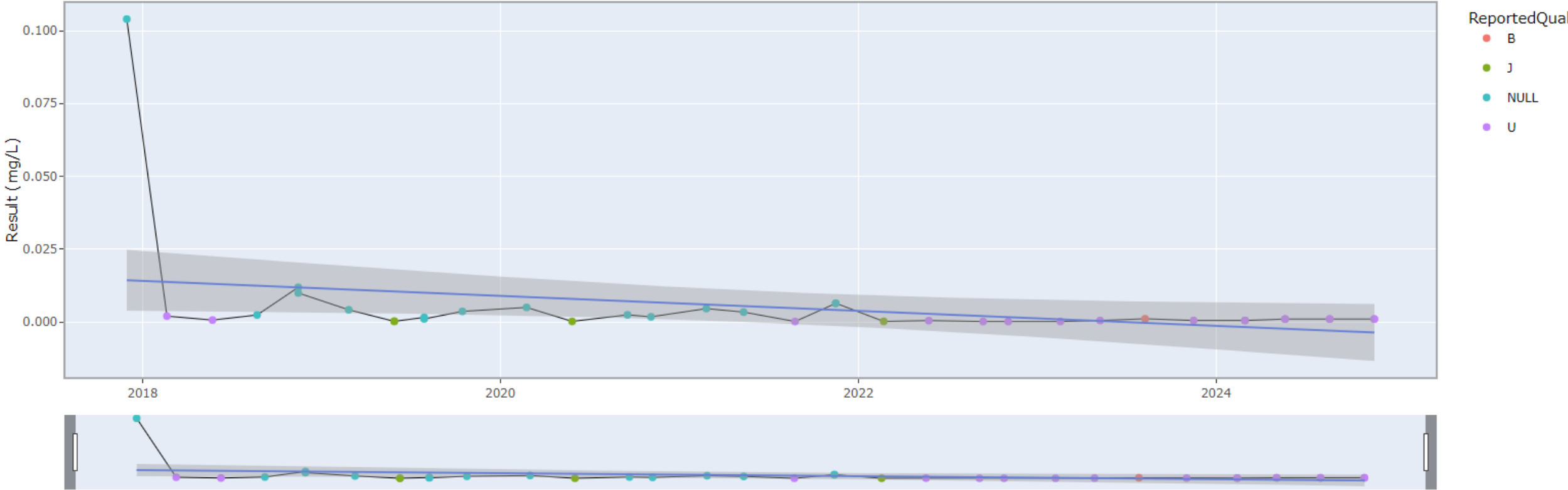
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.75      | 0.45    | 37        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.06     | 0.02      | 2.63      | 0.01    |
| CollectionDate | -0.00    | 0.00      | -2.50     | 0.02    |

Trend test for Ethylbenzene at MW-11



Statistical Summary

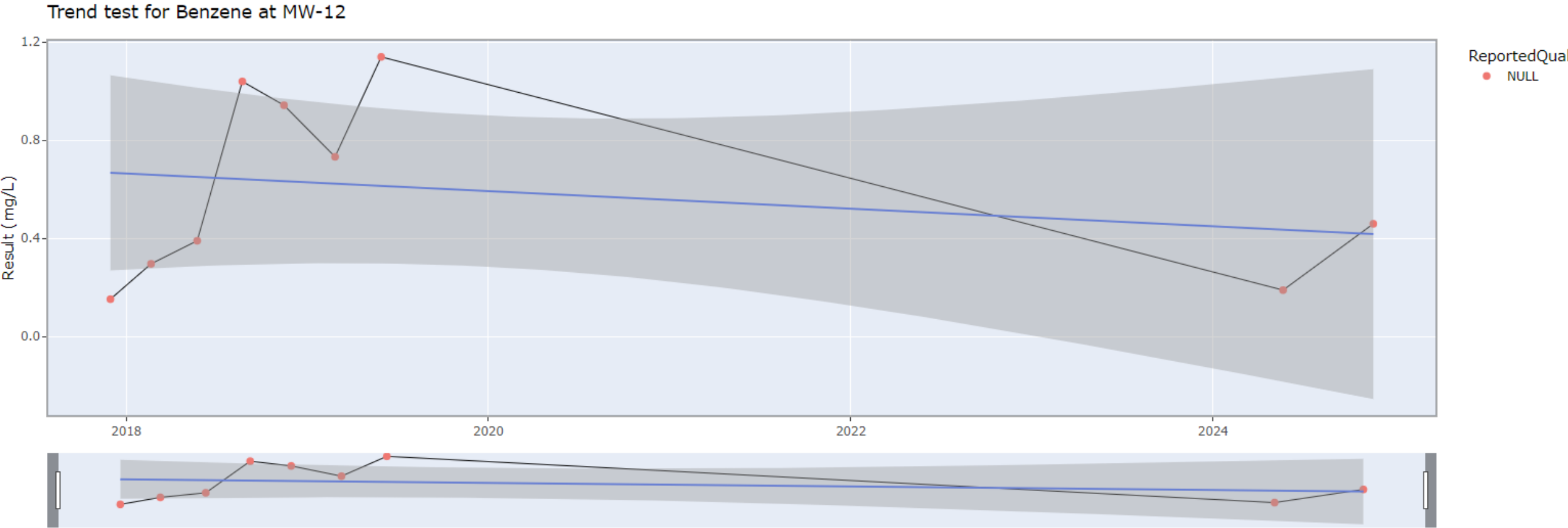
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -2.06     | 0.04    | 37        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.14     | 0.06      | 2.20      | 0.03    |
| CollectionDate | -0.00    | 0.00      | -2.13     | 0.04    |





Statistical Summary

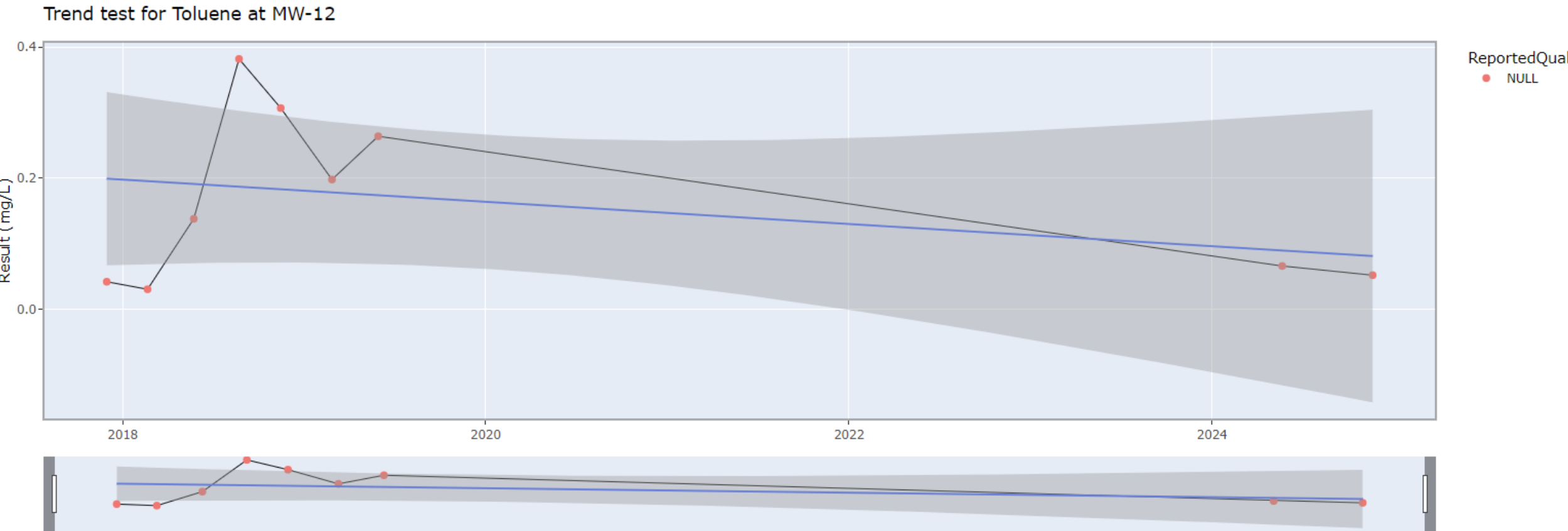
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.94      | 0.35    | 9         | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 2.39     | 2.57      | 0.93      | 0.39    |
| CollectionDate | -0.00    | 0.00      | -0.70     | 0.51    |





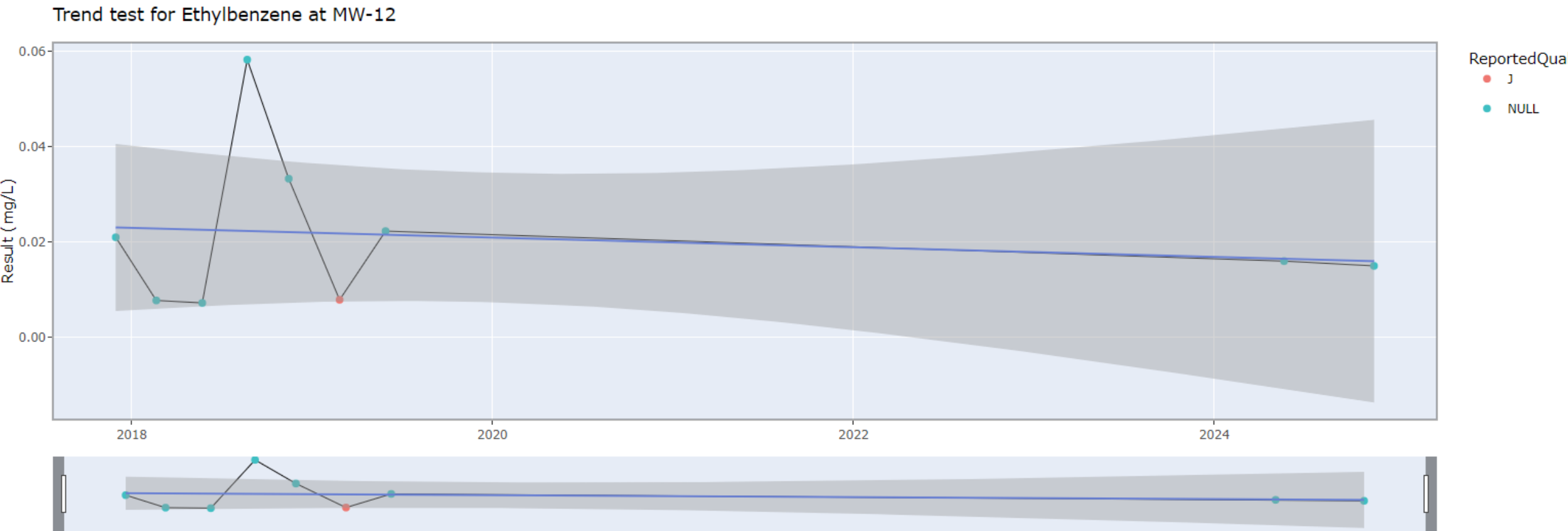
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.10      | 0.92    | 9         | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 1.01     | 0.86      | 1.18      | 0.28    |
| CollectionDate | -0.00    | 0.00      | -0.99     | 0.35    |



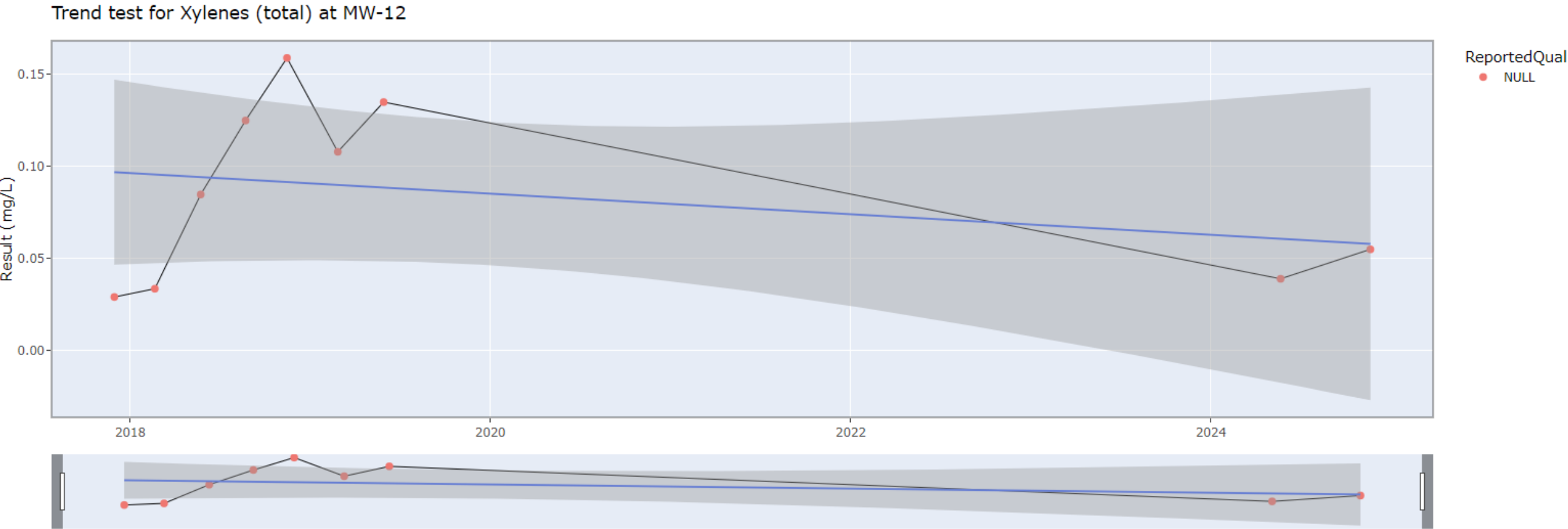
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -0.00     | 1.00    | 9         | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.07     | 0.11      | 0.63      | 0.55    |
| CollectionDate | -0.00    | 0.00      | -0.45     | 0.67    |



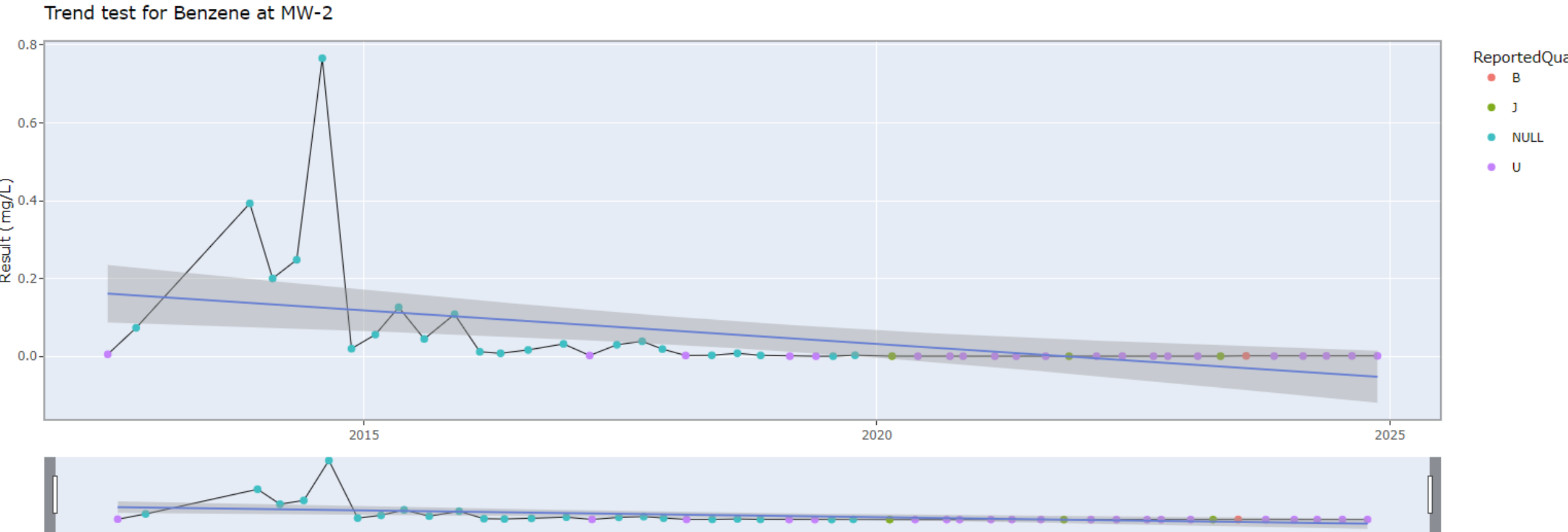
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| 0.94      | 0.35    | 9         | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.36     | 0.33      | 1.12      | 0.30    |
| CollectionDate | -0.00    | 0.00      | -0.86     | 0.42    |



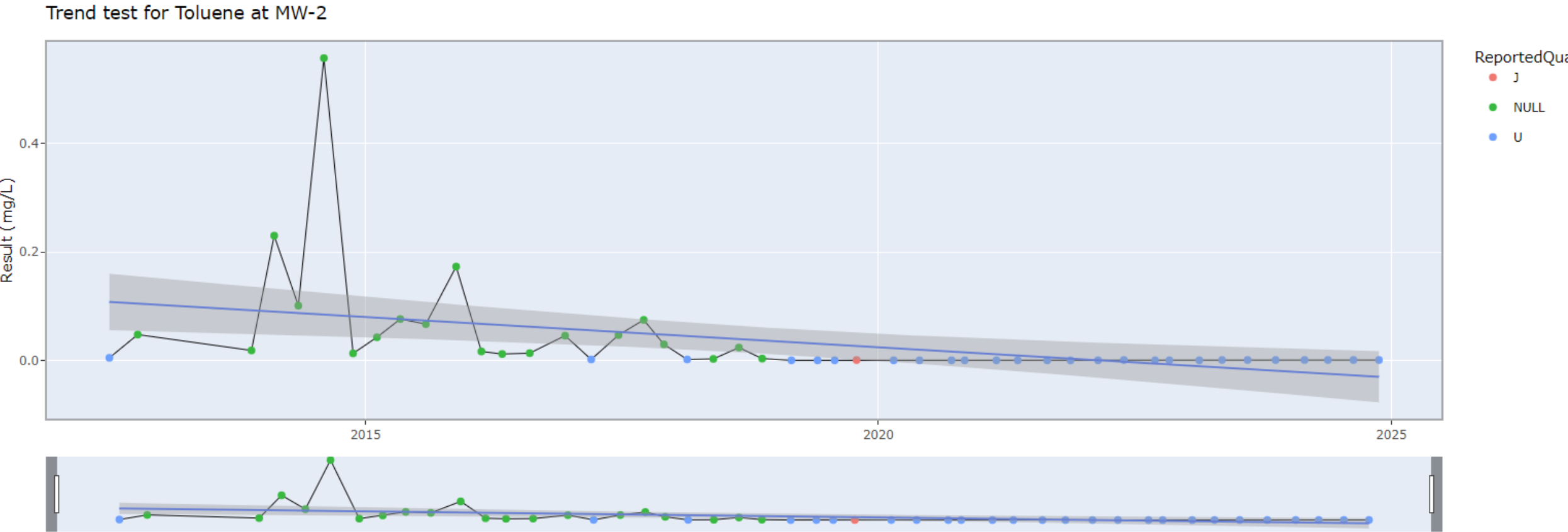
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -5.38     | 0.00    | 47        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.89     | 0.24      | 3.69      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -3.51     | 0.00    |



Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -4.74     | 0.00    | 47        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.58     | 0.17      | 3.41      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -3.21     | 0.00    |



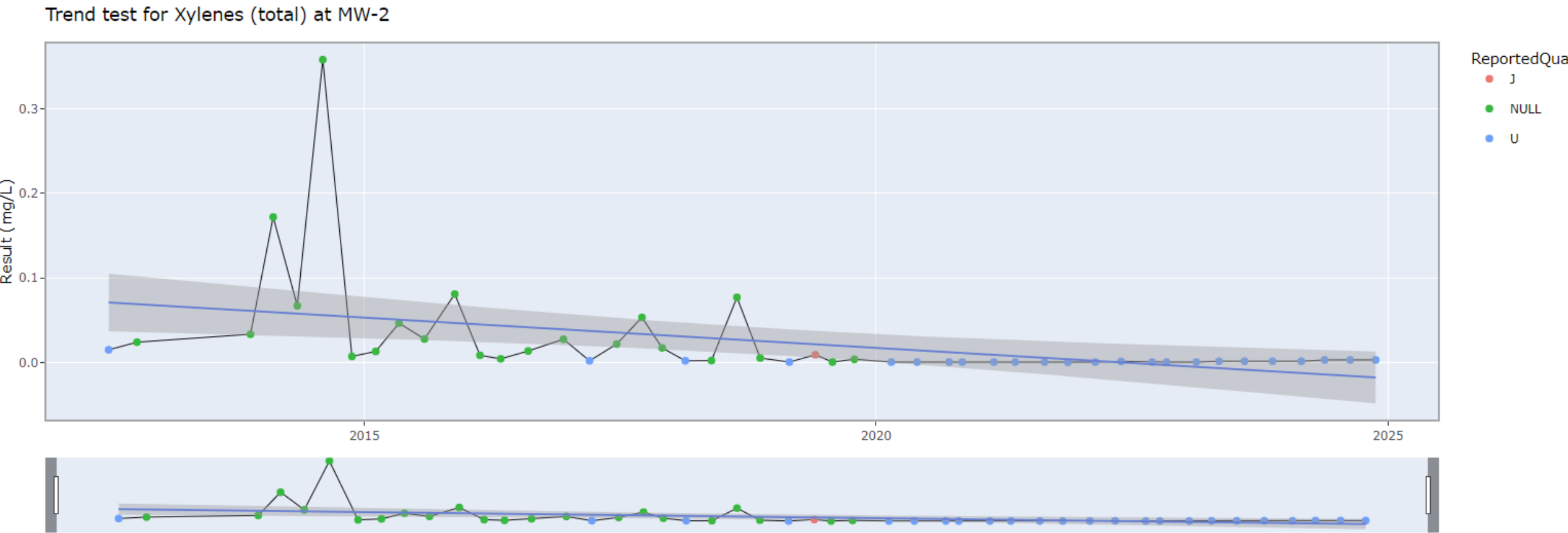
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -4.73     | 0.00    | 47        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.31     | 0.10      | 3.03      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -2.87     | 0.01    |



Statistical Summary

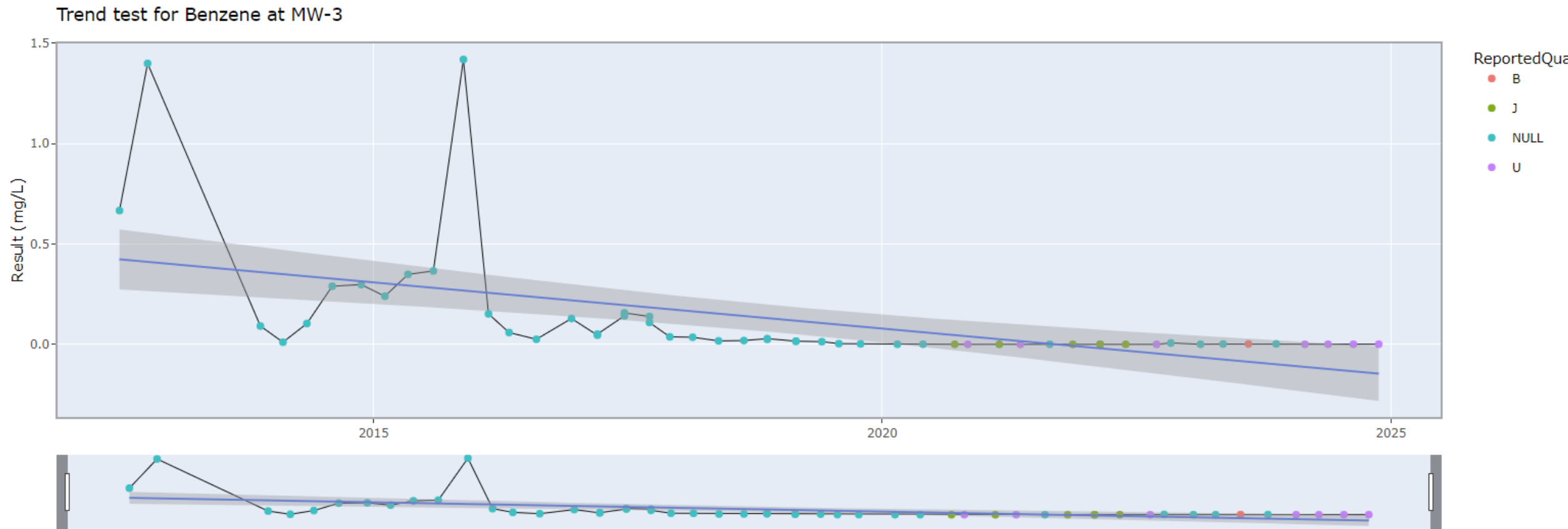
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -4.67     | 0.00    | 47        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.38     | 0.11      | 3.37      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -3.17     | 0.00    |





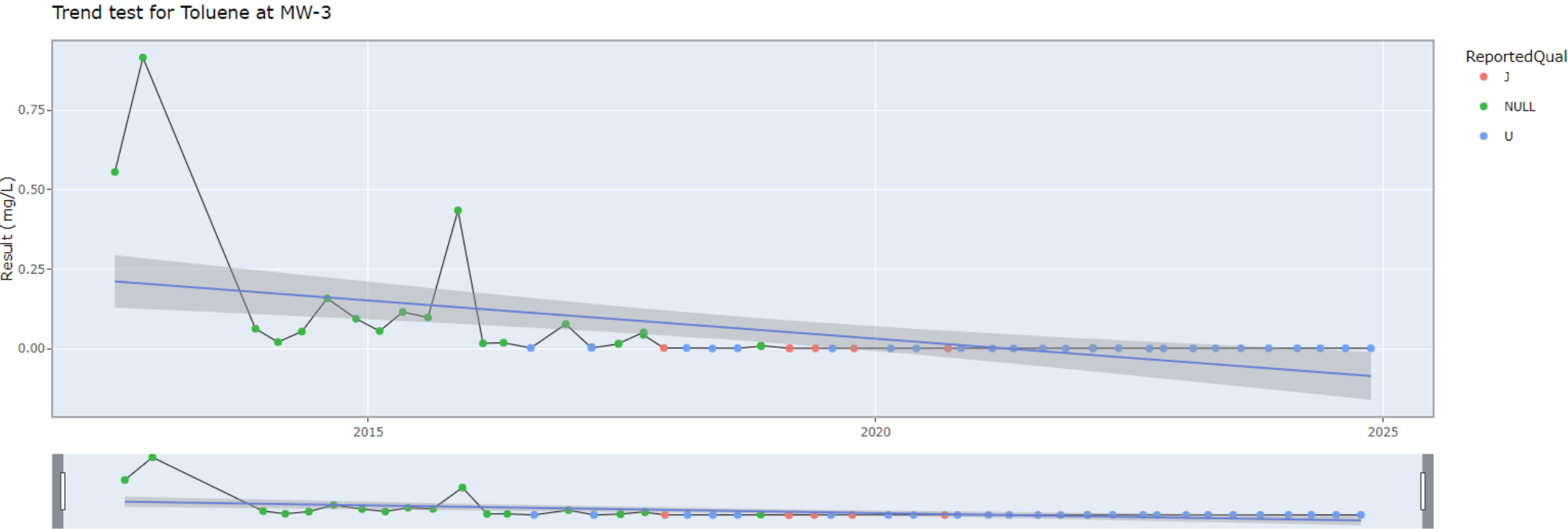
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -6.81     | 0.00    | 53        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 2.38     | 0.50      | 4.78      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -4.54     | 0.00    |



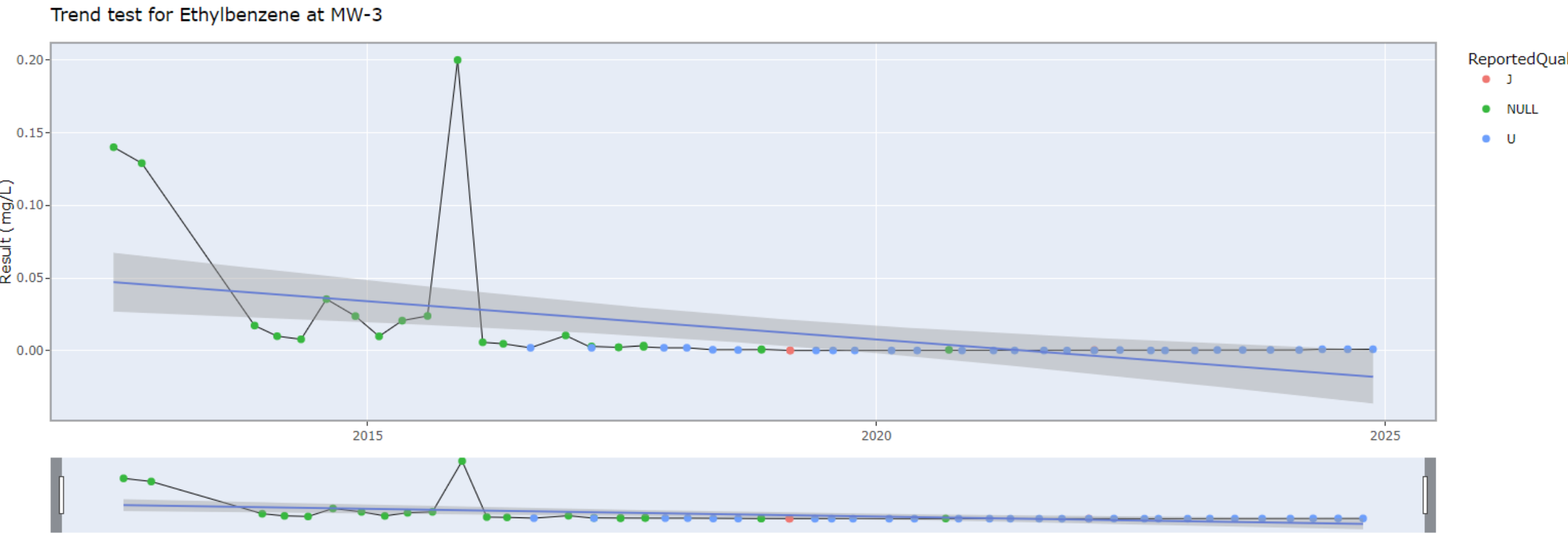
Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -5.82     | 0.00    | 53        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 1.23     | 0.28      | 4.48      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -4.29     | 0.00    |



Statistical Summary

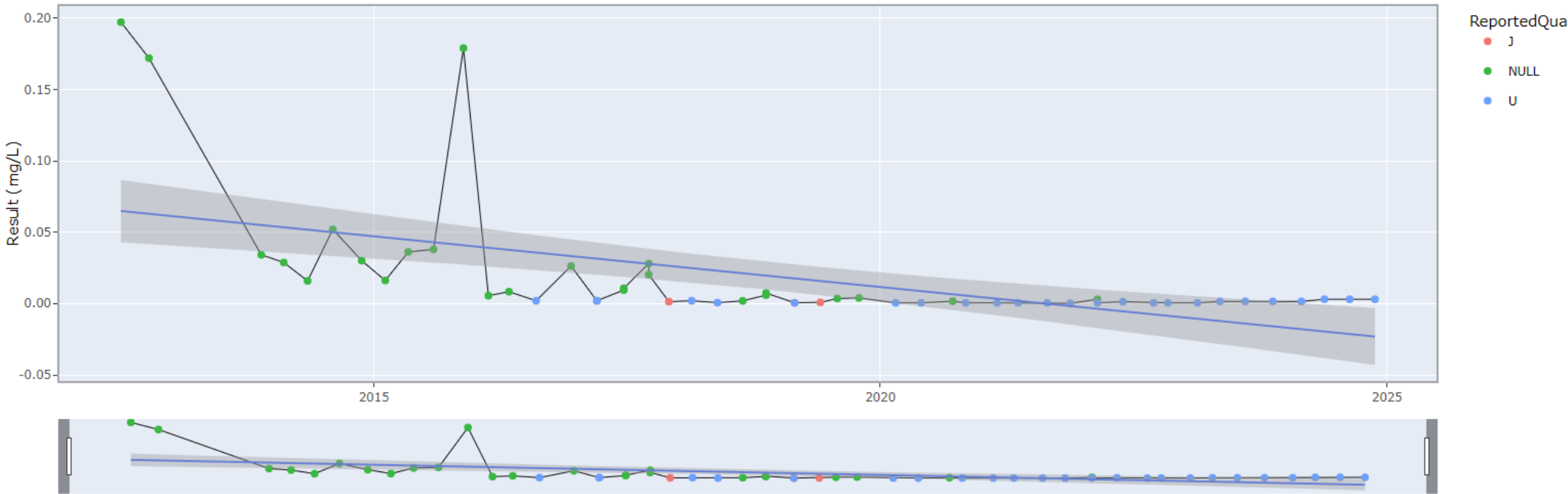
Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -6.13     | 0.00    | 53        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.27     | 0.07      | 4.02      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -3.84     | 0.00    |

Trend test for Xylenes (total) at MW-3



Statistical Summary

Mann Kendall Test Results

| statistic | p.value | parameter | method                  | alternative |
|-----------|---------|-----------|-------------------------|-------------|
| -5.51     | 0.00    | 53        | Mann-Kendall trend test | two.sided   |

Linear Regression Test Results

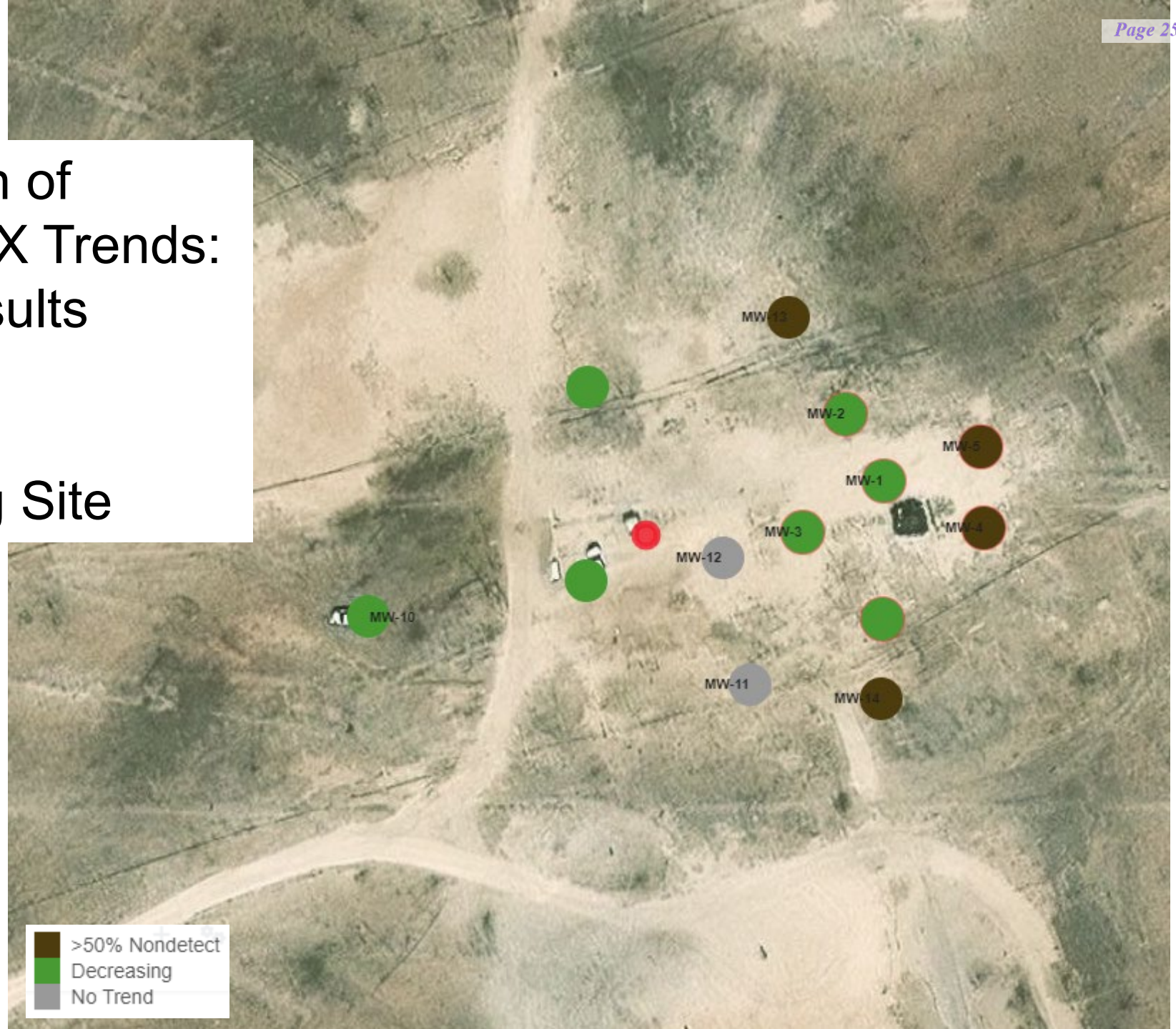
| term           | estimate | std.error | statistic | p.value |
|----------------|----------|-----------|-----------|---------|
| (Intercept)    | 0.37     | 0.07      | 5.04      | 0.00    |
| CollectionDate | -0.00    | 0.00      | -4.80     | 0.00    |

# Attachment D

## M-K Site Plan

# Spatial Distribution of Groundwater BTEX Trends: Mann-Kendall Results 2012-2024

## Chevron Grayburg Site







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

General Information  
Phone: (505) 629-6116

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

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

COMMENTS

Action 498865

COMMENTS

|                                                                                           |                                                                              |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Operator:<br><br>PLAINS MARKETING L.P.<br>333 Clay Street Suite 1900<br>Houston, TX 77002 | OGRID:<br><br>34053                                                          |
|                                                                                           | Action Number:<br><br>498865                                                 |
|                                                                                           | Action Type:<br><br>[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT) |

COMMENTS

| Created By | Comment                                                             | Comment Date |
|------------|---------------------------------------------------------------------|--------------|
| csmith     | Returned to OCD Review, Site map is attached, rereview and process. | 10/8/2025    |

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

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 498865

**CONDITIONS**

|                                                                                       |                |
|---------------------------------------------------------------------------------------|----------------|
| Operator:<br>PLAINS MARKETING L.P.<br>333 Clay Street Suite 1900<br>Houston, TX 77002 | OGRID:         |
|                                                                                       | 34053          |
|                                                                                       | Action Number: |
|                                                                                       | 498865         |
| Action Type:                                                                          |                |
| [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)                              |                |

**CONDITIONS**

| Created By   | Condition                                                                                                                                                                                                                                                                                                                     | Condition Date |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| shanna.smith | OCD records indicate that an approved Stage 2 plan is not on file. Pursuant to 19.15.30 NMAC, Plains must submit a Stage 2 Abatement Plan by November 5, 2025. Alternatively, if a Stage 2 Abatement Plan has been approved by OCD, provide a copy of Stage 2 Plan by November 5, 2025, so OCD can update our online records. | 10/8/2025      |
| shanna.smith | Continue submitting quarterly monitoring and sampling reports into OCD permitting.                                                                                                                                                                                                                                            | 10/8/2025      |
| shanna.smith | Continue to sample for BTEX EPA Method 8260 for all applicable monitoring wells.                                                                                                                                                                                                                                              | 10/8/2025      |
| shanna.smith | Monitor wells MW-2, MW-5, and MW-13 may be removed from groundwater monitoring and sampling plan. These wells will not be P&A and will remain in place.                                                                                                                                                                       | 10/8/2025      |
| shanna.smith | Continue annual PAH analysis in monitoring well MW-8.                                                                                                                                                                                                                                                                         | 10/8/2025      |
| shanna.smith | Pursuant to 20.6.2.3103 A(3) continue LNAPL recovery in monitor well MW-7. Include recovery method and schedule in Stage 2 Abatement Plan.                                                                                                                                                                                    | 10/8/2025      |
| shanna.smith | 2024 AGWMR approval does not relieve the owner/operator of responsibility for compliance with OCD, federal, state, or local laws and/or regulations.                                                                                                                                                                          | 10/8/2025      |