REVIEWED By Nelson Velez at 2:11 pm, Aug 03, 2022

**Review of 2021 ANNUAL GROUNDWATER** MONITORING REPORT: Content satisfactory

Contractor anticipated actions approved by

of SVE emissions and analyze for TPH and

and MW-5 for the presence of PSH, purged, and sampling quarterly for BTEX in 2022

Continue manual PSH recovery

Continue gauging MW-2, MW-4,

Sample MW-3 and MW-6 on a

Submit Annual Groundwater

Monitoring Report to NMOCD no later than

OCD and are as follows;

from monitoring well MW-1

1.

2.

3.

4.

5.

semiannual basis

March 31, 2023.

BTEX

# **2021 Annual Groundwater** Monitoring Report

Plains All American Pipeline, L.P. DCP Plant to Lea Station 6-Inch Section 31 Plains All American Pipeline, L.P. SRS No. 2009-084 Collect monthly effluent air samples Lea County, New Mexico NMOCD Reference No. 1RP-2166 NMOCD Incident No. nAPP2109734163

> **Terracon Project No. AR217009** March 28, 2022



terracon.com

## **Prepared for:**



Plains All American Pipeline, L.P. 1106 Griffith Drive Midland, Texas 79706

## **Prepared by:**

Terracon Consultants, Inc. Lubbock, Texas





March 28, 2022

Plains All American Pipeline, LP 1106 Griffith Drive Midland, Texas 79706

Attn:Mrs. Camille BryantTelephone:(432) 221-7924Email:CJBryant@paalp.com

Re: 2021 Annual Groundwater Monitoring Report DCP Plant to Lea Station 6-Inch Section 31 U/L "K", Sec. 31, T20S, R37E Lea County, New Mexico NMOCD Reference No. 1RP-2166 NMOCD Incident No. nAPP2109734163 Plains All American Pipeline, L.P. SRS NO. 2009-084 Terracon Project No. AR217009

Dear Mrs. Bryant:

Terracon is pleased to submit one electronic copy of the 2021 Annual Groundwater Monitoring Report for the above-referenced site.

We appreciate the opportunity to perform these services for Plains All American Pipeline, L.P. Please contact either of the undersigned at (806) 300-0140 if you have questions regarding the information provided in the report.

Sincerely, **Tierracon** 

Prepared by:

Brett Dennis

Staff Scientist Lubbock

Reviewed by:

Erin Loyd, P.

Principal Office Manager – Lubbock

Terracon Consultants, Inc. 5847 50th Street Lubbock, Texas 79424 P (806) 300 0140 F (806) 797 0947 terracon.com

Facilities

Environmental

i.

**2021 Annual Groundwater Monitoring Report** 

 Plains – DCP Plant to Lea Station 6-Inch Section 31 • Lea County, New Mexico

 March 28, 2022 Terracon Project No. AR217009

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Terracon Plains – DCP Plant to Lea Station 6-Inch Section 31 Lea County, New Mexico March 28, 2022 Terracon Project No. AR217009

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Terracon Plains – DCP Plant to Lea Station 6-Inch Section 31 Lea County, New Mexico March 28, 2022 Terracon Project No. AR217009

#### 1.0 INTRODUCTION

#### 1.1 Site Description

The legal description of the DCP Plant to Lea Station 6-Inch Section 31 release site is Unit Letter "K" (NE/SW), Section 31, Township 20 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by The State of New Mexico and administered by the New Mexico State Land Office (NMSLO). The geographic coordinates of the release site are 32.527330° North latitude and 103.29060° West longitude. A "Topographic Map" depicting the site's location is provided as Exhibit 1 in Appendix A.

| Site Name                | DCP Plant to Lea Station 6-Inch Section 31  |  |  |  |
|--------------------------|---|--|--|--|
| Site Location            | Latitude 32.527330° North, Longitude 103.29060° West  |  |  |  |
| General Site Description | The site consists of six groundwater monitoring wells located in, and adjacent to, a pipeline right-of-way surrounded by native pasture land. |  |  |  |
| Landowner                | State of New Mexico   |  |  |  |

#### 1.2 Background Information

Based on information provided by the client, on April 2, 2009, Plains All American Pipeline, L.P. (Plains) discovered a crude oil release from a 6-inch steel pipeline. During initial response activities, Plains installed a temporary clamp on the pipeline to mitigate the release. The crude oil release resulted in a surface stain measuring approximately 6 feet (ft.) in width by 8 ft. in length. Plains initially classified the release as "non-reportable". Upon further investigation, Plains reclassified the release to "reportable" status and notified the New Mexico Oil Conservation Division (NMOCD) Hobbs District 1 Office and submitted a Release Notification and Corrective Action (Form C-141) on April 29, 2009. The cause of the release was attributed to external corrosion of the pipeline. The C-141 indicated approximately 20 barrels (bbls) of crude oil were released from the pipeline, with no recovery.

On April 15, 2009, soil boring (SB-1) was advanced approximately 10 ft. west of the release point to evaluate the vertical extent of soil impact. During advancement of the soil boring, groundwater was encountered at approximately 77 ft. below ground surface (bgs). Temporary casing was installed in the boring to obtain a preliminary groundwater sample. On April 16, 2009, a groundwater sample (SB-1) was collected from the temporary casing and submitted for laboratory analysis of total dissolved solids (TDS), chlorides, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Following the collection of the groundwater sample, the temporary casing was removed from the soil boring and the soil boring was plugged with cement and bentonite, as

Terracon Plains – DCP Plant to Lea Station 6-Inch Section 31 Lea County, New Mexico March 28, 2022 Terracon Project No. AR217009

required by the New Mexico Office of the State Engineer (NMOSE). Laboratory analytical results indicated a benzene concentration of 1.915 milligrams per liter (mg/L), a BTEX concentration of 4.7711 mg/L, a chloride concentration of 54.6 mg/L, and a TDS concentration of 788 mg/L. Based on the analytical results of the submitted groundwater sample, Plains notified NMOCD representatives in the Hobbs District Office and the Santa Fe Office of the laboratory-confirmed impact to groundwater at the site.

On June 2, 2009, subsequent excavation of crude oil impacted soil began at the site. Approximately 1,400 cubic yards (cy) were excavated and stockpiled on a plastic liner to mitigate the potential leaching of the contaminants into the vadose zone. The final dimensions of the excavation were approximately 77 ft. in width, approximately 80 ft. in length, and 15 ft. in depth.

On September 21 through September 23, 2009, four monitoring wells (MW-1, MW-2, MW-3, and MW-4), were drilled, completed, and developed to further evaluate the status of the groundwater at the site with NMOCD approval. Soil samples were collected at 5-foot drilling intervals and field screened using a photo-ionization detector (PID). Selected soil samples were submitted to the laboratory for determination of concentrations of BTEX and total petroleum hydrocarbons (TPH) using EPA Methods SW-846 8021b and SW-846 8015M, respectively.

Monitoring well MW-1 was installed on the floor of the excavation, at approximately 15 ft. bgs, to a total depth of approximately 86 ft. bgs. Soil samples collected at 25 ft. bgs, 35 ft. bgs, 45 ft. bgs, 55 ft. bgs, 65 ft. bgs, and 75 ft. bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory method detection limit (MDL) for all of the submitted soil samples. BTEX concentrations ranged from 0.0359 milligrams per kilogram (mg/kg) for the soil sample collected at 25 ft. bgs to 13.444 mg/kg for the soil sample collected at 55 ft. bgs. The TPH concentrations ranged from 286 mg/kg for the soil sample collected at 25 ft. bgs to 1,538 mg/kg for the soil sample collected at 55 ft. bgs.

Monitoring well MW-2 is located approximately 75 ft. northwest (up-gradient) of the release point. The well was installed to a total depth of approximately 90 ft. bqs. Soil samples collected at 15 ft. bgs, 30 ft. bgs, 45 ft. bgs, 60 ft. bgs, and 75 ft. bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples.

Monitoring well MW-3 is located approximately 75 ft. to the southwest (cross-gradient) of the release point. The monitoring well was installed to a total depth of approximately 90 ft. bgs. Soil samples collected at 15 ft. bgs, 30 ft. bgs, 45 ft. bgs, and 60 ft. bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene concentrations ranged from less than the appropriate laboratory MDL for the soil samples collected at 15 ft. bgs, 30 ft. bgs, 45 ft. bgs, and 60 ft. bgs to 0.0025 mg/kg for the soil sample collected at 60 ft. bgs. Analytical results indicated BTEX concentrations ranged from less than the appropriate laboratory MDL for the soil samples collected at 15 ft. bgs, 30 ft. bgs, and 45 ft. bgs to 0.0052 mg/kg for the soil

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sample collected at 60 ft. bgs. TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples.

Monitoring well MW-4 is located approximately 75 ft. to the southeast (down-gradient) of the release point. The monitoring well was installed to a total depth of approximately 89 ft. bgs. Soil samples collected at 15 ft. bgs, 30 ft. bgs, 45 ft. bgs, and 60 ft. bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples.

On January 25, 2011, monitoring well MW-5 was installed to further monitor the down-gradient migration of the phase separated hydrocarbons (PSH) plume. Monitoring well MW-5 is located approximately 60 ft. to the southeast (down-gradient) of the release point. The well was installed to a total depth of approximately 95 ft. bgs. Soil samples collected at 15 ft. bgs, 25 ft. bgs, 45 ft. bgs, 65 ft. bgs, and 75 ft. bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples. PSH was not observed in monitoring well MW-5.

On September 11, 2013, monitoring well MW-6 was installed to further monitor the down-gradient migration of the PSH plume. Monitoring well MW-6 is located approximately 95 ft. to the east (cross-gradient) of the release point. The well was installed to a total depth of approximately 100 ft. bgs. Soil samples collected at 5 ft. bgs, 40 ft. bgs, and 75 ft. bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples. PSH was not observed in monitoring well MW-6.

On October 18, 2016, Terracon assumed project management responsibilities and oversight of groundwater monitoring activities at the DCP Plant to Lea Station 6-Inch Section 31 project site. There are a total of six monitoring wells (MW-1 through MW-6) located at the site. Monitoring wells MW-2 through MW-6 are gauged and sampled on a guarterly schedule and monitoring well MW-1 is currently not sampled due to the presence of PSH. A "Site Diagram" depicting monitoring well locations is provided as Exhibit 2 in Appendix A.

On March 6, 2020, a soil vapor extraction (SVE) unit was installed on monitor well MW-1. Previously a mobile dual phase extraction (MDPE) unit was utilized for the extraction of soil vapor. Monthly effluent air samples are collected from the SVE unit to ensure compliance with New Mexico Environment Department (NMED) Air Quality Bureau Action Levels. Results of effluent sample analysis is summarized in Table 3 of Appendix B.

During May of 2020, due to COVID-19, manual recovery events were reduced from a frequency of once per week to once per month. The monthly recovery event frequency persisted into 2021.

**2021 Annual Groundwater Monitoring Report** Plains – DCP Plant to Lea Station 6-Inch Section 31 

Lea County, New Mexico March 28, 2022 
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On January 11, 2022, approval was received from the NMOCD to reduce sampling frequency of monitoring wells MW-3 and MW-6 from a quarterly to a semi-annual basis. Both of these monitoring wells were sampled during each quarter of the 2021 reporting period. Monitoring wells MW-3 and MW-6 will be sampled semi-annually beginning in the 2022 reporting period, tentatively during the 1<sup>st</sup> and 3<sup>rd</sup> quarter monitoring events.

## 1.3 Scope of Work

Terracon's scope of work includes project management responsibilities, oversight of groundwater monitoring activities, and preparation of an *Annual Groundwater Monitoring Report* in accordance with the NMOCD letter, dated May 1998, requiring submittal of and *Annual Groundwater Monitoring* Report by April 1<sup>st</sup> of each year. Groundwater monitoring activities include conducting quarterly events at the site. Quarterly monitoring events include measuring the static water levels in the monitoring wells, checking for the presence of PSH, and the collection of groundwater samples from each of the on-site wells not exhibiting a measurable thickness of PSH. In accordance with the approved scope of work, Terracon conducted the quarterly groundwater monitoring events on March 18, June 17, September 10, and December 9, 2021.

## 2.0 GROUNDWATER REMEDIATION PROGRAM

## 2.1 Groundwater Monitoring

Quarterly groundwater monitoring events were conducted on March 18 (1Q2021), June 17 (2Q2021), September 10 (3Q2021), and December 9, 2021 (4Q2021). Quarterly groundwater monitoring events included measuring the static water level in the on-site monitoring wells, checking for the presence of PSH, purging, and the collection of groundwater samples from each of the on-site wells not exhibiting a measurable thickness of PSH.

Groundwater samples were collected utilizing low-flow sampling equipment, including a bladder pump and multi-parameter meter. Prior to sample collection, readings on the multi-parameter meter were recorded for a minimum of four cycles of five minutes each. Each collected sample was placed in laboratory-supplied containers appropriate to the analysis requested and placed on ice in a cooler. The sample coolers and completed chain-of-custody forms were delivered to Xenco Laboratories in Lubbock, Texas for analysis of benzene, toluene, ethylbenzene, and total (BTEX). Purged water was placed into an on-site polystyrene aboveground storage tank (AST) and disposed of at an NMOCD-approved disposal facility.

Based on sampling criteria provided by the NMOCD, groundwater samples collected from the onsite monitor wells were not subject to analysis of polynuclear aromatic hydrocarbons (PAHs). PAH sample requirements were met, as two years of sampling was performed on monitoring well MW-2 through MW-6. However, PAH was inadvertently analyzed during the 4<sup>th</sup> quarter monitoring

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event. There were no detections of PAHs above laboratory sample detection limits. Therefore, to adhere to the requirement of two consecutive years of PAH concentrations below action levels monitor wells MW-2 through MW-6 were analyzed for PAHs during the 4<sup>th</sup> guarter of 2021. Concentrations of PAHs were below applicable actions levels. PAH sampling will be completed on monitoring well MW-1 once it no longer contains PSH. Historical PAH data can be found in Table 5 in Appendix B.

Groundwater elevation gauging data collected during the respective quarterly sampling events were used to construct groundwater gradient maps, which are included as Exhibits 3 through 6 in Appendix A. Groundwater flow direction was relatively consistent during each quarter of 2021 in the southeasterly direction. Groundwater elevation and PSH thickness data is summarized in Table 1 in Appendix B.

#### LABORATORY ANALYTICAL METHODS 3.0

The groundwater samples collected from the on-site monitoring wells were analyzed for BTEX using EPA SW-846 Method 8021B. Laboratory results from the analysis of groundwater samples collected from the monitor wells are summarized in Table 2 in Appendix B and presented on Exhibits 7 through 10 in Appendix A. Copies of the certified laboratory reports and chain-ofcustody forms are provided in Appendix C.

#### 4.0 **GROUNDWATER DATA EVALUATION**

#### 4.1 **Groundwater Sample Results**

Laboratory analytical results from groundwater samples collected during each quarterly monitoring event were compared to NMOCD regulatory standards based on New Mexico Water Quality Control Commission (NMWQCC) groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC).

## 4.1.1 Monitoring Well MW-1

Monitoring well MW-1 was not sampled due to the presence of PSH. PSH thicknesses of 1.40 ft (1Q2021), 1.32 ft. (2Q2021), 1.20 ft (3Q2021), 1.04 ft (4Q2021) were observed during the quarterly monitoring events.

## 4.1.2 Monitoring Wells MW-2, MW-3, MW-4, MW-5, and MW-6

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDL during each guarterly monitoring event.

Terracon Plains – DCP Plant to Lea Station 6-Inch Section 31 
Lea County, New Mexico March 28, 2022 Terracon Project No. AR217009

#### 5.0 **CORRECTIVE ACTION**

#### 5.1 **Product Recovery**

An estimated 1.23 gallons of PSH were recovered from monitoring well MW-1 by manual recovery in 2021. During the last recovery event, the PSH thickness in monitoring well MW-1 measured 0.84 ft. An estimated 31.5 gallons (0.75 bbls) of hydrocarbon impacted groundwater were recovered manually from monitoring well MW-1 for 2021. Since recovery operations began in 2009, an estimated 5,799.43 gallons (138 bbls) of PSH have been manually recovered from monitoring well MW-1.

In September 2012, an MDPE unit was installed on monitoring well MW-1 by Talon LPE. The MDPE unit was shared with the nearby release site known as DCP Plant to Lea Station 6-Inch #2 (NMOCD Reference #1RP-2136), and the location of the unit was alternated periodically until an SVE unit was placed on the previously mentioned site on July 19, 2017.

On March 6, 2020, an SVE unit was installed on monitor well MW-1. Monthly effluent air samples are collected from the SVE unit to ensure compliance with New Mexico Environment Department (NMED) Air Quality Bureau (AQB) Action Levels.

During the 2021 reporting period, an average of 4.91 gallons per day of PSH in the vapor phase. The effluent sample collected on December 20, 2021 exhibited concentrations of TPH exceeding NMED AQB Action Level of 10 tons per year. The calculated value of TPH in the previously mentioned sample resulted in 14.8 tons per year. In response, Terracon mobilized to the site and adjusted a dilution valve on the SVE unit to ensure compliance in the future. Monitoring well MW-1 SVE air emissions analytical results for BTEX and TPH is summarized in Table 3 of Appendix Β.

#### 6.0 SUMMARY OF FINDINGS

The findings of the 2021 Quarterly groundwater monitoring activities are as follows:

- Currently, there are six groundwater monitoring wells (MW-1 through MW-6) located at the site.
- Monitoring well MW-1 was not sampled during each quarterly monitoring event due to the presence of PSH.
- Monitoring well MW-2 through MW-6 were gauged, purged, and sampled during each quarterly monitoring event.
- Benzene, toluene, ethylbenzene and total xylene concentrations were below the respective laboratory SDLs in groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, and MW-6 during each guarterly monitoring event.

Plains – DCP Plant to Lea Station 6-Inch Section 31 
Lea County, New Mexico March 28, 2022 Terracon Project No. AR217009

- Monitor wells MW-2, MW-3, MW-4, MW-5, and MW-6 were analyzed for PAHs for the second consecutive year during the 4<sup>th</sup> quarter monitoring events. Concentrations of PAHs were not detected above NMOCD Action Levels.
- The groundwater flow direction was relatively consistent to the southeast for each quarterly event. The groundwater gradient averaged 0.002 ft./ft.
- An estimated 1.23 gallons of PSH was recovered manually from monitoring well MW-1.

#### 7.0 **ANTICIPATED ACTIONS AND REQUESTS**

- Manual PSH recovery will continue on monitoring well MW-1.
- Monthly effluent air samples of SVE emissions will be collected and analyzed for TPH and BTEX.
- Monitoring wells MW-2, MW-4, and MW-5 will continue to be gauged for the presence of PSH, purged, and sampled quarterly for analysis of BTEX in 2022.
- Per NMOCD approval, monitoring wells MW-3 and MW-6 will be sampled on a semi-annual basis, tentatively during the 1<sup>st</sup> and 3<sup>rd</sup> quarter of 2022.
- An Annual Groundwater Monitoring Report will be prepared detailing field activities and the results of groundwater monitoring activities conducted during the 2022 reporting period.

#### 8.0 DISTRIBUTION

- Copy 1: Bradford Billings, Hydrologist, E Spec. A. New Mexico Energy, Minerals and Natural Resources Department **Oil Conservation Division** 1220 South St. Francis Drive Santa Fe, New Mexico 87505 bradford.billings@state.nm.us
- Copy 2: New Mexico Oil Conservation Division District 1 Office 1625 N. French Drive Hobbs, New Mexico 88240 emnrd-ocd-district1spills@state.nm.us
- Copy 3: Ryan Mann, Remediation Specialist New Mexico State Land Office 914 N. Linam Street Hobbs, New Mexico 88240 rmann@slo.state.nm.us
- Copy 4: Mrs. Camille Bryant Plains All American Pipeline, L.P. 1106 Griffith Drive Midland, Texas 79706 cjbryant@paalp.com
- Copy 5: Mr. Jeff Dann Plains All American Pipeline, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002 jpdann@paalp.c

## APPENDIX A

## Exhibit 1 – Topographic Map

Exhibit 2 – Site Diagram

Exhibit 3 – 1Q20 Groundwater Gradient Map (03/18/21)

Exhibit 4 – 2Q20 Groundwater Gradient Map (06/17/21)

Exhibit 5 – 3Q20 Groundwater Gradient Map (09/10/21)

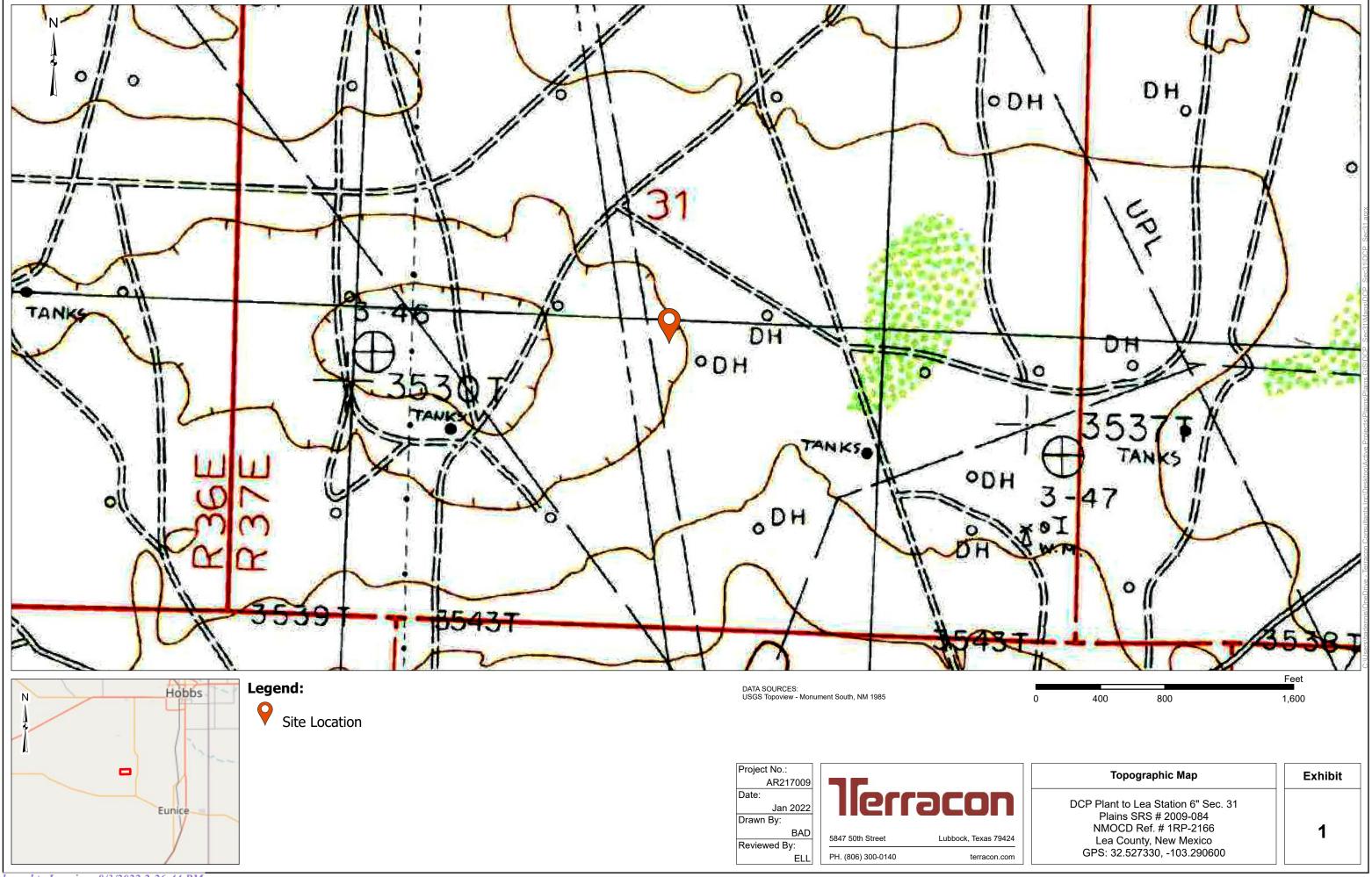
Exhibit 6 – 4Q20 Groundwater Gradient Map (12/09/21)

Exhibit 7 – 1Q20 Groundwater Contaminant Concentration Map (03/18/21)

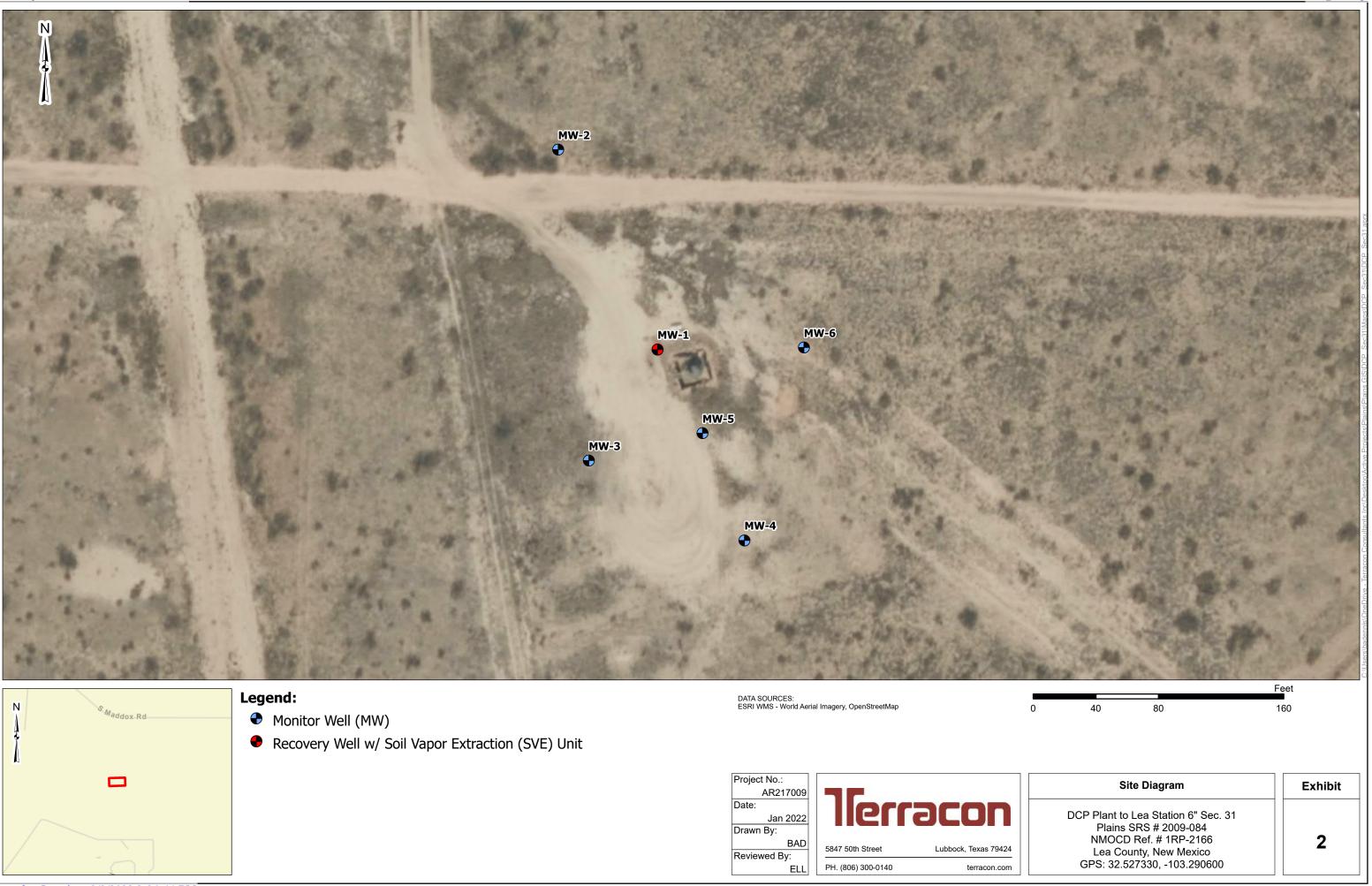
Exhibit 8 – 2Q20 Groundwater Contaminant Concentration Map (06/17/21)

Exhibit 9 – 3Q20 Groundwater Contaminant Concentration Map (09/10/21)

Exhibit 10 – 4Q20 Groundwater Contaminant Concentration Map (12/09/21)

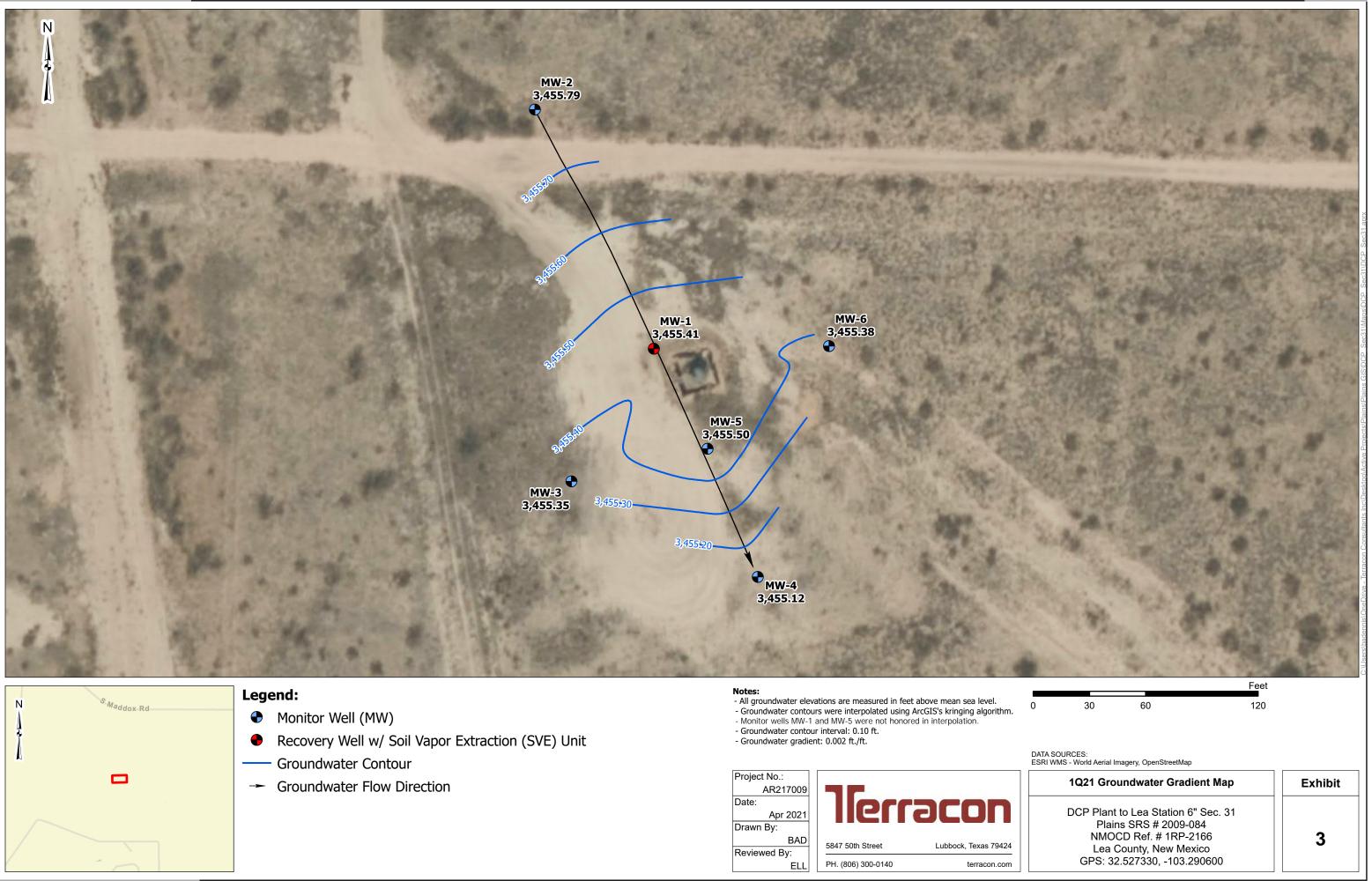


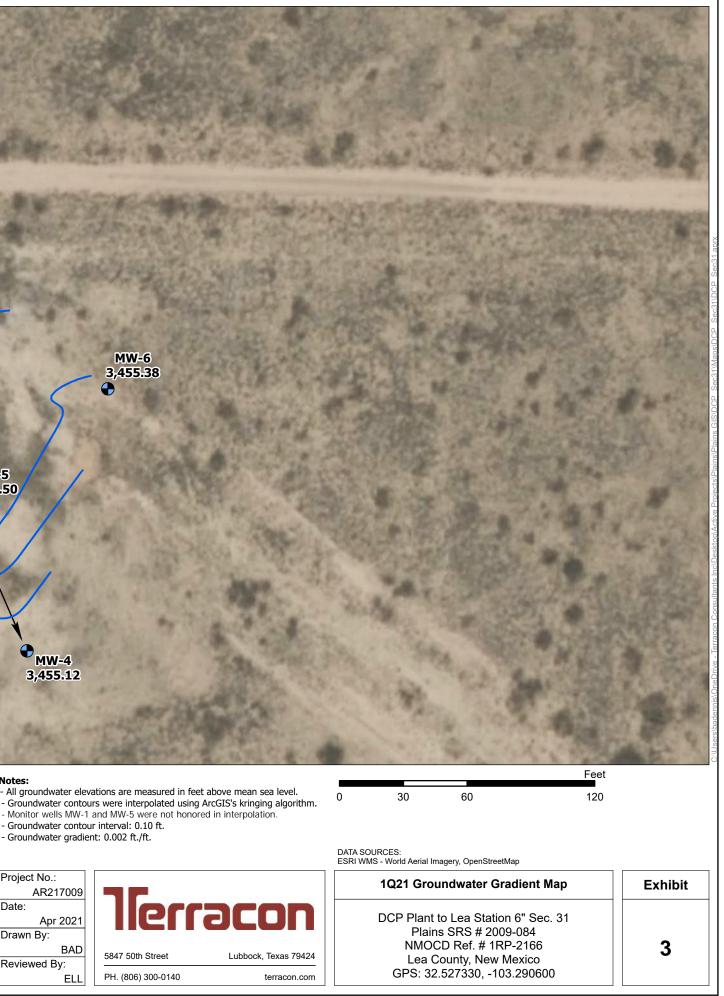
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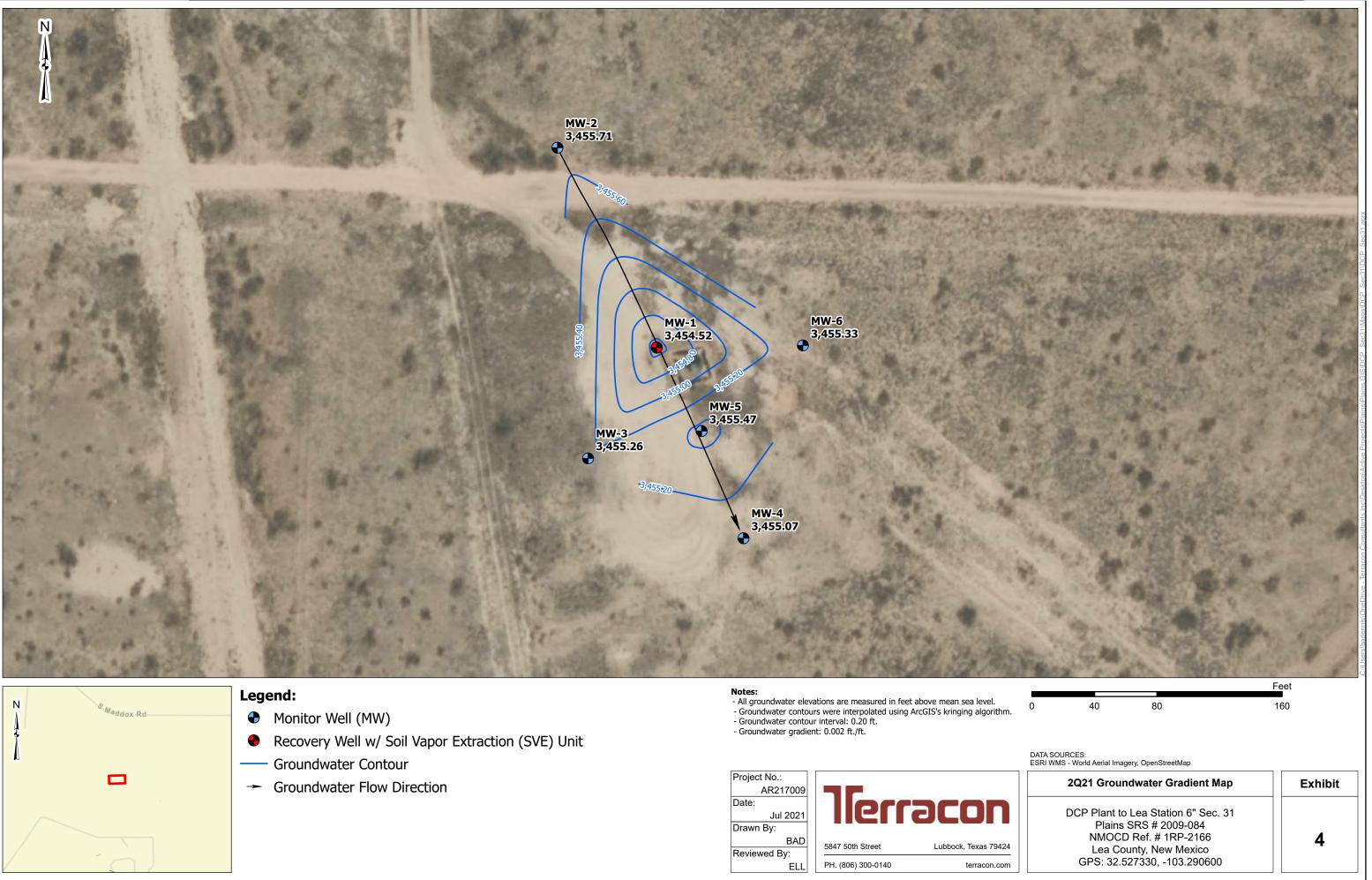
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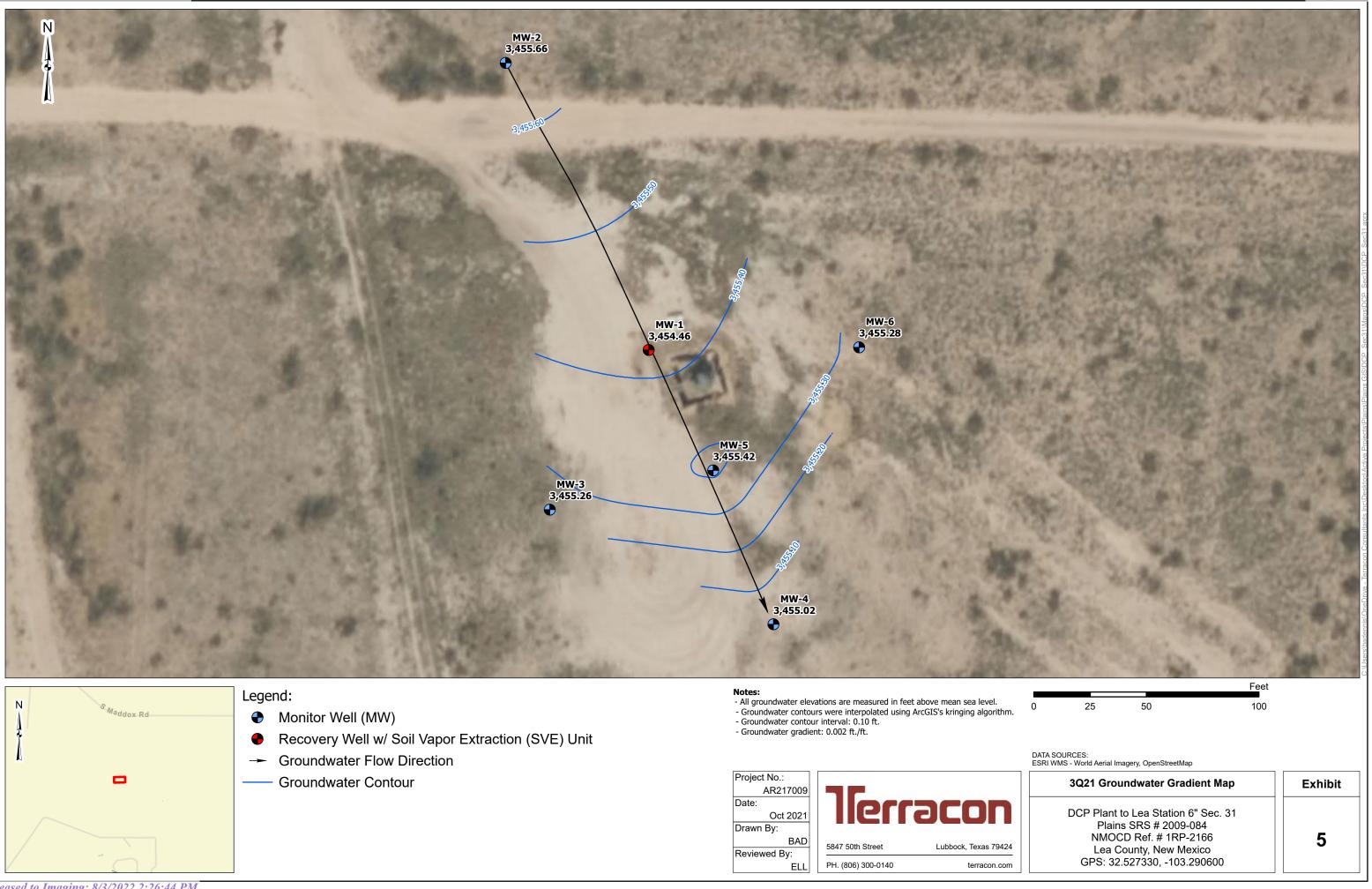


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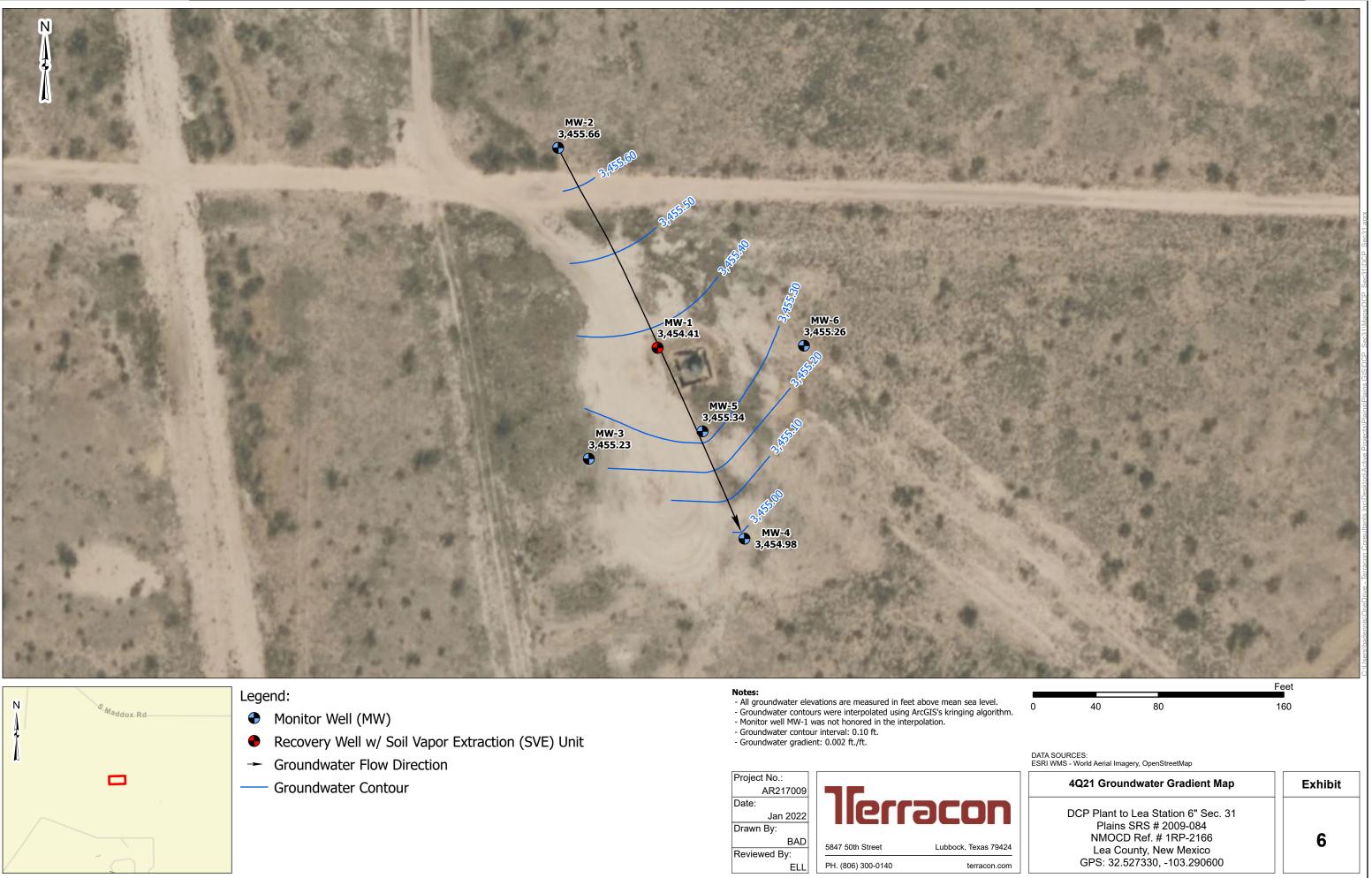


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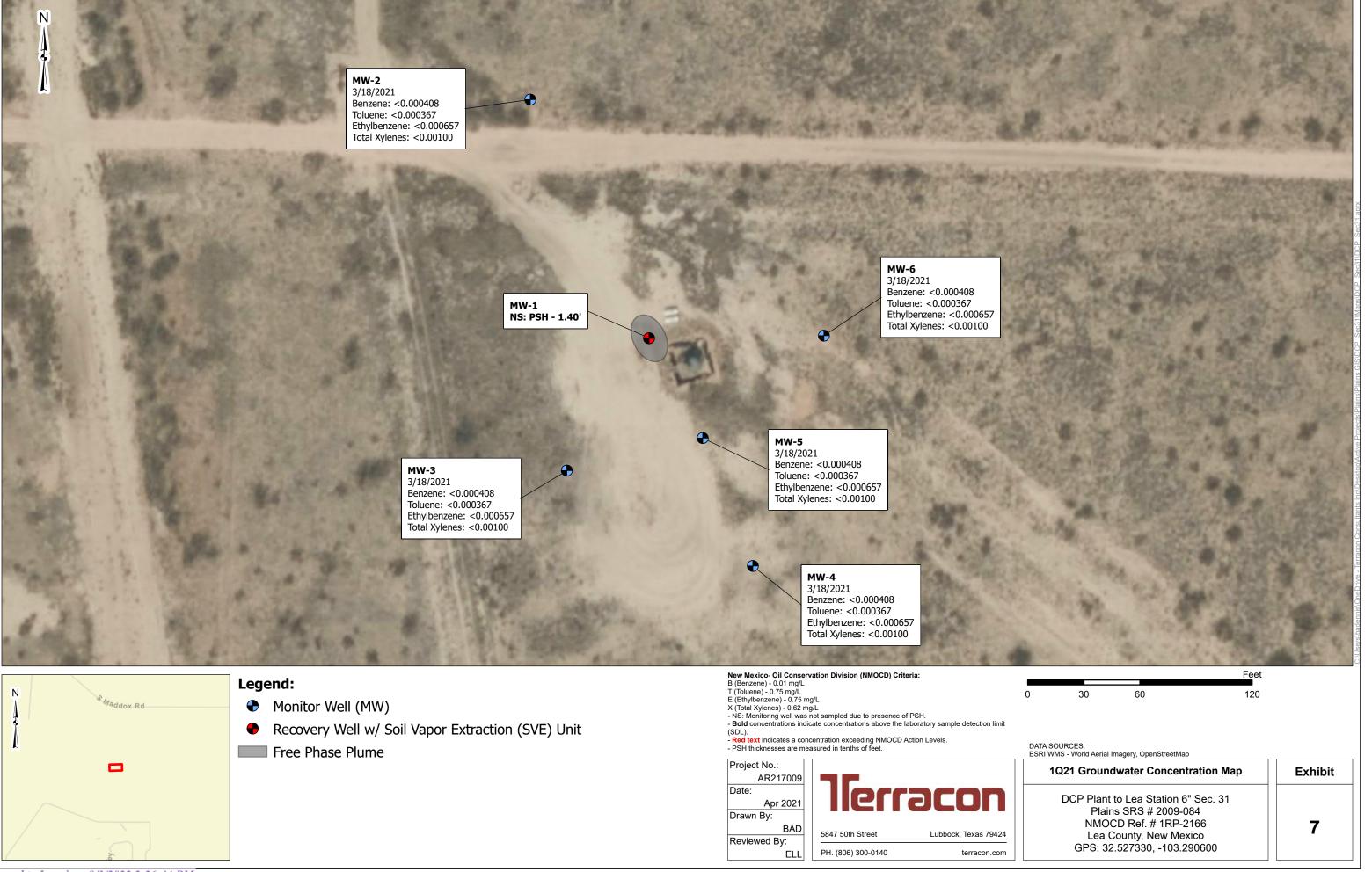


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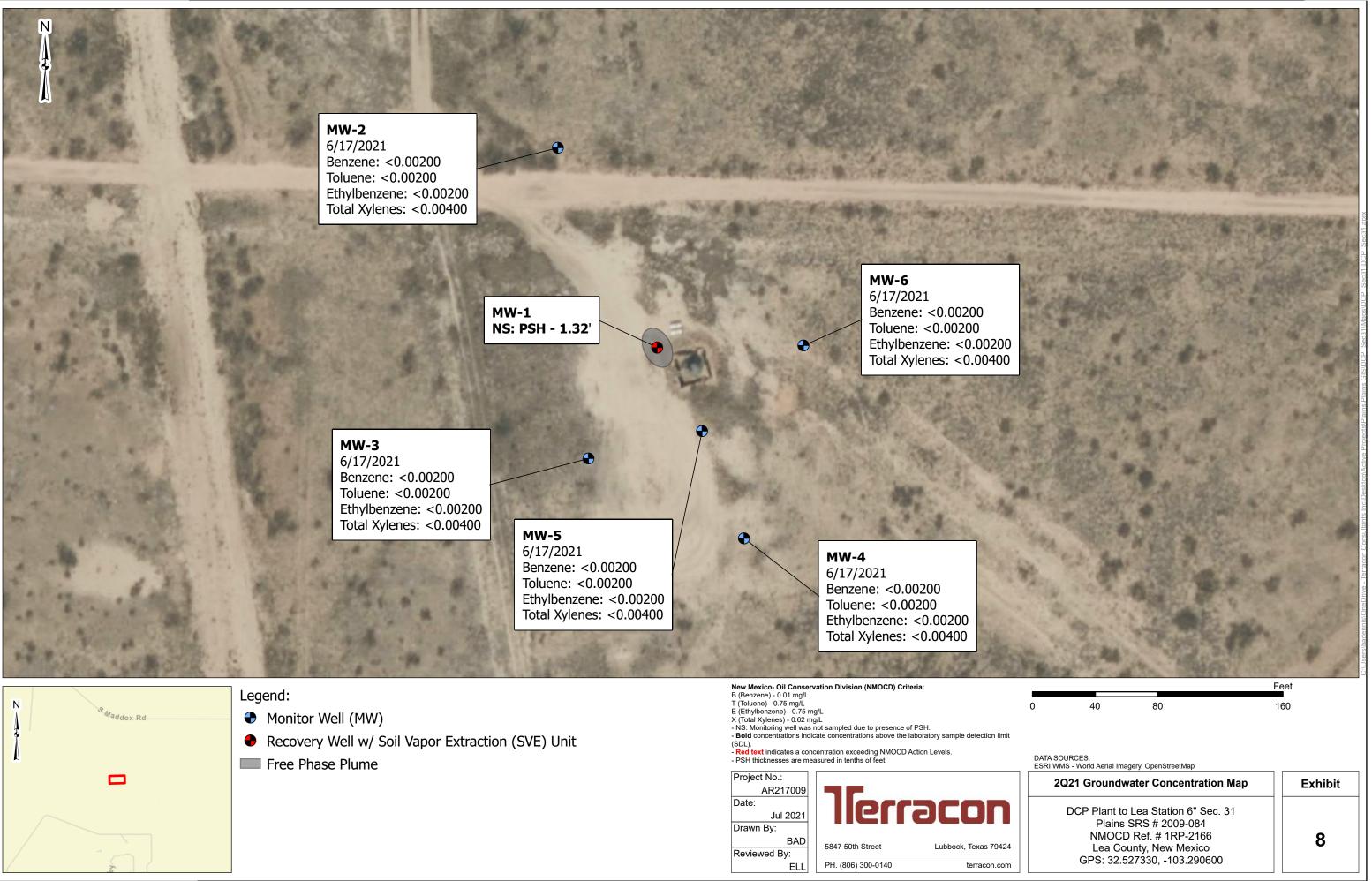


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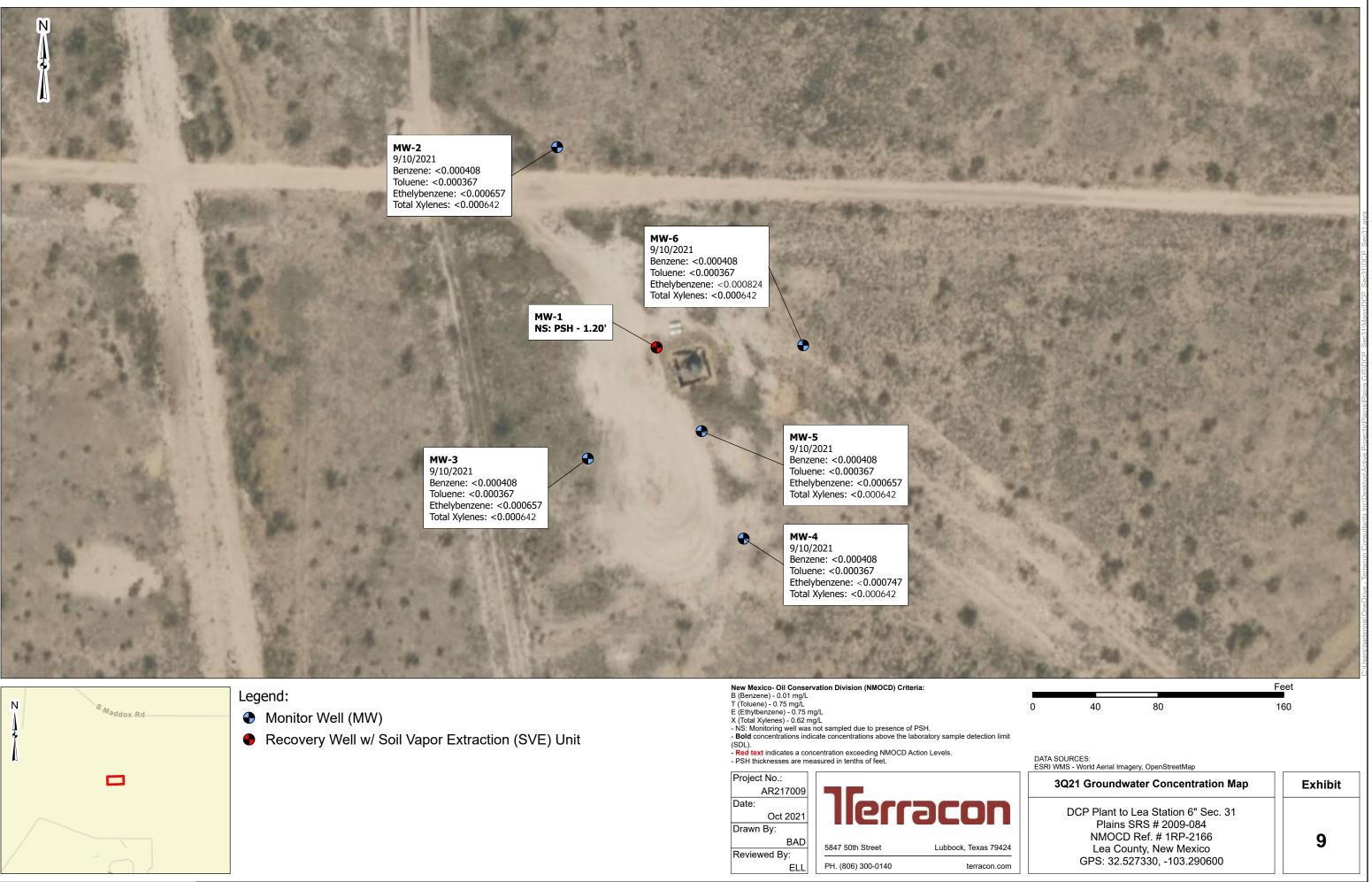


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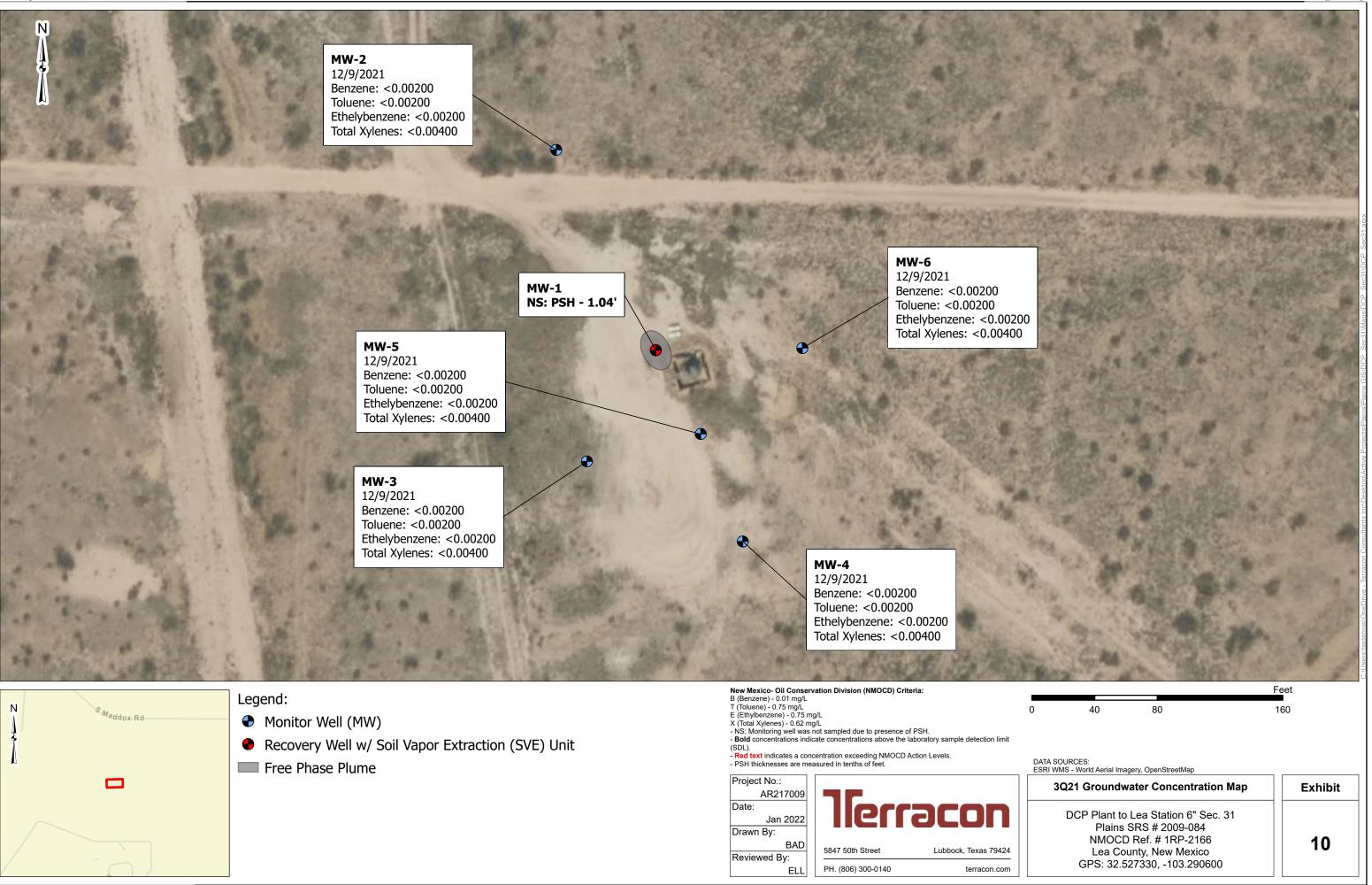


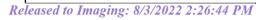
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## APPENDIX B

Table 1 – Groundwater Elevation and PSH Thickness Summary Table 2 – Groundwater BTEX Concentration Analytical Summary Table 3 – Air Emission Analytical Summary - BTEX and TPH Table 4 – MW-1 PSH Thickness & BTEX Recovery Summary Table 5 – Historical Concentrations of PAH in Groundwater Summary

.

#### Table 1 Groundwater Elevation and PSH<sup>1</sup> Thickness Summary

#### DCP Plant to Lea Station 6-Inch Sec. 31 Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-084 Terracon Project#: AR217009 NMOCD<sup>2</sup> Reference #: 1RP-2166

All measurements are in feet above mean sea level

|                   |                          | Top of             |              |                |           |                             |
|-------------------|--------------------------|--------------------|--------------|----------------|-----------|-----------------------------|
| Monitoring Well   | Date                     | Casing             | Depth to PSH | Depth to       | PSH       | Corrected                   |
| (Well Diameter ") | Gauged                   | (TOC) <sup>3</sup> | Below TOC    | Water Below    | Thickness | Groundwater                 |
| · · ·             |                          | Elevation          | (feet)       | TOC (feet)     | (feet)    | Elevation                   |
|                   | 01/23/2020               |                    | 83.95        | 84.45          | 0.50      | 3,455.57                    |
|                   | 06/24/2020               |                    | 84.37        | 84.50          | 0.13      | 3,455.20                    |
|                   | 09/21/2020               |                    | 84.72        | 86.36          | 1.64      | 3,454.62                    |
| MW-1 (4")         | 12/18/2020               | 3.539.59           | 84.87        | 86.37          | 1.50      | 3,454.50                    |
|                   | 03/18/2021               | 0,000.00           | 83.97        | 85.37          | 1.40      | 3,455.41                    |
|                   | 06/17/2021               |                    | 84.87        | 86.19          | 1.32      | 3,454.52                    |
|                   | 09/10/2021               |                    | 84.95        | 86.15          | 1.20      | 3,454.46                    |
|                   | 12/09/2021               |                    | 85.02        | 86.06          | 1.04      | 3,454.41                    |
|                   | 1                        | l.                 | 1            | 1              |           |                             |
|                   | 01/23/2020               |                    | -            | 84.55          | -         | 3,454.82                    |
|                   | 06/24/2020               |                    | -            | 83.55          | -         | 3,455.82                    |
|                   | 09/21/2020               |                    | -            | 83.55          | -         | 3,455.82                    |
| MW-2 (2")         | 12/18/2020               | 3,539.37           | -            | 83.62          | -         | 3,455.75                    |
| = (= )            | 03/18/2021               | .,                 | -            | 83.58          | -         | 3,455.79                    |
|                   | 06/17/2021               |                    | -            | 83.66          | -         | 3,455.71                    |
|                   | 09/10/2021               |                    | -            | 83.71          | -         | 3,455.66                    |
|                   | 12/09/2021               |                    | -            | 83.71          | -         | 3,455.66                    |
|                   |                          |                    | 1            |                |           |                             |
|                   | 01/23/2020               |                    | -            | 83.83          | -         | 3,455.45                    |
|                   | 06/24/2020               |                    | -            | 83.86          | -         | 3,455.42                    |
|                   | 09/21/2020               | 3,539.28           | -            | 83.85          | -         | 3,455.43                    |
| MW-3 (2")         | 12/18/2020               |                    | -            | 83.93          | -         | 3,455.35                    |
| - ( )             | 03/18/2021               |                    | -            | 83.93          | -         | 3,455.35                    |
|                   | 06/17/2021               |                    | -            | 84.02          | -         | 3,455.26                    |
|                   | 09/10/2021               |                    | -            | 84.02          | -         | 3,455.26                    |
|                   | 12/09/2021               |                    | -            | 84.05          | -         | 3,455.23                    |
|                   | 01/23/2020               | F                  | -            | 84.88          | - [       | 3,455.19                    |
|                   | 06/24/2020               |                    | -            | 84.89          | -         | 3,455.19                    |
|                   | 09/21/2020               |                    | -            | 84.89          | -         | 3,455.18                    |
|                   | 12/18/2020               | 0 = 40 0 =         | -            | 84.97          | -         | 3,455.10                    |
| MW-4 (2")         | 03/18/2021               | 3,540.07           | -            | 84.95          | -         | 3,455.12                    |
|                   | 06/17/2021               |                    | -            | 85.00          | -         | 3,455.07                    |
|                   | 09/10/2021               |                    | -            | 85.05          | -         | 3,455.02                    |
|                   | 12/09/2021               |                    | -            | 85.09          | -         | 3,454.98                    |
|                   |                          |                    |              |                |           |                             |
|                   | 01/23/2020               |                    | -            | 84.46          | -         | 3,455.44                    |
|                   | 06/24/2020               |                    | -            | 84.59          | -         | 3,455.31                    |
|                   | 09/21/2020               |                    | -            | 84.48          | -         | 3,455.42                    |
| MW-5 (4")         | 12/18/2020               | 3,539.90           | -            | 84.50          | -         | 3,455.40                    |
|                   | 03/18/2021<br>06/17/2021 |                    | -            | 84.57<br>84.60 | -         | <u>3,455.50</u><br>3,455.47 |
|                   | 09/10/2021               |                    | -            | 84.60          | -         | 3,455.47                    |
|                   | 12/09/2021               |                    | -            | 84.73          | -         | 3,455.34                    |
|                   | , 0 0, _ 0 _ 1           |                    |              | 00             |           | 0, 100.01                   |
|                   | 01/23/2020               |                    | -            | 85.39          | - [       | 3,455.43                    |
|                   | 06/24/2020               |                    | -            | 83.35          | -         | 3,457.47                    |
|                   | 09/21/2020               |                    | -            | 85.39          | -         | 3,455.43                    |
|                   | 12/18/2020               | 3,540.82           | -            | 85.45          | -         | 3,455.37                    |
| MW-6 (2")         | 03/18/2021               | 3,340.62           | -            | 85.44          | -         | 3,455.38                    |
|                   | 06/17/2021               |                    | -            | 85.49          | -         | 3,455.33                    |
|                   | 09/10/2021               |                    | -            | 85.54          | -         | 3,455.28                    |
|                   | 12/09/2021               |                    | -            | 85.56          | -         | 3,455.26                    |
|                   |                          |                    |              |                |           |                             |

Notes:

1. PSH: Phase Separated Hydrocarbons

2. NMOCD: New Mexico Oil Conservation Division

3. TOC: Top of Casing

\* Elevations based on the North American Vertical Datum of 1988.

\*\* Corrected groundwater elevations were extrapolated using a PSH specific gravity of 0.85, if PSH was gauged in the monitoring well.

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#### Table 2 Groundwater BTEX<sup>1</sup> Concentration Analytical Summary

#### DCP Plant to Lea Station 6-Inch Sec. 31 Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-084 NMOCD<sup>2</sup> Reference #: 1RP-2166 Terracon Project #: AR217009 All concentrations are in million or litor (ma/l) <u>no n</u>

|            |                          | All conce                         | entrations are                    | e in milligrams p      |                        |                        |                        |                        |  |  |  |  |
|------------|--------------------------|-----------------------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|--|--|--|
| Monitoring | Date                     | EPA SW846-8021B                   |                                   |                        |                        |                        |                        |                        |  |  |  |  |
| Well       |                          | _                                 |                                   | <b>E</b> (1, 1)        | M,P-                   | 0-                     | Total                  | Total                  |  |  |  |  |
| weii       | Sampled                  | Benzene                           | Toluene                           | Ethylbenzene           | Xylenes                | Xylenes                | Xylenes                | BTEX                   |  |  |  |  |
| NMOCD RR.  | AL CRITERIA <sup>3</sup> | 0.01                              | 0.75                              | 0.75                   | ΤΟΤΑ                   | L XYLENES 0            | .62                    | NE⁴                    |  |  |  |  |
|            | 01/23/2020               |                                   |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 06/25/2020               |                                   |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 09/21/2020               |                                   |                                   |                        |                        |                        |                        |                        |  |  |  |  |
| MW-1       | 12/18/2020               |                                   |                                   | Not Sampled o          | lue to presence        | of PSH                 |                        |                        |  |  |  |  |
|            | 03/18/2021               | _                                 |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 06/17/2021               | -                                 |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 09/10/2021<br>12/09/2021 | -                                 |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 12/03/2021               |                                   |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 01/23/2020               | <0.000480                         | < 0.000512                        | <0.000616              | <0.000454              | <0.000270              | <0.000270              | <0.000270              |  |  |  |  |
|            | 06/25/2020               | <0.000408                         | < 0.000367                        | < 0.000657             | <0.000630              | < 0.000642             | <0.000630              | < 0.000367             |  |  |  |  |
|            | 09/21/2020               | <0.000408                         | < 0.000367                        | <0.000657              | <0.000630              | <0.000642              | < 0.000630             | < 0.000367             |  |  |  |  |
| MW-2       | 12/18/2020               | < 0.000408                        | < 0.000367                        | < 0.000657             | <0.000630              | < 0.000642             | < 0.000630             |                        |  |  |  |  |
|            | 03/18/2021               | <0.000408                         | <0.000367                         | <0.000657              | <0.000629              | < 0.000642             | <0.00100               | <0.00100               |  |  |  |  |
|            | 06/17/2021<br>09/10/2021 | <0.00200<br><0.000408             | <0.00200<br><0.000367             | <0.00200<br><0.000657  | <0.00400<br><0.000629  | <0.00200<br><0.000642  | <0.00400<br><0.000642  | <0.00400<br><0.000657  |  |  |  |  |
|            | 12/09/2021               | <0.000408                         | <0.000367                         | <0.000657<br><0.00200  | <0.000629              | <0.000642              | <0.000642              | <0.000657              |  |  |  |  |
|            |                          |                                   |                                   |                        |                        |                        |                        |                        |  |  |  |  |
|            | 01/23/2020               | <0.000480                         | <0.000512                         | <0.000616              | <0.000454              | <0.000270              | <0.000270              |                        |  |  |  |  |
|            | 06/25/2020               | <0.000408                         | < 0.000367                        | <0.000657              | <0.000630              | <0.000642              | <0.000630              |                        |  |  |  |  |
|            | 09/21/2020               | <0.000408                         | < 0.000367                        | <0.000657              | <0.000630              | <0.000642              | < 0.000630             | < 0.000367             |  |  |  |  |
| MW-3       | 12/18/2020               | < 0.000408                        | < 0.000367                        | < 0.000657             | <0.000630              | < 0.000642             | <0.000630              | < 0.000367             |  |  |  |  |
|            | 03/18/2021               | < 0.000408                        | < 0.000367                        | < 0.000657             | <0.000629              | < 0.000642             | < 0.00100              | < 0.00100              |  |  |  |  |
|            | 06/17/2021<br>09/10/2021 | <0.00200<br><0.000408             | <0.00200<br><0.000367             | <0.00200<br><0.000657  | <0.00400<br><0.000629  | <0.00200<br><0.000642  | <0.00400<br><0.000642  | <0.00400<br><0.000657  |  |  |  |  |
|            | 12/09/2021               | <0.00200                          | <0.00200                          | <0.00200               | <0.00400               | <0.00200               | < 0.000042             | < 0.00400              |  |  |  |  |
|            | 12/00/2021               | 40.00200                          | <0.00200                          | <0.00200               | <0.00400               | <0.00200               | 40.00400               | <0.00400               |  |  |  |  |
|            | 01/23/2020               | < 0.000480                        | < 0.000512                        | < 0.000616             | <0.000454              | <0.000270              | <0.000270              | < 0.000270             |  |  |  |  |
|            | 06/25/2020               | 0.00123 J                         | < 0.000367                        | <0.000657              | <0.000630              | < 0.000642             |                        | 0.00123 J              |  |  |  |  |
|            | 09/21/2020               | 0.000520 J                        | < 0.000367                        | <0.000657              | <0.000630              | <0.000642              | < 0.000630             |                        |  |  |  |  |
| MW-4       | 12/18/2020               | <0.000480                         | < 0.000367                        | < 0.000657             | < 0.000630             | < 0.000642             | < 0.000630             | < 0.000367             |  |  |  |  |
|            | 03/18/2021               | <0.000408                         | < 0.000367                        | <0.000657              | <0.000629              | < 0.000642             | < 0.00100              | < 0.00100              |  |  |  |  |
|            | 06/17/2021<br>09/10/2021 | <0.00200<br><0.000408             | <0.00200<br><0.000367             | <0.00200<br><0.000747  | <0.00400<br><0.000629  | <0.00200<br><0.000642  | <0.00400<br><0.000642  | <0.00400<br><0.000747  |  |  |  |  |
|            | 12/09/2021               | <0.00200                          | <0.000307                         | <0.00200               | <0.00400               | <0.00200               | <0.000042              | <0.00400               |  |  |  |  |
|            |                          | 40100200                          | 40100200                          | 10100200               | 40100100               | 40100200               | 40.001.00              | 40100100               |  |  |  |  |
|            | 01/23/2020               | <0.000480                         | <0.000512                         | <0.000616              | <0.000454              | <0.000270              | <0.000270              | < 0.000270             |  |  |  |  |
|            | DUP-1                    | <0.000480                         | <0.000512                         | < 0.000616             | <0.000454              | <0.000270              |                        | <0.000270              |  |  |  |  |
|            | 06/25/2020               | <0.000408                         | < 0.000367                        | < 0.000657             | <0.000630              | < 0.000642             | <0.000630              |                        |  |  |  |  |
|            | DUP-1                    | < 0.000408                        | < 0.000367                        | < 0.000657             | <0.000630              | < 0.000642             | < 0.000630             |                        |  |  |  |  |
|            | 09/21/2020<br>DUP-1      | <0.000408<br><0.000408            | <0.000367<br><0.000367            | <0.000657<br><0.000657 | <0.000630<br><0.000630 | <0.000642<br><0.000642 | <0.000630<br><0.000630 | <0.000367<br><0.000367 |  |  |  |  |
|            | 12/18/2020               | <0.000408                         | <0.000367                         | <0.000657              | <0.000630              | <0.000642              | <0.000630              | <0.000367              |  |  |  |  |
|            | DUP-1                    | <0.000408                         | <0.000367                         | <0.000657              | <0.000630              | < 0.000642             |                        | <0.000367              |  |  |  |  |
| MW-5       | 03/18/2021               | <0.000408                         | <0.000367                         | <0.000657              | <0.000629              | < 0.000642             | < 0.00100              | < 0.00100              |  |  |  |  |
|            | DUP-1                    | <0.000408                         | < 0.000367                        | <0.000657              | <0.000629              | < 0.000642             | <0.00100               | < 0.00100              |  |  |  |  |
|            | 06/17/2021               | <0.00200                          | <0.00200                          | <0.00200               | <0.00400               | <0.00200               | < 0.00400              | < 0.00400              |  |  |  |  |
|            | DUP-1                    | <0.00200                          | <0.00200                          | <0.00200               | <0.00400               | <0.00200               | <0.00400               | < 0.00400              |  |  |  |  |
|            | 09/10/2021               | < 0.000408                        | < 0.000367                        | < 0.000657             | <0.000629              | < 0.000642             | < 0.000642             | < 0.00400              |  |  |  |  |
|            | DUP-1<br>12/09/2021      | <0.00200<br><0.00200              | <0.00200<br><0.00200              | <0.00200<br><0.00200   | <0.00400<br><0.00400   | <0.00200<br><0.00200   | <0.00400<br><0.00400   | <0.00400<br><0.00400   |  |  |  |  |
|            | 12/09/2021<br>DUP-1      | <0.00200                          | <0.00200                          | <0.00200               | <0.00400               | <0.00200               | <0.00400               | <0.00400               |  |  |  |  |
|            | DOFT                     | <u> \0.00200</u>                  | <b>NU.00200</b>                   | <0.00200               | <0.00400               | <0.00200               | ~0.00400               | <0.00 <del>4</del> 00  |  |  |  |  |
|            | 01/23/2020               | <0.000480                         | <0.000512                         | <0.000616              | <0.000454              | <0.000270              | <0.000270              | <0.000270              |  |  |  |  |
|            | 06/25/2020               | <0.000408                         | < 0.000367                        | <0.000657              | <0.000630              | <0.000642              | <0.000630              |                        |  |  |  |  |
|            | 09/21/2020               | <0.000408                         | < 0.000367                        | <0.000657              | <0.000630              | <0.000642              |                        | < 0.000367             |  |  |  |  |
| MW-6       | 12/18/2020               | <0.000408                         | <0.000367                         | <0.000657              | <0.000630              | <0.000642              | <0.000630              | <0.000367              |  |  |  |  |
|            | 03/18/2021               | < 0.000408                        | < 0.000367                        | < 0.000657             | <0.000629              | < 0.000642             | < 0.00100              | < 0.00100              |  |  |  |  |
|            | 06/17/2021               | < 0.00200                         | < 0.00200                         | < 0.00200              | < 0.00400              | < 0.00200              | < 0.00400              | < 0.00400              |  |  |  |  |
|            |                          |                                   |                                   |                        |                        |                        |                        | 0.0005                 |  |  |  |  |
|            | 09/10/2021               | <0.00200<br><0.000408<br><0.00200 | <0.00200<br><0.000367<br><0.00200 | <0.000824<br><0.00200  | <0.000629<br><0.00400  | <0.000642<br><0.00200  | <0.000642<br><0.00400  | <0.00824<br><0.00400   |  |  |  |  |

Notes: 1. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes 2. NMOCD: New Mexico Oil Conservation Division 3. RRAL Criteria: Recommended Remediation Action Level Criteria

4. NE: Not Established

J: The target analyte was positively identified below the quantitation limit and above the detection limit

#### TABLE 3 Air Emission Analytical Summary - $\mbox{BTEX}^1$ and $\mbox{TPH}^2$

# DCP Plant to Lea Station 6-Inch Sec. 31 Lea Courty, New Mexico Plains Pipeline, L.P. SRS#: 2009-084 NMOCD Reference #: 1RP-2166 Terracon Project No. AR217009

| Sample I.D.                           | Sample Date           | Laboratory             | BTEX / TPH<br>(mg/m³)                      | Emission Mass <sup>3</sup><br>(tons/year) | Emission Volume<br>(gal/day) |
|---------------------------------------|-----------------------|------------------------|--|---|------------------------------|
| New Mexico Enviro                     | onment Department (NN | IED) Air Quality Burea | (AQB) Action Level requiring an Air Permit | 10  |                              |
|                                       |                       |                        | Benzene - 3.96                             | 0.003                                     | 0.002                        |
|                                       |                       |                        | Toluene - 8.80                             | 0.006                                     | 0.004                        |
| EF-1 (20200331)                       | 03/31/20              | Pace                   | Ethylbenzene - ND                          | N/A                                       | N/A                          |
| 2 (20200001)                          | 00/01/20              | 1 400                  | Total Xylene - 17.6                        | 0.012                                     | 0.009                        |
|                                       |                       |                        | Total BTEX - 6.2                           | 0.004                                     | 0.003                        |
|                                       |                       |                        | TPH - GRO - N/A                            | N/A                                       | N/A                          |
|                                       |                       |                        | Benzene - 12.8                             | 0.009                                     | 0.007                        |
|                                       |                       |                        | Toluene - 16.7                             | 0.011                                     | 0.009                        |
| EFF-1 (20200430)                      | 04/30/20              | Pace                   | Ethylbenzene - 1.87                        | 0.001                                     | 0.001                        |
| . ,                                   |                       |                        | Total Xylene - 41.6                        | 0.028                                     | 0.021                        |
|                                       |                       |                        | Total BTEX - 17.2                          | 0.012                                     | 0.009                        |
|                                       |                       |                        | TPH - GRO - 6,490                          | 4.42                                      | 4.09                         |
|                                       |                       |                        | Benzene - 27.8                             | 0.019                                     | 0.014                        |
|                                       |                       |                        | Toluene - 36.0                             | 0.025                                     | 0.018                        |
| EFF-1 (20200528)                      | 05/28/20              | Pace                   | Ethylbenzene - 3.20                        | 0.002                                     | 0.002                        |
| ,                                     |                       |                        | Total Xylene - 101                         | 0.069                                     | 0.052                        |
|                                       |                       |                        | Total BTEX - 29.2                          | 0.020                                     | 0.015                        |
|                                       |                       |                        | TPH - GRO - 12,500                         | 8.51                                      | 7.87                         |
|                                       |                       |                        | Benzene - 42.8                             | 0.029                                     | 0.022                        |
|                                       |                       |                        | Toluene - 77.2                             | 0.053                                     | 0.040                        |
| EFF-1 (20200629)                      | 06/29/20              | Pace                   | Ethylbenzene - 9.70                        | 0.007                                     | 0.005                        |
| . ,                                   |                       |                        | Total Xylene - 169                         | 0.115                                     | 0.086                        |
|                                       |                       |                        | Total BTEX - 72.4                          | 0.049                                     | 0.037                        |
|                                       |                       |                        | TPH - GRO - 19,900                         | 13.6                                      | 12.5                         |
|                                       |                       |                        | Benzene - 26.3                             | 0.018                                     | 0.013                        |
|                                       |                       |                        | Toluene - 46.7                             | 0.032                                     | 0.024                        |
| EFF-1 (20200729)                      | 07/29/20              | Pace                   | Ethylbenzene - 4.30                        | 0.003                                     | 0.002                        |
| ( ,                                   |                       |                        | Total Xylene - 65.5                        | 0.045                                     | 0.034                        |
|                                       |                       |                        | Total BTEX - 25.4                          | 0.017                                     | 0.013                        |
|                                       |                       |                        | TPH - GRO - 9,250                          | 6.30                                      | 5.83                         |
|                                       |                       |                        | Benzene - 13.1                             | 0.009                                     | 0.007                        |
|                                       |                       |                        | Toluene - 17.9                             | 0.012                                     | 0.009                        |
| EFF-1 (20200819)                      | 08/19/20              | Pace                   | Ethylbenzene - ND                          | -   | -                            |
| ( ,                                   |                       |                        | Total Xylene - 16.0                        | 0.010                                     | 0.008                        |
|                                       |                       |                        | Total BTEX - 6.00                          | 0.004                                     | 0.003                        |
|                                       |                       |                        | TPH - GRO - 5,580                          | 3.80                                      | 3.51                         |
|                                       |                       |                        | Benzene - 21.3                             | 0.014                                     | 0.011                        |
|                                       |                       |                        | Toluene - 31.1                             | 0.021                                     | 0.016                        |
| EFF-1 (09282020)                      | 09/28/20              | Pace                   | Ethylbenzene - 3.10                        | 0.002                                     | 0.002                        |
|                                       |                       |                        | Total Xylene - 64.9                        | 0.044                                     | 0.033                        |
|                                       |                       |                        | Total BTEX - 120.4                         | 0.082                                     | 0.062                        |
|                                       |                       |                        | TPH - GRO - 9,250                          | 6.30                                      | 5.82                         |
|                                       |                       |                        | Benzene - 18.2                             | 0.012                                     | 0.009                        |
|                                       |                       |                        | Toluene - 28.1                             | 0.019                                     | 0.014                        |
| EFF-1 (10292020)                      | 10/29/20              | Pace                   | Ethylbenzene - 2.90                        | 0.002                                     | 0.001                        |
| ,                                     |                       |                        | Total Xylene - 32.9                        | 0.022                                     | 0.017                        |
|                                       |                       |                        | Total BTEX - 82.1                          | 0.056                                     | 0.042                        |
|                                       |                       |                        | TPH - GRO - 7,230                          | 4.92                                      | 4.55                         |
|                                       |                       |                        | Benzene - 15.6                             | 0.011                                     | 0.008                        |
|                                       |                       |                        | Toluene - 26.2                             | 0.018                                     | 0.013                        |
| EFF-1 (12312020)                      | 12/31/20              | Pace                   | Ethylbenzene - 2.51                        | 0.002                                     | 0.001                        |
| · · · · · · · · · · · · · · · · · · · |                       |                        | Total Xylene - 54.3                        | 0.037                                     | 0.028                        |
|                                       |                       |                        |  |   | 0.050                        |
|                                       |                       |                        | Total BTEX - 98.6<br>TPH - GRO - 5,780     | 0.067 3.935                               | 0.050 3.64                   |

Notes:

1. BTEX: Benzene, toluene, ethylbenzene, total xylene analyzed by EPA Method 8021B

2. TPH: Total petroleum hydrocarbons analyzed by EPA Method 8015 3. Emission Mass calculated assuming flowrate 1.1073 (m³/min) and constituent concentration were constant for the entirety of a year.

4. SVE Emission: Soil Vapor Extraction

NA: Indicates constituant was not analyzed

< = Constituent not detected above laboratory sample detection limit (SDL) Bold denotes concentrations that could potentially be in violation of applicable NMED AQB criteria.

#### TABLE 3 Air Emission Analytical Summary - $\mbox{BTEX}^1$ and $\mbox{TPH}^2$

# DCP Plant to Lea Station 6-Inch Sec. 31 Lea Courty, New Mexico Plains Pipeline, L.P. SRS#: 2009-084 NMOCD Reference #: 1RP-2166 Terracon Project No. AR217009

| Sample I.D.       | Sample Date           | Laboratory             | BTEX / TPH<br>(mg/m³)   | Emission Mass <sup>3</sup><br>(tons/year)                     | Emission Volume<br>(gal/day)                                  |
|-------------------|-----------------------|------------------------|---|---|---|
| New Mexico Enviro | onment Department (NI | IED) Air Quality Burea | (AQB) Action Level requiring an Air Permit  | 10  |   |
| EFF-1 Sec. 31     | 01/28/21              | Pace                   | Benzene - 14.7<br>Toluene - 25.6<br>Ethylbenzene - 2.49<br>Total Xylene - 59.3  | 0.010<br>0.017<br>0.002<br>0.040                              | 0.008<br>0.013<br>0.001<br>0.030                              |
|                   |                       |                        | Total BTEX - 102<br>TPH - GRO - 7,560<br>Benzene - 9.26   | 0.069<br>5.15<br>0.006  | 0.052<br>4.76<br>0.005  |
| EFF-1 (02262021)  | 02/26/21              | Pace                   | Toluene - 20.7<br>Ethylbenzene - 2.45<br>Total Xylene - 47.1<br>Total BTEX - 79.5<br>TPH - GRO - 7.770  | 0.014<br>0.002<br>0.032<br>0.054<br>5.29                      | 0.011<br>0.001<br>0.024<br>0.041<br>4.89                      |
| EFF-1 (03302021)  | 03/30/21              | Pace                   | Benzene - 7.67<br>Toluene - 14.3<br>Ethylbenzene - 1.60<br>Total Xylene - 32.4<br>Total BTEX - 56.0<br>TPH - GRO - 5,910                      | 0.005<br>0.010<br>0.001<br>0.022<br>0.038<br>4.02             | 0.004<br>0.007<br>0.001<br>0.017<br>0.029<br>3.72             |
| EFF-1 (04272021)  | 04/27/21              | Pace                   | Benzene - 0.00470<br>Toluene - 0.0180<br>Ethylbenzene - 0.00274<br>Total Xylene - 0.0456<br>Total BTEX - 0.0710<br>TPH - GRO - ND             | 0.000003<br>0.000012<br>0.000002<br>0.000031<br>0.000048      | 0.000002<br>0.000009<br>0.000001<br>0.000023<br>0.000023      |
| EFF-1 (05272021)  | 05/27/21              | Pace                   | TPH - GRO - ND<br>Benzene - ND<br>Toluene - 27.9<br>Ethylbenzene - 5.42<br>Total Xylene - 60.0<br>Total BTEX - 93.3<br>TPH - GRO - 6,400      | 0.0190<br>0.0037<br>0.0408<br>0.0635                          | 0.0143<br>0.0028<br>0.0307<br>0.0478                          |
| EFF-1 (06282021)  | 06/28/21              | Pace                   | Benzene - 2.97<br>Toluene - 5.99<br>Ethylbenzene - 0.815<br>Total Xylene - 13.6<br>Total BTEX - 23.4  | 4.36<br>0.00202<br>0.00408<br>0.00055<br>0.00925<br>0.0159    | 4.03<br>0.00152<br>0.00307<br>0.00042<br>0.00696<br>0.0120    |
| EFF-1 (07272021)  | 07/27/21              | Pace                   | TPH - GRO - 3,480<br>Benzene - 6.77<br>Toluene - 11.0<br>Ethylbenzene - ND<br>Total Xylene - 21.9<br>Total BTEX - 39.6<br>TPH - GRO - 4,250   | 2.37<br>0.005<br>0.007<br>-<br>0.015<br>0.027<br>2.89         | 2.19<br>0.003<br>-<br>0.011<br>0.020                          |
| EFF-1 (08252021)  | 08/25/21              | Pace                   | Benzene - ND<br>Toluene - 9.79<br>Ethylbenzene - 1.40<br>Total Xylene - 23.16<br>Total BTEX - 34.4<br>TPH - GRO - 6,070                       | -<br>0.007<br>0.001<br>0.016<br>0.023<br>4.13                 | 2.68<br>-<br>0.005<br>0.001<br>0.012<br>0.018<br>3.82         |
| EFF-1 (09302021)  | 09/30/21              | Pace                   | Benzene - ND<br>Toluene - 18.0<br>Ethylbenzene - 3.50<br>Total Xylene - 40.3<br>Total BTEX - 61.8<br>TPH - GRO - 7,230                        | - 0.012<br>0.002<br>0.027<br>0.042<br>4.92                    |   |
| EFF-1 (10282021)  | 10/28/21              | Pace                   | Benzene - 5.27<br>Toluene - 8.02<br>Ethylbenzene - ND<br>Total Xylene - 15.3<br>Total BTEX - 28.6   | 0.004<br>0.005<br>-<br>0.010<br>0.019                         | 0.003<br>0.004<br>-<br>0.008<br>0.015                         |
| EFF-1 (11302021)  | 11/30/22              | Pace                   | TPH - GRO - 3,120<br>Benzene - 4.66<br>Toluene - 9,64<br>Ethylbenzene - 1.67<br>Total Xylene - 20.9<br>Total BTEX - 36.9<br>TPH - GRO - 4,670 | 2.12<br>0.003<br>0.0066<br>0.0011<br>0.0142<br>0.0251<br>3.18 | 1.96<br>0.002<br>0.0049<br>0.0009<br>0.0107<br>0.0189<br>2.94 |
| EFF-1 (12202021)  | 12/20/21              | Pace                   | Benzene - ND<br>Toluene - 561<br>Ethylbenzene - 119<br>Total Xylene - 379<br>Total BTEX - 1,059   | -<br>0.382<br>0.081<br>0.258<br>0.721                         | -<br>0.287<br>0.061<br>0.194<br>0.542                         |
|                   |                       | I                      | TPH - GRO - 21,700<br>2021 TPH Avera  | 14.8<br>age: 4.91   | 13.7<br>4.54  |

1. BTEX: Benzene, toluene, ethylbenzene, total xylene analyzed by EPA Method 8021B

1. B1EX: Benzene, toluene, ethylebnizene, total xylene analyzed by EPA Method 8021B 2. TPH: Total petroleum hydrocarbons analyzed by EPA Method 8015 3. Emission Mass calculated assuming flowrate 1.1073 (m<sup>3</sup>/min) and constituent concentration were constant for the entirety of a year. 4. SVE Emission: Soil Vapor Extraction NA: Indicates constituant was not analyzed

constituent not detected above laboratory sample detection limit (SDL)
 Bold denotes concentrations that could potentially be in violation of applicable NMED AQB criteria.

#### TABLE 4 MW-1 SVE<sup>1</sup> System Operation and PSH<sup>2</sup> Thickness & Recovery Summary

#### DCP Plant to Lea Station 6-Inch Sec. 31 Lea County, New Mexico Plains Pipeline, L.P. SRS #2009-084 Terracon Project #: AR217009 NMOCD<sup>3</sup> REFERENCE #: 1RP-2166

#### All measurements are in feet above mean sea level

| Monitoring<br>Well | Date       | Top of Casing<br>(TOC) <sup>4</sup><br>Elevation* | Depth to<br>PSH Below<br>TOC<br>(feet) | Depth to<br>Water Below<br>TOC (feet) | PSH<br>Thickness<br>(feet) | PID <sup>5</sup><br>Reading | SVE <sup>6</sup> Unit<br>Hours of<br>Operation | Total Fluid<br>Recovery<br>(gallons) | PSH<br>Recovered<br>(gallons) |
|--------------------|------------|---|--|---------------------------------------|----------------------------|-----------------------------|--|--------------------------------------|-------------------------------|
|                    | 01/10/2020 |   | 84.36                                  | 84.70                                 | 0.34                       | -                           | -  | 3.0                                  | 0.06                          |
|                    | 02/07/2020 |   | 84.26                                  | 84.40                                 | 0.14                       | -                           | -  | 3.0                                  | 0.02                          |
|                    | 02/20/2020 |   | 84.11                                  | 84.33                                 | 0.22                       | -                           | -  | 3.0                                  | 0.04                          |
|                    | 03/02/2020 |   | 84.00                                  | 84.29                                 | 0.29                       | -                           | -  | 3.0                                  | 0.05                          |
|                    | 03/06/2020 |   | -                                      | -                                     | -                          | 525.0                       | 0  | -                                    | -                             |
|                    | 03/16/2020 |   | 83.62                                  | 84.67                                 | 1.05                       | 1,582.0                     | 11.0   | -                                    | -                             |
|                    | 03/30/2020 |   | 84.00                                  | 84.22                                 | 0.22                       | 380.0                       | 20.0   | 3.0                                  | 0.04                          |
|                    | 04/16/2020 |   | -                                      | -                                     | -                          | 1,192.0                     | 144.0  | -                                    | -                             |
|                    | 04/30/2020 |   | -                                      | -                                     | -                          | 757.0                       | 159.0  | -                                    | -                             |
|                    | 05/28/2020 |   | -                                      | -                                     | -                          | 1,314.0                     | 159.0  | -                                    | -                             |
|                    | 06/18/2020 |   | 84.30                                  | 85.00                                 | 0.70                       | -                           | 160.0  | 5.0                                  | 0.11                          |
|                    | 06/29/2020 |   | -                                      | -                                     | -                          | 855.9                       | 160.0  | -                                    | -                             |
|                    | 07/29/2020 |   | 84.35                                  | 85.45                                 | 1.10                       | 932.3                       | 160.0  | 3.0                                  | 0.18                          |
|                    | 08/19/2020 |   | 84.39                                  | 85.47                                 | 1.08                       | 855.9                       | 160.0  | 5.0                                  | 0.18                          |
| MW-1               | 09/28/2020 | 3,540.25  | 84.52                                  | 85.41                                 | 0.89                       | 475.2                       | 163.0  | 3.0                                  | 0.15                          |
|                    | 10/14/2020 | 0,040.20  | 84.35                                  | 85.45                                 | 1.10                       | 932.3                       | 160.0  | 3.0                                  | 0.18                          |
|                    | 10/29/2020 |   | 84.66                                  | 86.29                                 | 1.63                       | 729.1                       | 164.0  | 4.0                                  | 0.27                          |
|                    | 11/12/2020 |   | -                                      | -                                     | -                          | 952.2                       | 164.0  | -                                    | -                             |
|                    | 12/30/2020 |   | 84.88                                  | 86.33                                 | 1.45                       | 618.7                       | 164.0  | 4.0                                  | 0.24                          |
|                    | 01/28/2021 |   | 84.67                                  | 85.78                                 | 1.11                       | 1,105.0                     | 192.0  | 2.5                                  | 0.18                          |
|                    | 02/26/2021 |   | -                                      | -                                     | -                          | 1,339.0                     | 199.0  | 4.0                                  | -                             |
|                    | 03/30/2021 |   | 83.87                                  | 85.42                                 | 1.55                       | 758.0                       | 199.0  | 3.0                                  | 0.25                          |
|                    | 04/27/2021 |   | 84.40                                  | 85.16                                 | 0.76                       | 971.9                       | 204.0  | 2.5                                  | 0.12                          |
|                    | 05/28/2021 |   | 84.64                                  | 85.41                                 | 0.77                       | 957.0                       | 208.0  | 3.0                                  | 0.13                          |
|                    | 06/28/2021 |   | 84.66                                  | 85.42                                 | 0.76                       | 1,102.0                     | 208.0  | 3.5                                  | 0.12                          |
|                    | 07/27/2021 |   | 84.56                                  | 85.56                                 | 1.00                       | 915.3                       | -  | 3.0                                  | 0.16                          |
|                    | 08/25/2021 |   | 83.78                                  | 84.44                                 | 0.66                       | 963.2                       | 149.2  | 3.0                                  | 0.11                          |
|                    | 10/28/2021 |   | 84.90                                  | 84.98                                 | 0.08                       | -                           | -  | 3.5                                  | 0.01                          |
|                    | 11/30/2021 |   | -                                      | -                                     | -                          | 752.9                       | 1,496.0  | -                                    | -                             |
|                    | 12/20/2021 |   | 84.76                                  | 85.60                                 | 0.84                       | -                           | -  | 3.5                                  | 0.14                          |
|                    |            |   | 2021 Average                           | PSH Thickness                         | 0.84                       | 2021 Tot                    | al Recovered                                   | 31.5                                 | 1.227                         |

Notes:

1. SVE: Soil Vapor Extraction

2. PSH: Phase Separated Hydrocarbons

3. NMOCD: New Mexico Oil Conservation Division

4. TOC: Top Of Casing

5. PID: Photoionization Detector

6. SVE: Soil Vapor Extraction

\* Elevations based on the North American Vertical Datum of 1988.

\*\* Corrected groundwater elevations were extrapolated using a PSH specific gravity of 0.85, if PSH

.

 Table 5

 Historical Concentrations of PAH<sup>1</sup> in Groundwater Summary

#### DCP Plant to Lea Station 6-Inch Section 31 Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-084 Terracon Project #: AR217009 NMOCD<sup>2</sup> Reference#: 1RP-2166

All concentrations are in milligrams per liter (mg/L)<sup>3</sup>

|                      |   |  | All concentrations are in milligrams per liter (mg/L)<br>EPA SW846-8270C, 3510 |  |   |   |  |   |  |  |  |  |                                       |  |  |  |   |  |
|----------------------|---|--|--|--|---|---|--|---|--|--|--|--|---------------------------------------|--|--|--|---|--|
| Monitoring Well      | Date<br>Sampled   | Naphthalene  | Benzo(a)pyrene   | Acenaphthene   | Acenaphthylene  | Anthracene  | Benzo(a)anthracene   | Benzo(b)fluoranthene  | Benzo(g,h,i)perylene                                       | Benzo(k)fluoranthene                                       | Chrysene   | Dibenz(a,h)anthracene                                | Dibenzofuran                          | Fluoranthene   | Fluorene   | Indeno(1,2,3-c,d)Pyrene                                    | Phenanthrene  | Pyrene   |
| NMWQCC Gro<br>Criter |   | 0.03   | 0.0007   |  |   |   |  |   |  |  | NE⁵  |  |                                       |  |  |  |   |  |
| MW-1                 | 12/10/2009<br>12/18/2020  | <0.05  | <0.05  | <0.05  | <0.05   | <0.05   | <0.05  | <0.05   | <0.05  | <0.05  | <0.05  | <0.05  | N/A                                   | <0.05  | <0.05  | <0.05  | N/A   | <0.05  |
|                      | 12/9/2021   |  |  |  |   |   |  |   | Well Not   | Sampled Due t  | O PSH  |  |                                       |  |  |  |   |  |
| MW-2                 | 9/29/2009<br>12/18/2020<br>12/9/2021                            | N/A<br><0.000101<br><0.000184                        | <0.005<br><0.0000592<br><0.000184  | <0.005<br><0.000104<br><0.000184                           | <0.005<br><0.000873<br><0.000184                            | <0.005<br><0.000898<br><0.000184                            | <0.005<br><0.000139<br><0.000184                           | <0.005<br><0.0000737<br>0.000272                            | <0.005<br><0.000117<br><b>0.000232</b>                     | <0.005<br><0.000120<br><0.000184                           | <0.005<br><0.000162<br><0.000184                           | <0.005<br>N/A<br><0.000184                           | N/A<br><0.0000788<br><0.000184        | <0.005<br><0.000163<br><0.000184                           | <0.005<br><0.000105<br><0.000184                           | <0.005<br><0.0000947<br><0.000184                          | <0.005<br><0.0000882<br><0.000184                           | <0.005<br><0.000135<br><0.000184                           |
| MW-3                 | 9/29/2009<br>12/16/2011<br>11/9/2012<br>12/18/2020<br>12/9/2021 | N/A<br><0.0111<br><0.00031<br><0.000100<br><0.00373  | <0.005<br><0.0111<br><0.00019<br><0.0000590<br><0.000186                       | <0.005<br><0.0111<br><0.00035<br><0.000103<br><0.000186    | <0.005<br><0.0111<br><0.00033<br><0.0000870<br><0.000186    | <0.005<br><0.0111<br><0.00016<br><0.0000895<br><0.000186    | <0.005<br><0.0111<br><0.00024<br><0.000139<br><0.000186    | <0.005<br><0.0111<br><0.00036<br><0.0000735<br><0.000186    | <0.005<br><0.0111<br><0.00049<br><0.000117<br><0.000186    | <0.005<br><0.0111<br><0.00028<br><0.000120<br><0.000186    | <0.005<br><0.0111<br><0.00022<br><0.000161<br><0.000186    | <0.005<br><0.0111<br><0.00019<br>N/A<br><0.000186    | N/A<br>N/A<br><0.0000785<br><0.000186 | <0.005<br><0.0111<br><0.00024<br><0.000162<br><0.000186    | <0.005<br><0.0111<br><0.00030<br><0.000104<br><0.000186    | <0.005<br><0.0111<br><0.00032<br><0.0000944<br><0.000186   | <0.005<br><0.0111<br><0.00027<br><0.0000879<br><0.000186    | <0.005<br><0.0111<br><0.00027<br><0.000135<br><0.000186    |
| MW-4                 | 9/29/2009<br>12/21/2011<br>12/18/2020<br>12/9/2021              | <0.005<br><0.0102<br><0.000116<br><0.00366           | <0.005<br><0.0102<br><0.0000679<br><0.000183                                   | <0.005<br><0.0102<br><0.000119<br><0.000183                | <0.005<br><0.0102<br><0.000100<br><0.000183                 | <0.005<br><0.0102<br><0.000103<br><0.000183                 | <0.005<br><0.0102<br><0.000160<br><0.000183                | <0.005<br><0.0102<br><0.0000846<br><0.000183                | <0.005<br><0.0102<br><0.000135<br><0.000183                | <0.005<br><0.0102<br><0.000138<br><0.000183                | <0.005<br><0.0102<br><0.000186<br><0.000183                | <0.005<br><0.0102<br>N/A<br><0.000183                | N/A<br>N/A<br><0.0000904<br><0.000183 | <0.005<br><0.0102<br><0.000187<br><0.000183                | <0.005<br><0.0102<br><0.000120<br><0.000183                | <0.005<br><0.0102<br><0.000109<br><0.000183                | <0.005<br><0.0102<br><0.000101<br><0.000183                 | <0.005<br><0.0102<br><0.000155<br><0.000183                |
| MW-5                 | 3/25/2011<br>11/9/2012<br>12/23/2013<br>12/18/2020<br>12/9/2021 | N/A<br><0.00032<br>0.000535<br><0.000110<br><0.00378 | <0.0100<br><0.00020<br><0.000049<br><0.0000644<br><0.000189                    | <0.0100<br><0.00037<br><0.000049<br><0.000113<br><0.000189 | <0.0100<br><0.00034<br><0.000049<br><0.0000950<br><0.000189 | <0.0100<br><0.00016<br><0.000049<br><0.0000978<br><0.000189 | <0.0100<br><0.00025<br><0.000049<br><0.000152<br><0.000189 | <0.0100<br><0.00038<br><0.000049<br><0.0000802<br><0.000189 | <0.0100<br><0.00051<br><0.000049<br><0.000128<br><0.000189 | <0.0100<br><0.00029<br><0.000049<br><0.000131<br><0.000189 | <0.0100<br><0.00023<br><0.000049<br><0.000176<br><0.000189 | <0.0100<br><0.00020<br><0.000049<br>N/A<br><0.000189 | N/A<br>N/A<br><0.0000858<br><0.000189 | <0.0100<br><0.00025<br><0.000049<br><0.000177<br><0.000189 | <0.0100<br><0.00031<br><0.000049<br><0.000114<br><0.000189 | <0.0100<br><0.00034<br><0.000049<br><0.000103<br><0.000189 | <0.0100<br><0.00028<br><0.000049<br><0.0000960<br><0.000189 | <0.0100<br><0.00028<br><0.000049<br><0.000147<br><0.000189 |
| MW-6                 | 5/13/2014<br>12/18/2020<br>12/9/2021                            | N/A<br><0.000101<br><0.00367                         | <0.000051<br><0.0000590<br><0.000188   | <0.000051<br><0.000103<br><0.000188                        | <0.000051<br><0.0000870<br><0.000188                        | <0.000051<br><0.0000895<br><0.000188                        | <0.000051<br><0.000139<br><0.000188                        | <0.000051<br><0.0000735<br><0.000188                        | <0.000051<br><0.000117<br><0.000188                        | <0.000051<br><0.000120<br><0.000188                        | <0.000051<br><0.000161<br><0.000188                        | <0.000051<br>N/A<br><0.000188                        | N/A<br><0.0000786<br><0.000188        | <0.000051<br><0.000163<br><0.000188                        | <0.000051<br><0.000104<br><0.000188                        | <0.000051<br><0.0000944<br><0.000188                       | <0.000051<br><0.0000879<br><0.000188                        | <0.000051<br><0.000135<br><0.000188                        |

Notes:

1. PAH: Polycyclic Aromatic Hydrocarbons

2. NMOCD: New Mexico Oil Conservation Division

3. mg/L milligrams per liter

4. NMWQCC Groundwater Criteria: Recommended Remediation Action Level Criteria (NMAC 20.6.2)

5. NE: Not Established

J: The target analyte was positively identified below the quantitation limit and above the detection limit

Bold text indicates a concentration above the laboratory detection limit.

Highlighted text indicates a concentration exceeding the NMOCD RRAL Criteria

## APPENDIX C

**Certified Laboratories Analytical Reports:** 

Received by OCD: 3/28/2022 9:18:57 AM

🔅 eurofins

## Environment Testing America

## **ANALYTICAL REPORT**

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8 Lubbock, TX 79424 Tel: (806)794-1296

## Laboratory Job ID: 820-170-1

Laboratory Sample Delivery Group: AR217009 Client Project/Site: DCP Sec. 31

## For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

## Attn: Brett Dennis

VRAMER

Authorized for release by: 3/28/2021 8:48:55 AM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Visit us at: www.eurofinsus.com/Env

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Ask-

The

Expert

Released to Imaging: 8/3/2022 2:26:44 PM

Laboratory Job ID: 820-170-1 SDG: AR217009

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Coliform MCLs

- Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

#### Warranties, Terms, and Conditions

Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

• Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

• Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

• EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

• Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

• The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).

VRAMER

Jessica Kramer Project Manager 3/28/2021 8:48:55 AM

Page 33 of 249

Laboratory Job ID: 820-170-1

SDG: AR217009

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DLC

EDL LOD

LOQ

MCL

MDA

MDC

MDL

MPN

MQL

NC

ND NEG

POS

PQL

QC

RER

RL RPD

TEF

TEQ

TNTC

PRES

ML

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive

**Quality Control** 

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

| eceived by OC   | D: 3/28/2022 9:18:57 AM Page 35 of 2  | <b>:49</b> |  |  |  |
|---|---|------------|--|--|--|
|   | Definitions/Glossary  | 1          |  |  |  |
| Client: Terracon Consulting Eng & ScientistsJob ID: 820-170-1Project/Site: DCP Sec. 31SDG: AR217009 |   |            |  |  |  |
| Qualifiers  |   | 3          |  |  |  |
| GC VOA<br>Qualifier   | Qualifier Description   | 4          |  |  |  |
| U   | Analyte was not detected at or above the SDL.   |            |  |  |  |
| Glossary  |   | 5          |  |  |  |
| Abbreviation  | These commonly used abbreviations may or may not be present in this report.                                 |            |  |  |  |
| ¤   | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |            |  |  |  |
| %R  | Percent Recovery  |            |  |  |  |
| CFL   | Contains Free Liquid  |            |  |  |  |
| CFU   | Colony Forming Unit   | 0          |  |  |  |
| CNF   | Contains No Free Liquid   | Ο          |  |  |  |
| DER   | Duplicate Error Ratio (normalized absolute difference)  |            |  |  |  |
| Dil Fac   | Dilution Factor   | 9          |  |  |  |
| DL  | Detection Limit (DoD/DOE)   |            |  |  |  |
| DL, RA, RE, IN  | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |            |  |  |  |

Eurofins Xenco, Lubbock

Released to Imaging: 8/3/2022 2:26:44 PM

## **Case Narrative**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31 Job ID: 820-170-1 SDG: AR217009

### Job ID: 820-170-1

#### Laboratory: Eurofins Xenco, Lubbock

#### Narrative

Job Narrative 820-170-1

#### Receipt

The samples were received on 3/19/2021 1:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.3°C

#### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

| 70-1<br>009 | 2 |
|-------------|---|
|             |   |
|             | 4 |
|             | 5 |

| Received by | <b>OCD:</b> 3 | 3/28/2022 | 9:18:57 AM |
|-------------|---------------|-----------|------------|
|-------------|---------------|-----------|------------|

| Detection Summary  |     |
|--|-----|
| Client: Terracon Consulting Eng & ScientistsJob ID: 820-170Project/Site: DCP Sec. 31SDG: AR21700 |     |
| Client Sample ID: MW-2 Lab Sample ID: 820-170  | 1 3 |
| No Detections.   |     |
| Client Sample ID: MW-3 Lab Sample ID: 820-170  | 2 4 |
| No Detections.   | 5   |
| Client Sample ID: MW-4 Lab Sample ID: 820-170  | 3 6 |
| No Detections.   |     |
| Client Sample ID: MW-5 Lab Sample ID: 820-170  | 4   |
| No Detections.   | 8   |
| Client Sample ID: MW-6 Lab Sample ID: 820-170  | 59  |
| No Detections.   | 10  |
| Client Sample ID: Dup-1 Lab Sample ID: 820-170   | .6  |
| No Detections.   |     |

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Lubbock

Client: Terracon Consulting Eng & Scientists

Job ID: 820-170-1 SDG: AR217009

## Lab Sample ID: 820-170-1

Lab Sample ID: 820-170-2

Lab Sample ID: 820-170-3

Matrix: Water

Matrix: Water

Matrix: Water

5

6

## Project/Site: DCP Sec. 31 Client Sample ID: MW-2

Date Collected: 03/18/21 14:14 Date Received: 03/19/21 13:45

| Method: 8021B - Volatile Orga | nic Compounds ( | (GC)      |          |          |      |   |          |                |         |
|-------------------------------|-----------------|-----------|----------|----------|------|---|----------|----------------|---------|
| Analyte                       | Result          | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                       | <0.000408       | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 07:02 | 1       |
| Ethylbenzene                  | <0.000657       | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 07:02 | 1       |
| Toluene                       | <0.000367       | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 07:02 | 1       |
| Total BTEX                    | <0.00100        | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 07:02 | 1       |
| Xylenes, Total                | <0.00100        | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 07:02 | 1       |
| m-Xylene & p-Xylene           | <0.000629       | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 07:02 | 1       |
| o-Xylene                      | <0.000642       | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 07:02 | 1       |
| Surrogate                     | %Recovery       | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr)   | 100             |           | 70 - 130 |          |      | - |          | 03/27/21 07:02 | 1       |
| 1,4-Difluorobenzene (Surr)    | 79              |           | 70 - 130 |          |      |   |          | 03/27/21 07:02 | 1       |

### **Client Sample ID: MW-3**

Date Collected: 03/18/21 14:57

### Date Received: 03/19/21 13:45

| Method: 8021B - Volatile Orga |           | · · ·     |          |          |      |   |          |                |         |
|-------------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Analyte                       | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                       | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 07:28 | 1       |
| Ethylbenzene                  | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 07:28 | 1       |
| Toluene                       | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 07:28 | 1       |
| Total BTEX                    | <0.00100  | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 07:28 | 1       |
| Xylenes, Total                | <0.00100  | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 07:28 | 1       |
| m-Xylene & p-Xylene           | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 07:28 | 1       |
| o-Xylene                      | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 07:28 | 1       |
| Surrogate                     | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr)   | 103       |           | 70 - 130 |          |      | - |          | 03/27/21 07:28 | 1       |
| 1,4-Difluorobenzene (Surr)    | 89        |           | 70 - 130 |          |      |   |          | 03/27/21 07:28 | 1       |

### **Client Sample ID: MW-4**

Date Collected: 03/18/21 15:52

Date Received: 03/19/21 13:45

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 07:54 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 07:54 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 07:54 | 1       |
| Total BTEX                  | <0.00100  | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 07:54 | 1       |
| Xylenes, Total              | <0.00100  | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 07:54 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 07:54 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 07:54 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 123       |           | 70 - 130 |          |      | - |          | 03/27/21 07:54 | 1       |
| 1,4-Difluorobenzene (Surr)  | 100       |           | 70 - 130 |          |      |   |          | 03/27/21 07:54 | 1       |

Client: Terracon Consulting Eng & Scientists

Job ID: 820-170-1 SDG: AR217009

## Lab Sample ID: 820-170-4

Lab Sample ID: 820-170-5

Lab Sample ID: 820-170-6

Matrix: Water

Matrix: Water

Matrix: Water

5

6

## Project/Site: DCP Sec. 31 **Client Sample ID: MW-5**

Date Collected: 03/18/21 17:03 Date Received: 03/19/21 13:45

| Method: 8021B - Volatile Orga | nic Compounds ( | (GC)      |          |          |      |   |          |                |         |
|-------------------------------|-----------------|-----------|----------|----------|------|---|----------|----------------|---------|
| Analyte                       | Result          | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                       | <0.000408       | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 08:20 | 1       |
| Ethylbenzene                  | <0.000657       | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 08:20 | 1       |
| Toluene                       | <0.000367       | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 08:20 | 1       |
| Total BTEX                    | <0.00100        | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 08:20 | 1       |
| Xylenes, Total                | <0.00100        | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 08:20 | 1       |
| m-Xylene & p-Xylene           | <0.000629       | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 08:20 | 1       |
| o-Xylene                      | <0.000642       | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 08:20 | 1       |
| Surrogate                     | %Recovery       | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr)   | 124             |           | 70 - 130 |          |      | - |          | 03/27/21 08:20 | 1       |
| 1,4-Difluorobenzene (Surr)    | 101             |           | 70 - 130 |          |      |   |          | 03/27/21 08:20 | 1       |

### **Client Sample ID: MW-6**

Date Collected: 03/18/21 16:22

### Date Received: 03/19/21 13:45

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 08:46 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 08:46 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 08:46 | 1       |
| Total BTEX                  | <0.00100  | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 08:46 | 1       |
| Xylenes, Total              | <0.00100  | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 08:46 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 08:46 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 08:46 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 125       |           | 70 - 130 |          |      | - |          | 03/27/21 08:46 | 1       |
| 1,4-Difluorobenzene (Surr)  | 101       |           | 70 - 130 |          |      |   |          | 03/27/21 08:46 | 1       |

### **Client Sample ID: Dup-1**

Date Collected: 03/18/21 00:00

Date Received: 03/19/21 13:45

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 10:05 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 10:05 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 10:05 | 1       |
| Total BTEX                  | <0.00100  | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 10:05 | 1       |
| Xylenes, Total              | <0.00100  | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 10:05 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 10:05 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 10:05 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 109       |           | 70 - 130 |          |      | - |          | 03/27/21 10:05 | 1       |
| 1,4-Difluorobenzene (Surr)  | 76        |           | 70 - 130 |          |      |   |          | 03/27/21 10:05 | 1       |

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

### Method: 8021B - Volatile Organic Compounds (GC) Matrix: Water

|                 |                        |          |          | Percent Surrogate Recovery (Acceptance Limits) |
|-----------------|------------------------|----------|----------|--|
|                 |                        | BFB1     | DFBZ1    |  |
| ab Sample ID    | Client Sample ID       | (70-130) | (70-130) |  |
| 0-170-1         | MW-2                   | 100      | 79       |  |
| 20-170-2        | MW-3                   | 103      | 89       |  |
| 20-170-3        | MW-4                   | 123      | 100      |  |
| 20-170-4        | MW-5                   | 124      | 101      |  |
| 20-170-5        | MW-6                   | 125      | 101      |  |
| 20-170-6        | Dup-1                  | 109      | 76       |  |
| CS 880-846/117  | Lab Control Sample     | 112      | 94       |  |
| CSD 880-846/118 | Lab Control Sample Dup | 117      | 100      |  |
| /IB 880-846/122 | Method Blank           | 71       | 83       |  |
| MB 880-905/5-A  | Method Blank           | 71       | 81       |  |

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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Job ID: 820-170-1 SDG: AR217009

Prep Type: Total/NA

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### **QC Sample Results**

### Method: 8021B - Volatile Organic Compounds (GC)

## Lab Sample ID: MB 880-846/122

Matrix: Water Analysis Batch: 846

|                             | MB        | МВ        |          |          |      |   |          |                |         |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 03/27/21 04:01 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 03/27/21 04:01 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 03/27/21 04:01 | 1       |
| Total BTEX                  | <0.00100  | U         | 0.00200  | 0.00100  | mg/L |   |          | 03/27/21 04:01 | 1       |
| Xylenes, Total              | <0.00100  | U         | 0.00400  | 0.00100  | mg/L |   |          | 03/27/21 04:01 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 03/27/21 04:01 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 03/27/21 04:01 | 1       |
|                             | MB        | МВ        |          |          |      |   |          |                |         |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 71        |           | 70 - 130 |          |      | - |          | 03/27/21 04:01 | 1       |
| 1,4-Difluorobenzene (Surr)  | 83        |           | 70 - 130 |          |      |   |          | 03/27/21 04:01 | 1       |
|                             |           |           |          |          |      |   |          |                |         |

### Lab Sample ID: LCS 880-846/117 Matrix: Water

### Analysis Batch: 846

|                     | Spike | LCS     | LCS       |      |   |      | %Rec.    |  |
|---------------------|-------|---------|-----------|------|---|------|----------|--|
| Analyte             | Added | Result  | Qualifier | Unit | D | %Rec | Limits   |  |
| Benzene             | 0.100 | 0.09664 |           | mg/L |   | 97   | 70 - 130 |  |
| Ethylbenzene        | 0.100 | 0.09158 |           | mg/L |   | 92   | 70 - 130 |  |
| Toluene             | 0.100 | 0.08601 |           | mg/L |   | 86   | 70 - 130 |  |
| m-Xylene & p-Xylene | 0.200 | 0.1841  |           | mg/L |   | 92   | 70 - 130 |  |
| o-Xylene            | 0.100 | 0.09959 |           | mg/L |   | 100  | 70 - 130 |  |
|                     |       |         |           |      |   |      |          |  |

|                             | LCS       | LCS       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 112       |           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 94        |           | 70 - 130 |

### Lab Sample ID: LCSD 880-846/118 Matrix: Water

### Analysis Batch: 846

| •                   | Spike | LCSD    | LCSD      |      |   |      | %Rec.    |     | RPD   |
|---------------------|-------|---------|-----------|------|---|------|----------|-----|-------|
| Analyte             | Added | Result  | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |
| Benzene             | 0.100 | 0.09783 |           | mg/L |   | 98   | 70 - 130 | 1   | 20    |
| Ethylbenzene        | 0.100 | 0.09621 |           | mg/L |   | 96   | 70 - 130 | 5   | 20    |
| Toluene             | 0.100 | 0.1037  |           | mg/L |   | 104  | 70 - 130 | 19  | 20    |
| m-Xylene & p-Xylene | 0.200 | 0.1918  |           | mg/L |   | 96   | 70 - 130 | 4   | 20    |
| o-Xylene            | 0.100 | 0.1036  |           | mg/L |   | 104  | 70 - 130 | 4   | 20    |

|                             | LCSD      | LCSD      |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 117       |           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 100       |           | 70 - 130 |

| Matrix  | mple ID: MB 880-905/5-A<br>: Water<br>:is Batch: 846 |             |         |          |      |   | Client Sa      | mple ID: Metho<br>Prep Type: <sup>-</sup><br>Prep Ba | Total/NA |
|---------|--|-------------|---------|----------|------|---|----------------|--|----------|
|         | Μ  | 3 MB        |         |          |      |   |                |  |          |
| Analyte | Resu   | t Qualifier | RL      | MDL      | Unit | D | Prepared       | Analyzed   | Dil Fac  |
| Benzene | <0.00040   | BU          | 0.00200 | 0.000408 | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                                       | 1        |

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**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31 Job ID: 820-170-1 SDG: AR217009

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

| Lab Sample ID: MB 880-905/5-A<br>Matrix: Water |           |           |          |          |      |   | Client Sa      | mple ID: Metho<br>Prep Type: 1 |         |
|--|-----------|-----------|----------|----------|------|---|----------------|--------------------------------|---------|
| Analysis Batch: 846                            |           |           |          |          |      |   |                | Prep Bat                       |         |
|  | MB        | МВ        |          |          |      |   |                |                                |         |
| Analyte  | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared       | Analyzed                       | Dil Fac |
| Ethylbenzene                                   | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
| Toluene  | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
| Total BTEX                                     | <0.00100  | U         | 0.00200  | 0.00100  | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
| Xylenes, Total                                 | <0.00100  | U         | 0.00400  | 0.00100  | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
| m-Xylene & p-Xylene                            | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
| o-Xylene                                       | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
|  | МВ        | МВ        |          |          |      |   |                |                                |         |
| Surrogate                                      | %Recovery | Qualifier | Limits   |          |      |   | Prepared       | Analyzed                       | Dil Fac |
| 4-Bromofluorobenzene (Surr)                    | 71        |           | 70 - 130 |          |      |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |
| 1,4-Difluorobenzene (Surr)                     | 81        |           | 70 - 130 |          |      |   | 03/26/21 11:28 | 03/26/21 14:25                 | 1       |

5 6 7

## **QC Association Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

Job ID: 820-170-1

## GC VOA

### Analysis Batch: 846

| Lab Sample ID   | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------------|-----------|--------|--------|------------|
| 820-170-1       | MW-2                   | Total/NA  | Water  | 8021B  |            |
| 320-170-2       | MW-3                   | Total/NA  | Water  | 8021B  |            |
| 320-170-3       | MW-4                   | Total/NA  | Water  | 8021B  |            |
| 320-170-4       | MW-5                   | Total/NA  | Water  | 8021B  |            |
| 320-170-5       | MW-6                   | Total/NA  | Water  | 8021B  |            |
| 320-170-6       | Dup-1                  | Total/NA  | Water  | 8021B  |            |
| /IB 880-846/122 | Method Blank           | Total/NA  | Water  | 8021B  |            |
| /IB 880-905/5-A | Method Blank           | Total/NA  | Water  | 8021B  | 905        |
| CS 880-846/117  | Lab Control Sample     | Total/NA  | Water  | 8021B  |            |
| CSD 880-846/118 | Lab Control Sample Dup | Total/NA  | Water  | 8021B  |            |
| ep Batch: 905   |                        |           |        |        |            |
| ab Sample ID    | Client Sample ID       | Ргер Туре | Matrix | Method | Prep Batch |
| MB 880-905/5-A  | Method Blank           | Total/NA  | Water  | 5035   |            |

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|                       |                |                   |          | Lab Chro               | nicle           |                            |               |           |                 |
|-----------------------|----------------|-------------------|----------|------------------------|-----------------|----------------------------|---------------|-----------|-----------------|
| Client: Terracon      | -              | g & Scientists    |          |                        |                 |                            |               |           | Job ID: 820-170 |
| Project/Site: DC      | P Sec. 31      |                   |          |                        |                 |                            |               |           | SDG: AR2170     |
| Client Sampl          | e ID: MW-2     |                   |          |                        |                 |                            |               | Lab Samp  | ole ID: 820-170 |
| Date Collected:       |                | 4                 |          |                        |                 |                            |               |           | Matrix: Wat     |
| Date Received:        | 03/19/21 13:45 | 5                 |          |                        |                 |                            |               |           |                 |
| _                     | 5.4.1          | 5.4               |          | <b>B</b> 11 <i>(</i> 1 |                 | - ·                        |               |           |                 |
| Dava Tara             | Batch          | Batch             | <b>D</b> | Dilution               | Batch           | Prepared                   | A             | 1         |                 |
| Prep Type<br>Total/NA | Analysis       | _ Method<br>8021B | Run      | <b>Factor</b>          | Number<br>846   | or Analyzed 03/27/21 07:02 | Analyst<br>MR | Lab<br>XM |                 |
|                       |                | 00218             |          |                        | 010             | 00/21/21 01:02             |               |           |                 |
| Client Sampl          |                |                   |          |                        |                 |                            |               | Lab Samp  | ole ID: 820-170 |
| Date Collected:       |                |                   |          |                        |                 |                            |               |           | Matrix: Wat     |
| Date Received:        | 03/19/21 13:45 | 5                 |          |                        |                 |                            |               |           |                 |
|                       | Batch          | Batch             |          | Dilution               | Batch           | Prepared                   |               |           |                 |
| Ргер Туре             | Туре           | Method            | Run      | Factor                 | Number          | or Analyzed                | Analyst       | Lab       |                 |
| Total/NA              | Analysis       | 8021B             |          | 1                      | 846             | 03/27/21 07:28             | MR            | XM        | -               |
| Client Sampl          | e ID' MW-4     |                   |          |                        |                 |                            |               | Lab Samn  | ole ID: 820-170 |
| Date Collected:       |                | 2                 |          |                        |                 |                            |               | Lab Gamp  | Matrix: Wat     |
| Date Received:        |                |                   |          |                        |                 |                            |               |           | matrix. The     |
| _                     |                |                   |          |                        |                 |                            |               |           |                 |
|                       | Batch          | Batch<br>Method   | Run      | Dilution<br>Factor     | Batch<br>Number | Prepared                   | Analyst       | Lab       |                 |
| Prep Type<br>Total/NA | Analysis       |                   | Kun      |                        | 846             | or Analyzed 03/27/21 07:54 | Analyst<br>MR | Lab<br>XM |                 |
| _                     |                |                   |          |                        |                 |                            |               |           |                 |
| Client Sampl          |                |                   |          |                        |                 |                            |               | Lab Samp  | ole ID: 820-170 |
| Date Collected:       |                |                   |          |                        |                 |                            |               |           | Matrix: Wat     |
| Date Received:        | 03/19/21 13:48 | )                 |          |                        |                 |                            |               |           |                 |
|                       | Batch          | Batch             |          | Dilution               | Batch           | Prepared                   |               |           |                 |
| Ргер Туре             | Туре           | Method            | Run      | Factor                 | Number          | or Analyzed                | Analyst       | Lab       |                 |
| Total/NA              | Analysis       | 8021B             |          | 1                      | 846             | 03/27/21 08:20             | MR            | XM        |                 |
| Client Sampl          | e ID: MW-6     |                   |          |                        |                 |                            |               | Lab Samp  | ole ID: 820-170 |
| Date Collected:       |                | 2                 |          |                        |                 |                            |               |           | Matrix: Wat     |
| Date Received:        | 03/19/21 13:45 | 5                 |          |                        |                 |                            |               |           |                 |
| _                     | Batah          | Batch             |          | Dilution               | Batak           | Droparad                   |               |           |                 |
| Prep Type             | Batch<br>Type  | Batch<br>Method   | Run      | Factor                 | Batch<br>Number | Prepared<br>or Analyzed    | Analyst       | Lab       |                 |
| Total/NA              | Analysis       | 8021B             |          | _ <u></u>              | 846             | 03/27/21 08:46             | MR            |           |                 |
| _                     | -              |                   |          | •                      |                 |                            |               |           |                 |
| Client Sampl          |                |                   |          |                        |                 |                            |               | Lab Samp  | ole ID: 820-170 |
| Date Collected:       |                |                   |          |                        |                 |                            |               |           | Matrix: Wat     |
| Date Received:        | 03/19/21 13:45 | 5                 |          |                        |                 |                            |               |           |                 |
| _                     | Batch          | Batch             |          | Dilution               | Batch           | Prepared                   |               |           |                 |
| Ргер Туре             | Туре           | Method            | Run      | Factor                 | Number          | or Analyzed                | Analyst       | Lab       |                 |
| T-1-1/010             |                |                   |          |                        |                 |                            |               |           |                 |

Laboratory References:

Total/NA

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

8021B

Analysis

Eurofins Xenco, Lubbock

1

03/27/21 10:05

846

MR

XM

Client: Terracon Consulting Eng & Scientists

Job ID: 820-170-1

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| Project/Site: DCP Sec.                              | 31          |                                   |  | SDG: AR217009                 |    |
|---|-------------|-----------------------------------|--|-------------------------------|----|
| Laboratory: Eurofi<br>Unless otherwise noted, all a |             | nd<br>were covered under each acc | reditation/certification below.              |                               |    |
| Authority   |             | Program                           | Identification Number                        | Expiration Date               |    |
| Texas   |             | NELAP                             | T104704400-20-21                             | 06-30-21                      | 5  |
| The following analytes the agency does not of       |             | but the laboratory is not certif  | ied by the governing authority. This list ma | ay include analytes for which |    |
| Analysis Method                                     | Prep Method | Matrix                            | Analyte                                      |                               |    |
| 8021B   |             | Water                             | Total BTEX                                   |                               |    |
|   |             |                                   |  |                               | 8  |
|   |             |                                   |  |                               | 9  |
|   |             |                                   |  |                               |    |
|   |             |                                   |  |                               | 11 |
|   |             |                                   |  |                               |    |
|   |             |                                   |  |                               | 13 |
|   |             |                                   |  |                               |    |
|   |             |                                   |  |                               |    |

Eurofins Xenco, Lubbock

### **Method Summary**

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

Job ID: 820-170-1 SDG: AR217009

| Method | Method Description              | Protocol | Laboratory |
|--------|---------------------------------|----------|------------|
| 8021B  | Volatile Organic Compounds (GC) | SW846    | XM         |
| 5030B  | Purge and Trap                  | SW846    | XM         |

#### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

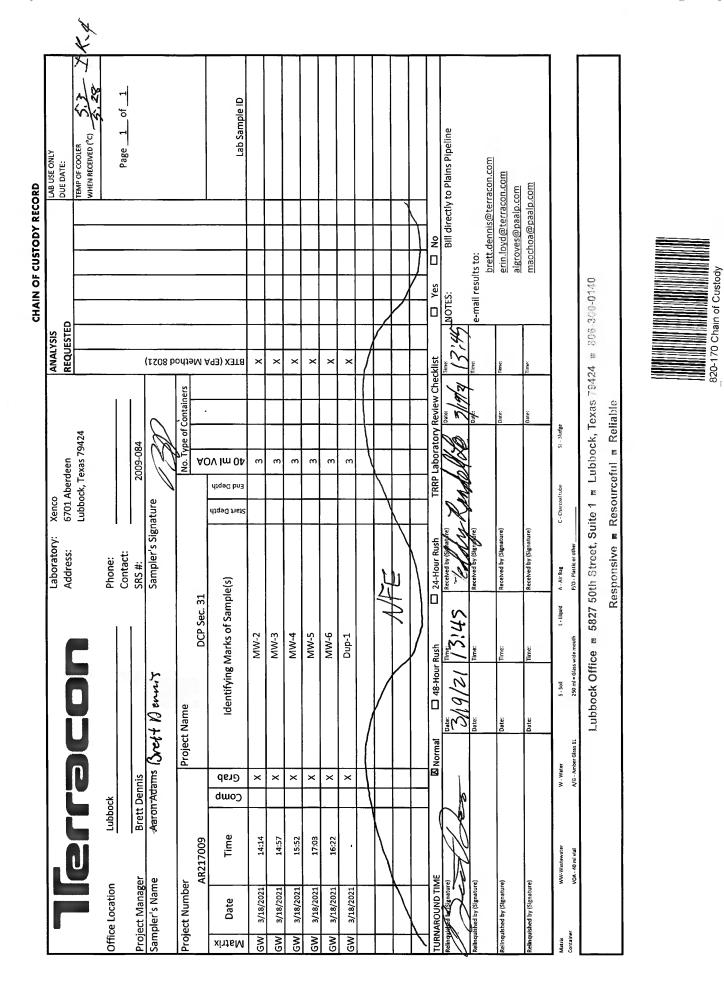
Eurofins Xenco, Lubbock

### Sample Summary

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

| b Sample ID | Client Sample ID | Matrix | Collected      | Received       | Asset ID |
|-------------|------------------|--------|----------------|----------------|----------|
| 20-170-1    | MW-2             | Water  | 03/18/21 14:14 | 03/19/21 13:45 |          |
| 20-170-2    | MW-3             | Water  | 03/18/21 14:57 | 03/19/21 13:45 |          |
| 0-170-3     | MW-4             | Water  | 03/18/21 15:52 | 03/19/21 13:45 |          |
| 0-170-4     | MW-5             | Water  | 03/18/21 17:03 | 03/19/21 13:45 |          |
| 0-170-5     | MW-6             | Water  | 03/18/21 16:22 | 03/19/21 13:45 |          |
| 20-170-6    | Dup-1            | Water  | 03/18/21 00:00 | 03/19/21 13:45 |          |

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3/28/2021

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5 6 7

13 14 15

|  | C  | Chain of Custody Record                                   | f Cust  | ody R  | ecord   |  |              |                      |                                    |                          |                     |  | ę                     |   | Environe<br>Arnerica       | Environment Tosting<br>America |
|--|--|---|---|--|---|--|--------------|----------------------|------------------------------------|--------------------------|---------------------|--|-----------------------|---|----------------------------|--------------------------------|
| Cfient Information (Sub Contract Lab)  | Sempler  |   |   | Lub PM<br>Kräme  | Lub PM<br>Kramer Jessica                              |  |              |                      |                                    | Carriar Tracking No(s)   | NO(=)               |  | a 0                   | COC No <sup>-</sup><br>820-144 1                                |                            |                                |
| Client Contex:<br>Shipping/Receiving   | Phone  |   |   | E, Mali<br>jebsko                                      | a kramer@   | eurofinee  | .com         |                      | Teogas                             | State of Origin<br>Texas | ļ                   |  | <u>च च</u>            | Page 1 of 1   |                            |                                |
| Company<br>Eurofins Xenco  |  |   |   |  | Active stations Required (See note)<br>NELAP ~ Teocas | i Requined (i<br>BX215   | See note)    |                      |                                    |                          |                     |  | <u></u>               | Jab #<br>820-170-1  |                            |                                |
| Address<br>1211 W Florida Ave  | Due Date Requested<br>3/26/2021                      | 4   |   |  |   |  | Anali        | livsis Ru            | Requested                          | Z [                      |                     |  |                       | Preservation Codes  | ¥,                         |                                |
| city<br>Midland  | TAT Requested (days):                                | (a)   |   |  |   | _  |              |                      |                                    | <sup>1</sup>             |                     | -  |                       | A HCL<br>B NaCH   | M Hexane                   | (3                             |
| Siska 7ip.<br>TX, 79701  | 1  |   |   |  |   |  |              |                      |                                    |                          |                     |  |                       | D Nitric Add  | P Na2O4S                   | ដ្ឋសំដ                         |
| 432-704-5440(fe)   | PO*  |   |   |  |   |  |              |                      |                                    |                          |                     |  | 8.5                   |   |                            | 103<br>103                     |
|  | WO#  |   |   |  |   |  |              |                      |                                    |                          |                     |  |                       | L ICE<br>1 ICE<br>1 ICE   |                            | Acatosia<br>Acatosia<br>MCAA   |
| Arded Name:<br>AR217000 DCP Sec. 31  | Project #:   |   |   |  |   |  |              |                      |                                    |                          |                     |  |                       |   |                            | pH 4-5<br>cofron (soundhy)     |
|  | SSOW#  |   | ĺ   |  |   |  |              |                      |                                    |                          |                     |  |                       |   |                            | :                              |
|  | -  |   |   |  | 97.1.4-i<br>97.1.4-i                                  |  |              |                      |                                    |                          |                     |  |                       |   |                            |                                |
|  | )<br>}<br>;  | Sample  | Sample<br>Type<br>(C=cemp,                        | Î Î Î Î  | 215/50X08 5   |  |              |                      |                                    |                          |                     | (a) () () () () () () () () () () () () () | 19 3 10 1 2<br>AF 10  |   |                            |                                |
|  |  |   |   |  | 10.00   |  |              |                      |                                    |                          |                     |  |                       | apecial instructions/work                                       |                            | ISNO(0                         |
| MNV-2 (820-170-1)  | 3/18/21  | 14 14<br>Central  |   | Water  | ×   |  |              |                      |                                    | • •                      |                     |  | œ                     |   |                            |                                |
| MW-3 (820-170-2)   | 3/18/21  | 14 57<br>Central  |   | Water  | ×   |  |              |                      |                                    |                          |                     | {  | 85                    |   |                            |                                |
| MW-4 (820-170-3)   | 3/18/21  | 15 52<br>Central  |   | Water  | ×   |  |              |                      |                                    |                          |                     | _  |                       |   |                            |                                |
| MW-5 (820-170-4)   | 3 <b>/18</b> /21                                     | Central   |   | Water  | ×   |  |              |                      |                                    | -                        |                     | $\dashv$                                   |                       |   |                            |                                |
| MVV-6 (820-170-5)  | 3/18/21  | 16 22   |   | Water  | ×   |  |              |                      |                                    | _                        |                     |  |                       |   |                            |                                |
| Dup-1 (820-170-6)  | 3/18/21  | Central   |   | Water  | ×   | $\square$  | ┝            | $\square$            |                                    | +                        |                     | ╂╍╉  |                       |   |                            |                                |
|  |  |   |   |  |   |  |              |                      |                                    |                          |                     |  | 8                     |   |                            |                                |
|  |  |   |   |  |   |  |              |                      |                                    |                          |                     |  | ×.                    |   |                            |                                |
| Note: Since rebordory screatizations and subject to change. Eurofins Xence LLC places the oversishino of method analysis & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-curricup of the laboratory core no currency maintain accreditation in the State of Origin listed above for analysis analyzed, the samples accreditation and the screece LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Euroine Xence LLC, attention immediately if all requested accreditations are current to date, return the append Chan of Cuescoly attenting to save complicance to Euroine Xence LLC. | being analyzed, the se<br>the signed Charry of Class | of method analy<br>imples stual be:<br>apply attesting to | /A & Scuredita<br>shipped back 1<br>sawd complice | fon compliance<br>o the Eurofins (<br>ince to Eurofini | e upon aut au<br>Genoo 1110 (a)<br>1 Xanco 1110,      | boontinect init<br>borathity or c  | xiner knetru | Ths an<br>ctone will | pl <del>a</del> shipr<br>be provid | eni is for<br>Any        | warded u<br>changes | indiar che                                 | in-of-cu<br>Switton s | stady if the laborate<br>status should be brou                  | ay Goor ng<br>Agint to Eur | stane Xenco LLC                |
| Possible Hazard Identification<br>Unconfirmed  |  |   |   |  | Sample  | Sample Disposal ( A fu   | U ( A fee    | New<br>Nav           | 9 assessed if sam                  |                          | eyoture             |  |                       | He may be assessed if sumples are retained longer than 1 month) | month)                     |                                |
| Deliverable Requested I II III V, Other (specify)  | Primary Deliverable Rank                             | ible Rank 2   |   |  | Special   | Special Instructions/QC  |              | Requirements         | lents                              |                          |                     |  |                       |   |                            |                                |
| Empty Kit Reinquished by   |  | Date  |   |  | <u> I</u> ne  |  | ł            |                      |                                    | Method of Shapment:      | f Shipme            | æ  |                       |   |                            |                                |
| Rellinguished by   | Date/Time:   |   |   | Company  | Roci  | Contraction of the contraction o | 2            |                      | 2]                                 |                          |                     | 21   | $\geq$                | M. (1) 0.1M   | Company                    | ~                              |
| Relarquished by  | Date/Time.   |   |   | Скарапу  | Rec   | Received by  |              |                      |                                    |                          | DathTime            | ŧ  |                       |   | Company                    | ~                              |
| Rasinquiaheed by   | Date/finte:  |   | 0   | Company  | Reci  | Received by  |              |                      |                                    |                          | DataTime            | ļu e.                                      |                       |   | Company                    |                                |
| Custody Seals Intact. Custody Seal No  |  |   |   |  | 8   | Cooler Temperatura(a) °  | <b>0</b>     | and Other Remarks    | Remarks                            |                          | ŀ                   |  |                       |   | ľ                          |                                |
|  |  |   |   |  |   |  |              |                      |                                    |                          |                     |  |                       |   | Ver II                     | Ver: 11/01/2020                |

**Chain of Custody Record** 

14

5

🔅 eurofins

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Job Number: 820-170-1 SDG Number: AR217009

List Source: Eurofins Lubbock

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

### Login Number: 170 List Number: 1 Creator: Lee, Randell

<6mm (1/4").

| Question   | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact.                                | True   |         |
| Sample custody seals, if present, are intact.                                    | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is               | True   |         |

Job Number: 820-170-1 SDG Number: AR217009

List Source: Eurofins Midland

List Creation: 03/22/21 11:21 AM

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Login Number: 170 List Number: 2 Creator: Copeland, Tatiana

| Question   | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact.                                | True   |         |
| Sample custody seals, if present, are intact.                                    | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is               | True   |         |

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Received by OCD: 3/28/2022 9:18:57 AM



## ANALYTICAL REPORT January 05, 2021

## **Plains All American Pipeline - Terracon**

Sample Delivery Group: Samples Received: Project Number: Description: Site:

Report To:

| L1301754                       |
|--------------------------------|
| 12/31/2020                     |
| AR207009                       |
| DCP Section 31 (SRS# 2009-084) |
| SRS# 2009-084                  |
| Brett Dennis                   |
| 5827 50th St.                  |
| Suite 1                        |
| Lubbock, TX 79424              |
|                                |

Ср Тс Ss Cn Śr Qc Gl AI Sc

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Entire Report Reviewed By:

Ayisha Raza 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

Mount Juliet, TN 37122 615-758-5858 800-767-5859 12065 Lebanon Rd www.pacenational.com

Released to Imaging: %/372022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR207009

SDG: L1301754

DATE/TIME: 01/05/21 14:24 PAGE: 1 of 9

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| Cp: Cover Page                                  | 1 |
|---|---|
| Tc: Table of Contents                           | 2 |
| Ss: Sample Summary                              | 3 |
| Cn: Case Narrative                              | 4 |
| Sr: Sample Results                              | 5 |
| EFF-1 L1301754-01                               | 5 |
| Qc: Quality Control Summary                     | 6 |
| Volatile Organic Compounds (MS) by Method TO-15 | 6 |
| GI: Glossary of Terms                           | 7 |
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SDG: L1301754 DATE/TIME:

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## SAMPLE SUMMARY

ONE LAB. NAT Page 54 of 249

|   |           |          | Collected by   | Collected date/tim | e Received dat | e/time         |
|---|-----------|----------|----------------|--------------------|----------------|----------------|
| EFF-1 L1301754-01 Air                           |           |          | Brett Dennis   | 12/30/20 13:30     | 12/31/20 09:4  | 15             |
| Method  | Batch     | Dilution | Preparation    | Analysis           | Analyst        | Location       |
|   |           |          | date/time      | date/time          |                |                |
| Volatile Organic Compounds (MS) by Method TO-15 | WG1599572 | 400      | 12/31/20 23:46 | 12/31/20 23:46     | GLN            | Mt. Juliet, TN |
| Volatile Organic Compounds (MS) by Method TO-15 | WG1599879 | 10000    | 01/01/21 16:07 | 01/01/21 16:07     | GLN            | Mt. Juliet, TN |



Ср

Тс

SDG: L1301754 DATE/TIME:

PAGE: 3 of 9

### CASE NARRATIVE

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.

Ayisha Raza Project Manager



SDG: L1301754

DATE/TIME: 01/05/21 14:24 PAGE: 4 of 9

## SAMPLE RESULTS - 01

### Volatile Organic Compounds (MS) by Method TO-15

|                            | CAS #     | Mol. Wt. | RDL1     | RDL2   | Result  | Result  | Qualifier | Dilution | Batch     |
|----------------------------|-----------|----------|----------|--------|---------|---------|-----------|----------|-----------|
| Analyte                    |           |          | ppbv     | ug/m3  | ppbv    | ug/m3   |           |          |           |
| Benzene                    | 71-43-2   | 78.10    | 80.0     | 256    | 4890    | 15600   |           | 400      | WG1599572 |
| Ethylbenzene               | 100-41-4  | 106      | 80.0     | 347    | 580     | 2510    |           | 400      | WG1599572 |
| Toluene                    | 108-88-3  | 92.10    | 200      | 753    | 6950    | 26200   |           | 400      | WG1599572 |
| m&p-Xylene                 | 1330-20-7 | 106      | 160      | 694    | 9040    | 39200   |           | 400      | WG1599572 |
| o-Xylene                   | 95-47-6   | 106      | 80.0     | 347    | 3490    | 15100   |           | 400      | WG1599572 |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 80000    | 330000 | 1400000 | 5780000 |           | 400      | WG1599572 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 98.4    |         |           |          | WG1599879 |

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Ss

SDG: L1301754

PAGE: 5 of 9 Volatile Organic Compounds (MS) by Method TO-15

## QUALITY CONTROL SUMMARY

ONE LAB. NAT Rage 57 of 249

### Method Blank (MB)

(MB) R3608741-3 12/31/20 10:36

| ( )                      |           |              |        |        |
|--------------------------|-----------|--------------|--------|--------|
|                          | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte                  | ppbv      |              | ppbv   | ppbv   |
| Benzene                  | U         |              | 0.0715 | 0.200  |
| Ethylbenzene             | U         |              | 0.0835 | 0.200  |
| m&p-Xylene               | U         |              | 0.135  | 0.400  |
| o-Xylene                 | U         |              | 0.0828 | 0.200  |
| Toluene                  | U         |              | 0.0870 | 0.500  |
| TPH (GC/MS) Low Fraction | U         |              | 39.7   | 200    |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3608741-1 12/31/2 | 0 09:13 • (LCSD | ) R3608741-2 | 12/31/20 09:50 | ŝ        |           |             |               |                |       |            |                 |
|--------------------------|-----------------|--------------|----------------|----------|-----------|-------------|---------------|----------------|-------|------------|-----------------|
|                          | Spike Amount    | LCS Result   | LCSD Result    | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits | 7               |
| Analyte                  | ppbv            | ppbv         | ppbv           | %        | %         | %           |               |                | %     | %          | <sup>′</sup> G  |
| Benzene                  | 3.75            | 4.34         | 4.38           | 116      | 117       | 70.0-130    |               |                | 0.917 | 25         |                 |
| Ethylbenzene             | 3.75            | 4.30         | 4.39           | 115      | 117       | 70.0-130    |               |                | 2.07  | 25         | <sup>8</sup> Al |
| m&p-Xylene               | 7.50            | 8.71         | 8.82           | 116      | 118       | 70.0-130    |               |                | 1.25  | 25         | A               |
| o-Xylene                 | 3.75            | 4.29         | 4.33           | 114      | 115       | 70.0-130    |               |                | 0.928 | 25         | 9               |
| Toluene                  | 3.75            | 4.29         | 4.31           | 114      | 115       | 70.0-130    |               |                | 0.465 | 25         | Š               |
| TPH (GC/MS) Low Fraction | 203             | 230          | 233            | 113      | 115       | 70.0-130    |               |                | 1.30  | 25         |                 |

Τс

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AI

Sc

### 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.  |
|---------------------------------|--|
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
|                                 |  |
| Qualifier                       | Description  |

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

SDG: L1301754

## Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
\* 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 National.

### State Accreditations

| Alabama                | 40660          |
|------------------------|----------------|
| Alaska                 | 17-026         |
| Arizona                | AZ0612         |
| Arkansas               | 88-0469        |
| California             | 2932           |
| Colorado               | TN00003        |
| Connecticut            | PH-0197        |
| Florida                | E87487         |
| Georgia                | NELAP          |
| Georgia <sup>1</sup>   | 923            |
| Idaho                  | 523<br>TN00003 |
| Illinois               | 200008         |
| Indiana                | C-TN-01        |
| lowa                   | 364            |
| Kansas                 | E-10277        |
| Kentucky <sup>16</sup> | KY90010        |
| Kentucky <sup>2</sup>  | 16             |
| Louisiana              | AI30792        |
| Louisiana <sup>1</sup> | LA180010       |
| Maine                  | TN00003        |
| Maryland               | 324            |
| Massachusetts          | M-TN003        |
| Michigan               | 9958           |
| Minnesota              | 047-999-395    |
| Mississippi            | TN00003        |
| Missouri               | 340            |
| Montana                | CERT0086       |
| montana                | CENTOODO       |

| lebraska                    | NE-OS-15-05      |
|-----------------------------|------------------|
| Nevada                      | TN000032021-1    |
| New Hampshire               | 2975             |
| New Jersey–NELAP            | TN002            |
| New Mexico <sup>1</sup>     | TN00003          |
| New York                    | 11742            |
| North Carolina              | Env375           |
| North Carolina <sup>1</sup> | DW21704          |
| North Carolina <sup>3</sup> | 41               |
| North Dakota                | R-140            |
| Ohio-VAP                    | CL0069           |
| Oklahoma                    | 9915             |
| Oregon                      | TN200002         |
| Pennsylvania                | 68-02979         |
| Rhode Island                | LAO00356         |
| South Carolina              | 84004            |
| South Dakota                | n/a              |
| Tennessee <sup>14</sup>     | 2006             |
| Texas                       | T104704245-20-18 |
| Texas ⁵                     | LAB0152          |
| Utah                        | TN00003          |
| Vermont                     | VT2006           |
| Virginia                    | 460132           |
| Washington                  | C847             |
| West Virginia               | 233              |
| Wisconsin                   | 998093910        |
| Wyoming                     | A2LA             |
|                             |                  |

### Third Party Federal Accreditations

| 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

### **Our Locations**

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Released to Imaging: %/372022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR207009

SDG: L1301754

DATE/TIME: 01/05/21 14:24

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|                             |                  |               |                 |  | Laboratory:   | Daga        |          |                    |            |        | ANAL                   | VEIC              |          | MIDIFEST           |  | LAB USE ONLY                |
|-----------------------------|------------------|---------------|-----------------|--|---|-------------|----------|--------------------|------------|--------|------------------------|-------------------|----------|--------------------|--|-----------------------------|
|                             |                  | _             |                 | con                                    | Address:  | Pace        |          | anon Rd            |            |        |                        |                   |          |                    |  | DUE DATE:                   |
|                             |                  |               |                 |  | Address:  |             |          | anon Rd<br>TN 3712 | 2          |        | REQU                   | ESTED             |          | - 1                |  | TEMP OF COOLER              |
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| Office Location             | 1                | Lubbock       |                 |  | Phone:  | (800        | ) 767-   | 5859               |            |        |                        |                   |          |                    |  |                             |
|                             |                  |               |                 |  | - Contact:  |             |          |                    |            | _      |                        |                   |          |                    |  | Page of                     |
| Project Manag               | er -             | Brett De      | ennis           |  | SRS #:  |             | 2        | 2009-084           | 1          | -      |                        |                   | <u>_</u> |                    |  | , age 01                    |
| Sampler's Nam               |                  | Brett De      |                 |  | Sampler's Sig   | natur       |          |                    |            |        | 12                     |                   | 300)     |                    |  |                             |
|                             |                  |               |                 |  |   |             |          |                    |            |        | 80                     | -                 | poq      |                    |  | (1301                       |
| Project Numbe               | er               |               | I               | Project Name                           |   |             |          | No. Typ            | e of Conta | ainers | thod                   | nde               | Method   | - 1                |  |                             |
|                             | AR207009         |               |                 |  | (SRS# 2009-084)   |             |          |                    |            | T      | Me                     | exte              | (EPA     | 10                 |  |                             |
|                             |                  | -             |                 |  |   | bth         | ŧ        | bag                |            |        | BTEX (EPA Method 8021) | TPH 8015 extended | de (E    |                    |  |                             |
| Matrix<br>Date              | Time             | Comp          | Grab            | Identifying Marks                      | of Sample(s)  | Start Depth | d Depth  | tedlar             |            |        | EX                     | H 80              | Chloride | P                  |  |                             |
| 2                           |                  |               | + +             |  |   | Sta         | End      | ţ,                 | _          | -      | 81                     | ₽.                | 5        | PIOH               | _  | Lab Sample ID               |
| A 12/30/2020                | 13:30            |               | X               | EFF-1                                  |   |             |          | 1                  |            |        | x                      | x                 |          |                    |  |                             |
|                             |                  |               |                 |  |   |             |          |                    |            |        |                        |                   |          | T                  |  |                             |
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|                             |                  |               |                 |  |   | X           |          |                    |            |        |                        |                   |          |                    | V  |                             |
|                             |                  |               |                 |  |   |             | N        | FE                 |            |        |                        |                   |          |                    |  |                             |
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| TURNAROUND TI               | ME               |               | 50              | Normal 48-Hour Rush                    | 24-Hour Rush  | 14          | TRRO     | laborat            | tory Revie | ew Cho | cklist                 |                   |          | Ves                | D No   |                             |
| Relinquished by (Signatur   |                  |               | 1               | Date: Time:                            | Received by (Signature  | 1/          | TARP     | 200010             | Date:      | /      | L.                     | 11                | NOTES    |                    | the state of the s | lirectly to Plains Pipeline |
| 1 fc                        | at               | to            | >               | - 12/30/20 16:                         | 7 /   | 6           |          |                    | 12         | 131    | 04                     | 14 2              |          |                    |  |                             |
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| Relinquished by (Signatur   |                  |               |                 | Date: Time:                            |   | 1           |          |                    | Date:      |        | Time:                  | _                 |          |                    |  | is@terracon.com             |
| incluiduistico pă (signecui |                  |               |                 | Date.                                  | Reperced by (Signature  |             |          |                    | Date.      |        | time.                  |                   |          | 101                | lgroves@   | paalp.com                   |
| Relinquished by (Signatur   | re)              |               |                 | Date: Time:                            | Received by (Signature  | :)          |          |                    | Date:      |        | Time:                  | -                 |          |                    |  |                             |
|                             |                  |               |                 |  |   |             |          |                    |            |        |                        |                   |          |                    |  |                             |
| Matrix                      | WW-Wastewater    |               | W - Water       | S - Soil                               | L · Liquid A · Air Bag  | C - Charo   | oal tube | s                  | - Sludge   |        |                        |                   |          |                    |  |                             |
| Container                   | VOA - 40 ml vial |               | A/G - Amb       | er Glass 11. 250 ml = Glass wide mouth | P/O - Plastic or other  |             |          |                    |            |        |                        |                   |          |                    |  |                             |
|                             |                  |               |                 | Lubbock Office                         | e = 5847 50th Stree   | et =        | Lubb     | ock T              | exas 70    | 424    | 806                    | -300              | 0140     |                    |  |                             |
|                             |                  |               |                 | EUDIOUR OTHO                           |   |             |          |                    |            |        | - 500                  | 000-              | 0140     |                    |  |                             |
|                             |                  |               |                 |  | Responsive  | Reso        | ource    | etul 🔳             | Reliabl    | e      |                        |                   |          |                    |  |                             |
|                             |                  |               |                 |  | Samola De-  |             |          |                    |            |        |                        |                   |          |                    |  |                             |
|                             |                  |               |                 | COC Seal Pres                          | Sample Receipt<br>ent/Intact:N  |             | If       | Appli              | able .     |        |                        |                   |          |                    |  | A. 0                        |
|                             |                  |               |                 | Bottles arrive                         | intact: <u>Y</u> N  | VOA         |          |                    |            | Y N    |                        |                   |          |                    |  | AmB                         |
|                             |                  |               |                 | Correct bottle                         | a used.   | Pres        | .Cor     | reat/Cl            | nesk:      | Y_N    |                        |                   |          |                    |  | 11111                       |
|                             |                  |               |                 | Sullicient voj                         | ume sent: Y_N<br>5 mR/hr: Y_N   |             |          |                    |            |        |                        |                   |          |                    |  | Delige                      |
|                             |                  |               |                 | woreen (0.                             | o may nr: 🔨 N   |             |          |                    |            |        |                        |                   |          |                    |  | RAU SCREEN: <0.5 m          |
| d to Imaging                | * 8/3/202        | 2 2.26        | • <b>44 D</b> ) | м                                      |   |             |          |                    |            |        |                        |                   |          |                    |  |                             |
| , to imaging                | . 0/5/404        | <i>4.4</i> 0. | . 77 1 1        | 7.4                                    |   |             |          |                    |            |        |                        |                   |          |                    |  | (ac SP                      |

Received by OCD: 3/28/2022 9:18:57 AM



## ANALYTICAL REPORT February 02, 2021

## **Plains All American Pipeline - Terracon**

Sample Delivery Group: Samples Received:

Project Number:

Description:

L1311575 01/29/2021 AR217009 DCP Sec. 31

Report To:

Brett Dennis 5847 50th St. Suite 1 Lubbock, TX 79424

Entire Report Reviewed By:

Ayisha Raza 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

Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com 12065 Lebanon Rd

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PROJECT: AR217009

SDG: L1311575

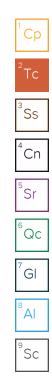
DATE/TIME: 02/02/21 09:27 PAGE: 1 of 9

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PROJECT: AR217009

SDG: L1311575

DATE/TIME: 02/02/21 09:27

PAGE: 2 of 9

## SAMPLE SUMMARY

ONE LAB. NAT Rage 63 of 249

| EFF-1 SEC. 31 L1311575-01 Air                     |           |          | Collected by<br>Aaron Adams | Collected date/time<br>01/28/21 11:39 | Received dat<br>01/29/21 09:3 | 1              |   |
|---|-----------|----------|-----------------------------|---------------------------------------|-------------------------------|----------------|---|
| Method  | Batch     | Dilution | Preparation                 | Analysis                              | Analyst                       | Location       | - |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1613428 | 800      | date/time<br>01/30/21 00:23 | date/time<br>01/30/21 00:23           | DAH                           | Mt. Juliet, TN | - |

| ³Ss             |
|-----------------|
| <sup>4</sup> Cn |
| <sup>5</sup> Sr |
| <sup>6</sup> Qc |
| <sup>7</sup> Gl |
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Τс

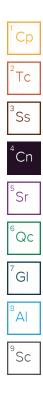
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/TIME: 21 09:27 PAGE: 3 of 9

### CASE NARRATIVE

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.

Ayisha Raza Project Manager



SDG: L1311575

DATE/TIME: 02/02/21 09:27 PAGE: 4 of 9

## SAMPLE RESULTS - 01

Qc

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A

Sc

### Volatile Organic Compounds (MS) by Method M18-Mod

| 0                          | 1         | · · · ·  |          |        |         |         |           |          |           |
|----------------------------|-----------|----------|----------|--------|---------|---------|-----------|----------|-----------|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2   | Result  | Result  | Qualifier | Dilution | Batch     |
| Analyte                    |           |          | ppbv     | ug/m3  | ppbv    | ug/m3   |           |          |           |
| Benzene                    | 71-43-2   | 78.10    | 160      | 511    | 4600    | 14700   |           | 800      | WG1613428 |
| Toluene                    | 108-88-3  | 92.10    | 400      | 1510   | 6790    | 25600   |           | 800      | WG1613428 |
| Ethylbenzene               | 100-41-4  | 106      | 160      | 694    | 574     | 2490    |           | 800      | WG1613428 |
| m&p-Xylene                 | 1330-20-7 | 106      | 320      | 1390   | 9880    | 42800   |           | 800      | WG1613428 |
| o-Xylene                   | 95-47-6   | 106      | 160      | 694    | 3800    | 16500   |           | 800      | WG1613428 |
| Methyl tert-butyl ether    | 1634-04-4 | 88.10    | 160      | 577    | ND      | ND      |           | 800      | WG1613428 |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 160000   | 661000 | 1830000 | 7560000 |           | 800      | WG1613428 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 94.7    |         |           |          | WG1613428 |
|                            |           |          |          |        |         |         |           |          |           |

Volatile Organic Compounds (MS) by Method M18-Mod

## QUALITY CONTROL SUMMARY

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### Method Blank (MB)

| (MB) R3617583-3 | 01/29/21 10:17 |
|-----------------|----------------|
|-----------------|----------------|

|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
|----------------------------|-----------|--------------|--------|----------|
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| MTBE                       | U         |              | 0.0647 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |
| (S) 1,4-Bromofluorobenzene | 84.6      |              |        | 60.0-140 |
|                            |           |              |        |          |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3617583-1 01/29/21 08:54 • (LCSD) R3617583-2 01/29/21 09:36 |              |            |             |          |           |             |               |                |       |            |
|--|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|  | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
| Analyte  | ppbv         | ppbv       | ppbv        | %        | %         | %           |               |                | %     | %          |
| MTBE   | 3.75         | 3.83       | 3.82        | 102      | 102       | 70.0-130    |               |                | 0.261 | 25         |
| Benzene  | 3.75         | 4.16       | 4.16        | 111      | 111       | 70.0-130    |               |                | 0.000 | 25         |
| Toluene  | 3.75         | 4.09       | 4.12        | 109      | 110       | 70.0-130    |               |                | 0.731 | 25         |
| Ethylbenzene   | 3.75         | 4.74       | 4.67        | 126      | 125       | 70.0-130    |               |                | 1.49  | 25         |
| m&p-Xylene   | 7.50         | 9.36       | 9.33        | 125      | 124       | 70.0-130    |               |                | 0.321 | 25         |
| o-Xylene   | 3.75         | 4.62       | 4.59        | 123      | 122       | 70.0-130    |               |                | 0.651 | 25         |
| TPH (GC/MS) Low Fraction   | 203          | 252        | 251         | 124      | 124       | 70.0-130    |               |                | 0.398 | 25         |
| (S) 1,4-Bromofluorobenzene   |              |            |             | 87.6     | 86.9      | 60.0-140    |               |                |       |            |
|  |              |            |             |          |           |             |               |                |       |            |

DATE/TIME: 02/02/21 09:27

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### 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 Method Quantitation Limit.   |
| 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<br>Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be<br>detected in all environmental media.   |
| U                               | Not detected at the Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL"<br>(Below Detectable Levels). The information in the results column should always be accompanied by either an MDL<br>(Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect<br>or report for this analyte. |
| Uncertainty<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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

SDG: L1311575 DATE/TIME: 02/02/21 09:27

## Received by OCD: 3/28/2022 9:18:57 AMCCCREDITATIONS & LOCATIONS



### 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         |
| lowa                   | 364         | Pennsylvania                | 68-02979         |
| Kansas                 | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup> | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>  | 16          | South Dakota                | n/a              |
| Louisiana              | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana               | 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 ⁵     | 1461.02     | DOD                         | 1461.01          |
| Canada                 | 1461.01     | USDA                        | P330-15-00234    |
| EPA–Crypto             | TN00003     |                             |                  |
|                        |             |                             |                  |

### Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

| Alabama                           | 40160                         |                         |          |
|-----------------------------------|-------------------------------|-------------------------|----------|
| ANSI National Accreditation Board | L2239                         |                         |          |
| Pace Analytical National          | 660 Bercut Dr. Ste. C Sacra   | mento, CA, 95811        |          |
| California                        | 2961                          | Oregon                  | CA300002 |
| Minnesota                         | 006-999-465                   | Washington              | C926     |
| North Dakota                      | R-214                         |                         |          |
| Pace Analytical National          | 6000 South Eastern Avenue     | Ste 9A Las Vegas, NV, 8 | 9119     |
| Nevada                            | NV009412021-1                 |                         |          |
| Pace Analytical National          | 1606 E. Brazos Street Suite E | ) Victoria, TX, 77901   |          |
| Texas                             | T104704328-20-18              |                         |          |

<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

| <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 |

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SDG: L1311575 Received by OCD: 3/28/2022 9:18:57 AM

## B215

CHAIN OF CUSTODY RECORD

|                   | Project Manager Brett Dennis<br>Sampler's Name Aaron Adams |                  | Contact:<br>SRS #: 2009-084<br>Sampler's Signature |                             |   |   |  | (EPA Method 8021) | Method 8015) Extended |             |                  |  |          | Page <u>1</u> of _          |          |          |     |                    |
|-------------------|--|------------------|--|-----------------------------|---|---|--|-------------------|-----------------------|-------------|------------------|--|----------|-----------------------------|----------|----------|-----|--------------------|
| Proj              | ect Numbe  | r<br>AR217009    |  | Proj                        | ect Name                                  | DCP Sec. 3  | 31   |                   |                       | Salaria and | of Containers    | Metho  | Metho    |                             | 14.20    | 1        |     |                    |
| Matrix            | Date   | Time             | Comp   | Grab                        | Identifying                               | Marks of Sam  |  | Start Depth       | End Depth             | tedlar bag  |                  | BTEX (EPA  | трн (ерд |                             |          |          |     | Lab Sample         |
| A                 | 1/28/2021  | 11:39            |  | x                           | E   | FF-1 Sec. 31  |  |                   |                       | x           |                  | x  | x        |                             |          |          |     | L1311              |
| -                 | 14. 1994<br>14. 1976                                       | /                | -  |                             | < T                                       |   |  |                   |                       |             | X                | 1  |          |                             |          |          |     |                    |
|                   | $\mathcal{T}_{2^{n+1}}$                                    | 1                |  |                             | /   |   |  |                   |                       | K           |                  |  |          |                             |          |          |     |                    |
|                   |  | /                |  |                             | /   |   | ttillen.<br>Hitlen i   |                   | Z                     |             |                  |  |          |                             |          |          |     |                    |
|                   |  |                  |  |                             |   |   |  | 1                 | 1                     |             |                  | -  |          |                             | N        |          |     | /                  |
|                   |  |                  |  |                             |   | 1   | /  | 1                 | N                     | FE          |                  |  |          |                             |          | 7        |     |                    |
| $\mathbf{k}$      |  |                  |  |                             | And the Alle                              | and the second second   | an a                         |                   |                       |             |                  |  | 1.00     |                             |          |          |     |                    |
| Reling            | NAROUND TH<br>uished by (Signatur<br>uished by (Signatur   | Adm              | -  | Nor                         | mal 48-Hou<br>Date:<br>/-28-202/<br>Date: | r Rush<br>Time:<br>147:00<br>Time:  | 24-Hour Rush     Received by (Signatur     Received by (Signatur | rla               | TRRE                  | P Laborate  | Date:            | Time:  | 30       | Ves<br>NOTES:<br>e-mail res | ults to: | Bill dir |     | to Plains Pipeline |
| Relinq            | uished by (Signatur  | e)               |  | na 2000<br>Cashir C         | Date:                                     | r: Time: Received by (Signatu   |  |                   |                       | Date        |                  | Time:  |          | 1. CJBRYA<br>2. ALGRO       | VES@PA   | ALP.C    | сом |                    |
| Reling            | Relinquished by (Signature) Date: Time:                    |                  |  | Time:                       | Received by (Signatur                     | re) Date:   |  |                   | Date:                 | Time:       | 9-4 X.<br>15- 73 | 3. BRETT.DENNIS@TERRA<br>4. ERIN.LOYD@TERRACO<br>5. AARON.ADAMS@TERR |          |                             | ON.CO    | N.COM    |     |                    |
| Matrix<br>Contair |  | WW-Wastewater    |  | W - Water<br>A/G - Amber Gl | 5 - Soll                                  | t - Liquid<br>ess wide mouth  | f A - Air Bag<br>P/O - Plantic or other                          | C - Char          | rcoal tube            | 8           | Sludge           |  |          |                             |          |          |     |                    |
| Γ                 |  | APNY - 40 UR APR |  | ny o - Arnowl G             |   |   | 50th Street, S   | uite '            | 1 . 1                 | ubboc       | k, Texas 79      | 424 #  | 806      | -300-014                    | 0        |          |     |                    |
| L                 |  |                  |  | ot Check                    | list<br>If Applicable                     | 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 -<br>1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 -<br>1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - | Responsive   | Res               | ourc                  | eful 🔳      | Reliable         | TR   | AC       | K 8                         | 126      | 50       | 184 | 1 1617             |

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Received by OCD: 3/28/2022 9:18:57 AM



# ANALYTICAL REPORT

## Plains All American Pipeline - Terracon

Sample Delivery Group: Samples Received: Project Number:

Description:

02/27/2021 AR217009 DCP Sec. 31

L1321006

Report To:

Brett Dennis 5847 50th St. Suite 1 Lubbock, TX 79424

Entire Report Reviewed By:

Ayisha Raza 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

Released to Imaging: 8/3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1321006

03/0

DATE/TIME: 03/02/21 09:17

PAGE: 1 of 9

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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

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| Cp: Cover Page                                    | 1 |
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| Sr: Sample Results                                | 5 |
| EFF-1 (02262021) L1321006-01                      | 5 |
| Qc: Quality Control Summary                       | 6 |
| Volatile Organic Compounds (MS) by Method M18-Mod | 6 |
| GI: Glossary of Terms                             | 7 |
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|   |   |



Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1321006 DATE/TIME: 03/02/21 09:17

/TIME: 21 09:17 PAGE: 2 of 9

## SAMPLE SUMMARY

ONE LAB. NAT Rage 72 of 249

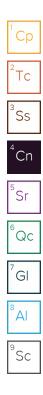
|   |           |          | Collected by   | Collected date/time | ed date/time Received date/time |                |     |
|---|-----------|----------|----------------|---------------------|---------------------------------|----------------|-----|
| EFF-1 (02262021) L1321006-01 Air                  |           |          | Brett Dennis   | 02/26/2113:00       | 02/27/21 09:15                  | ō              | 1   |
| Method  | Batch     | Dilution | Preparation    | Analysis            | Analyst                         | Location       | · Ц |
|   |           |          | date/time      | date/time           |                                 |                | 2   |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1627104 | 400      | 02/28/21 22:29 | 02/28/21 22:29      | CAW                             | Mt. Juliet, TN |     |

| <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> AI |
| <sup>9</sup> Sc |

## CASE NARRATIVE

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.

Ayisha Raza Project Manager



SDG: L1321006

DATE/TIME: 03/02/21 09:17 PAGE: 4 of 9

### SAMPLE RESULTS - 01 L1321006

Qc

Gl

ΑI

Sc

### Volatile Organic Compounds (MS) by Method M18-Mod

| -                          |           |          |          |        |         |         |           |          |           |
|----------------------------|-----------|----------|----------|--------|---------|---------|-----------|----------|-----------|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2   | Result  | Result  | Qualifier | Dilution | Batch     |
| Analyte                    |           |          | ppbv     | ug/m3  | ppbv    | ug/m3   |           |          |           |
| Benzene                    | 71-43-2   | 78.10    | 80.0     | 256    | 2900    | 9260    |           | 400      | WG1627104 |
| Toluene                    | 108-88-3  | 92.10    | 200      | 753    | 5490    | 20700   |           | 400      | WG1627104 |
| Ethylbenzene               | 100-41-4  | 106      | 80.0     | 347    | 564     | 2450    |           | 400      | WG1627104 |
| m&p-Xylene                 | 1330-20-7 | 106      | 160      | 694    | 7840    | 34000   |           | 400      | WG1627104 |
| o-Xylene                   | 95-47-6   | 106      | 80.0     | 347    | 3020    | 13100   |           | 400      | WG1627104 |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 80000    | 330000 | 1880000 | 7770000 |           | 400      | WG1627104 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 109     |         |           |          | WG1627104 |
|                            |           |          |          |        |         |         |           |          |           |

SDG: L1321006

DATE/TIME: 03/02/21 09:17 Volatile Organic Compounds (MS) by Method M18-Mod

## QUALITY CONTROL SUMMARY

Ср

Тс

Ss

Cn

Sr

Qc

## Method Blank (MB)

| (MB) R3625955-3 | 02/28/21 10:37 |
|-----------------|----------------|
|                 |                |

| (                          |           |              |        |          |
|----------------------------|-----------|--------------|--------|----------|
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |
| (S) 1,4-Bromofluorobenzene | 94.2      |              |        | 60.0-140 |

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3625955-1 02/28     | 3/21 09:22 • (LC | SD) R362595 | 5-2 02/28/2110 | 0:01     |           |             |               |                |       |            | 7  |
|----------------------------|------------------|-------------|----------------|----------|-----------|-------------|---------------|----------------|-------|------------|----|
|                            | Spike Amount     | LCS Result  | LCSD Result    | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits | GI |
| Analyte                    | ppbv             | ppbv        | ppbv           | %        | %         | %           |               |                | %     | %          |    |
| Benzene                    | 3.75             | 3.66        | 3.68           | 97.6     | 98.1      | 70.0-130    |               |                | 0.545 | 25         | 8  |
| Toluene                    | 3.75             | 3.73        | 3.74           | 99.5     | 99.7      | 70.0-130    |               |                | 0.268 | 25         | A  |
| Ethylbenzene               | 3.75             | 3.70        | 3.79           | 98.7     | 101       | 70.0-130    |               |                | 2.40  | 25         | 9  |
| m&p-Xylene                 | 7.50             | 7.68        | 7.92           | 102      | 106       | 70.0-130    |               |                | 3.08  | 25         | Sc |
| o-Xylene                   | 3.75             | 3.80        | 3.87           | 101      | 103       | 70.0-130    |               |                | 1.83  | 25         |    |
| TPH (GC/MS) Low Fraction   | 203              | 214         | 219            | 105      | 108       | 70.0-130    |               |                | 2.31  | 25         |    |
| (S) 1,4-Bromofluorobenzene | <u>j</u>         |             |                | 100      | 100       | 60.0-140    |               |                |       |            |    |

Τс

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### 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.  |
|---------------------------------|--|
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL"<br>(Below Detectable Levels). The information in the results column should always be accompanied by either an MDL<br>(Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect<br>or report for this analyte. |
| Uncertainty<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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<br>by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for<br>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.  |
|                                 |  |
| Qualifier                       | Description  |

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

SDG: L1321006

## Received by OCD: 3/28/2022 9:18:57 AMCCCREDITATIONS & LOCATIONS



#### 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               |
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| Illinois               | 200008      | Oklahoma                    | 9915             |
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| Kansas                 | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup> | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>  | 16          | South Dakota                | n/a              |
| Louisiana              | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana               | LA018       | Texas                       | T104704245-20-18 |
| Maine                  | TN00003     | Texas <sup>5</sup>          | LAB0152          |
| Maryland               | 324         | Utah                        | TN000032021-11   |
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| Michigan               | 9958        | Virginia                    | 110033           |
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| Missouri               | 340         | Wisconsin                   | 998093910        |
| Montana                | CERT0086    | Wyoming                     | A2LA             |
| A2LA – ISO 17025       | 1461.01     | AIHA-LAP,LLC EMLAP          | 100789           |
| A2LA – ISO 17025 ⁵     | 1461.02     | DOD                         | 1461.01          |
| Canada                 | 1461.01     | USDA                        | P330-15-00234    |
| EPA–Crypto             | TN00003     |                             |                  |
|                        |             |                             |                  |

## Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

| Alabama                           | 40160                         |                         |          |
|-----------------------------------|-------------------------------|-------------------------|----------|
| ANSI National Accreditation Board | L2239                         |                         |          |
| Paco Analytical National          | 660 Bercut Dr. Ste. C Sacra   | monto CA 95811          |          |
| California                        | 2961                          | Oregon                  | CA300002 |
| Minnesota                         | 006-999-465                   | Washington              | C926     |
| North Dakota                      | R-214                         |                         | 0,20     |
| Pace Analytical National          | 6000 South Eastern Avenue     | Ste 9A Las Vegas, NV, 8 | 9119     |
| Nevada                            | NV009412021-1                 |                         |          |
| Pace Analytical National          | 1606 E. Brazos Street Suite I | ) Victoria, TX, 77901   |          |
| Texas                             | T104704328-20-18              |                         |          |

<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

| <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 |

Released to Imaging: %/372022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1321006

PAGE: 8 of 9

ONE LAB. NATIONWIDE.

## H029

|   |  | -         | _                |   | -                  | Laboratory:<br>Address:   | Pace<br>1206 |           | anon Rd    |               | and the second         | LYSIS       |           |         |                          | AB USE ONLY<br>DUE DATE:            |
|---|--|-----------|------------------|---|--------------------|---|--------------|-----------|------------|---------------|------------------------|-------------|-----------|---------|--------------------------|-------------------------------------|
| Office Location   |  |           | Ð                | CO  |                    | Phone:  | Mt.          |           | TN 37122   | 2             | REQ                    | UESTED      |           |         | П                        | emp of cooler<br>Vhen received (°C) |
| onice Location  |  | JUCK      |                  |   |                    | Contact:  | (000         | J 707     | 3033       |               |                        |             |           |         |                          | Page _1_ of                         |
| Project Manager   | the second s   | tt Denr   |                  |   |                    | SRS #:  |              |           | 2009-084   |               |                        |             |           |         |                          |                                     |
| Sampler's Name  | Bret   | tt Denr   | lis              |   |                    | Sampler's Sig   | gnatur       | e         |            |               | 8021                   |             |           |         |                          |                                     |
| Project Number  | 2217000  |           | Proj             | ject Name   |                    |   | 0            |           | No. Type   | e of Containe | lethod                 | extended    |           |         |                          |                                     |
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|   | /  |           |                  | /   | Service and a      | 中国新生产的  |              |           | 1          |               |                        | N           |           | 1.017   |                          |                                     |
|   | /  |           |                  | /   |                    |   |              |           |            |               |                        |             |           |         |                          | and the second                      |
| X   | and the  |           |                  | /   |                    |   |              | 1         |            |               |                        |             |           |         |                          | E. S. Heles                         |
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| //  |  | $\square$ |                  |   | 1                  | a she she i   | X            |           |            |               |                        |             |           | N       |                          | /                                   |
| /   | State.   | $\square$ | _                |   | /                  |   |              | N         | FE         | -             |                        |             |           |         |                          | /                                   |
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| Relinquished by (Signature)   |  |           |                  | Date:   | Time:              | Received by (Signature  | 1            |           |            | Date:         | Time:                  | e           | -mail res |         |                          |                                     |
| Relinquished by (Signature)   |  |           |                  | Date:   | Time:              | Received by (Signature  | )            |           |            | Date:         | Time:                  | _           |           |         | nnis@terra<br>@paalp.cor |                                     |
| Relinguished by (Signature)   | The second second  |           |                  |   | 6) - 13 a - 7      |   |              |           |            |               |                        |             |           |         | @paalp.cor               |                                     |
| reanquisited by (signature)   |  |           |                  | Date:   | Time:              | Received by Prature   | pas          |           |            | 7-27          | 29                     | 15          |           | maochoa | a@paalp.co               | m                                   |
|   | Wastewater   | w         | - Water          | S - Solf  | 1.                 | Liquid A - Air Bag  | C - Charco   | oal tube  | SL-        | Sludge        | 011 0                  |             |           |         |                          |                                     |
| Container VOA -   | 40 ml vial   | N         | /G - Amber Glass | 11. 250 ml  | - Glass wide mouth | P/O - Plastic or other  | 1002         |           |            |               | -                      |             | - anti-   | in the  |                          |                                     |
|   |  |           |                  | Lubbo   | ock Office         | 5847 50th Stree   | t = L        | Lubbe     | ock, Te    | xas 7942      | 4 = 806                | 5-300-0     | 140       |         |                          |                                     |
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|   | C  | OC Se     | al Pres          | Sample<br>sent/Intact:                              | Receipt Ch         | ecklast   |              |           |            | t             |                        |             |           |         |                          |                                     |
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# 🔅 eurofins

## Environment Testing America

## ANALYTICAL REPORT

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8 Lubbock, TX 79424 Tel: (806)794-1296

## Laboratory Job ID: 820-1069-1

Laboratory Sample Delivery Group: AR217009 Client Project/Site: DCP Sec. 31

## For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

## Attn: Brett Dennis

RAMER

Authorized for release by: 6/23/2021 1:03:50 PM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 820-1069-1 SDG: AR217009

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Coliform MCLs

- Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

#### Warranties, Terms, and Conditions

Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

• Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

• Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

• EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

• Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

• The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).

VRAMER

Jessica Kramer Project Manager 6/23/2021 1:03:50 PM

Laboratory Job ID: 820-1069-1 SDG: AR217009

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DLC EDL LOD LOQ MCL MDA MDC

MDL

ML

MPN

MQL

NC

ND NEG

POS

PQL

QC RER

RL

RPD

TEF

TEQ

TNTC

PRES

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

|                                    | Definitions/Glossary  |                                    |   |
|------------------------------------|---|------------------------------------|---|
| Client: Terraco<br>Project/Site: D | on Consulting Eng & Scientists Jo   | ob ID: 820-1069-1<br>SDG: AR217009 | 2 |
| Qualifiers                         |   |                                    | 3 |
| GC VOA<br>Qualifier                | Qualifier Description   |                                    | 4 |
| S1-                                | Surrogate recovery exceeds control limits, low biased.  |                                    |   |
| S1+                                | Surrogate recovery exceeds control limits, high biased.   |                                    | 5 |
| U                                  | Indicates the analyte was analyzed for but not detected.  |                                    |   |
| Glossary                           |   |                                    |   |
| Abbreviation                       | These commonly used abbreviations may or may not be present in this report.                                 |                                    |   |
| ¤                                  | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |                                    |   |
| %R                                 | Percent Recovery  |                                    | g |
| CFL                                | Contains Free Liquid  |                                    |   |
| CFU                                | Colony Forming Unit   |                                    | G |
| CNF                                | Contains No Free Liquid   |                                    | 2 |
| DER                                | Duplicate Error Ratio (normalized absolute difference)  |                                    |   |
| Dil Fac                            | Dilution Factor   |                                    |   |
| DL                                 | Detection Limit (DoD/DOE)   |                                    |   |
| DL, RA, RE, IN                     | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |                                    |   |
| DLC                                | Decision Level Concentration (Radiochemistry)   |                                    |   |
| EDL                                | Estimated Detection Limit (Dioxin)  |                                    |   |
| LOD                                | Limit of Detection (DoD/DOE)  |                                    |   |
| LOQ                                | Limit of Quantitation (DoD/DOE)   |                                    |   |
| MCL                                | EPA recommended "Maximum Contaminant Level"   |                                    |   |
| MDA                                | Minimum Detectable Activity (Radiochemistry)  |                                    |   |

Eurofins Xenco, Lubbock

**Case Narrative** 

Job ID: 820-1069-1 SDG: AR217009

#### Job ID: 820-1069-1

#### Laboratory: Eurofins Xenco, Lubbock

#### Narrative

Job Narrative 820-1069-1

#### Receipt

The samples were received on 6/18/2021 10:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.7°C

#### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-4 (820-1069-3), MW-5 (820-1069-4), (CCV 880-4464/2), (LCS 880-4464/3), (LCSD 880-4464/4), (MB 880-4464/8), (820-1069-A-1 MS) and (820-1069-A-1 MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-6 (820-1069-5), DUP-1 (820-1069-6) and (CCV 880-4464/20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 820-1069-1 SDG: AR217009

## Lab Sample ID: 820-1069-1

Lab Sample ID: 820-1069-2

Lab Sample ID: 820-1069-3

Matrix: Water

Matrix: Water

Matrix: Water

5

## Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

#### **Client Sample ID: MW-2** Date Collected: 06/17/21 09:04 Date Received: 06/18/21 10:35

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| Total BTEX                  | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 13:53 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 104       |           | 70 - 130 |     |      | - |          | 06/22/21 13:53 | 1       |
| 1,4-Difluorobenzene (Surr)  | 100       |           | 70 - 130 |     |      |   |          | 06/22/21 13:53 | 1       |

### **Client Sample ID: MW-3**

Date Collected: 06/17/21 11:22

#### Date Received: 06/18/21 10:35

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | < 0.00200 | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| Total BTEX                  | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 14:18 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 102       |           | 70 - 130 |     |      | - |          | 06/22/21 14:18 | 1       |
| 1,4-Difluorobenzene (Surr)  | 130       |           | 70 - 130 |     |      |   |          | 06/22/21 14:18 | 1       |

### **Client Sample ID: MW-4**

Date Collected: 06/17/21 10:30

Date Received: 06/18/21 10:35

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | < 0.00200 | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| Total BTEX                  | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 14:43 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 97        |           | 70 - 130 |     |      | - |          | 06/22/21 14:43 | 1       |
| 1,4-Difluorobenzene (Surr)  | 136       | S1+       | 70 - 130 |     |      |   |          | 06/22/21 14:43 | 1       |

Job ID: 820-1069-1 SDG: AR217009

## Lab Sample ID: 820-1069-4

Lab Sample ID: 820-1069-5

Lab Sample ID: 820-1069-6

Matrix: Water

Matrix: Water

Matrix: Water

5

## Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

#### **Client Sample ID: MW-5** Date Collected: 06/17/21 12:05 Date Received: 06/18/21 10:35

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
|                             |           |           |          |     |      |   | ricparea | ·              |         |
| Benzene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| Total BTEX                  | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:08 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 92        |           | 70 - 130 |     |      | - |          | 06/22/21 15:08 | 1       |
| 1,4-Difluorobenzene (Surr)  | 135       | S1+       | 70 - 130 |     |      |   |          | 06/22/21 15:08 | 1       |

### **Client Sample ID: MW-6**

Date Collected: 06/17/21 09:52

#### Date Received: 06/18/21 10:35

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | < 0.00200 | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| Total BTEX                  | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:33 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 94        |           | 70 - 130 |     |      | - |          | 06/22/21 15:33 | 1       |
| 1,4-Difluorobenzene (Surr)  | 139       | S1+       | 70 _ 130 |     |      |   |          | 06/22/21 15:33 | 1       |

### **Client Sample ID: DUP-1**

Date Collected: 06/17/21 00:00

Date Received: 06/18/21 10:35

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| Total BTEX                  | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 06/22/21 15:58 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 94        |           | 70 - 130 |     |      | - |          | 06/22/21 15:58 | 1       |
| 1,4-Difluorobenzene (Surr)  | 146       | S1+       | 70 - 130 |     |      |   |          | 06/22/21 15:58 | 1       |

### Method: 8021B - Volatile Organic Compounds (GC) Matrix: Water

| -                |                        |          |          | Percent Surrogate Recovery (Acceptance Limits) |   |
|------------------|------------------------|----------|----------|--|---|
|                  |                        | BFB1     | DFBZ1    |  |   |
| Lab Sample ID    | Client Sample ID       | (70-130) | (70-130) |  | _ |
| 820-1069-1       | MW-2                   | 104      | 100      |  |   |
| 820-1069-1 MS    | MW-2                   | 84       | 146 S1+  |  |   |
| 820-1069-1 MSD   | MW-2                   | 86       | 149 S1+  |  |   |
| 320-1069-2       | MW-3                   | 102      | 130      |  |   |
| 320-1069-3       | MW-4                   | 97       | 136 S1+  |  |   |
| 320-1069-4       | MW-5                   | 92       | 135 S1+  |  |   |
| 320-1069-5       | MW-6                   | 94       | 139 S1+  |  |   |
| 320-1069-6       | DUP-1                  | 94       | 146 S1+  |  |   |
| _CS 880-4464/3   | Lab Control Sample     | 87       | 130      |  |   |
| _CSD 880-4464/4  | Lab Control Sample Dup | 92       | 149 S1+  |  |   |
| MB 880-4464/8    | Method Blank           | 62 S1-   | 111      |  |   |
| Surrogate Legend |                        |          |          |  |   |

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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| Job ID: 820-1069-1 |
|--------------------|
| SDG: AR217009      |

Prep Type: Total/NA

## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

## Method: 8021B - Volatile Organic Compounds (GC)

| Lab Sample ID: MB 880-4464/8      |              |           |          |         |     |        |      |          | Client   | Sample ID: M  | lethod  | Blank   |
|-----------------------------------|--------------|-----------|----------|---------|-----|--------|------|----------|----------|---------------|---------|---------|
| Matrix: Water                     |              |           |          |         |     |        |      |          |          | Prep Ty       | pe: To  | tal/NA  |
| Analysis Batch: 4464              |              |           |          |         |     |        |      |          |          |               | · · ·   |         |
|                                   | ME           | MB        |          |         |     |        |      |          |          |               |         |         |
| Analyte                           | Resul        | Qualifier | RL       |         | MDL | Unit   |      | D        | Prepared | Analyze       | d       | Dil Fac |
| Benzene                           | <0.00200     | U         | 0.00200  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
| Toluene                           | <0.00200     | U         | 0.00200  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
| Ethylbenzene                      | <0.00200     | U         | 0.00200  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
| m-Xylene & p-Xylene               | <0.00400     | U         | 0.00400  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
| o-Xylene                          | <0.00200     | U         | 0.00200  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
| Xylenes, Total                    | <0.00400     | U         | 0.00400  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
| Total BTEX                        | <0.00400     | U         | 0.00400  |         |     | mg/L   |      |          |          | 06/22/21 13   | 3:28    | 1       |
|                                   | МЕ           | MB        |          |         |     |        |      |          |          |               |         |         |
| Surrogate                         | %Recovery    | Qualifier | Limits   |         |     |        |      |          | Prepared | Analyze       | d       | Dil Fac |
| 4-Bromofluorobenzene (Surr)       | 62           |           | 70 - 130 |         |     |        |      |          | -        | 06/22/21 13   |         | 1       |
| 1,4-Difluorobenzene (Surr)        | 111          |           | 70 - 130 |         |     |        |      |          |          | 06/22/21 1    | 3:28    | 1       |
| Lab Sample ID: LCS 880-4464/3     |              |           |          |         |     |        |      | Clier    | nt Sampl | e ID: Lab Cor | ntrol S | ample   |
| Matrix: Water                     |              |           |          |         |     |        |      |          |          | Prep Ty       |         |         |
| Analysis Batch: 4464              |              |           |          |         |     |        |      |          |          |               |         |         |
|                                   |              |           | Spike    | LCS     | LCS |        |      |          |          | %Rec.         |         |         |
| Analyte                           |              |           | Added    | Result  | Qua | lifier | Unit | D        | %Rec     | Limits        |         |         |
| Benzene                           |              |           | 0.100    | 0.1076  |     |        | mg/L |          | 108      | 70 - 130      |         |         |
| Toluene                           |              |           | 0.100    | 0.09715 |     |        | mg/L |          | 97       | 70 - 130      |         |         |
| Ethylbenzene                      |              |           | 0.100    | 0.09730 |     |        | mg/L |          | 97       | 70 - 130      |         |         |
| m-Xylene & p-Xylene               |              |           | 0.200    | 0.2005  |     |        | mg/L |          | 100      | 70 - 130      |         |         |
| o-Xylene                          |              |           | 0.100    | 0.09818 |     |        | mg/L |          | 98       | 70 _ 130      |         |         |
|                                   | LCS LC       | \$        |          |         |     |        |      |          |          |               |         |         |
| Surrogate                         |              | alifier   | Limits   |         |     |        |      |          |          |               |         |         |
| 4-Bromofluorobenzene (Surr)       | 87           |           | 70 - 130 |         |     |        |      |          |          |               |         |         |
| 1,4-Difluorobenzene (Surr)        | 130          |           | 70 - 130 |         |     |        |      |          |          |               |         |         |
|                                   | 100          |           | 10-100   |         |     |        |      |          |          |               |         |         |
| Lab Sample ID: LCSD 880-4464      | 4            |           |          |         |     |        | С    | lient Sa | mple ID: | Lab Control   | Samp    | le Dup  |
| Matrix: Water                     |              |           |          |         |     |        |      |          |          | Prep Ty       |         |         |
| Analysis Batch: 4464              |              |           |          |         |     |        |      |          |          |               |         |         |
|                                   |              |           | Spike    | LCSD    | LCS | D      |      |          |          | %Rec.         |         | RPD     |
| Analyte                           |              |           | Added    | Result  | Qua | lifier | Unit | D        | %Rec     | Limits        | RPD     | Limit   |
| Benzene                           |              |           | 0.100    | 0.1192  |     |        | mg/L |          | 119      | 70 - 130      | 10      | 20      |
| Toluene                           |              |           | 0.100    | 0.1089  |     |        | mg/L |          | 109      | 70 - 130      | 11      | 20      |
| Ethylbenzene                      |              |           | 0.100    | 0.1061  |     |        | mg/L |          | 106      | 70 _ 130      | 9       | 20      |
| m-Xylene & p-Xylene               |              |           | 0.200    | 0.2185  |     |        | mg/L |          | 109      | 70 - 130      | 9       | 20      |
| o-Xylene                          |              |           | 0.100    | 0.1065  |     |        | mg/L |          | 106      | 70 - 130      | 8       | 20      |
|                                   | LCSD LC      | SD        |          |         |     |        |      |          |          |               |         |         |
| Surrogate                         | %Recovery Qu |           | Limits   |         |     |        |      |          |          |               |         |         |
| 4-Bromofluorobenzene (Surr)       | 92           |           | 70 - 130 |         |     |        |      |          |          |               |         |         |
| 4.4 Diffusion have a second (Dum) | 440.04       |           | 70 400   |         |     |        |      |          |          |               |         |         |

| 1,4-Difluorobenzene (Surr)  | 149      | S1+       | 70 - 130 |        |           |      |   |      |          |                               |
|---|----------|-----------|----------|--------|-----------|------|---|------|----------|-------------------------------|
| Lab Sample ID: 820-1069-1 MS<br>Matrix: Water<br>Analysis Batch: 4464 |          |           |          |        |           |      |   |      |          | ple ID: MW-2<br>ype: Total/NA |
|   | Sample   | Sample    | Spike    | MS     | MS        |      |   |      | %Rec.    |                               |
| Analyte   | Result   | Qualifier | Added    | Result | Qualifier | Unit | D | %Rec | Limits   |                               |
| Benzene   | <0.00200 | U         | 0.100    | 0.1187 |           | mg/L |   | 119  | 70 _ 130 |                               |

SDG: AR217009

Job ID: 820-1069-1

## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

| Lab Sample ID: 820-1069-1 MS |  |
|------------------------------|--|
| Matrix: Water                |  |

### Analysis Batch: 4464

|                     | Sample   | Sample    | Spike | MS     | MS        |      |   |      | %Rec.    |
|---------------------|----------|-----------|-------|--------|-----------|------|---|------|----------|
| Analyte             | Result   | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   |
| Toluene             | <0.00200 | U         | 0.100 | 0.1198 |           | mg/L |   | 120  | 70 - 130 |
| Ethylbenzene        | <0.00200 | U         | 0.100 | 0.1059 |           | mg/L |   | 106  | 70 - 130 |
| m-Xylene & p-Xylene | <0.00400 | U         | 0.200 | 0.2186 |           | mg/L |   | 109  | 70 - 130 |
| o-Xylene            | <0.00200 | U         | 0.100 | 0.1073 |           | mg/L |   | 107  | 70 - 130 |
|                     |          | МС        |       |        |           |      |   |      |          |

|                             | MS        | MS        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 84        |           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 146       | S1+       | 70 - 130 |

#### Lab Sample ID: 820-1069-1 MSD Matrix: Water

#### Analysis Batch: 4464

|                     | Sample   | Sample    | Spike | MSD    | MSD       |      |   |      | %Rec.    |     | RPD   |  |
|---------------------|----------|-----------|-------|--------|-----------|------|---|------|----------|-----|-------|--|
| Analyte             | Result   | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |  |
| Benzene             | <0.00200 | U         | 0.100 | 0.1163 |           | mg/L |   | 116  | 70 - 130 | 2   | 25    |  |
| Toluene             | <0.00200 | U         | 0.100 | 0.1198 |           | mg/L |   | 120  | 70 - 130 | 0   | 25    |  |
| Ethylbenzene        | <0.00200 | U         | 0.100 | 0.1055 |           | mg/L |   | 105  | 70 - 130 | 0   | 25    |  |
| m-Xylene & p-Xylene | <0.00400 | U         | 0.200 | 0.2187 |           | mg/L |   | 109  | 70 - 130 | 0   | 25    |  |
| o-Xylene            | <0.00200 | U         | 0.100 | 0.1077 |           | mg/L |   | 108  | 70 - 130 | 0   | 25    |  |
|                     |          |           |       |        |           |      |   |      |          |     |       |  |

|                             | MSD       | MSD       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 86        |           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 149       | S1+       | 70 - 130 |

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Job ID: 820-1069-1 SDG: AR217009

Client Sample ID: MW-2 Prep Type: Total/NA

Client Sample ID: MW-2

Prep Type: Total/NA

## **QC Association Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

Job ID: 820-1069-1 SDG: AR217009

### **GC VOA**

#### Analysis Batch: 4464

| Lab Sample ID  | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------|------------------------|-----------|--------|--------|------------|
| 320-1069-1     | MW-2                   | Total/NA  | Water  | 8021B  |            |
| 320-1069-2     | MW-3                   | Total/NA  | Water  | 8021B  |            |
| 320-1069-3     | MW-4                   | Total/NA  | Water  | 8021B  |            |
| 20-1069-4      | MW-5                   | Total/NA  | Water  | 8021B  |            |
| 20-1069-5      | MW-6                   | Total/NA  | Water  | 8021B  |            |
| 20-1069-6      | DUP-1                  | Total/NA  | Water  | 8021B  |            |
| IB 880-4464/8  | Method Blank           | Total/NA  | Water  | 8021B  |            |
| CS 880-4464/3  | Lab Control Sample     | Total/NA  | Water  | 8021B  |            |
| CSD 880-4464/4 | Lab Control Sample Dup | Total/NA  | Water  | 8021B  |            |
| 20-1069-1 MS   | MW-2                   | Total/NA  | Water  | 8021B  |            |
| 20-1069-1 MSD  | MW-2                   | Total/NA  | Water  | 8021B  |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |
|                |                        |           |        |        |            |

Client: Terracon Consulting Eng & Scientists

Lab Chronicle

| Job ID: 820-1069-1 |
|--------------------|
| SDG: AR217009      |

Matrix: Water

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Lab Sample ID: 820-1069-1

## Client Sample ID: MW-2 Date Collected: 06/17/21 09:04

Project/Site: DCP Sec. 31

|   | Batch   | Batch   |         | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  |  |
|---|---|---|---------|-----------------------------------|---|---|---|---|--|--|
| Prep Type   | Туре  | Method  | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | or Analyzed   | Analyst  | Lab  |
| Total/NA  | Analysis  | 8021B   |         | 1                                 | 5 mL  | 5 mL                                      | 4464                                      | 06/22/21 13:53  | MR   | XEN MID  |
| lient Samp  | le ID: MW-3   |   |         |                                   |   |   |   | Lab Sam   | ple ID: 8  | 320-1069   |
| ate Collected   | : 06/17/21 11:22  | 2   |         |                                   |   |   |   |   | N  | Aatrix: Wat  |
| Date Received   | : 06/18/21 10:35  | 5   |         |                                   |   |   |   |   |  |  |
| -   | Batch   | Batch   |         | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  |  |
| Prep Type   | Туре  | Method  | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | or Analyzed   | Analyst  | Lab  |
| Total/NA  | Analysis  | 8021B   |         | 1                                 | 5 mL  | 5 mL                                      | 4464                                      | 06/22/21 14:18  | MR   | XEN MID  |
| lient Samp  | le ID: MW-4   |   |         |                                   |   |   |   | Lab Sam   | ple ID: 8  | 320-1069   |
| -   | : 06/17/21 10:30  | )   |         |                                   |   |   |   |   |  | Atrix: Wat   |
|   | : 06/18/21 10:35  |   |         |                                   |   |   |   |   |  |  |
| _   | Batch   | Batch   |         | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  |  |
| Prep Type   | Туре  | Method  | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | or Analyzed   | Analyst  | Lab  |
| Total/NA  | Analysis  | 8021B   |         | 1                                 | 5 mL  | 5 mL                                      | 4464                                      | 06/22/21 14:43  | MR   | XEN MID  |
| ate Collected   | : 06/17/21 12:05  |   |         |                                   |   |   |   | Lab Sam   |  |  |
| ate Collected   |   |   |         |                                   |   |   |   | Lab Sam   |  |  |
| Date Collected  | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch   | Batch   |         | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  | Aatrix: Wat  |
| Date Collected<br>Date Received:<br>Prep Type   | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type   | Batch<br>Method   | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed   | Analyst  | Natrix: Wat  |
| Date Collected  | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch   | Batch   | Run     |                                   |   |   |   | Prepared  |  | Aatrix: Wat  |
| Date Collected<br>Date Received:<br>Prep Type<br>Total/NA   | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br><u>Type</u><br>Analysis  | Batch<br>Method   | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed   | Analyst<br>MR  | Aatrix: Wat  |
| Prep Type<br>Total/NA   | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br><u>Type</u><br>Analysis  | Batch<br>Method<br>8021B                                      | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed<br>06/22/21 15:08   | Analyst<br>MR<br>ple ID: 1                               | Matrix: Wat<br>- Lab<br>XEN MID<br>320-1069  |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected  | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br><u>Type</u><br>Analysis<br>Ie ID: MW-6   | 5<br>Batch<br>Method<br>8021B                                 | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed<br>06/22/21 15:08   | Analyst<br>MR<br>ple ID: 1                               | Matrix: Wat<br>- Lab<br>XEN MID<br>320-1069  |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected  | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br><u>Type</u><br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52   | 5<br>Batch<br>Method<br>8021B                                 | Run     | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed<br>06/22/21 15:08   | Analyst<br>MR<br>ple ID: 1                               | Aatrix: Wat  |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected  | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52<br>: 06/18/21 10:35  | Batch<br>Method<br>8021B                                      | Run Run | Factor<br>1                       | Amount<br>5 mL                              | Amount<br>5 mL                            | Aumber<br>4464                            | Prepared<br>or Analyzed<br>06/22/21 15:08<br>Lab Sam  | Analyst<br>MR<br>ple ID: 1                               | Matrix: Wat<br>- Lab<br>XEN MID<br>320-1069  |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected  | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52<br>: 06/18/21 10:35<br>Batch   | Batch<br>Method<br>8021B                                      |         | Factor<br>1                       | Amount<br>5 mL                              | Amount<br>5 mL<br>Final                   | Number<br>4464<br>Batch                   | Prepared<br>or Analyzed<br>06/22/21 15:08<br>Lab Sam  | Analyst<br>MR<br>ple ID: 1                               | Atrix: Wat<br>Lab<br>XEN MID<br>320-1069<br>Matrix: Wat  |
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| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA   | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis   | Batch<br>Method<br>8021B<br>Batch<br>Batch<br>Method<br>8021B |         |                                   | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>4464<br>Batch<br>Number         | Prepared           or Analyzed           06/22/21 15:08           Lab Sam           Prepared           or Analyzed           06/22/21 15:33 | Analyst<br>MR<br>ple ID: 8<br>Analyst<br>MR<br>ple ID: 8 | Lab          Lab          XEN MID           320-1069           Matrix: Wat          Lab          Lab          XEN MID           320-1069           320-1069  |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA   | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: DUP-1   | Batch<br>Method<br>8021B<br>Batch<br>Batch<br>8021B           |         |                                   | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>4464<br>Batch<br>Number         | Prepared           or Analyzed           06/22/21 15:08           Lab Sam           Prepared           or Analyzed           06/22/21 15:33 | Analyst<br>MR<br>ple ID: 8<br>Analyst<br>MR<br>ple ID: 8 | Lab          Lab           XEN MID           320-1069           Matrix: Wat          Lab          Lab |
| Prep Type<br>Total/NA<br>Date Collected<br>Total/NA<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: DUP-1<br>: 06/17/21 00:00                     | Batch<br>Method<br>8021B<br>Batch<br>Batch<br>8021B           |         |                                   | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>4464<br>Batch<br>Number         | Prepared           or Analyzed           06/22/21 15:08           Lab Sam           Prepared           or Analyzed           06/22/21 15:33 | Analyst<br>MR<br>ple ID: 8<br>Analyst<br>MR<br>ple ID: 8 | Lab          Lab          XEN MID           320-1069           Matrix: Wat          Lab          Lab          XEN MID           320-1069           320-1069  |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected                | : 06/17/21 12:05<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: MW-6<br>: 06/17/21 09:52<br>: 06/18/21 10:35<br>Batch<br>Type<br>Analysis<br>Ie ID: DUP-1<br>: 06/17/21 00:00<br>: 06/18/21 10:35 | Batch<br>Method<br>8021B<br>Batch<br>Batch<br>8021B           |         | Factor<br>1<br>Dil<br>Factor<br>1 | Amount<br>5 mL<br>Initial<br>Amount<br>5 mL | Amount<br>5 mL<br>Final<br>Amount<br>5 mL | Number<br>4464<br>Batch<br>Number<br>4464 | Prepared<br>or Analyzed<br>06/22/21 15:08<br>Lab Sam<br>Prepared<br>or Analyzed<br>06/22/21 15:33<br>Lab Sam                                | Analyst<br>MR<br>ple ID: 8<br>Analyst<br>MR<br>ple ID: 8 | Atrix: Wat<br>- Lab<br>XEN MID<br>320-1069<br>Atrix: Wat<br>- Lab<br>XEN MID   |

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Lubbock

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

Job ID: 820-1069-1 SDG: AR217009

## Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority   | Pro | gram                                    | Identification Number                       | Expiration Date       |
|---|-----|---|---|-----------------------|
| Texas   | NE  | LAP                                     | T104704400-20-21                            | 06-30-21              |
|   |     |   |   |                       |
| 0,  |     | the laboratory is not certifi           | ed by the governing authority. This list ma | ay include analytes f |
| The following analytes a the agency does not off<br>Analysis Method |     | the laboratory is not certifi<br>Matrix | ed by the governing authority. This list ma | ay include analytes f |

Eurofins Xenco, Lubbock

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## **Method Summary**

#### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

Job ID: 820-1069-1 SDG: AR217009

| Method | Method Description              | Protocol | Laboratory |
|--------|---------------------------------|----------|------------|
| 8021B  | Volatile Organic Compounds (GC) | SW846    | XEN MID    |
| 5030B  | Purge and Trap                  | SW846    | XEN MID    |

#### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Eurofins Xenco, Lubbock

## Sample Summary

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec. 31

#### Job ID: 820-1069-1 SDG: AR217009

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Asset ID |   |
|---------------|------------------|--------|----------------|----------------|----------|---|
| 820-1069-1    | MW-2             | Water  | 06/17/21 09:04 | 06/18/21 10:35 |          | 4 |
| 820-1069-2    | MW-3             | Water  | 06/17/21 11:22 | 06/18/21 10:35 |          |   |
| 820-1069-3    | MW-4             | Water  | 06/17/21 10:30 | 06/18/21 10:35 |          | 5 |
| 820-1069-4    | MW-5             | Water  | 06/17/21 12:05 | 06/18/21 10:35 |          |   |
| 820-1069-5    | MW-6             | Water  | 06/17/21 09:52 | 06/18/21 10:35 |          |   |
| 320-1069-6    | DUP-1            | Water  | 06/17/21 00:00 | 06/18/21 10:35 |          |   |
|               |                  |        |                |                |          |   |
|               |                  |        |                |                |          | 8 |
|               |                  |        |                |                |          | 9 |
|               |                  |        |                |                |          | 1 |
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Eurofins Xenco, Lubbock

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| Tubbolic     Prome       Birt Demis     Start       Actor Adams     Start Demis       Start     Start       Actor Adams     Start Demis       Start     Project Name       Actor Adams     Start Demis       Start     Project Name       Actor Adams     Start Demis       Actor Adams <th></th> <th>J</th> <th></th> <th></th> <th>5</th> <th></th> <th></th> <th>Lubb</th> <th>ock, Texas 7</th> <th>9424</th> <th></th> <th></th> <th></th> <th></th> <th>TEM</th> <th></th> <th>17/4.00</th>  |                 | J                                 |           |                            | 5  |             |                     | Lubb        | ock, Texas 7  | 9424          |            |                    |             |                       | TEM                           |                   | 17/4.00 |
| n         Time         Time         Software         Software </td <td>e Locatio</td> <td></td> <td>sbock</td> <td></td> <td></td> <td></td> <td>Phone:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>7</td> <td></td>  | e Locatio       |                                   | sbock     |                            |  |             | Phone:              |             |               |               |            |                    |             |                       |                               | 7                 |         |
| Project Value         Sampler's Signature           R121209         Project Value         DCF Sec. 31           R121209         Project Value         DCF Sec. 31           R121209         Project Value         DCF Sec. 31           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121209         No. Type of Constances         No. Type of Constances           R121         No. Type of Constances         No. Type of Constances           R121         No. Type of Constances         No. Type of Constances           R121         No. Type of Constances         No. Type of Constances           R121         No. Type of Constances         No. Type of Constances           R121         No. Type of Constances         No. Type of Constances           R121         No. T  | ct Mana£        | •                                 | ett Denni | is                         |  |             | SRS #:              |             | 2009-0        | 84            | Ť          |                    |             |                       |                               | 1                 |         |
| Project Name     Not Type of Continents     All of the first of Sample(s)       Inter     DCP Sec. 31       Inter     DCP Sec. 31       Inter     DCP Sec. 31       Sign of the first of Sample(s)       Sign of the first of the first of Sample(s)       Sign of the first of Sample(s)  | oler's Nan      |                                   | ron Adar  | ns                         |  |             | Sampler's           | Signature   |               |               | 11208      | 17700              |             |                       |                               |                   |         |
| M0212005         DCP Sec 31           Time         R         DCP Sec 31         A         DCP Sec 31         A         DCP Sec 31         A         DCP Sec 31         DCP Sec 31 <thdcp 31<="" sec="" th="">         DCP Sec 31         DCP Sec 3</thdcp>   | ct Numb         | er                                |           | Project N                  | ame                                      |             |                     |             | No. T         | ype of Contai |            |                    |             |                       |                               |                   |         |
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| 6/17/2021         5(a)         X         MW2         MW2         X         MW2         X         N         X         N   | Date            | Time                              | _         | dero                       | ldentifying                              | Marks of Si | ample(s)            | dfart Depth |               |               | BTFX (FD/  |                    |             |                       | No A                          | Lab Samı          | ple ID  |
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| 1205       X       MW-5       MW-5       X       MW-5       X       N       X       N       <  | 6/17/2021       |                                   |           | ×                          |  | MW-4        |                     | 32          | e             | 200           | ×          |                    |             | <i></i>               |                               |                   | ~       |
| 922     X     MW-6     MW-6     MW-6     MM-6     X     N     X     N     N       1     X     Dup-1     1     1     X     1     X     1     1     N       1     X     N     N     1     1     X     1     1     1     1       1     N     N     N     N     1     1     1     1     1       1     N     N     N     N     N     1     1     1     1       1     N     N     N     N     N     N     N     N       1     N     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N     N     N     N     N     N       1     N  | 6/17/2021       |                                   |           | ×                          |  | MW-5        |                     |             | m             |               |            |                    |             |                       |                               |                   | 2       |
| Notice  | 6/17/2021       |                                   |           | ×                          |  | MW-6        |                     |             | 3             |               | ×          |                    |             |                       |                               |                   | 5       |
| E     Mormal     48-Hour Rush     RPP Laboratory Review Checklist     P     P       E     Mormal     48-Hour Rush     Reveetery (Signature)     Reveetery (Signature)     P     P     P       E     Mormal     046     Time:     Received by (Signature)     Reveetery (Signature)     P     P     P     P       Date     Time:     Received by (Signature)     Date     Time:     Received by (Signature)     Date     Time:     Date     Date </td <td>6/17/2021</td> <td>,</td> <td></td> <td>×</td> <td></td> <td>Dup-1</td> <td></td> <td></td> <td>3</td> <td></td> <td>×</td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td>c</td>   | 6/17/2021       | ,                                 |           | ×                          |  | Dup-1       |                     |             | 3             |               | ×          |                    |             |                       |                               | +                 | c       |
| Image: Second by Signature     An An Equilibrium       Morrowate     w. Water     5- Sail     1 - Linguid     A An Equilibrium     2 - Cancent later     Processing  |                 |                                   |           |                            |  |             |                     | _           |               |               |            |                    |             |                       | _                             |                   |         |
| E     Mormal     48-Hour Rush     24-Hour Rush     TRRP Laboratory Review Checklist     Yes       Date     Date     Date     Date     Date     Date     Date     Date       Order     Date     Date     Date     Date     Date     Date     Date     Date       Obset     Date     Time:     Received by (Signature)     Date     Date     Date     Date     Date       Date     Time:     Received by (Signature)     Date     Date     Date     Date     Date       Date     Time:     Received by (Signature)     Date     Date     Date     Date     Date       Outce     Waterwate     W. Water     Scala     Onte     Date     Date     Date       Onte     Time:     Received by (Signature)     Date     Date     Date     Date       Onte     Waterwate     W. Water     Scala     Onte     Date     Date       Montecklast L     Scala     Scala     Scala     Scala     Scala       Montecklast L     Scala     Scala     Scala     Scala     Scala       Montecklast L     Scala     Scala     Scala     Scala     Scala       Montecklast L     Scala     Scala     Scala   |                 |                                   |           | _                          |  |             |                     |             |               |               |            | -                  |             |                       |                               |                   |         |
| E     Mornal     48-Hour Rush     24-Hour Rush     TRRP Laboratory Review Checklist     Ves       A     Date     Time:     Received by (Signature)     Date     Date     NOTES:       A     Date     Time:     Received by (Signature)     Date     Date     NOTES:       A     Date     Time:     Received by (Signature)     Date     Date     Date       Date     Time:     Received by (Signature)     Date     Date     Time:     Date       A     Nationation     A A Bag     C. Classifier     Date     Time:     Date       Wintered     W. Water     S. Solid     1. Liquid     A A Bag     C. Classolube     S. Sude       Montered     W. Water     S. Solid     1. Liquid     A A Bag     C. Classolube     S. Sude       Montered     W. Water     S. Solid     1. Liquid     A A Bag     C. Classolube     S. Sude       Montered     W. Water     S. Solid     1. Liquid     A A Bag     C. Classolube     S. Sude  |                 |                                   |           |                            | ß  |             |                     |             |               |               |            |                    |             |                       |                               |                   |         |
| Model     Date:     Time:     Received by (Signature)     One:     Time:     NOTES:       Date:     Time:     Received by (Signature)     One:     CG/R1     C.35     e-mail       Date:     Time:     Received by (Signature)     Date:     Time:     Received by (Signature)     Date:     breach       Date:     Time:     Received by (Signature)     Date:     Time:     Received by (Signature)     Date:     breach       Date:     Time:     Received by (Signature)     Date:     Time:     Received by (Signature)     Date:     breach       Wittender     W. Water     S. Solid     Li laud     A. Ar Beg.     C. Cloncolidate     S. Sulgero       Mater     S. Solid     Li laud     A. Ar Beg.     C. Cloncolidate     S. Sulgero     Lubbock, Texas 794.24     806-300-0140  | ROUND TI        | ME                                |           | Mormal                     | a 48-Hour                                | Rush        |                     |             | TRRP Labor    | atory Reviev  | w Checklis |                    |             |                       |                               |                   |         |
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| W. Water 5- Soll 1- Legual A AF Bag C- Charceal tube 51- Studge<br>AG Amber Gass IL 250 nd = Glass wide mouth P/O-Plantice other<br>Lubbocck Office Im 5827 50th Street, Suite 1 Im Lubbocck, Texas 79424 Im 806-300-0140  | hed by (Signatu | (ə.                               |           | Dat                        | ţē.                                      | Time:       | Received by (Signa: | ture)       |               | Date:         | Time:      |                    |             | cibryant@<br>maochoa( | paalp.com                     |                   |         |
| Lubbock Office 🔤 5827 50th Street, Suite 1 🔳 Lubbock, Texas 79424  |                 | WW-Wastewater<br>VOA - 40 ml vial | W.        | Water<br>Pamber Glass 11   | S - Soll<br>250 ml = Glass               |             |                     | C - Charcos | il tube       | SL - Sludge   |            |                    |             |                       |                               |                   |         |
|  |                 |                                   |           |                            | ubbock Off                               | н           | 7 50th Street,      | Suite 1     | # Lubbo       | ock, Texas    | ; 79424    | <b>806-3</b>       | 00-0140     |                       |                               |                   |         |

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6/23/2021

| Var 11/01/2020  |  |  |                    |                                    |                      |                          |   |   |                        |  |                                  |                                   |                         |                                 |                                     |  |             |
|---|--|--|--------------------|------------------------------------|----------------------|--------------------------|---|---|------------------------|--|----------------------------------|-----------------------------------|-------------------------|---------------------------------|-------------------------------------|--|-------------|
|   |  |  |                    |                                    | lemarke:             | d Other H                | Cooler Temperature(s) <sup>*</sup> C and Other Remarks: | mpenature   | Cooler Te              |  |                                  |                                   |                         |                                 |                                     | A Yes & No   | 0           |
| Company   |  | 8  | DataTino           |                                    |                      |                          |   | g   | Received by            |  | Company                          | 0                                 |                         | , me                            | DatesTime                           |  |             |
| Company   |  | e.   | DaterTire          |                                    | !                    | I                        |   | ι bγ.   | Received               |  | Company                          |                                   |                         |                                 |                                     |  |             |
|   | 12/U/av                                    | 121  | Dane Tiny          |                                    |                      |                          | N   |   | AL PANDAGE             |  | Company                          | Shic                              | 11 03                   | R                               |                                     | Connuciance by   | 위<br>위      |
|   |  |  | Method of Shipment | isthod of                          | ۱<br>ب               | $\mathbb{N}$             |   | $\left  \right\rangle$                              |                        | 1 me                                   |                                  |                                   | Date                    |                                 | Date                                | Empty Nit KellingLilsned by<br>Refinationed by   | ~ ~         |
| :   |  |  |                    |                                    | ants                 | equirements              | VOC Re  | Special Instructions/QC R                           | icial Ins              |  |                                  |                                   | DHƏ KARIK. 2            | Frintary Deliveradie Kark. 2    |                                     | annon Vi Definencia I. III, IV. Origi (aperaly)  |             |
| then 1 month)<br>Months                                 |  | may be assessed if samples are retained longer | ta seyddau         | assessed If san<br>Disposal By Lab | das pagas<br>Disposi | Tay be                   |   | Return To Client                                    | ⊔npute Di              |  |                                  |                                   | -                       | 7                               |                                     | < L  | 25          |
|   |  |  |                    |                                    |                      |                          |   |   | 5<br>1                 | a Xenco                                | nce to Eurafie                   | sard complica                     | ody atteating to        | 1 Chash of Cus                  | eubie eus umie.                     | Possible Hazard Mandfication   | <u>z</u>    |
| BERY COSS not currently<br>reacht to Euroten Xenco II C | ustaday it me tabor<br>Istatus should be b | er chain-si-c<br>accreditation                 | bur pagnar         | ant is forw<br>of. Any cf          | aphvord Br           | This samp<br>ions will b | ratories. 1<br>er instructi                             | thact labor<br>tory or oth                          | ut auboon<br>LC labora | Xencon o<br>Xenco LL                   | tion compilanc<br>o the Eurofine | te & accreditat<br>Inloped back b | method analy            | salyzad the ser                 | en L&C places i<br>Ametrix being av | method investigations with a second states and the second states the ownership of method analyte & scoredization compliance upon out autoontract laboratories. This semptia hipment is towarded under chain-of-custody it the bibbodory does not currently in the bibbodory and according to accordi |             |
|   |  |  |                    |                                    | <u> </u>             |                          |   |   |                        |  |                                  |                                   |                         |                                 |                                     |  | Ĭ           |
|   |  |  |                    | -                                  |                      |                          | -   | <u> </u>  |                        | -                                      |                                  |                                   |                         |                                 |                                     |  |             |
|   |  |  |                    |                                    |                      |                          |   |   |                        |  |                                  | <br>                              | <br>                    |                                 |                                     |  |             |
|   |  |  |                    |                                    |                      |                          |   |   | ×                      |  | Water                            |                                   | Mountain                | 6/17/21                         |                                     | DUP-1 (820-1089-6)   |             |
|   |  |  |                    |                                    |                      |                          |   |   | ×                      |  | Water                            |                                   | de 52<br>Mountain       | 8/17/21                         |                                     | MW-8 (820-1088-5)  | Š           |
| -   |  |  |                    |                                    |                      |                          |   |   | ×                      |  | Water                            |                                   | 12 05<br>Mountain       | 6/17/21                         |                                     | MW-5 (820-1069-4)  | ş           |
|   |  |  |                    |                                    |                      |                          |   |   | x                      |  | Water                            |                                   | 10:30<br>Mountain       | 8/17/21                         |                                     | MW-4 (820-1069-3)  | Ş           |
|   |  |  |                    |                                    |                      |                          |   |   | х                      |  | Water                            |                                   | 11 22<br>Mountain       | 8/17/21                         |                                     | MNV-3 (820-1089-2)   | T3          |
|   |  |  |                    |                                    |                      |                          |   |   | X                      |  | Water                            |                                   | Mountain                | 8/17/21                         |                                     |  | Ţ           |
|   | Sec.                                       | X  |                    |                                    |                      |                          |   |   |                        |  |                                  | Contraction Contraction           | 844                     |                                 |                                     | MM-2 (SOL INBLI)   | 5 1         |
| Special Instructions/Note:                              | Speciati                                   |  |                    | -                                  |                      |                          |   |   | 8                      | i E                                    | Tellingung, Anyther              | G=grab)                           | Time                    | Sample Date                     | Sei                                 | earnoise ocertonication - Client ID (Lab ID)   | - 8         |
|   |  |  |                    |                                    |                      |                          |   |   | 16/5030B B             |  | Matrix<br>S-unit                 | Sample<br>Type<br>(C=comp.        | Sample                  |                                 |                                     |  | 2           |
|   | Other                                      |  | ··-··              |                                    |                      |                          |   |   |                        |  |                                  |                                   |                         | ,                               | SSOM#:                              |  |             |
| W - pH 4-5<br>Z - other (spec¶y)                        | L EDA                                      | 5688<br>07-06                                  |                    |                                    | • • •                |                          |   |   |                        |  |                                  |                                   |                         | 82000284                        | 820002                              | DCP Sec. 31-AR217009-Terracon  | 88          |
| U - Acetoria<br>V MCAA                                  | U DI Water                                 |  |                    |                                    |                      |                          |   |   |                        |  |                                  |                                   |                         |                                 |                                     | rouset Nama  | 7           |
| R - Na25203<br>S - H2804<br>T TSP Divisional Juniors    | F MeOH<br>G - Amchikar<br>H Assorbic Acid  | <u> </u>                                       |                    |                                    |                      |                          |   |   |                        | 0                                      |                                  |                                   |                         |                                 | Po<br>#                             | 432-704-5440(Tel)<br>Enast   | 363         |
| O Na2SO3  | E NaHSO4                                   |  |                    |                                    | •                    |                          |   |   |                        |  |                                  |                                   |                         |                                 |                                     | States 240<br>TX 79701   | ا<br>ل<br>ا |
| Mi Hexano   | A HOL                                      |  |                    |                                    |                      | _                        |   |   |                        |  |                                  |                                   | yn)                     | TAT Requisited (days)           | TAT                                 | ung<br>Midland   | 5           |
| 70#   | Preservation Codes                         |  |                    | ed                                 | Requested            | /sis Re                  | Analy   |   |                        |  |                                  |                                   | -                       | but vata Koquenied<br>6/24/2021 | 04111-1<br>64/24                    | 1211 W Florida Ave   | 12)         |
|   | .∞6#<br>820-10 <del>88</del> -1            |  |                    |                                    |                      |                          | iei note)   | Accreditations Required (See note)<br>NELAP - Texae | ations Ro<br>- Texa    | Accrede                                |                                  |                                   |                         |                                 | 1                                   | Eurofins Xenco   | t m         |
|   | Page<br>Page                               |  |                    | State of Crigin<br>New Mexico      | State o<br>New I     | !                        | CO III  | E-Mas <sup>a</sup><br>Jeselca kramer@euroilnaet.com | ner@eu                 | C2 Krem                                | E-Mas<br>Jeseic                  |                                   |                         |                                 |                                     | Shipping/Receiving<br>Company  | ŝ           |
|   | 000 No:<br>820-1458 1                      |  | (s)cN              | Cernier Tracking No <u>(s)</u>     | Carrier              |                          |   |   | isica                  | Lab PM <sup>*</sup><br>Kramer, Jessica | Lab PM                           |                                   |                         |                                 |                                     | Cilent Information (Sub Contract Lab)  | 20          |
| America   |  |  |                    |                                    |                      |                          |   |   |                        |  |                                  |                                   |                         |                                 | Samo                                |  | יבר         |
| Environment Tosting                                     | 🛠 eurofins                                 |  |                    |                                    |                      |                          |   |   | ā                      | leco                                   | ody R                            | f Cus                             | Chain of Custody Record | 0                               |                                     | 6701 Aberdeen Ave Suns B<br>Lubbock. TX 79424  | 5 3         |
|   |  | 1  |                    |                                    |                      | į                        |   |   |                        |  |                                  |                                   |                         |                                 |                                     |  |             |

## 6/23/2021

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Eurofins Xenco, Lubbock 6701 Aberdeen Ave Suite B Lubbock TX 78424

Chain of Custody Record

13

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-1069-1 SDG Number: AR217009

Login Number: 1069 List Source: Eurofins Xenco, Lubbock

Creator: Turner, Michael

<6mm (1/4").

| Question   | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is               | True   |         |

## Login Sample Receipt Checklist

Answer

True

True

True

True True

True

True

True

True

True

True

True

True

True

True

True

True

True

True

True

Comment

Client: Terracon Consulting Eng & Scientists

The cooler's custody seal, if present, is intact.

The cooler or samples do not appear to have been compromised or

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Sample custody seals, if present, are intact.

Login Number: 1069

Creator: Copeland, Tatiana

Samples were received on ice.

Cooler Temperature is acceptable. Cooler Temperature is recorded.

COC is filled out in ink and legible.

Sample containers have legible labels.

Containers are not broken or leaking.

Sample bottles are completely filled.

Sample Preservation Verified.

Sample collection date/times are provided.

Appropriate sample containers are used.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

List Number: 2

tampered with.

COC is present.

HTs)

MS/MSDs

<6mm (1/4").

Question

Job Number: 820-1069-1 SDG Number: AR217009

List Source: Eurofins Xenco, Midland List Creation: 06/21/21 11:55 AM

| Page | 19 | of  | 19 |
|------|----|-----|----|
| гаус | 19 | UI. | 13 |

Received by OCD: 3/28/2022 9:18:57 AM

July 28, 2021 Revised Report

L1345069

## Plains All American Pipeline - Terracon

Sample Delivery Group: Samples Received:

Project Number:

Description:

04/28/2021 AR217009 DCP Sec. 31 (SRS# 2009-084)

Report To:

Kimble Thrash 5847 50th St. Suite 1 Lubbock, TX 79424

Entire Report Reviewed By:

Ayisha Raza 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

Released to Imaging: 8/3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1345069

DATE/TIME: 07/28/21 10:22

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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

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| <sup>1</sup> Cp |
|-----------------|
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| <sup>5</sup> Sr |
| <sup>6</sup> Qc |
| <sup>7</sup> Gl |
| <sup>8</sup> Al |
| ⁰Sc             |

Released to Imaging: 3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1345069

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## SAMPLE SUMMARY

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|   |           |          | Collected by   | Collected date/tim | e Received dat | te/time        |     |
|---|-----------|----------|----------------|--------------------|----------------|----------------|-----|
| EFF-1 (04272021) L1345069-01 Air                |           |          | Aaron Adams    | 04/27/21 12:10     | 04/28/21 09:   | 00             | 1   |
| Method  | Batch     | Dilution | Preparation    | Analysis           | Analyst        | Location       | - 4 |
|   |           |          | date/time      | date/time          |                |                | 2   |
| Volatile Organic Compounds (MS) by Method TO-15 | WG1661298 | 1        | 04/29/21 21:30 | 04/29/21 21:30     | GLN            | Mt. Juliet, TN |     |



Ср

SDG: L1345069

PAGE: 3 of 9

## CASE NARRATIVE

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.

Ayisha Raza Project Manager

#### Report Revision History

Level II Report - Version 1: 05/13/21 00:07

#### Sample Delivery Group (SDG) Narrative

Analysis was performed from an improper container.

| Lab Sample ID         | Project Sample ID | Method |
|-----------------------|-------------------|--------|
| L1345069-01           | EFF-1 (04272021)  | TO-15  |
|                       |                   |        |
| Sample received in te | dlar bag.         |        |

Lab Sample ID L1345069-01

Project Sample ID EFF-1 (04272021)

Method TO-15

SDG: L1345069 DATE/TIME:

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## SAMPLE RESULTS - 01

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## Volatile Organic Compounds (MS) by Method TO-15

|                            | CAS #     | Mol. Wt. | RDL1     | RDL2  | Result | Result | Qualifier | Dilution | Batch     |  |
|----------------------------|-----------|----------|----------|-------|--------|--------|-----------|----------|-----------|--|
| Analyte                    |           |          | ppbv     | ug/m3 | ppbv   | ug/m3  |           |          |           |  |
| Benzene                    | 71-43-2   | 78.10    | 0.200    | 0.639 | 1.40   | 4.47   |           | 1        | WG1661298 |  |
| Ethylbenzene               | 100-41-4  | 106      | 0.200    | 0.867 | 0.633  | 2.74   |           | 1        | WG1661298 |  |
| Toluene                    | 108-88-3  | 92.10    | 0.500    | 1.88  | 4.78   | 18.0   |           | 1        | WG1661298 |  |
| m&p-Xylene                 | 1330-20-7 | 106      | 0.400    | 1.73  | 6.99   | 30.3   |           | 1        | WG1661298 |  |
| o-Xylene                   | 95-47-6   | 106      | 0.200    | 0.867 | 3.53   | 15.3   |           | 1        | WG1661298 |  |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 200      | 826   | ND     | ND     |           | 1        | WG1661298 |  |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |       | 103    |        |           |          | WG1661298 |  |
|                            |           |          |          |       |        |        |           |          |           |  |

SDG: L1345069 DATE/TIME: 07/28/21 10:22

Volatile Organic Compounds (MS) by Method TO-15

## QUALITY CONTROL SUMMARY

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### Method Blank (MB)

| (MB) R3649419-3 | 04/29/21 09:48 |
|-----------------|----------------|
|                 |                |

| (=)                        |           |              |        |          |
|----------------------------|-----------|--------------|--------|----------|
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| TPH (GC/MS) Low Fraction   | 59.0      | J            | 39.7   | 200      |
| (S) 1,4-Bromofluorobenzene | 95.5      |              |        | 60.0-140 |

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3649419-1 04/29     | /21 08:49 • (LCS | D) R3649419- | 2 04/29/21 09: | 20       |           |             |               |                |       |            | 7  |
|----------------------------|------------------|--------------|----------------|----------|-----------|-------------|---------------|----------------|-------|------------|----|
|                            | Spike Amount     | LCS Result   | LCSD Result    | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits | GI |
| Analyte                    | ppbv             | ppbv         | ppbv           | %        | %         | %           |               |                | %     | %          |    |
| Benzene                    | 3.75             | 4.09         | 4.21           | 109      | 112       | 70.0-130    |               |                | 2.89  | 25         | 8  |
| Toluene                    | 3.75             | 4.02         | 4.17           | 107      | 111       | 70.0-130    |               |                | 3.66  | 25         | A  |
| Ethylbenzene               | 3.75             | 4.03         | 4.13           | 107      | 110       | 70.0-130    |               |                | 2.45  | 25         | Q  |
| m&p-Xylene                 | 7.50             | 8.11         | 8.19           | 108      | 109       | 70.0-130    |               |                | 0.982 | 25         | Sc |
| o-Xylene                   | 3.75             | 4.05         | 4.16           | 108      | 111       | 70.0-130    |               |                | 2.68  | 25         |    |
| TPH (GC/MS) Low Fraction   | 203              | 246          | 251            | 121      | 124       | 70.0-130    |               |                | 2.01  | 25         |    |
| (S) 1,4-Bromofluorobenzene | e                |              |                | 99.6     | 101       | 60.0-140    |               |                |       |            |    |

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#### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

J

The identification of the analyte is acceptable; the reported value is an estimate.

SDG: L1345069 DATE/TIME: 07/28/21 10:22

## Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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|------|-----|-------|-----------|

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| 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           |
| lorida                        | E87487      | North Carolina <sup>1</sup> | DW21704          |
| Georgia                       | NELAP       | North Carolina <sup>3</sup> | 41               |
| Georgia <sup>1</sup>          | 923         | North Dakota                | R-140            |
| daho                          | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                       | 200008      | Oklahoma                    | 9915             |
| ndiana                        | C-TN-01     | Oregon                      | TN200002         |
| owa                           | 364         | Pennsylvania                | 68-02979         |
| Kansas                        | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup>        | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>         | 16          | South Dakota                | n/a              |
| ouisiana                      | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                      | LA018       | Texas                       | T104704245-20-18 |
| faine                         | TN00003     | Texas ⁵                     | LAB0152          |
| laryland                      | 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             |
| 2LA – 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    |
| PA-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.

SDG: L1345069

## M187

CHAIN OF CUSTODY RECORD

|   |                              |           |                         |                          |                   | Laboratory                             | Paga                |           |                       |                    | ANALYSIS |                        |          |               |                           |          |                 |                                      |           |
|---|------------------------------|-----------|-------------------------|--------------------------|-------------------|--|---------------------|-----------|-----------------------|--------------------|----------|------------------------|----------|---------------|---------------------------|----------|-----------------|--------------------------------------|-----------|
| lerracor                                    |                              |           | Laboratory:<br>Address: | Pace<br>12065 Lebanon Rd |                   |  |                     |           | ANALYSIS<br>REQUESTED |                    |          |                        |          |               | LAB USE ONLY<br>DUE DATE: |          |                 |                                      |           |
|   | 26                           |           | 7                       |                          |                   | Address:                               |                     |           | TN 37                 |                    |          | REQU                   | JESTEI   |               |                           |          | Τ               | TEMP OF COOLER<br>WHEN RECEIVED (°C) |           |
| Office Location                             | Lubbo                        | ock       |                         |                          |                   | Phone:                                 | (800)               | 767-      | 5859                  |                    | _        |                        |          |               |                           |          |                 |                                      |           |
| Project Manager                             | Project Manager Brett Dennis |           |                         | Contact:<br>SRS #:       |                   |  |                     |           |                       |                    |          |                        |          | Page _        | 1_of_1<br>345069          |          |                 |                                      |           |
| Sampler's Name                              | Aaro                         |           |                         |                          |                   |  | Sampler's Signature |           |                       |                    | 1)       |                        |          |               |                           |          | 1               | 3115069                              |           |
| Sumplet S Hume                              | , lor o                      |           |                         |                          |                   | Sumpler 5 Sig                          | inacare             | Ge        | 1/0                   | na                 | m        | d 802                  | P        |               |                           |          |                 |                                      | ()40      |
| Project Number<br>AR21                      | 7009                         |           |                         | Project Name             | OCP Sec. 31 (SRS# | # 2009-084)                            |                     |           |                       | pe of Conta        | ainers   | Metho                  | extended |               |                           |          |                 |                                      |           |
| Date W                                      | Time                         | Comp      | Grab                    |                          | ing Marks of San  |  | Start Depth         | End Depth | tedlar bag            |                    |          | BTEX (EPA Method 8021) | TPH 8015 |               |                           |          |                 | Lab                                  | Sample ID |
|   | 210                          |           | х                       |                          | EFF-1 (04272021)  |  | 0,                  |           | 1                     |                    |          | x                      | x        |               |                           |          |                 | Lau                                  | -0        |
|   |                              |           |                         | <u> </u>                 |                   |  |                     |           | 102                   |                    |          |                        |          |               |                           |          |                 |                                      |           |
|   | -                            |           | $\rightarrow$           |                          |                   |  |                     |           |                       | X                  |          | -                      |          |               |                           |          |                 |                                      |           |
|   |                              |           | -                       | $\rightarrow$            |                   |  | - 1                 |           |                       |                    |          |                        |          |               | _                         | _        |                 |                                      | /         |
|   |                              | $\square$ | +                       |                          |                   |  |                     | -         |                       | 14 mg              | +        | _                      |          | $\rightarrow$ | _                         | -        | -               |                                      |           |
| $+ \wedge$                                  |                              | $\vdash$  | -                       |                          |                   |  |                     | -         |                       |                    | +        |                        |          |               | V                         |          | -               |                                      | _/_       |
|   |                              |           | +                       |                          | 1                 | 29-12 P                                |                     | -         |                       |                    |          |                        |          | -             |                           | +        |                 |                                      | -/        |
|   |                              |           |                         |                          | /                 | /                                      | 1                   | N         | FE                    |                    |          |                        |          |               | -                         | N        |                 |                                      | /         |
|   |                              |           |                         |                          |                   |  |                     |           |                       |                    |          |                        |          |               |                           |          |                 |                                      |           |
|   |                              |           |                         |                          |                   |  |                     |           |                       |                    |          |                        |          |               |                           |          |                 |                                      |           |
| TURNAROUND TIME<br>Relinquished (Signature) | R/ al                        | /         | A                       |                          | Hour Rush         | 24-Hour Rush<br>Received by (Signature |                     | TRRP      | Labor                 | atory Revie        | ew Chec  | klist                  | _        | NOTES         |                           | No No    | irectly         | to Plains Pipeli                     |           |
| (DON /A                                     | 10/11/                       |           |                         | Date:<br>4-27-20         | 21 17:24          |  |                     |           |                       |                    |          | 1                      | 5/5      | NOTES         |                           | biii u   | nectry          | to Fiants Fipen                      | ne        |
| Relinquished by (Signature)                 |                              |           |                         | Date:                    | Time:             | Received by (Signature                 | 9                   | /         |                       | Date:              |          | Time:                  |          | e-mail        | results                   |          |                 |                                      |           |
| Relinquished by (Signature)                 |                              |           |                         | Date:                    | Time:             | Received by (Signature                 | )                   | 1         | -                     | Date:              | -        | Time:                  |          |               |                           | groves@p |                 | racon.com                            | OK        |
| Relinguished by (Signature)                 |                              |           |                         | Date:                    | Time:             | Received by (Signature                 | -/                  |           |                       | Dates              |          | Time:                  |          |               |                           | oryant@p | 120 F 12 F 12 F | 100 M - 100 M                        | 01        |
|   |                              |           |                         |                          |                   |  | N                   | 1         |                       | 4.                 | 28.21    | 9                      | 900      |               | m                         | aochoa@  | paalp.          | .com                                 |           |
| Matrix - WW-Waste<br>Container VDA - 40 m   |                              |           | W - Wate<br>A/G - Ami   |                          | L - Liquid        | A - Air Bag<br>P/O - Plastic or other  | C - Charcon         | μ         |                       | <u>SL</u> - Sludge |          |                        |          |               |                           |          |                 |                                      |           |
|   |                              |           |                         | Lubb                     |                   | 847 50th Stree<br>Responsive ∎         |                     |           |                       |                    |          | 806                    | -300-    | 0140          |                           |          |                 |                                      |           |
|   |                              |           |                         |                          |                   |  | Resol               | urce      | iui II                | Reliable           | 8        |                        |          |               |                           |          |                 |                                      |           |
|   |                              |           |                         |                          | Cont-16           |  |                     |           |                       | Amb                |          |                        |          |               |                           |          |                 |                                      |           |

Received by OCD: 3/28/2022 9:18:57 AM

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| e Analytical <sup>®</sup> |                                    | CAL REPORT<br>e 07, 2021 |  |
|---------------------------|------------------------------------|--------------------------|--|
|                           |                                    |                          |  |
| F                         | Plains All American                | Pipeline - Terracon      |  |
| ç                         | ample Delivery Group:              | L1359586                 |  |
| J                         |                                    |                          |  |
|                           | amples Received:                   | 05/29/2021               |  |
| S                         | amples Received:<br>roject Number: | 05/29/2021<br>AR217009   |  |

Report To:

Brett Dennis 5847 50th St. Suite 1 Lubbock, TX 79424

Entire Report Reviewed By:

Ayisha Raza 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

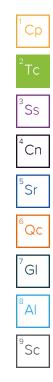
Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1359586

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DATE/TIME: 06/07/2115:37 PAGE: 1 of 9

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Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1359586

DATE/TIME: 06/07/21 15:37

PAGE: 2 of 9

### SAMPLE SUMMARY

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|   |           |          | Collected by   | Collected date/time | Received date | /time          |     |
|---|-----------|----------|----------------|---------------------|---------------|----------------|-----|
| EFF-1 (05272021) L1359586-01 Air                  |           |          | Aaron Adams    | 05/27/21 07:55      | 05/29/21 09:3 | D              | 1   |
| Method  | Batch     | Dilution | Preparation    | Analysis            | Analyst       | Location       | · L |
|   |           |          | date/time      | date/time           |               |                | 2   |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1679834 | 2000     | 05/29/21 15:20 | 05/29/21 15:20      | FKG           | Mt. Juliet, TN |     |

| <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> AI |
| <sup>9</sup> Sc |

Ср

Released to Imaging: 3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1359586

DATE/TIME: 06/07/21 15:37

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### CASE NARRATIVE

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.

Ayisha Raza Project Manager



SDG: L1359586 DATE 06/07/ PAGE: 4 of 9

# SAMPLE RESULTS - 01

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### Volatile Organic Compounds (MS) by Method M18-Mod

| •                          |           |          |          |         |         |         |           |          |           |
|----------------------------|-----------|----------|----------|---------|---------|---------|-----------|----------|-----------|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2    | Result  | Result  | Qualifier | Dilution | Batch     |
| Analyte                    |           |          | ppbv     | ug/m3   | ppbv    | ug/m3   |           |          |           |
| Benzene                    | 71-43-2   | 78.10    | 400      | 1280    | ND      | ND      |           | 2000     | WG1679834 |
| Toluene                    | 108-88-3  | 92.10    | 1000     | 3770    | 7400    | 27900   |           | 2000     | WG1679834 |
| Ethylbenzene               | 100-41-4  | 106      | 400      | 1730    | 1250    | 5420    |           | 2000     | WG1679834 |
| m&p-Xylene                 | 1330-20-7 | 106      | 800      | 3470    | 10000   | 43400   |           | 2000     | WG1679834 |
| o-Xylene                   | 95-47-6   | 106      | 400      | 1730    | 3820    | 16600   |           | 2000     | WG1679834 |
| Methyl tert-butyl ether    | 1634-04-4 | 88.10    | 400      | 1440    | ND      | ND      |           | 2000     | WG1679834 |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 400000   | 1650000 | 1550000 | 6400000 |           | 2000     | WG1679834 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |         | 93.1    |         |           |          | WG1679834 |
|                            |           |          |          |         |         |         |           |          |           |

# QUALITY CONTROL SUMMARY

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### Method Blank (MB)

(S) 1,4-Bromofluorobenzene 95.2

| (MB) R3660993-2 05/29    | /21 10:48 |              |        |        |
|--------------------------|-----------|--------------|--------|--------|
|                          | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte                  | ppbv      |              | ppbv   | ppbv   |
| Benzene                  | U         |              | 0.0715 | 0.200  |
| Ethylbenzene             | U         |              | 0.0835 | 0.200  |
| MTBE                     | U         |              | 0.0647 | 0.200  |
| Toluene                  | U         |              | 0.0870 | 0.500  |
| m&p-Xylene               | U         |              | 0.135  | 0.400  |
| o-Xylene                 | U         |              | 0.0828 | 0.200  |
| TPH (GC/MS) Low Fraction | U         |              | 39.7   | 200    |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3660993-1 05/29/    | 21 10:10 • (LCSE | D) R3660993-3 | 8 05/29/21 12:1 | 1        |           |             |               |                |       |            |
|----------------------------|------------------|---------------|-----------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                            | Spike Amount     | LCS Result    | LCSD Result     | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
| Analyte                    | ppbv             | ppbv          | ppbv            | %        | %         | %           |               |                | %     | %          |
| MTBE                       | 3.75             | 4.27          | 4.30            | 114      | 115       | 70.0-130    |               |                | 0.700 | 25         |
| Benzene                    | 3.75             | 4.36          | 4.31            | 116      | 115       | 70.0-130    |               |                | 1.15  | 25         |
| Toluene                    | 3.75             | 4.44          | 4.41            | 118      | 118       | 70.0-130    |               |                | 0.678 | 25         |
| Ethylbenzene               | 3.75             | 4.38          | 4.28            | 117      | 114       | 70.0-130    |               |                | 2.31  | 25         |
| m&p-Xylene                 | 7.50             | 8.96          | 8.82            | 119      | 118       | 70.0-130    |               |                | 1.57  | 25         |
| o-Xylene                   | 3.75             | 4.39          | 4.34            | 117      | 116       | 70.0-130    |               |                | 1.15  | 25         |
| TPH (GC/MS) Low Fraction   | 203              | 244           | 241             | 120      | 119       | 70.0-130    |               |                | 1.24  | 25         |
| (S) 1,4-Bromofluorobenzene |                  |               |                 | 96.8     | 97.4      | 60.0-140    |               |                |       |            |

60.0-140

DATE/TIME: 06/07/21 15:37

PAGE: 6 of 9

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### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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

SDG: L1359586

### Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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|------|-----|----|-----|
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| 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          |
| olorado                      | TN00003     | New York                    | 11742            |
| onnecticut                   | PH-0197     | North Carolina              | Env375           |
| lorida                       | E87487      | North Carolina <sup>1</sup> | DW21704          |
| eorgia                       | NELAP       | North Carolina <sup>3</sup> | 41               |
| Georgia <sup>1</sup>         | 923         | North Dakota                | R-140            |
| daho                         | TN00003     | Ohio-VAP                    | CL0069           |
| linois                       | 200008      | Oklahoma                    | 9915             |
| ndiana                       | C-TN-01     | Oregon                      | TN200002         |
| owa                          | 364         | Pennsylvania                | 68-02979         |
| Cansas                       | E-10277     | Rhode Island                | LAO00356         |
| entucky <sup>16</sup>        | KY90010     | South Carolina              | 84004002         |
| entucky <sup>2</sup>         | 16          | South Dakota                | n/a              |
| ouisiana                     | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                     | LA018       | Texas                       | T104704245-20-18 |
| laine                        | TN00003     | Texas <sup>5</sup>          | LAB0152          |
| laryland                     | 324         | Utah                        | TN000032021-11   |
| lassachusetts                | M-TN003     | Vermont                     | VT2006           |
| lichigan                     | 9958        | Virginia                    | 110033           |
| linnesota                    | 047-999-395 | Washington                  | C847             |
| lississippi                  | TN00003     | West Virginia               | 233              |
| lissouri                     | 340         | Wisconsin                   | 998093910        |
| lontana                      | CERT0086    | Wyoming                     | A2LA             |
| 2LA – ISO 17025              | 1461.01     | AIHA-LAP,LLC EMLAP          | 100789           |
| 2LA – ISO 17025 <sup>5</sup> | 1461.02     | DOD                         | 1461.01          |
| Canada                       | 1461.01     | USDA                        | P330-15-00234    |
| PA–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.

SDG: L1359586 DATE/TIME: 06/07/2115:37

PAGE: 8 of 9

|  |           |         |                              | Laboratory: Pace |                      |   |           |           |                       |              | ANALYSIS LAB USE ONLY |  |      |          |          |          |                   |                                      |      |
|--|-----------|---------|------------------------------|------------------|----------------------|---|-----------|-----------|-----------------------|--------------|-----------------------|--|------|----------|----------|----------|-------------------|--------------------------------------|------|
|  |           |         |                              |                  |                      | Address:                                    |           | 5 Lebano  | n Rd                  |              |                       | REQUESTED                              |      |          |          |          |                   | DUE DATE:                            |      |
|  | 26        |         | 2                            |                  |                      |   | Mt. J     | uliet, TN | 37122                 |              |                       | T                                      |      |          |          |          |                   | TEMP OF COOLER<br>WHEN RECEIVED (°C) |      |
| ffice Location   | Lubb      | lock    |                              |                  |                      | Phone:                                      | (800)     | 767-585   | 9                     |              |                       |  |      |          |          |          | t                 |                                      |      |
|  |           | _       |                              |                  |                      | Contact:<br>SRS #:                          |           | 200       | 9-084                 |              |                       |  |      |          |          |          | - 1               | Page <u>1</u> of                     |      |
| roject Manager   |           | t Denn  |                              |                  |                      | SRS #:<br>Sampler's Sig                     | mature    |           | 9-084                 | 1            | -                     | <b>a</b>                               |      |          |          |          |                   |                                      |      |
| ampler's Name  | Aaro      | on Adai | ms                           |                  |                      | Sampler 3 Sig                               | /         | DE        | n                     | AM           |                       | p                                      |      |          |          |          |                   | B145                                 |      |
| roject Number  |           |         | Proje                        | ect Name         |                      |   |           |           | and the second second | of Container | 5                     | extended                               |      |          |          |          |                   | Line                                 | 0-01 |
|  | 7009      | 1       |                              |                  | DCP Sec. 31 (SR      | S# 2009-084)                                |           |           | ag                    |              |                       | A Me                                   |      |          |          |          |                   | U35                                  | 9586 |
| Date   | Time      | Comp    | Grab                         | Identi           | fying Marks of S     | ample(s)                                    | art Depth | nd Depth  | tediar bag            |              |                       | BILEX (EPA Method<br>TPH 8015 extended |      |          |          |          |                   |                                      | 10   |
|  |           |         | -                            |                  | FFF 4 (0527202       | 1)  | - ñ       |           | _                     |              | _                     | -                                      | -    | +        |          |          | -                 | Lab Sample                           | -0   |
| 5/27/2021  | 7:55      |         | X                            |                  | EFF-1 (0527202       | .,  | +         |           | 1                     | + +          |                       | x x                                    | +    | +        |          | $\vdash$ | -                 |                                      | 0    |
|  |           |         | -                            |                  |                      |   | +         | ++        | +                     |              | -                     | +                                      | +    | +        | +        |          | +                 |                                      |      |
|  | -         | +       | _                            | $\leftarrow$     |                      |   | +-        | +         | $\rightarrow$         | 4-+          | +                     |  | +    | +        | +        | $\vdash$ | -+                |                                      | 1    |
|  |           | +       | -                            | $\rightarrow$    |                      |   | +         |           | A                     | ++           | +                     | +                                      | X    | +        | +        |          | -                 |                                      |      |
|  |           | +       | -                            | $\rightarrow$    |                      |   | +         | +         | +                     | +            | +                     | +                                      | +    | X        | +        |          | -                 |                                      | 1    |
|  |           | ++      |                              |                  |                      |   |           | $\vee$    | +                     |              | -                     | -                                      | +    |          |          |          | -                 |                                      | 1    |
|  | - Se      | ++      | _                            |                  |                      |   | 1         |           | -                     |              | -                     | -                                      | +    | +        | N        |          |                   | /                                    | /    |
|  |           | +       | -                            |                  |                      | /   | 4         | NF        | E -                   |              | +                     | +                                      | +    | +        |          |          | -                 | /                                    |      |
|  |           | +       | _                            |                  |                      |   | +         | NE        |                       | +            | -                     | -                                      | +    | +        | +        |          |                   |                                      |      |
| $A \rightarrow$  |           | +       | _                            |                  |                      | $\smile$                                    | 1         |           | -                     | ++           | +                     | +                                      | +    | +        |          |          | 4                 |                                      |      |
|  |           |         | -                            |                  |                      |   |           | TRRDI     | horate                | Poviow (     | Chockli               |  | 1_   | Yes      |          | No       |                   |                                      |      |
| URNAROUND TIME   | -/        |         | Norn                         | Date:            | 8-Hour Rush<br>Time: | 24-Hour Rush<br>Received by (Signatur       | e}        | TKKP La   | Dorato                | Date:        | Time                  | st<br>r                                | _    | TES:     |          |          | ectly t           | o Plains Pipeline                    |      |
| Mon 1  | ann       |         |                              | 5-28-            | 2021 14:24           |   |           |           |                       |              |                       |  |      |          |          |          |                   |                                      |      |
| elinquished by (Signature)   |           |         |                              | Date:            | Time:                | Received by (Signatur                       | e)        |           |                       | Date:        | Time                  | ĸ                                      | e-m  | nail res | ults to: |          | 0                 |                                      |      |
| Relinquished by (Signature)  |           |         |                              | Date:            | Time:                | Received by (Signatur                       | e)        | /         |                       | Date:        | Time                  | e:                                     | -    |          |          | ves@pa   |                   | acon.com                             |      |
| terinduished by (signature)  |           |         |                              |                  |                      |   | /         | · .       |                       |              |                       |  |      |          |          | ant@pa   | 100 C 100 C 100 C |                                      |      |
| telinquished by (Signature)  |           |         |                              | Date:            | Time:                | Received by (Signatur                       | •)        | иЛ        |                       | 5-24         | 121                   | 093                                    | ~    |          | maoc     | hoa@r    | baalp.c           | :om                                  |      |
|  |           |         | 101201                       |                  |                      |   | 10        | W         |                       | 1.0          |                       | VTX                                    | 1    | _        |          |          |                   |                                      |      |
| and the second s | estewater |         | W - Water<br>A/G - Amber Gla |                  | Soll L .             | iquid A - Air Bag<br>P/O - Plastic or other | C · Chart | and the   | SL -                  | ingle.       |                       |  |      |          |          |          |                   |                                      |      |
| - ADV  | 0 ml vial |         | re o · remer da              |                  |                      | 5847 50th Stre                              | et =      | Lubbor    | k Te                  | (as 7942     | 4 = 9                 | 306-30                                 | 0-01 | 40       |          |          |                   |                                      |      |
|  |           |         |                              | 201              | NOCK OTTICE          |   |           |           |                       |              |                       |  | I    |          |          |          |                   |                                      |      |
|  |           |         |                              |                  |                      | Responsive .                                | Kes       | ourcefu   | 1 10 1                | ellable      |                       |  |      |          |          |          |                   |                                      |      |

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| Plains All American    | n Pipeline - Terracon |  |
|------------------------|-----------------------|--|
| Sample Delivery Group: | L1372014              |  |
| Samples Received:      | 06/29/2021            |  |
| Project Number:        | AR217009              |  |
| Description:           | DCP Sec. 31           |  |
| Report To:             | Brett Dennis          |  |
|                        | 5847 50th St.         |  |
|                        | Suite 1               |  |
|                        | Lubbock, TX 79424     |  |

Entire Report Reviewed By:

Ayisha Raza Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be Analytical National is performed per guidance provided in 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

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### SAMPLE SUMMARY

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|   |           |          | Collected by   | Collected date/time | Received da  | te/time        |
|---|-----------|----------|----------------|---------------------|--------------|----------------|
| EFF-1 (06282021) L1372014-01 Air                |           |          | Aaron Adams    | 06/28/21 12:05      | 06/29/21 09: | :00            |
| Method  | Batch     | Dilution | Preparation    | Analysis            | Analyst      | Location       |
|   |           |          | date/time      | date/time           |              |                |
| Volatile Organic Compounds (MS) by Method TO-15 | WG1697863 | 80       | 06/30/21 23:54 | 06/30/21 23:54      | GLN          | Mt. Juliet, TN |
| Volatile Organic Compounds (MS) by Method TO-15 | WG1698509 | 1000     | 07/01/21 17:43 | 07/01/21 17:43      | GLN          | Mt. Juliet, TN |



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### CASE NARRATIVE

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.

Ayisha Raza Project Manager



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### SAMPLE RESULTS - 01 L1372014

### Volatile Organic Compounds (MS) by Method TO-15

|                                | CAS #      | Mol. Wt. | RDL1 | RDL2  | Result | Result | Qualifier | Dilution | Batch     | L   |
|--------------------------------|------------|----------|------|-------|--------|--------|-----------|----------|-----------|-----|
| Analyte                        |            |          | ppbv | ug/m3 | ppbv   | ug/m3  |           |          |           |     |
| Acetone                        | 67-64-1    | 58.10    | 100  | 238   | 132    | 314    |           | 80       | WG1697863 |     |
| Allyl chloride                 | 107-05-1   | 76.53    | 16.0 | 50.1  | ND     | ND     |           | 80       | WG1697863 | L   |
| Benzene                        | 71-43-2    | 78.10    | 16.0 | 51.1  | 930    | 2970   |           | 80       | WG1697863 | 3   |
| Benzyl Chloride                | 100-44-7   | 127      | 16.0 | 83.1  | ND     | ND     |           | 80       | WG1697863 |     |
| Bromodichloromethane           | 75-27-4    | 164      | 16.0 | 107   | ND     | ND     |           | 80       | WG1697863 |     |
| Bromoform                      | 75-25-2    | 253      | 48.0 | 497   | ND     | ND     |           | 80       | WG1697863 |     |
| Bromomethane                   | 74-83-9    | 94.90    | 16.0 | 62.1  | ND     | ND     |           | 80       | WG1697863 | L   |
| I,3-Butadiene                  | 106-99-0   | 54.10    | 160  | 354   | ND     | ND     |           | 80       | WG1697863 | 5   |
| Carbon disulfide               | 75-15-0    | 76.10    | 16.0 | 49.8  | ND     | ND     |           | 80       | WG1697863 | _   |
| Carbon tetrachloride           | 56-23-5    | 154      | 16.0 | 101   | ND     | ND     |           | 80       | WG1697863 | _   |
| Chlorobenzene                  | 108-90-7   | 113      | 16.0 | 73.9  | ND     | ND     |           | 80       | WG1697863 | e   |
| Chloroethane                   | 75-00-3    | 64.50    | 16.0 | 42.2  | ND     | ND     |           | 80       | WG1697863 | L L |
| Chloroform                     | 67-66-3    | 119      | 16.0 | 77.9  | ND     | ND     |           | 80       | WG1697863 |     |
|                                |            |          |      |       |        |        |           |          |           |     |
| Chloromethane                  | 74-87-3    | 50.50    | 16.0 | 33.0  | ND     | ND 424 |           | 80       | WG1697863 | L   |
| 2-Chlorotoluene                | 95-49-8    | 126      | 16.0 | 82.5  | 82.3   | 424    |           | 80       | WG1697863 | 8   |
| Cyclohexane                    | 110-82-7   | 84.20    | 200  | 689   | 71300  | 246000 |           | 1000     | WG1698509 |     |
| Dibromochloromethane           | 124-48-1   | 208      | 16.0 | 136   | ND     | ND     |           | 80       | WG1697863 | F   |
| I,2-Dibromoethane              | 106-93-4   | 188      | 16.0 | 123   | ND     | ND     |           | 80       | WG1697863 | ç   |
| l,2-Dichlorobenzene            | 95-50-1    | 147      | 16.0 | 96.2  | ND     | ND     |           | 80       | WG1697863 |     |
| ,3-Dichlorobenzene             | 541-73-1   | 147      | 16.0 | 96.2  | ND     | ND     |           | 80       | WG1697863 |     |
| l,4-Dichlorobenzene            | 106-46-7   | 147      | 16.0 | 96.2  | ND     | ND     |           | 80       | WG1697863 |     |
| l,2-Dichloroethane             | 107-06-2   | 99       | 16.0 | 64.8  | ND     | ND     |           | 80       | WG1697863 |     |
| l,1-Dichloroethane             | 75-34-3    | 98       | 16.0 | 64.1  | ND     | ND     |           | 80       | WG1697863 |     |
| ,1-Dichloroethene              | 75-35-4    | 96.90    | 16.0 | 63.4  | ND     | ND     |           | 80       | WG1697863 |     |
| cis-1,2-Dichloroethene         | 156-59-2   | 96.90    | 16.0 | 63.4  | ND     | ND     |           | 80       | WG1697863 |     |
| rans-1,2-Dichloroethene        | 156-60-5   | 96.90    | 16.0 | 63.4  | ND     | ND     |           | 80       | WG1697863 |     |
| I,2-Dichloropropane            | 78-87-5    | 113      | 16.0 | 73.9  | ND     | ND     |           | 80       | WG1697863 |     |
| cis-1,3-Dichloropropene        | 10061-01-5 | 111      | 16.0 | 72.6  | ND     | ND     |           | 80       | WG1697863 |     |
|                                |            |          |      |       |        |        |           |          |           |     |
| rans-1,3-Dichloropropene       | 10061-02-6 | 111      | 16.0 | 72.6  | ND     | ND     |           | 80       | WG1697863 |     |
| ,4-Dioxane                     | 123-91-1   | 88.10    | 16.0 | 57.7  | ND     | ND     |           | 80       | WG1697863 |     |
| Ethanol                        | 64-17-5    | 46.10    | 100  | 189   | 592    | 1120   |           | 80       | WG1697863 |     |
| Ethylbenzene                   | 100-41-4   | 106      | 16.0 | 69.4  | 188    | 815    |           | 80       | WG1697863 |     |
| 4-Ethyltoluene                 | 622-96-8   | 120      | 16.0 | 78.5  | 1540   | 7560   |           | 80       | WG1697863 |     |
| Frichlorofluoromethane         | 75-69-4    | 137.40   | 16.0 | 89.9  | ND     | ND     |           | 80       | WG1697863 |     |
| Dichlorodifluoromethane        | 75-71-8    | 120.92   | 16.0 | 79.1  | ND     | ND     |           | 80       | WG1697863 |     |
| I,1,2-Trichlorotrifluoroethane | 76-13-1    | 187.40   | 16.0 | 123   | ND     | ND     |           | 80       | WG1697863 |     |
| l,2-Dichlorotetrafluoroethane  | 76-14-2    | 171      | 16.0 | 112   | ND     | ND     |           | 80       | WG1697863 |     |
| Heptane                        | 142-82-5   | 100      | 200  | 818   | 48800  | 200000 |           | 1000     | WG1698509 |     |
| Hexachloro-1,3-butadiene       | 87-68-3    | 261      | 50.4 | 538   | ND     | ND     |           | 80       | WG1697863 |     |
| n-Hexane                       | 110-54-3   | 86.20    | 630  | 2220  | 83300  | 294000 |           | 1000     | WG1698509 |     |
| sopropylbenzene                | 98-82-8    | 120.20   | 16.0 | 78.7  | 80.5   | 396    |           | 80       | WG1697863 |     |
| Methylene Chloride             | 75-09-2    | 84.90    | 16.0 | 55.6  | ND     | ND     |           | 80       | WG1697863 |     |
| Methyl Butyl Ketone            | 591-78-6   | 100      | 10.0 | 409   | ND     | ND     |           | 80       | WG1697863 |     |
|                                |            |          |      |       |        |        |           |          |           |     |
| 2-Butanone (MEK)               | 78-93-3    | 72.10    | 100  | 295   | ND     | ND     |           | 80       | WG1697863 |     |
| 4-Methyl-2-pentanone (MIBK)    | 108-10-1   | 100.10   | 100  | 409   | ND     | ND     |           | 80       | WG1697863 |     |
| Methyl methacrylate            | 80-62-6    | 100.12   | 16.0 | 65.5  | ND     | ND     |           | 80       | WG1697863 |     |
| ИТВЕ                           | 1634-04-4  | 88.10    | 16.0 | 57.7  | ND     | ND     |           | 80       | WG1697863 |     |
| laphthalene                    | 91-20-3    | 128      | 50.4 | 264   | ND     | ND     |           | 80       | WG1697863 |     |
| 2-Propanol                     | 67-63-0    | 60.10    | 100  | 246   | 1350   | 3320   |           | 80       | WG1697863 |     |
| Propene                        | 115-07-1   | 42.10    | 100  | 172   | 101    | 174    |           | 80       | WG1697863 |     |
| Styrene                        | 100-42-5   | 104      | 16.0 | 68.1  | ND     | ND     |           | 80       | WG1697863 |     |
| ,1,2,2-Tetrachloroethane       | 79-34-5    | 168      | 16.0 | 110   | ND     | ND     |           | 80       | WG1697863 |     |
| Tetrachloroethylene            | 127-18-4   | 166      | 16.0 | 109   | ND     | ND     |           | 80       | WG1697863 |     |
| Tetrahydrofuran                | 109-99-9   | 72.10    | 16.0 | 47.2  | ND     | ND     |           | 80       | WG1697863 |     |
|                                |            |          | 40.0 | 151   | 1590   | 5990   |           | 80       | WG1697863 |     |
| Toluene                        | 108-88-3   | 92.10    | 400  |       |        |        |           |          |           |     |

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# SAMPLE RESULTS - 01

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### Volatile Organic Compounds (MS) by Method TO-15

|                            | CAS #     | Mol. Wt. | RDL1     | RDL2   | Result | Result  | Qualifier | Dilution | Batch     |   |
|----------------------------|-----------|----------|----------|--------|--------|---------|-----------|----------|-----------|---|
| Analyte                    |           |          | ppbv     | ug/m3  | ppbv   | ug/m3   |           |          |           | L |
| ,1,1-Trichloroethane       | 71-55-6   | 133      | 16.0     | 87.0   | ND     | ND      |           | 80       | WG1697863 |   |
| ,1,2-Trichloroethane       | 79-00-5   | 133      | 16.0     | 87.0   | ND     | ND      |           | 80       | WG1697863 |   |
| richloroethylene           | 79-01-6   | 131      | 16.0     | 85.7   | ND     | ND      |           | 80       | WG1697863 |   |
| ,2,4-Trimethylbenzene      | 95-63-6   | 120      | 16.0     | 78.5   | 920    | 4520    |           | 80       | WG1697863 |   |
| ,3,5-Trimethylbenzene      | 108-67-8  | 120      | 16.0     | 78.5   | 792    | 3890    |           | 80       | WG1697863 |   |
| 2,2,4-Trimethylpentane     | 540-84-1  | 114.22   | 16.0     | 74.7   | ND     | ND      |           | 80       | WG1697863 | 1 |
| /inyl chloride             | 75-01-4   | 62.50    | 16.0     | 40.9   | ND     | ND      |           | 80       | WG1697863 |   |
| /inyl Bromide              | 593-60-2  | 106.95   | 16.0     | 70.0   | ND     | ND      |           | 80       | WG1697863 |   |
| /inyl acetate              | 108-05-4  | 86.10    | 16.0     | 56.3   | ND     | ND      |           | 80       | WG1697863 |   |
| n&p-Xylene                 | 1330-20-7 | 106      | 32.0     | 139    | 2300   | 9970    |           | 80       | WG1697863 |   |
| o-Xylene                   | 95-47-6   | 106      | 16.0     | 69.4   | 834    | 3620    |           | 80       | WG1697863 |   |
| PH (GC/MS) Low Fraction    | 8006-61-9 | 101      | 200000   | 826000 | 842000 | 3480000 |           | 1000     | WG1698509 |   |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 142    |         | <u>J1</u> |          | WG1697863 | Г |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 98.2   |         |           |          | WG1698509 |   |

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### QUALITY CONTROL SUMMARY L1372014-01

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### Method Blank (MB)

| (MB) R3674265-3 | 06/30/21 11:48 |
|-----------------|----------------|
|                 | MP Pocult      |

|                                | MB Result | MB Qualifier | MB MDL | MB RDL |  |  |
|--------------------------------|-----------|--------------|--------|--------|--|--|
| Analyte                        | ppbv      |              | ppbv   | ppbv   |  |  |
| Acetone                        | U         |              | 0.584  | 1.25   |  |  |
| Allyl Chloride                 | U         |              | 0.114  | 0.200  |  |  |
| Benzene                        | U         |              | 0.0715 | 0.200  |  |  |
| Benzyl Chloride                | U         |              | 0.0598 | 0.200  |  |  |
| Bromodichloromethane           | U         |              | 0.0702 | 0.200  |  |  |
| Bromoform                      | U         |              | 0.0732 | 0.600  |  |  |
| Bromomethane                   | U         |              | 0.0982 | 0.200  |  |  |
| 1,3-Butadiene                  | U         |              | 0.104  | 2.00   |  |  |
| Carbon disulfide               | U         |              | 0.102  | 0.200  |  |  |
| Carbon tetrachloride           | U         |              | 0.0732 | 0.200  |  |  |
| Chlorobenzene                  | U         |              | 0.0832 | 0.200  |  |  |
| Chloroethane                   | U         |              | 0.0996 | 0.200  |  |  |
| Chloroform                     | U         |              | 0.0717 | 0.200  |  |  |
| Chloromethane                  | U         |              | 0.103  | 0.200  |  |  |
| 2-Chlorotoluene                | U         |              | 0.0828 | 0.200  |  |  |
| Dibromochloromethane           | U         |              | 0.0727 | 0.200  |  |  |
| 1,2-Dibromoethane              | U         |              | 0.0721 | 0.200  |  |  |
| 1,2-Dichlorobenzene            | U         |              | 0.128  | 0.200  |  |  |
| 1,3-Dichlorobenzene            | U         |              | 0.182  | 0.200  |  |  |
| 1,4-Dichlorobenzene            | U         |              | 0.0557 | 0.200  |  |  |
| 1,2-Dichloroethane             | U         |              | 0.0700 | 0.200  |  |  |
| 1,1-Dichloroethane             | U         |              | 0.0723 | 0.200  |  |  |
| 1,1-Dichloroethene             | U         |              | 0.0762 | 0.200  |  |  |
| cis-1,2-Dichloroethene         | U         |              | 0.0784 | 0.200  |  |  |
| trans-1,2-Dichloroethene       | U         |              | 0.0673 | 0.200  |  |  |
| 1,2-Dichloropropane            | U         |              | 0.0760 | 0.200  |  |  |
| cis-1,3-Dichloropropene        | U         |              | 0.0689 | 0.200  |  |  |
| trans-1,3-Dichloropropene      | U         |              | 0.0728 | 0.200  |  |  |
| 1,4-Dioxane                    | U         |              | 0.0833 | 0.200  |  |  |
| Ethylbenzene                   | U         |              | 0.0835 | 0.200  |  |  |
| 4-Ethyltoluene                 | U         |              | 0.0783 | 0.200  |  |  |
| Trichlorofluoromethane         | U         |              | 0.0819 | 0.200  |  |  |
| Dichlorodifluoromethane        | U         |              | 0.137  | 0.200  |  |  |
| 1,1,2-Trichlorotrifluoroethane | U         |              | 0.0793 | 0.200  |  |  |
| 1,2-Dichlorotetrafluoroethane  |           |              | 0.0890 | 0.200  |  |  |
| Hexachloro-1,3-butadiene       | U         |              | 0.105  | 0.630  |  |  |
| Isopropylbenzene               | U         |              | 0.0777 | 0.200  |  |  |
| Methylene Chloride             | U         |              | 0.0979 | 0.200  |  |  |
| Methyl Butyl Ketone            | U         |              | 0.133  | 1.25   |  |  |
| 2-Butanone (MEK)               | U         |              | 0.0814 | 1.25   |  |  |

### Released to Imaging 8/3/2022 2:26:44 PM Plains All American Pipeline - Terracon

SDG: L1372014

DATE/TIME: 07/09/21 08:45

PAGE: 7 of 14

# QUALITY CONTROL SUMMARY

MB RDL

ppbv

MB MDL

ppbv

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### Method Blank (MB)

| (MB) R3674265-3 | 06/30/21 11:48 |              |
|-----------------|----------------|--------------|
|                 | MB Result      | MB Qualifier |
| Analyte         | ppbv           |              |

| Analyte                     | pppv | pppv   | pppv     |
|-----------------------------|------|--------|----------|
| 4-Methyl-2-pentanone (MIBK) | U    | 0.0765 | 1.25     |
| Methyl Methacrylate         | U    | 0.0876 | 0.200    |
| MTBE                        | U    | 0.0647 | 0.200    |
| Naphthalene                 | U    | 0.350  | 0.630    |
| 2-Propanol                  | U    | 0.264  | 1.25     |
| Propene                     | U    | 0.0932 | 1.25     |
| Styrene                     | U    | 0.0788 | 0.200    |
| 1,1,2,2-Tetrachloroethane   | U    | 0.0743 | 0.200    |
| Tetrachloroethylene         | U    | 0.0814 | 0.200    |
| Tetrahydrofuran             | U    | 0.0734 | 0.200    |
| Toluene                     | U    | 0.0870 | 0.500    |
| 1,2,4-Trichlorobenzene      | U    | 0.148  | 0.630    |
| 1,1,1-Trichloroethane       | U    | 0.0736 | 0.200    |
| 1,1,2-Trichloroethane       | U    | 0.0775 | 0.200    |
| Trichloroethylene           | U    | 0.0680 | 0.200    |
| 1,2,4-Trimethylbenzene      | U    | 0.0764 | 0.200    |
| 1,3,5-Trimethylbenzene      | U    | 0.0779 | 0.200    |
| 2,2,4-Trimethylpentane      | U    | 0.133  | 0.200    |
| Vinyl chloride              | U    | 0.0949 | 0.200    |
| Vinyl Bromide               | U    | 0.0852 | 0.200    |
| Vinyl acetate               | U    | 0.116  | 0.200    |
| m&p-Xylene                  | U    | 0.135  | 0.400    |
| o-Xylene                    | U    | 0.0828 | 0.200    |
| Ethanol                     | U    | 0.265  | 1.25     |
| (S) 1,4-Bromofluorobenzene  | 98.0 |        | 60.0-140 |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3674265-1 06/30/       | .CS) R3674265-1 06/30/21 08:44 • (LCSD) R3674265-2 06/30/21 09:25 |            |             |          |           |             |               |                |       |            |  |  |  |  |
|-------------------------------|---|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|--|--|--|--|
|                               | Spike Amount  | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |  |  |  |  |
| Analyte                       | ppbv  | ppbv       | ppbv        | %        | %         | %           |               |                | %     | %          |  |  |  |  |
| Ethanol                       | 3.75  | 3.01       | 2.95        | 80.3     | 78.7      | 55.0-148    |               |                | 2.01  | 25         |  |  |  |  |
| Propene                       | 3.75  | 3.00       | 2.98        | 80.0     | 79.5      | 64.0-144    |               |                | 0.669 | 25         |  |  |  |  |
| Dichlorodifluoromethane       | 3.75  | 3.47       | 3.48        | 92.5     | 92.8      | 64.0-139    |               |                | 0.288 | 25         |  |  |  |  |
| 1,2-Dichlorotetrafluoroethane | 3.75  | 3.27       | 3.26        | 87.2     | 86.9      | 70.0-130    |               |                | 0.306 | 25         |  |  |  |  |
| Chloromethane                 | 3.75  | 3.02       | 3.02        | 80.5     | 80.5      | 70.0-130    |               |                | 0.000 | 25         |  |  |  |  |
| Vinyl chloride                | 3.75  | 3.20       | 3.18        | 85.3     | 84.8      | 70.0-130    |               |                | 0.627 | 25         |  |  |  |  |
| 1,3-Butadiene                 | 3.75  | 3.07       | 3.02        | 81.9     | 80.5      | 70.0-130    |               |                | 1.64  | 25         |  |  |  |  |
| Bromomethane                  | 3.75  | 3.29       | 3.28        | 87.7     | 87.5      | 70.0-130    |               |                | 0.304 | 25         |  |  |  |  |
|                               |   |            |             |          |           |             |               |                |       |            |  |  |  |  |

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# QUALITY CONTROL SUMMARY

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### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3674265-1 06/30/          |                   |          |             |          |           | Dog Limite  |               |                | חחח   | DDD Limits     |         | Ср              |
|----------------------------------|-------------------|----------|-------------|----------|-----------|-------------|---------------|----------------|-------|----------------|---------|-----------------|
| Analida                          | Spike Amount      |          | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits     |         | <sup>2</sup> Tc |
| Analyte                          | ppbv              | ppbv     | ppbv        | %        | %         | %           |               |                | %     | %              |         | IC.             |
| Chloroethane                     | 3.75              | 3.13     | 3.15        | 83.5     | 84.0      | 70.0-130    |               |                | 0.637 | 25             |         | 3               |
| Trichlorofluoromethane           | 3.75              | 3.46     | 3.45        | 92.3     | 92.0      | 70.0-130    |               |                | 0.289 | 25             |         | ິSs             |
| 1,1,2-Trichlorotrifluoroethane   | 3.75              | 3.29     | 3.31        | 87.7     | 88.3      | 70.0-130    |               |                | 0.606 | 25             |         |                 |
| 1,1-Dichloroethene               | 3.75              | 3.18     | 3.18        | 84.8     | 84.8      | 70.0-130    |               |                | 0.000 | 25             |         | <sup>4</sup> Cn |
| 1,1-Dichloroethane               | 3.75              | 3.13     | 3.09        | 83.5     | 82.4      | 70.0-130    |               |                | 1.29  | 25             |         | CII             |
| Acetone                          | 3.75              | 3.09     | 3.09        | 82.4     | 82.4      | 70.0-130    |               |                | 0.000 | 25             |         | 5               |
| 2-Propanol                       | 3.75              | 2.99     | 3.03        | 79.7     | 80.8      | 70.0-139    |               |                | 1.33  | 25             |         | ँSr             |
| Carbon disulfide                 | 3.75              | 3.11     | 3.14        | 82.9     | 83.7      | 70.0-130    |               |                | 0.960 | 25             |         |                 |
| Methylene Chloride               | 3.75              | 2.97     | 2.97        | 79.2     | 79.2      | 70.0-130    |               |                | 0.000 | 25             |         | <sup>6</sup> Qc |
| MTBE                             | 3.75              | 3.22     | 3.25        | 85.9     | 86.7      | 70.0-130    |               |                | 0.927 | 25             |         |                 |
| trans-1,2-Dichloroethene         | 3.75              | 3.14     | 3.13        | 83.7     | 83.5      | 70.0-130    |               |                | 0.319 | 25             |         | 7               |
| Vinyl acetate                    | 3.75              | 2.89     | 2.92        | 77.1     | 77.9      | 70.0-130    |               |                | 1.03  | 25             |         | ΄GΙ             |
| Methyl Ethyl Ketone              | 3.75              | 3.22     | 3.29        | 85.9     | 87.7      | 70.0-130    |               |                | 2.15  | 25             |         |                 |
| cis-1,2-Dichloroethene           | 3.75              | 3.09     | 3.07        | 82.4     | 81.9      | 70.0-130    |               |                | 0.649 | 25             |         | 8               |
| Chloroform                       | 3.75              | 3.27     | 3.26        | 87.2     | 86.9      | 70.0-130    |               |                | 0.306 | 25             |         | A               |
| 1,1,1-Trichloroethane            | 3.75              | 3.44     | 3.43        | 91.7     | 91.5      | 70.0-130    |               |                | 0.291 | 25             |         |                 |
| Carbon tetrachloride             | 3.75              | 3.44     | 3.49        | 91.7     | 93.1      | 70.0-130    |               |                | 1.44  | 25             |         | °Sc             |
| Benzene                          | 3.75              | 3.18     | 3.16        | 84.8     | 84.3      | 70.0-130    |               |                | 0.631 | 25             |         |                 |
| 1,2-Dichloroethane               | 3.75              | 3.38     | 3.36        | 90.1     | 89.6      | 70.0-130    |               |                | 0.593 | 25             |         |                 |
| Trichloroethylene                | 3.75              | 3.22     | 3.25        | 85.9     | 86.7      | 70.0-130    |               |                | 0.927 | 25             |         |                 |
| 1,2-Dichloropropane              | 3.75              | 2.96     | 2.99        | 78.9     | 79.7      | 70.0-130    |               |                | 1.01  | 25             |         |                 |
| 1,4-Dioxane                      | 3.75              | 3.26     | 3.24        | 86.9     | 86.4      | 70.0-140    |               |                | 0.615 | 25             |         |                 |
| Bromodichloromethane             | 3.75              | 3.33     | 3.33        | 88.8     | 88.8      | 70.0-130    |               |                | 0.000 | 25             |         |                 |
| cis-1,3-Dichloropropene          | 3.75              | 3.23     | 3.24        | 86.1     | 86.4      | 70.0-130    |               |                | 0.309 | 25             |         |                 |
| 4-Methyl-2-pentanone (MIBK)      | 3.75              | 3.12     | 3.09        | 83.2     | 82.4      | 70.0-139    |               |                | 0.966 | 25             |         |                 |
| Toluene                          | 3.75              | 3.29     | 3.28        | 87.7     | 87.5      | 70.0-130    |               |                | 0.304 | 25             |         |                 |
| trans-1,3-Dichloropropene        | 3.75              | 3.35     | 3.36        | 89.3     | 89.6      | 70.0-130    |               |                | 0.298 | 25             |         |                 |
| 1,1,2-Trichloroethane            | 3.75              | 3.22     | 3.23        | 85.9     | 86.1      | 70.0-130    |               |                | 0.310 | 25             |         |                 |
| Tetrachloroethylene              | 3.75              | 3.40     | 3.39        | 90.7     | 90.4      | 70.0-130    |               |                | 0.295 | 25             |         |                 |
| Methyl Butyl Ketone              | 3.75              | 3.30     | 3.20        | 88.0     | 85.3      | 70.0-149    |               |                | 3.08  | 25             |         |                 |
| Dibromochloromethane             | 3.75              | 3.48     | 3.45        | 92.8     | 92.0      | 70.0-130    |               |                | 0.866 | 25             |         |                 |
| 1,2-Dibromoethane                | 3.75              | 3.41     | 3.38        | 90.9     | 90.1      | 70.0-130    |               |                | 0.884 | 25             |         |                 |
| Chlorobenzene                    | 3.75              | 3.38     | 3.41        | 90.1     | 90.9      | 70.0-130    |               |                | 0.884 | 25             |         |                 |
| Ethylbenzene                     | 3.75              | 3.28     | 3.30        | 87.5     | 88.0      | 70.0-130    |               |                | 0.608 | 25             |         |                 |
| m&p-Xylene                       | 7.50              | 6.63     | 6.69        | 88.4     | 89.2      | 70.0-130    |               |                | 0.901 | 25             |         |                 |
| o-Xylene                         | 3.75              | 3.26     | 3.29        | 86.9     | 87.7      | 70.0-130    |               |                | 0.916 | 25             |         |                 |
| Styrene                          | 3.75              | 3.36     | 3.37        | 89.6     | 89.9      | 70.0-130    |               |                | 0.297 | 25             |         |                 |
| Bromoform                        | 3.75              | 3.38     | 3.45        | 90.1     | 92.0      | 70.0-130    |               |                | 2.05  | 25             |         |                 |
| 1,1,2,2-Tetrachloroethane        | 3.75              | 3.10     | 3.12        | 82.7     | 83.2      | 70.0-130    |               |                | 0.643 | 25             |         |                 |
| 4-Ethyltoluene                   | 3.75              | 3.33     | 3.43        | 88.8     | 91.5      | 70.0-130    |               |                | 2.96  | 25             |         |                 |
|                                  |                   |          |             |          |           |             |               |                |       |                |         |                 |
| Released to Imaging <sup>A</sup> | 8/3/2022 2:       | 26:44 PM |             |          | OJECT:    |             | SDG:          |                |       | DATE/TIME:     | PAGE:   |                 |
| Plains All Ameri                 | can Pipeline - Te | erracon  |             | AR       | 217009    |             | L13720        | 14             |       | 07/09/21 08:45 | 9 of 14 |                 |

# QUALITY CONTROL SUMMARY

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

|                           | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
|---------------------------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|
| Analyte                   | ppbv         | ppbv       | ppbv        | %        | %         | %           |               |                | %     | %          |
| 1,3,5-Trimethylbenzene    | 3.75         | 3.34       | 3.34        | 89.1     | 89.1      | 70.0-130    |               |                | 0.000 | 25         |
| 1,2,4-Trimethylbenzene    | 3.75         | 3.35       | 3.41        | 89.3     | 90.9      | 70.0-130    |               |                | 1.78  | 25         |
| 1,3-Dichlorobenzene       | 3.75         | 3.45       | 3.48        | 92.0     | 92.8      | 70.0-130    |               |                | 0.866 | 25         |
| 1,4-Dichlorobenzene       | 3.75         | 3.54       | 3.60        | 94.4     | 96.0      | 70.0-130    |               |                | 1.68  | 25         |
| Benzyl Chloride           | 3.75         | 3.54       | 3.54        | 94.4     | 94.4      | 70.0-152    |               |                | 0.000 | 25         |
| 1,2-Dichlorobenzene       | 3.75         | 3.44       | 3.45        | 91.7     | 92.0      | 70.0-130    |               |                | 0.290 | 25         |
| 1,2,4-Trichlorobenzene    | 3.75         | 3.76       | 3.87        | 100      | 103       | 70.0-160    |               |                | 2.88  | 25         |
| Hexachloro-1,3-butadiene  | 3.75         | 3.62       | 3.69        | 96.5     | 98.4      | 70.0-151    |               |                | 1.92  | 25         |
| Naphthalene               | 3.75         | 3.64       | 3.71        | 97.1     | 98.9      | 70.0-159    |               |                | 1.90  | 25         |
| Allyl Chloride            | 3.75         | 3.23       | 3.19        | 86.1     | 85.1      | 70.0-130    |               |                | 1.25  | 25         |
| 2-Chlorotoluene           | 3.75         | 3.34       | 3.37        | 89.1     | 89.9      | 70.0-130    |               |                | 0.894 | 25         |
| Methyl Methacrylate       | 3.75         | 3.23       | 3.21        | 86.1     | 85.6      | 70.0-130    |               |                | 0.621 | 25         |
| Tetrahydrofuran           | 3.75         | 2.88       | 2.84        | 76.8     | 75.7      | 70.0-137    |               |                | 1.40  | 25         |
| 2,2,4-Trimethylpentane    | 3.75         | 3.04       | 2.95        | 81.1     | 78.7      | 70.0-130    |               |                | 3.01  | 25         |
| Vinyl Bromide             | 3.75         | 3.25       | 3.28        | 86.7     | 87.5      | 70.0-130    |               |                | 0.919 | 25         |
| Isopropylbenzene          | 3.75         | 3.29       | 3.35        | 87.7     | 89.3      | 70.0-130    |               |                | 1.81  | 25         |
| (S) 1,4-Bromofluorobenzen | ç            |            |             | 101      | 102       | 60.0-140    |               |                |       |            |

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### QUALITY CONTROL SUMMARY L1372014-01

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### Method Blank (MB)

| (MB) R3674816-3 | 07/01/21 10:38 |
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| D) K3074010-3 07/01/21     |           |              |        |          |  |
|----------------------------|-----------|--------------|--------|----------|--|
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |  |
| Analyte                    | ppbv      |              | ppbv   | ppbv     |  |
| Cyclohexane                | U         |              | 0.0753 | 0.200    |  |
| Heptane                    | U         |              | 0.104  | 0.200    |  |
| n-Hexane                   | U         |              | 0.206  | 0.630    |  |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |  |
| (S) 1,4-Bromofluorobenzene | 85.9      |              |        | 60.0-140 |  |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3674816-1 07/01/2   | LCS) R3674816-1 07/01/21 09:03 • (LCSD) R3674816-2 07/01/21 09:55 |            |             |          |           |             |               |                |       |            |  |  |  |
|----------------------------|---|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|--|--|--|
|                            | Spike Amount  | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |  |  |  |
| Analyte                    | ppbv  | ppbv       | ppbv        | %        | %         | %           |               |                | %     | %          |  |  |  |
| n-Hexane                   | 3.75  | 3.73       | 3.86        | 99.5     | 103       | 70.0-130    |               |                | 3.43  | 25         |  |  |  |
| Cyclohexane                | 3.75  | 3.80       | 3.90        | 101      | 104       | 70.0-130    |               |                | 2.60  | 25         |  |  |  |
| Heptane                    | 3.75  | 3.86       | 3.82        | 103      | 102       | 70.0-130    |               |                | 1.04  | 25         |  |  |  |
| TPH (GC/MS) Low Fraction   | 203   | 207        | 208         | 102      | 102       | 70.0-130    |               |                | 0.482 | 25         |  |  |  |
| (S) 1,4-Bromofluorobenzene |   |            |             | 102      | 98.2      | 60.0-140    |               |                |       |            |  |  |  |

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### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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Surrogate recovery limits have been exceeded; values are outside upper control limits.

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### Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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|------|------------|----|-----|
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| 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           |
| lorida                 | E87487      | North Carolina <sup>1</sup> | DW21704          |
| Georgia                | NELAP       | North Carolina <sup>3</sup> | 41               |
| Georgia <sup>1</sup>   | 923         | North Dakota                | R-140            |
| daho                   | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                | 200008      | Oklahoma                    | 9915             |
| ndiana                 | C-TN-01     | Oregon                      | TN200002         |
| owa                    | 364         | Pennsylvania                | 68-02979         |
| Kansas                 | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup> | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>  | 16          | South Dakota                | n/a              |
| ouisiana               | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana               | 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           |
| Vinnesota              | 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 5     | 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.

SDG: L1372014 DATE/TIME: 07/09/21 08:45

| Received by | <b>OCD:</b> | 3/28 | /2022 | 9:18:57 | A |
|-------------|-------------|------|-------|---------|---|
|-------------|-------------|------|-------|---------|---|

### C105

CHAIN OF CUSTODY RECORD

|   |             | _         |          |  | Laboratory:                          | ESC        | Labo      | non Pd           |                  |  | ALY             | STED     |          |          |                 |                                  | LAB USE ONLY<br>DUE DATE:            |
|---|-------------|-----------|----------|--|--------------------------------------|------------|-----------|------------------|------------------|--|-----------------|----------|----------|----------|-----------------|----------------------------------|--------------------------------------|
|   | 26          |           | 7        | CON                                      | Address:                             |            |           | non Rd<br>N 3712 |                  | RE   |                 |          |          |          |                 |                                  | TEMP OF COOLER<br>WHEN RECEIVED (°C) |
| ffice Location  | Lubbo       |           |          |  | Phone:<br>Contact:                   | (800)      | 767-5     | 859              |                  |  |                 |          |          |          |                 |                                  | Page 1 of 1                          |
|   | Brett       | Donr      | aic      |  | SRS #:                               | 2009-084   |           | 4                |                  |  |                 |          |          |          |                 | Contraction (1995) Agents (1995) |                                      |
| roject Manager<br>ampler's Name   | Aaro        |           |          |  | Sampler's Signature                  |            |           | 11.000           | 1                |  |                 |          |          |          | 6137 2014       |                                  |                                      |
| ampier s Name   | 1945        |           |          |  |                                      | <u>M</u>   | 12        | nc               | AMA              | 1:   |                 | ded      |          |          |                 |                                  | 01512019                             |
| roject Number   |             |           |          | Project Name<br>DCP Sec                  | 31                                   |            |           |                  | pe of Containers | Anoth  |                 | extended |          |          |                 |                                  |                                      |
| AR21  | 7009        | a         | 9        |  | 1                                    | bepth      | Depth     | tedlar bag       |                  | (CDA   | /IELA           | TPH 8015 |          |          |                 |                                  |                                      |
| Date  | Time        | Comp      | Grab     | Identifying Marks of Sa                  | mple(s)                              | Start Dept | End D     | tedl             |                  | DTC  |                 | H        | _        | -        |                 |                                  | Lab Sample ID                        |
|   | 205         |           | х        | EFF-1 (06282021                          | )                                    | -          | -         | x                |                  | - 2  | ×               | x        | +        | +        | -               | -                                | -(                                   |
|   |             |           | -        |  |                                      | 1 7        | -         |                  |                  | +  | $\triangleleft$ | +        | +        | +        | +               |                                  |                                      |
|   | -           | $\square$ | -        |  |                                      |            |           |                  |                  |  |                 | X        |          |          |                 |                                  |                                      |
| + + /   | /           |           |          |  |                                      |            |           |                  |                  |  |                 |          | X        | _        | -               | -                                | /                                    |
|   |             |           |          |  |                                      | -          | 4         |                  |                  | +  | +               | -        |          |          |                 |                                  |                                      |
|   |             | -         | -        |  | and the second second                | $\vee$     | Menial D  |                  |                  | +  | +               | +        | -        | $\land$  |                 |                                  |                                      |
| 1/-   |             | +         | $\vdash$ |  | /                                    | 1          | N         | FE               |                  |  |                 |          |          |          |                 |                                  |                                      |
| 1   |             | +         | $\vdash$ |  |                                      |            | -         |                  |                  |  |                 | _        | _        | _        | -               |                                  |                                      |
| $A \vdash$  |             |           |          |  |                                      |            |           |                  |                  | backli                                       |                 |          | Yes      |          | l No            |                                  |                                      |
| TURNAROUND TIME   |             | -         | 1        | Normal 48-Hour Rush                      | 24-Hour Rush<br>Received by (Signatu |            | TRR       | PLabor           | atory Review C   | Tim  | e:              |          | IOTES:   |          |                 | directly                         | y to Plains Pipeline                 |
| and the second second   | 26m         |           |          | 6-28-21 1710                             | 2<br>Received by (Signati            | ure)       |           |                  | Date:            | Tim  | e:              | _        | -mail re | sults to |                 |                                  | 0                                    |
| Relinquished by (Signature)   |             |           |          | Date:                                    |                                      |            |           |                  | Date:            |  | -               |          |          | bret     | t.denn          |                                  | erracon.com                          |
| Relinquished by (Signature)   |             |           |          | Date: Time:                              | Received by (Signati                 | ure)       | 1         |                  | Date:            |  |                 |          |          | 10.000   | .loyd@<br>oves@ |                                  | con.com                              |
| Relinquished by (Signature)   |             |           |          | Date: Time:                              | Received by (Signat                  | ure)       | 1         | 1                | Bhe              | 7  | 29              | 00       |          |          | vant@           |                                  |                                      |
|   |             |           | W-V      | Vater S-Soll L-1                         | iquid A - Air Bag                    | C - Chard  | coal tube |                  | SL - Sludge      | <u>,                                    </u> |                 |          |          |          |                 |                                  |                                      |
| and the second se | 40 mil vial |           |          | Amber Glass 1L 250 ml = Glass wide mouth | P/O - Plastic or other               |            | _         |                  |                  |  | -               |          |          |          |                 |                                  |                                      |
|   |             |           |          | Lubbock Office = 58                      | 27 50th Street,<br>Responsive        |            |           |                  |                  | 9424   |                 | 806-3    | 00-014   | 10       |                 |                                  |                                      |
|   |             |           | _        |  | Reaponate                            | - 1100     |           |                  |                  |  |                 |          | 0        |          |                 |                                  |                                      |
|   |             |           |          |  |                                      |            |           |                  |                  |  |                 | pm       | 3        |          |                 |                                  |                                      |

Sample Receipt Checklist COC Seal Present/Intact: Y\_N If Applicable COC Signed/Accurate: Y\_N VOA Zero Headspace: Y\_N Bottles arrive intact: Y\_N Pres.Correct/Check: Y\_N Correct bottles used: Y\_N Sufficient volume sent: X\_N Sufficient volume sent: X\_N Released to Imaging: 8/3/2022/2:26:44 PM

5117 4435 3961

Received by OCD: 3/28/2022 9:18:57 AM

# 🔅 eurofins

# Environment Testing America

# **ANALYTICAL REPORT**

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8 Lubbock, TX 79424 Tel: (806)794-1296

### Laboratory Job ID: 820-1876-1 Client Project/Site: DCP Sec 31

For: Terracon Consu

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

Attn: Brett Dennis

URAMER

Authorized for release by: 9/16/2021 8:24:28 PM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS **Review your project** results through **Total** Access **Have a Question?** Ask-The Expert Visit us at: www.eurofinsus.com/Env

Released to Imaging: 8/3/2022 2:26:44 PM

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Coliform MCLs

- Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

### Warranties, Terms, and Conditions

Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

• Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

• Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

• EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

• Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

• The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).

VRAMER

Jessica Kramer Project Manager 9/16/2021 8:24:28 PM

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| Cover Page             | 1  |
|------------------------|----|
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CNF

DER

DL

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

MPN

MQL

NC

ND

NEG

POS

PQL

PRES

QC

RL

RPD

TEF

TEQ

TNTC

RER

ML

Dil Fac

DL, RA, RE, IN

Client: Terracon Consulting Eng & Scientists Ρ

Contains No Free Liquid

Detection Limit (DoD/DOE)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

Dilution Factor

Duplicate Error Ratio (normalized absolute difference)

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Job ID: 820-1876-1

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| Project/Site: I | DCP Sec 31   | 2 |
|-----------------|--|---|
| Qualifiers      |  | 3 |
| GC VOA          |  |   |
| Qualifier       | Qualifier Description  |   |
| F1              | MS and/or MSD recovery exceeds control limits.   |   |
| J               | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. | 5 |
| S1+             | Surrogate recovery exceeds control limits, high biased.  |   |
| U               | Indicates the analyte was analyzed for but not detected.   |   |
| Glossary        |  | 7 |
| Abbreviation    | These commonly used abbreviations may or may not be present in this report.                                    |   |
| ¤               | Listed under the "D" column to designate that the result is reported on a dry weight basis                     |   |
| %R              | Percent Recovery   | 0 |
| CFL             | Contains Free Liquid   |   |
| CFU             | Colony Forming Unit  | 9 |
|                 |  |   |

Eurofins Xenco, Lubbock

**Case Narrative** 

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-1876-1

Page 134 of 249

### Job ID: 820-1876-1

#### Laboratory: Eurofins Xenco, Lubbock

#### Narrative

Job Narrative 820-1876-1

#### Receipt

The samples were received on 9/10/2021 4:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 15.5°C

#### GC VOA

Method 8021B: 4-Bromofluorobenzene Surrogate recovery for the following samples were outside control limits: MW-2 (820-1876-1), MW-3 (820-1876-2), MW-4 (820-1876-3), MW-5 (820-1876-4), MW-6 (820-1876-5), (CCV 880-7869/2), (CCV 880-7869/20), (CCV 880-7869/33), (LCS 880-7869/3), (LCSD 880-7869/4), (MB 880-7869/8), (890-1238-A-1), (890-1238-A-1 MS) and (890-1238-A-1 MSD). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 880-7966 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 820-1876-1

### Lab Sample ID: 820-1876-1

Lab Sample ID: 820-1876-2

Lab Sample ID: 820-1876-3

Matrix: Water

Matrix: Water

Matrix: Water

5

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### Client Sample ID: MW-2 Date Collected: 09/10/21 08:45 Date Received: 09/10/21 16:35

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 09/14/21 22:14 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 09/14/21 22:14 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 09/14/21 22:14 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 09/14/21 22:14 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 09/14/21 22:14 | 1       |
| Xylenes, Total              | <0.000642 | U         | 0.00400  | 0.000642 | mg/L |   |          | 09/14/21 22:14 | 1       |
| Total BTEX                  | <0.000657 | U         | 0.00400  | 0.000657 | mg/L |   |          | 09/14/21 22:14 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 138       | S1+       | 70 - 130 |          |      | - |          | 09/14/21 22:14 | 1       |
| 1.4-Difluorobenzene (Surr)  | 121       |           | 70 - 130 |          |      |   |          | 09/14/21 22:14 | 1       |

### **Client Sample ID: MW-3**

Date Collected: 09/10/21 12:03

### Date Received: 09/10/21 16:35

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 09/14/21 22:42 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 09/14/21 22:42 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 09/14/21 22:42 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 09/14/21 22:42 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 09/14/21 22:42 | 1       |
| Xylenes, Total              | <0.000642 | U         | 0.00400  | 0.000642 | mg/L |   |          | 09/14/21 22:42 | 1       |
| Total BTEX                  | <0.000657 | U         | 0.00400  | 0.000657 | mg/L |   |          | 09/14/21 22:42 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 142       | S1+       | 70 - 130 |          |      | - |          | 09/14/21 22:42 | 1       |
| 1,4-Difluorobenzene (Surr)  | 113       |           | 70 - 130 |          |      |   |          | 09/14/21 22:42 | 1       |

### **Client Sample ID: MW-4**

Date Collected: 09/10/21 11:10

Date Received: 09/10/21 16:35

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 09/14/21 23:10 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 09/14/21 23:10 | 1       |
| Ethylbenzene                | 0.000747  | J         | 0.00200  | 0.000657 | mg/L |   |          | 09/14/21 23:10 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 09/14/21 23:10 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 09/14/21 23:10 | 1       |
| Xylenes, Total              | <0.000642 | U         | 0.00400  | 0.000642 | mg/L |   |          | 09/14/21 23:10 | 1       |
| Total BTEX                  | 0.000747  | J         | 0.00400  | 0.000657 | mg/L |   |          | 09/14/21 23:10 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 131       | S1+       | 70 - 130 |          |      | - |          | 09/14/21 23:10 | 1       |
| 1,4-Difluorobenzene (Surr)  | 112       |           | 70 - 130 |          |      |   |          | 09/14/21 23:10 | 1       |

### Released to Imaging: 8/3/2022 2:26:44 PM

Job ID: 820-1876-1

### Lab Sample ID: 820-1876-4

Matrix: Water

5

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### **Client Sample ID: MW-5** Date Collected: 09/10/21 12:47 Date Received: 09/10/21 16:35

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 09/14/21 23:37 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 09/14/21 23:37 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 09/14/21 23:37 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 09/14/21 23:37 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 09/14/21 23:37 | 1       |
| Xylenes, Total              | <0.000642 | U         | 0.00400  | 0.000642 | mg/L |   |          | 09/14/21 23:37 | 1       |
| Total BTEX                  | <0.000657 | U         | 0.00400  | 0.000657 | mg/L |   |          | 09/14/21 23:37 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 135       | S1+       | 70 - 130 |          |      | - |          | 09/14/21 23:37 | 1       |
| 1,4-Difluorobenzene (Surr)  | 115       |           | 70 - 130 |          |      |   |          | 09/14/21 23:37 | 1       |

### **Client Sample ID: MW-6**

Date Collected: 09/10/21 10:30

Date Received: 09/10/21 16:35

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 09/15/21 00:05 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 09/15/21 00:05 | 1       |
| Ethylbenzene                | 0.000824  | J         | 0.00200  | 0.000657 | mg/L |   |          | 09/15/21 00:05 | 1       |
| m-Xylene & p-Xylene         | <0.000629 | U         | 0.00400  | 0.000629 | mg/L |   |          | 09/15/21 00:05 | 1       |
| o-Xylene                    | <0.000642 | U         | 0.00200  | 0.000642 | mg/L |   |          | 09/15/21 00:05 | 1       |
| Xylenes, Total              | <0.000642 | U         | 0.00400  | 0.000642 | mg/L |   |          | 09/15/21 00:05 | 1       |
| Total BTEX                  | 0.000824  | J         | 0.00400  | 0.000657 | mg/L |   |          | 09/15/21 00:05 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 141       | S1+       | 70 - 130 |          |      | - |          | 09/15/21 00:05 | 1       |
| 1,4-Difluorobenzene (Surr)  | 113       |           | 70 - 130 |          |      |   |          | 09/15/21 00:05 | 1       |

### Client Sample ID: Dup-1

Date Collected: 09/10/21 00:00

Date Received: 09/10/21 16:35

| Analyte                     | Result    | Qualifier | RL       | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|------|---|----------|----------------|---------|
| Benzene                     | <0.000408 | U         | 0.00200  | 0.000408 | mg/L |   |          | 09/16/21 15:13 | 1       |
| Toluene                     | <0.000367 | U         | 0.00200  | 0.000367 | mg/L |   |          | 09/16/21 15:13 | 1       |
| Ethylbenzene                | <0.000657 | U         | 0.00200  | 0.000657 | mg/L |   |          | 09/16/21 15:13 | 1       |
| m-Xylene & p-Xylene         | 0.00135   | J         | 0.00400  | 0.000629 | mg/L |   |          | 09/16/21 15:13 | 1       |
| o-Xylene                    | <0.000642 | U F1      | 0.00200  | 0.000642 | mg/L |   |          | 09/16/21 15:13 | 1       |
| Xylenes, Total              | 0.00135   | J         | 0.00400  | 0.000642 | mg/L |   |          | 09/16/21 15:13 | 1       |
| Total BTEX                  | 0.00135   | J         | 0.00400  | 0.000657 | mg/L |   |          | 09/16/21 15:13 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |          |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 184       | S1+       | 70 - 130 |          |      | - |          | 09/16/21 15:13 | 1       |
| 1,4-Difluorobenzene (Surr)  | 105       |           | 70 - 130 |          |      |   |          | 09/16/21 15:13 | 1       |

Matrix: Water

Lab Sample ID: 820-1876-5

| , <b>,</b>     |   |
|----------------|---|
| 09/15/21 00:05 | 1 |
| 09/15/21 00:05 | 1 |

### Lab Sample ID: 820-1876-6

Matrix: Water

Job ID: 820-1876-1

Prep Type: Total/NA

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### Method: 8021B - Volatile Organic Compounds (GC) Matrix: Water

|  |                        |          |          | Percent Surrogate Recovery (Acceptance Limits) |   |
|--|------------------------|----------|----------|--|---|
|  |                        | BFB1     | DFBZ1    |  |   |
| Lab Sample ID                            | Client Sample ID       | (70-130) | (70-130) |  |   |
| 820-1876-1                               | MW-2                   | 138 S1+  | 121      |  | _ |
| 820-1876-2                               | MW-3                   | 142 S1+  | 113      |  |   |
| 820-1876-3                               | MW-4                   | 131 S1+  | 112      |  |   |
| 820-1876-4                               | MW-5                   | 135 S1+  | 115      |  |   |
| 820-1876-5                               | MW-6                   | 141 S1+  | 113      |  |   |
| 820-1876-6                               | Dup-1                  | 184 S1+  | 105      |  |   |
| 820-1876-6 MS                            | Dup-1                  | 155 S1+  | 105      |  |   |
| 820-1876-6 MSD                           | Dup-1                  | 157 S1+  | 115      |  |   |
| 890-1238-A-1 MS                          | Matrix Spike           | 134 S1+  | 111      |  |   |
| 890-1238-A-1 MSD                         | Matrix Spike Duplicate | 149 S1+  | 116      |  |   |
| _CS 880-7869/3                           | Lab Control Sample     | 130      | 103      |  |   |
| LCS 880-7966/3                           | Lab Control Sample     | 132 S1+  | 95       |  |   |
| LCSD 880-7869/4                          | Lab Control Sample Dup | 120      | 100      |  |   |
| LCSD 880-7966/4                          | Lab Control Sample Dup | 117      | 87       |  |   |
| MB 880-7869/8                            | Method Blank           | 84       | 103      |  |   |
| MB 880-7966/8                            | Method Blank           | 92       | 108      |  |   |
| 0  |                        |          |          |  |   |
| Surrogate Legend<br>BFB = 4-Bromofluorob |                        |          |          |  |   |

DFBZ = 1,4-Difluorobenzene (Surr)

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### Method: 8021B - Volatile Organic Compounds (GC)

| Lab Sample ID: MB 880-7869/8  |              |             |          |        |      |        |      |         | Client   | Sample ID: M         |         |          |
|-------------------------------|--------------|-------------|----------|--------|------|--------|------|---------|----------|----------------------|---------|----------|
| Matrix: Water                 |              |             |          |        |      |        |      |         |          | Prep Ty              | pe: ro  | Jtal/INF |
| Analysis Batch: 7869          | ME           | в мв        |          |        |      |        |      |         |          |                      |         |          |
| Analyte                       |              | t Qualifier | RL       |        | MDL  | Unit   |      | DF      | Prepared | Analyze              | Ч       | Dil Fa   |
| Benzene                       | <0.000408    |             | 0.00200  |        |      | mg/L   |      |         | reparea  | 09/14/21 13          |         | Dirta    |
| Toluene                       | <0.000367    |             | 0.00200  |        | 0367 | mg/L   |      |         |          | 09/14/21 13          |         |          |
| Ethylbenzene                  | <0.000657    |             | 0.00200  |        |      | mg/L   |      |         |          | 09/14/21 13          |         |          |
| m-Xylene & p-Xylene           | <0.000629    |             | 0.00400  |        |      | mg/L   |      |         |          | 09/14/21 13          |         |          |
| p-Xylene                      | <0.000642    |             | 0.00200  |        |      | mg/L   |      |         |          | 09/14/21 13          |         |          |
| Xylenes, Total                | <0.000642    |             | 0.00400  |        |      | mg/L   |      |         |          | 09/14/21 13          |         |          |
| Total BTEX                    | <0.000657    |             | 0.00400  |        |      | mg/L   |      |         |          | 09/14/21 13          |         |          |
|                               | 0.00000      | U           | 0.00100  | 0.00   | 0001 | ing/L  |      |         |          | 00/11/21 10          | 5.10    |          |
|                               | ME           | B MB        |          |        |      |        |      |         |          |                      |         |          |
| Surrogate                     | %Recovery    | Qualifier   | Limits   |        |      |        |      |         | Prepared | Analyze              | d       | Dil Fa   |
| 4-Bromofluorobenzene (Surr)   | 84           | 4           | 70 - 130 |        |      |        |      |         |          | 09/14/21 13          | 3:45    |          |
| 1,4-Difluorobenzene (Surr)    | 10:          | 3           | 70 - 130 |        |      |        |      |         |          | 09/14/21 1           | 3:45    |          |
| Lab Sample ID: LCS 880-7869/3 |              |             |          |        |      |        |      | Clion   | t Sample | BID: Lab Co          | atrol S | Sample   |
| Matrix: Water                 | •            |             |          |        |      |        |      | Clien   | t Sample |                      |         |          |
|                               |              |             |          |        |      |        |      |         |          | Prep Ty              | pe. ic  | JLai/IN/ |
| Analysis Batch: 7869          |              |             | Spike    | 1.09   | LCS  |        |      |         |          | %Rec.                |         |          |
| Analyta                       |              |             | Added    | Result |      | ifier  | Unit | D       | %Rec     | Limits               |         |          |
| Analyte<br>Benzene            |              |             | 0.100    | 0.1036 | Qua  | Inter  |      |         | 104      | 70 - 130             |         |          |
|                               |              |             | 0.100    | 0.1036 |      |        | mg/L |         |          | 70 - 130<br>70 - 130 |         |          |
| Toluene                       |              |             |          |        |      |        | mg/L |         | 116      |                      |         |          |
| Ethylbenzene                  |              |             | 0.100    | 0.1145 |      |        | mg/L |         | 115      | 70 - 130             |         |          |
| m-Xylene & p-Xylene           |              |             | 0.200    | 0.2312 |      |        | mg/L |         | 116      | 70 <sub>-</sub> 130  |         |          |
| p-Xylene                      |              |             | 0.100    | 0.1179 |      |        | mg/L |         | 118      | 70 - 130             |         |          |
|                               | LCS LC       | s           |          |        |      |        |      |         |          |                      |         |          |
| Surrogate                     | %Recovery Qu | alifier     | Limits   |        |      |        |      |         |          |                      |         |          |
| 4-Bromofluorobenzene (Surr)   | 130          |             | 70 - 130 |        |      |        |      |         |          |                      |         |          |
| 1,4-Difluorobenzene (Surr)    | 103          |             | 70 - 130 |        |      |        |      |         |          |                      |         |          |
|                               |              |             |          |        |      |        |      |         |          |                      | _       |          |
| Lab Sample ID: LCSD 880-7869  | /4           |             |          |        |      |        | Clie | ent Sar | npie iD: | Lab Control          |         |          |
| Matrix: Water                 |              |             |          |        |      |        |      |         |          | Prep Ty              | pe: IC  | otal/NA  |
| Analysis Batch: 7869          |              |             | <b>.</b> |        |      | _      |      |         |          |                      |         |          |
|                               |              |             | Spike    | LCSD   |      |        |      | _       |          | %Rec.                |         | RPI      |
| Analyte                       |              |             | Added    | Result | Qua  | ifier  | Unit | D       | %Rec     | Limits               | RPD     | Limi     |
| Benzene                       |              |             | 0.100    | 0.1082 |      |        | mg/L |         | 108      | 70 <sub>-</sub> 130  | 4       | 20       |
| Toluene                       |              |             | 0.100    | 0.1141 |      |        | mg/L |         | 114      | 70 <sub>-</sub> 130  | 2       | 20       |
| Ethylbenzene                  |              |             | 0.100    | 0.1149 |      |        | mg/L |         | 115      | 70 <u>-</u> 130      | 0       | 20       |
| m-Xylene & p-Xylene           |              |             | 0.200    | 0.2324 |      |        | mg/L |         | 116      | 70 <sub>-</sub> 130  | 1       | 20       |
| o-Xylene                      |              |             | 0.100    | 0.1185 |      |        | mg/L |         | 119      | 70 - 130             | 1       | 20       |
|                               | LCSD LC      | SD          |          |        |      |        |      |         |          |                      |         |          |
| Surrogate                     | %Recovery Qu | alifier     | Limits   |        |      |        |      |         |          |                      |         |          |
| 4-Bromofluorobenzene (Surr)   | 120          |             | 70 - 130 |        |      |        |      |         |          |                      |         |          |
| 1,4-Difluorobenzene (Surr)    | 100          |             | 70 - 130 |        |      |        |      |         |          |                      |         |          |
|                               | _            |             |          |        |      |        |      |         |          |                      |         | •        |
| Lab Sample ID: 890-1238-A-1 M | 5            |             |          |        |      |        |      |         | Client   | Sample ID:           |         |          |
| Matrix: Water                 |              |             |          |        |      |        |      |         |          | Prep Ty              | pe: To  | otal/N/  |
| Analysis Batch: 7869          | • • •        |             | 0.11     |        |      |        |      |         |          |                      |         |          |
|                               | Sample Sa    | -           | Spike    |        | MS   |        |      | _       |          | %Rec.                |         |          |
| Analyte                       | Result Qu    | alifier     | Added    | Result | Qual | lifier | Unit | D       | %Rec     | Limits               |         |          |

mg/L

103

70 - 130

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0.1032

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<0.000408 U

Benzene

0.100

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

### Lab Sample ID: 890-1238-A-1 MS

#### Matrix: Water Analysis Batch: 7869

|                     | Sample     | Sample    | Spike | MS      | MS        |      |   |      | %Rec.    |
|---------------------|------------|-----------|-------|---------|-----------|------|---|------|----------|
| Analyte             | Result     | Qualifier | Added | Result  | Qualifier | Unit | D | %Rec | Limits   |
| Toluene             | < 0.000367 | U         | 0.100 | 0.09788 |           | mg/L |   | 98   | 70 - 130 |
| Ethylbenzene        | <0.000657  | U         | 0.100 | 0.1069  |           | mg/L |   | 107  | 70 - 130 |
| m-Xylene & p-Xylene | <0.000629  | U         | 0.200 | 0.2179  |           | mg/L |   | 109  | 70 - 130 |
| o-Xylene            | < 0.000642 | U F1      | 0.100 | 0.1137  |           | mg/L |   | 114  | 70 - 130 |

|                             | MS        | MS        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 134       | S1+       | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 111       |           | 70 - 130 |

### Lab Sample ID: 890-1238-A-1 MSD Matrix: Water

#### Analysis Batch: 7869

|                     | Sample    | Sample    | Spike | MSD    | MSD       |      |   |      | %Rec.    |     | RPD   |   |
|---------------------|-----------|-----------|-------|--------|-----------|------|---|------|----------|-----|-------|---|
| Analyte             | Result    | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |   |
| Benzene             | <0.000408 | U         | 0.100 | 0.1186 |           | mg/L |   | 119  | 70 - 130 | 14  | 25    | Ē |
| Toluene             | <0.000367 | U         | 0.100 | 0.1257 |           | mg/L |   | 126  | 70 - 130 | 25  | 25    |   |
| Ethylbenzene        | <0.000657 | U         | 0.100 | 0.1246 |           | mg/L |   | 125  | 70 - 130 | 15  | 25    | ÷ |
| m-Xylene & p-Xylene | <0.000629 | U         | 0.200 | 0.2535 |           | mg/L |   | 127  | 70 - 130 | 15  | 25    |   |
| o-Xylene            | <0.000642 | U F1      | 0.100 | 0.1321 | F1        | mg/L |   | 132  | 70 - 130 | 15  | 25    |   |

|                             | MSD       | MSD       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 149       | S1+       | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 116       |           | 70 - 130 |

### Lab Sample ID: MB 880-7966/8 Matrix: Water Analysis Batch: 7966

Xylenes, Total

Total BTEX

|                     | MB        | MB        |         |          |      |   |          |                |         |
|---------------------|-----------|-----------|---------|----------|------|---|----------|----------------|---------|
| Analyte             | Result    | Qualifier | RL      | MDL      | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene             | <0.000408 | U         | 0.00200 | 0.000408 | mg/L |   |          | 09/16/21 14:47 | 1       |
| Toluene             | <0.000367 | U         | 0.00200 | 0.000367 | mg/L |   |          | 09/16/21 14:47 | 1       |
| Ethylbenzene        | <0.000657 | U         | 0.00200 | 0.000657 | mg/L |   |          | 09/16/21 14:47 | 1       |
| m-Xylene & p-Xylene | <0.000629 | U         | 0.00400 | 0.000629 | mg/L |   |          | 09/16/21 14:47 | 1       |
| o-Xylene            | <0.000642 | U         | 0.00200 | 0.000642 | mg/L |   |          | 09/16/21 14:47 | 1       |

0.00400

0.00400

70 - 130

0.000642 mg/L

0.000657 mg/L

|                             | МВ        | МВ        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 92        |           | 70 - 130 |

| Surrogate                   | %Recovery | Qualifier |  |
|-----------------------------|-----------|-----------|--|
| 4-Bromofluorobenzene (Surr) | 92        |           |  |
| 1,4-Difluorobenzene (Surr)  | 108       |           |  |

<0.000642 U

<0.000657 U

#### Lab Sample ID: LCS 880-7966/3 Matrix: Water

### Analysis Batch: 7966

|         | Spike | LCS     | LCS       |      |   |      | %Rec.    |  |
|---------|-------|---------|-----------|------|---|------|----------|--|
| Analyte | Added | Result  | Qualifier | Unit | D | %Rec | Limits   |  |
| Benzene | 0.100 | 0.09930 |           | mg/L |   | 99   | 70 - 130 |  |
| Toluene | 0.100 | 0.09648 |           | mg/L |   | 96   | 70 - 130 |  |

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### **Client Sample ID: Matrix Spike** Prep Type: Total/NA

### **Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA

### **Client Sample ID: Method Blank** Prep Type: Total/NA

09/16/21 14:47

09/16/21 14:47

Analyzed

09/16/21 14:47

09/16/21 14:47

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

Prepared

1

1

1

1

Dil Fac

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Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-1876-1

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

| Matrix: Water  | /3        |           |  |  |                   |   | Client       | Sample                                  | ID: Lab Co<br>Prep 1  | ontrol Sa<br>Type: To           |  |
|--|-----------|-----------|--|--|-------------------|---|--------------|---|---|---------------------------------|--|
| Analysis Batch: 7966   |           |           |  |  |                   |   |              |   |   |                                 |  |
|  |           |           | Spike  | LCS  | LCS               |   |              |   | %Rec.   |                                 |  |
| Analyte  |           |           | Added  | Result   | Qualifier         | Unit  | D            | %Rec                                    | Limits  |                                 |  |
| Ethylbenzene   |           |           | 0.100  | 0.1016   |                   | mg/L  |              | 102                                     | 70 - 130  |                                 |  |
| m-Xylene & p-Xylene  |           |           | 0.200  | 0.2063   |                   | mg/L  |              | 103                                     | 70 - 130  |                                 |  |
| o-Xylene   |           |           | 0.100  | 0.1066   |                   | mg/L  |              | 107                                     | 70 - 130  |                                 |  |
|  | LCS       | LCS       |  |  |                   |   |              |   |   |                                 |  |
| Surrogate  | %Recovery | Qualifier | Limits   |  |                   |   |              |   |   |                                 |  |
| 4-Bromofluorobenzene (Surr)  | 132       | S1+       | 70 - 130   |  |                   |   |              |   |   |                                 |  |
| 1,4-Difluorobenzene (Surr)   | 95        |           | 70 - 130   |  |                   |   |              |   |   |                                 |  |
| -  | 6/4       |           |  |  |                   | Clie  | nt San       | nple ID: I                              | Lab Contro<br>Prep 1  | l Sampl<br>Type: To             |  |
| Matrix: Water  | 6/4       |           | Spike  | LCSD   | LCSD              | Clie  | ent San      | nple ID: I                              |   |                                 |  |
| Matrix: Water<br>Analysis Batch: 7966  | 6/4       |           | Spike<br>Added                                     |  | LCSD<br>Qualifier | Clie<br>Unit                                | ent San<br>D | N <mark>ple ID:</mark>  <br>%Rec        | Prep 1  |                                 | tal/NA   |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte   |           |           | •  |  |                   |   |              |   | Prep 1<br>%Rec.   | Type: To                        | tal/NA<br>RPD                                  |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene  |           |           | Added  | Result   |                   | Unit  |              | %Rec                                    | Prep 1<br>%Rec.<br>Limits   | Type: To                        | tal/NA<br>RPD<br>Limit                         |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene<br>Toluene   |           |           | <b>Added</b>                                       | <b>Result</b> 0.1002                           |                   | _ <mark>Unit</mark><br>mg/L                 |              | <b>%Rec</b>                             | Prep 1<br>%Rec.<br>Limits<br>70 - 130                                     | Type: To<br>RPD<br>1            | RPD<br>Limit<br>20                             |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene   |           |           | Added           0.100           0.100              | <b>Result</b><br>0.1002<br>0.1062              |                   | _ <mark>Unit</mark><br>mg/L<br>mg/L         |              | <b>%Rec</b><br>100<br>106               | Prep 1<br>%Rec.<br>Limits<br>70 - 130<br>70 - 130                         | <b>RPD</b><br>1<br>10           | tal/NA<br>RPD<br>Limit<br>20<br>20             |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>m-Xylene & p-Xylene  |           |           | Added<br>0.100<br>0.100<br>0.100                   | Result<br>0.1002<br>0.1062<br>0.1044           |                   | _ <mark>Unit</mark><br>mg/L<br>mg/L<br>mg/L |              | %Rec<br>100<br>106<br>104               | Prep 1<br>%Rec.<br>Limits<br>70 - 130<br>70 - 130<br>70 - 130             | <b>RPD</b><br>1<br>10<br>3      | tal/NA<br>RPD<br>Limit<br>20<br>20<br>20       |
| Lab Sample ID: LCSD 880-796<br>Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>m-Xylene & p-Xylene<br>o-Xylene | 16/4      | LCSD      | Added<br>0.100<br>0.100<br>0.100<br>0.200          | Result<br>0.1002<br>0.1062<br>0.1044<br>0.2128 |                   | - Unit<br>mg/L<br>mg/L<br>mg/L              |              | <b>%Rec</b><br>100<br>106<br>104<br>106 | Prep 7<br>%Rec.<br>Limits<br>70 - 130<br>70 - 130<br>70 - 130<br>70 - 130 | <b>RPD</b><br>1<br>10<br>3<br>3 | tal/NA<br>RPD<br>Limit<br>20<br>20<br>20<br>20 |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>m-Xylene & p-Xylene<br>o-Xylene                                |           |           | Added<br>0.100<br>0.100<br>0.100<br>0.200          | Result<br>0.1002<br>0.1062<br>0.1044<br>0.2128 |                   | - Unit<br>mg/L<br>mg/L<br>mg/L              |              | <b>%Rec</b><br>100<br>106<br>104<br>106 | Prep 7<br>%Rec.<br>Limits<br>70 - 130<br>70 - 130<br>70 - 130<br>70 - 130 | <b>RPD</b><br>1<br>10<br>3<br>3 | tal/NA<br>RPD<br>Limit<br>20<br>20<br>20<br>20 |
| Matrix: Water<br>Analysis Batch: 7966<br>Analyte<br>Benzene<br>Toluene<br>Ethylbenzene<br>m-Xylene & p-Xylene  | LCSD      |           | Added<br>0.100<br>0.100<br>0.100<br>0.200<br>0.100 | Result<br>0.1002<br>0.1062<br>0.1044<br>0.2128 |                   | - Unit<br>mg/L<br>mg/L<br>mg/L              |              | <b>%Rec</b><br>100<br>106<br>104<br>106 | Prep 7<br>%Rec.<br>Limits<br>70 - 130<br>70 - 130<br>70 - 130<br>70 - 130 | <b>RPD</b><br>1<br>10<br>3<br>3 | tal/NA<br>RPD<br>Limit<br>20<br>20<br>20<br>20 |

### Lab Sample ID: 820-1876-6 MS Matrix: Water Analysis Batch: 7966

|                     | Sample     | Sample    | Spike | MS     | MS        |      |   |      | %Rec.    |  |
|---------------------|------------|-----------|-------|--------|-----------|------|---|------|----------|--|
| Analyte             | Result     | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| Benzene             | < 0.000408 | U         | 0.100 | 0.1112 |           | mg/L |   | 111  | 70 _ 130 |  |
| Toluene             | <0.000367  | U         | 0.100 | 0.1164 |           | mg/L |   | 116  | 70 - 130 |  |
| Ethylbenzene        | <0.000657  | U         | 0.100 | 0.1147 |           | mg/L |   | 115  | 70 - 130 |  |
| m-Xylene & p-Xylene | 0.00135    | J         | 0.200 | 0.2345 |           | mg/L |   | 117  | 70 - 130 |  |
| o-Xylene            | <0.000642  | U F1      | 0.100 | 0.1223 |           | mg/L |   | 122  | 70 - 130 |  |
|                     | MS         | MS        |       |        |           |      |   |      |          |  |

|                             | 1110      | 1110      |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 155       | S1+       | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 105       |           | 70 - 130 |

### Lab Sample ID: 820-1876-6 MSD Matrix: Water

### Analysis Batch: 7966

|                     | Sample    | Sample    | Spike | MSD    | MSD       |      |   |      | %Rec.    |     | RPD   |
|---------------------|-----------|-----------|-------|--------|-----------|------|---|------|----------|-----|-------|
| Analyte             | Result    | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |
| Benzene             | <0.000408 | U         | 0.100 | 0.1208 |           | mg/L |   | 121  | 70 - 130 | 8   | 25    |
| Toluene             | <0.000367 | U         | 0.100 | 0.1229 |           | mg/L |   | 123  | 70 - 130 | 5   | 25    |
| Ethylbenzene        | <0.000657 | U         | 0.100 | 0.1226 |           | mg/L |   | 123  | 70 - 130 | 7   | 25    |
| m-Xylene & p-Xylene | 0.00135   | J         | 0.200 | 0.2508 |           | mg/L |   | 125  | 70 - 130 | 7   | 25    |
| o-Xylene            | <0.000642 | U F1      | 0.100 | 0.1307 | F1        | mg/L |   | 131  | 70 - 130 | 7   | 25    |

Eurofins Xenco, Lubbock

**Client Sample ID: Dup-1** 

Prep Type: Total/NA

4 5 6

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

|                             | MSD       | MSD       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 157       | S1+       | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 115       |           | 70 - 130 |

Eurofins Xenco, Lubbock

### **QC Association Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-1876-1

| GC | VOA |  |
|----|-----|--|
|    |     |  |

### Analysis Batch: 7869

| Lab Sample ID    | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------------|-----------|--------|--------|------------|
| 820-1876-1       | MW-2                   | Total/NA  | Water  | 8021B  |            |
| 320-1876-2       | MW-3                   | Total/NA  | Water  | 8021B  |            |
| 820-1876-3       | MW-4                   | Total/NA  | Water  | 8021B  |            |
| 820-1876-4       | MW-5                   | Total/NA  | Water  | 8021B  |            |
| 820-1876-5       | MW-6                   | Total/NA  | Water  | 8021B  |            |
| MB 880-7869/8    | Method Blank           | Total/NA  | Water  | 8021B  |            |
| LCS 880-7869/3   | Lab Control Sample     | Total/NA  | Water  | 8021B  |            |
| LCSD 880-7869/4  | Lab Control Sample Dup | Total/NA  | Water  | 8021B  |            |
| 890-1238-A-1 MS  | Matrix Spike           | Total/NA  | Water  | 8021B  |            |
| 890-1238-A-1 MSD | Matrix Spike Duplicate | Total/NA  | Water  | 8021B  |            |

### Analysis Batch: 7966

| Lab Sample ID   | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------------|-----------|--------|--------|------------|
| 820-1876-6      | Dup-1                  | Total/NA  | Water  | 8021B  | 4          |
| MB 880-7966/8   | Method Blank           | Total/NA  | Water  | 8021B  |            |
| LCS 880-7966/3  | Lab Control Sample     | Total/NA  | Water  | 8021B  |            |
| LCSD 880-7966/4 | Lab Control Sample Dup | Total/NA  | Water  | 8021B  |            |
| 820-1876-6 MS   | Dup-1                  | Total/NA  | Water  | 8021B  |            |
| 820-1876-6 MSD  | Dup-1                  | Total/NA  | Water  | 8021B  |            |

Lab Chronicle

Job ID: 820-1876-1

Matrix: Water

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

000 12:020 1010

Lab Sample ID: 820-1876-1

### Client Sample ID: MW-2 Date Collected: 09/10/21 08:45

|   | Batch  | Batch   |     | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  |   |
|---|--|---|-----|-----------------------------------|---|---|---|---|--|---|
| Prep Type   | Туре   | Method  | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | or Analyzed   | Analyst  | Lab   |
| Total/NA  | Analysis   | 8021B   |     | 1                                 | 5 mL  | 5 mL                                      | 7869                                      | 09/14/21 22:14  | KL   | XEN MID   |
| Client Samp   | le ID: MW-3  |   |     |                                   |   |   |   | Lab Sam   | ple ID:  | 320-1876-   |
| -   | : 09/10/21 12:03   | 3   |     |                                   |   |   |   |   |  | Aatrix: Wat   |
| Date Received:  | : 09/10/21 16:3  | 5   |     |                                   |   |   |   |   |  |   |
| _   |  |   |     |                                   |   |   |   |   |  |   |
|   | Batch  | Batch   | _   | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  |   |
| Prep Type   | Туре   | Method  | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | or Analyzed   | Analyst  | Lab   |
| Total/NA  | Analysis   | 8021B   |     | 1                                 | 5 mL  | 5 mL                                      | 7869                                      | 09/14/21 22:42  | KL   | XEN MID   |
| Client Samp   | le ID: MW-4  |   |     |                                   |   |   |   | Lab Sam   | ple ID: 8  | 320-1876-   |
|   | : 09/10/21 11:10   | )   |     |                                   |   |   |   |   | · · · · · · · · · · · · · · · · · · ·                    | /latrix: Wat  |
| Date Received:  | : 09/10/21 16:38   | 5   |     |                                   |   |   |   |   |  |   |
| _   |  |   |     |                                   |   |   |   |   |  |   |
|   | Batch  | Batch   |     | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  |  |   |
| Prep Type   | Туре   | Method  | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | or Analyzed   | Analyst  | Lab   |
|   |  | 8021B   |     | 1                                 | 5 mL  | 5 mL                                      | 7869                                      | 09/14/21 23:10  | KL   | XEN MID   |
| Date Collected  | : 09/10/21 12:4  | 7   |     |                                   |   |   |   | Lab Sam   |  |   |
| –<br>Client Samp<br>Date Collected  | le ID: MW-5<br>: 09/10/21 12:4<br>: 09/10/21 16:3  | 7   |     |                                   |   |   |   |   |  | 320-1876<br>Aatrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:   | le ID: MW-5<br>: 09/10/21 12:4<br>: 09/10/21 16:3<br>Batch   | 7<br>5<br>Batch   |     | Dil                               | Initial                                     | Final                                     | Batch                                     | Prepared  | ľ  | Aatrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type  | le ID: MW-5<br>: 09/10/21 12:4<br>: 09/10/21 16:3<br>Batch<br>Type   | 7<br>5<br>Batch<br>Method   | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed   | Analyst  | Aatrix: Wat   |
| -<br>Client Samp<br>Date Collected<br>Date Received:<br>-   | le ID: MW-5<br>: 09/10/21 12:4<br>: 09/10/21 16:3<br>Batch   | 7<br>5<br>Batch   | Run |                                   |   |   |   | Prepared  | ľ  | Aatrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA  | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis  | 7<br>5<br>Batch<br>Method   | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed<br>09/14/21 23:37   | Analyst<br>KL  | Aatrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp   | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis  | 7<br>Batch<br>Method<br>8021B                                       | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed<br>09/14/21 23:37   | Analyst<br>KL<br>Tiple ID: 8                             | Aatrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected   | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: MW-6   | 7<br>5<br>Batch<br>Method<br>8021B                                  | Run | Factor                            | Amount                                      | Amount                                    | Number                                    | Prepared<br>or Analyzed<br>09/14/21 23:37   | Analyst<br>KL<br>Tiple ID: 8                             | Matrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected   | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3<br>: 09/10/21 16:3   | 7<br>Batch<br>Method<br>8021B                                       | Run | Factor<br>1                       | Amount<br>5 mL                              | Amount<br>5 mL                            | Number<br>7869                            | Prepared<br>or Analyzed<br>09/14/21 23:37<br>Lab Sam  | Analyst<br>KL<br>Tiple ID: 8                             | Matrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:   | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:33<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:35<br>: 09/10/21 16:35<br>Batch   | 7<br>Batch<br>Method<br>8021B<br>Batch                              |     | Factor 1                          | Amount<br>5 mL                              | Amount<br>5 mL<br>Final                   | Number<br>7869<br>Batch                   | Prepared<br>or Analyzed<br>09/14/21 23:37<br>Lab Sam  | Analyst<br>KL<br>Iple ID: 1                              | Matrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected   | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3<br>: 09/10/21 16:3   | 7<br>Batch<br>Method<br>8021B                                       | Run | Factor<br>1                       | Amount<br>5 mL                              | Amount<br>5 mL                            | Number<br>7869                            | Prepared<br>or Analyzed<br>09/14/21 23:37<br>Lab Sam  | Analyst<br>KL<br>Tiple ID: 8                             | Matrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA                                  | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis  | 7<br>Batch<br>Method<br>8021B<br>D<br>Batch<br>Method               |     | Factor<br>1<br>Dil<br>Factor      | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>7869<br>Batch<br>Number         | Prepared           or Analyzed           09/14/21 23:37           Lab Sam           Prepared           or Analyzed           09/15/21 00:05                   | Analyst<br>KL<br>ple ID: 1<br>M<br>Analyst<br>KL         | Atrix: Wat<br>- Lab<br>XEN MID<br>320-1876<br>Aatrix: Wat<br>- Lab<br>XEN MID   |
| Prep Type<br>Total/NA<br>Client Samp<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp   | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3<br>: 09/10/21 10:3<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: Dup-1     | 7<br>Batch<br>Method<br>8021B<br>0<br>5<br>Batch<br>Method<br>8021B |     | Factor<br>1<br>Dil<br>Factor      | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>7869<br>Batch<br>Number         | Prepared           or Analyzed           09/14/21 23:37           Lab Sam           Prepared           or Analyzed           09/15/21 00:05                   | Analyst<br>KL<br>ple ID: 8<br>Analyst<br>KL<br>ple ID: 8 | Lab   |
| Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Total/NA<br>Client Samp<br>Date Collected                    | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3<br>: 09/10/21 16:3<br>Batch<br>Type<br>Analysis  | 7<br>Batch<br>Method<br>8021B<br>0<br>5<br>Batch<br>Method<br>8021B |     | Factor<br>1<br>Dil<br>Factor      | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>7869<br>Batch<br>Number         | Prepared           or Analyzed           09/14/21 23:37           Lab Sam           Prepared           or Analyzed           09/15/21 00:05                   | Analyst<br>KL<br>ple ID: 8<br>Analyst<br>KL<br>ple ID: 8 | Lab   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3!<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3!<br>: 09/10/21 16:3!<br>Batch<br>Type<br>Analysis<br>le ID: Dup-1<br>: 09/10/21 16:3! | 7<br>Batch<br>Method<br>8021B<br>0<br>5<br>Batch<br>Method<br>8021B |     | Factor<br>1<br>Dil<br>Factor<br>1 | Amount<br>5 mL<br>Initial<br>Amount<br>5 mL | Amount<br>5 mL<br>Final<br>Amount<br>5 mL | Number<br>7869<br>Batch<br>Number<br>7869 | Prepared           or Analyzed           09/14/21 23:37           Lab Sam           Prepared           or Analyzed           09/15/21 00:05           Lab Sam | Analyst<br>KL<br>ple ID: 8<br>Analyst<br>KL<br>ple ID: 8 | Matrix: Wat   |
| Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected<br>Date Received:<br>Prep Type<br>Total/NA<br>Client Samp<br>Date Collected | le ID: MW-5<br>: 09/10/21 12:4'<br>: 09/10/21 16:3!<br>Batch<br>Type<br>Analysis<br>le ID: MW-6<br>: 09/10/21 10:3!<br>: 09/10/21 16:3!<br>Batch<br>Type<br>Analysis<br>le ID: Dup-1<br>: 09/10/21 00:0! | 7<br>Batch<br>Method<br>8021B<br>0<br>5<br>Batch<br>Method<br>8021B |     | Factor<br>1<br>Dil<br>Factor      | Amount<br>5 mL<br>Initial<br>Amount         | Amount<br>5 mL<br>Final<br>Amount         | Number<br>7869<br>Batch<br>Number         | Prepared           or Analyzed           09/14/21 23:37           Lab Sam           Prepared           or Analyzed           09/15/21 00:05                   | Analyst<br>KL<br>ple ID: 8<br>Analyst<br>KL<br>ple ID: 8 | Lab           XEN MID           320-1876           Matrix: Wat           Lab           XEN MID           320-1876           XEN MID           320-1876           320-1876 |

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-1876-1

| aboratory: Eurofi   | ns Xenco, Midla            | and   |  |                               |
|---|----------------------------|---|--|-------------------------------|
| nless otherwise noted, all a  | nalytes for this laborator | y were covered under each acc                   | reditation/certification below.              |                               |
| Authority   |                            | Program   | Identification Number                        | Expiration Date               |
| Texas   |                            | NELAP   | T104704400-21-22                             | 06-30-22                      |
| The following analytes<br>the agency does not of<br>Analysis Method |                            | rt, but the laboratory is not certifi<br>Matrix | ied by the governing authority. This list ma | ay include analytes for which |
| 8021B   |                            | Water   | Total BTEX                                   |                               |

### **Method Summary**

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-1876-1

| Method | Method Description              | Protocol | Laboratory |
|--------|---------------------------------|----------|------------|
| 8021B  | Volatile Organic Compounds (GC) | SW846    | XEN MID    |
| 5030B  | Purge and Trap                  | SW846    | XEN MID    |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

### Sample Summary

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

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| Job | ١D· | 820-1876-1 |
|-----|-----|------------|
| 000 | ıD. | 020 10/0 1 |

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 820-1876-1    | MW-2             | Water  | 09/10/21 08:45 | 09/10/21 16:35 |
| 820-1876-2    | MW-3             | Water  | 09/10/21 12:03 | 09/10/21 16:35 |
| 820-1876-3    | MW-4             | Water  | 09/10/21 11:10 | 09/10/21 16:35 |
| 820-1876-4    | MW-5             | Water  | 09/10/21 12:47 | 09/10/21 16:35 |
| 820-1876-5    | MW-6             | Water  | 09/10/21 10:30 | 09/10/21 16:35 |
| 820-1876-6    | Dup-1            | Water  | 09/10/21 00:00 | 09/10/21 16:35 |

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|  |                                       |   | Laboratory: X<br>Address: 6                        | Xenco<br>6701 Aberdeen                                  | ANALYSIS<br>REQUESTED   | LAB USE ONLY<br>DUE DATE:                           |
|--|---------------------------------------|---|--|---|-------------------------|---|
|  |                                       |   |  | Lubbock, Texas 79424                                    |                         | TEMP OF COOLER<br>WHEN RECEIVED (°C) 5              |
| Office Location  | Lubbock                               |   | Phone:   |   |                         |   |
| not Manager  | Brett Dennis                          | S   | SRS #:   | 2009-084  |                         | Lage OL   |
| Sampler's Name   | Aaron Adams                           | ns  | Sampler's Signature                                |   | 1 8021)                 |   |
| Project Number   |                                       | Project Name  |  | No. Type of Containers                                  |                         |   |
| AR2  | AR207009                              | DCP   | DCP Sec. 31  |   | AM                      |   |
| Datrix<br>Date   | Time                                  | G Identifying Marks of Sample(s)                                    | r Sample(s)  | Start Depth<br>End Depth<br>40 ml V                     | BTEX (EP 11111          | Chain of Custody                                    |
| GW 9/10/2021   | 8:45                                  | X MW-2  |  |   | ×                       |   |
| GW 9/10/2021   |                                       | X MW-3  |  | 3   | X                       |   |
|  |                                       | X MW-4  |  | ω   | ×                       |   |
|  |                                       | X MW-5  |  | 3   | ×                       |   |
|  | 10:30                                 | X MW-6  |  | ω   | ×                       |   |
| GW 9/10/2021   |                                       |   |  |   |                         |   |
| TURNAROUND TIME  |                                       | 48-Hour   | Received by (Signature)                            | TRRP Laboratory Review Checklist                        |                         | 1 14  |
| Relinquished by (Signature)                                | s/la                                  | 0.10/21 16:3  | n  | -1- Knoppler 9/10/                                      | 12 16.35 NOTES:         | Bill directly to Plains Pipeline<br>D:              |
| Relinquished by (Signature)<br>Relinquished by (Signature) |                                       | Date: Time:<br>Date: Time:  | Received by (Signature)<br>Received by (Signature) | Date:   | Time:<br>Time:<br>Time: | <u>erin.loyd@terracon.com</u><br>algroves@paalp.com |
| Main WW  | WW Wastewater V<br>VOA - 40 ml vial A | W Water S - Soll<br>A/G - Amber Glass 11. 250 ml = Glass wide month | L - Liquid A - Air Bag C<br>P/O - Plusaic or other | C Charcoal tube SL - Sludge                             |                         |   |
|  |                                       | Lubbock Office = {  | 5827 50th Street, Suite 1<br>Responsive  Resc      | uite 1 = Lubbock, Texas 79424<br>Resourceful = Reliable | 9424 🗰 806-300-0140     |   |
|  |                                       |   |  |   |                         |   |

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|   | enco Lubboc |
|---|-------------|
| - | ў 6<br>7    |
|   | 8           |
|   | 9           |
|   |             |
| _ |             |
|   |             |

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💸 eurofins

Environment Testing America

# Custody Record

| Sampler 1        | Cilent Information (Sub Contract Lab) |
|------------------|---------------------------------------|
|                  | Phone. 806-794-1296                   |
|                  | Lubbock, TX 78424                     |
| Obain of Output. | 6701 Aberdeen Ave Suite 8             |
|                  | Eurotins Aenco, Lubbock               |
|                  | Researching Vieway 1 - P.L 1-         |

| Client Information       (Sub Contract Lab)         Creat Coman:       ShippingReceiving         ShippingReceiving       Singram         Company       Singram         Curofins Xenco       Ave         Addrass.       Singram         1211 W Florida Ave       Singram         Gig       Midland         Sue 2e:       Singram         Midland       Sample Version         Size 2e:       Size 2e:         Midland       Size 2e:         Midland       Size 2e:         Nova       Size 2e:         Midland       Size 2e:         Nova       Size 2e:         Midland       Size 2e:         Nova       Size 2e:         Nova       Size 2e:         Nova       Size 2e:         Midland       Size 2e:         Size 2e:       Size 2e:         Projec Name:       Size 2e:         Projec Name:       Size 2e:         Size:       Size 2e:         Size:       Size 2e:         Size:       Size 2e:         Sample Identification - Client ID (Lab D) |  | 0:<br>Sample<br>Three<br>G=grab)  | Lab Pit<br>Kramer<br>E-Mail<br>essilo:<br>Nit<br>Matrix<br>Matrix<br>Matrix                                     | Acceleration and accommendation of the second secon | Carrier Tracking Notes):<br>Drowey:<br>Analysis Requested   | COC No:       B20-2044 1       Page:       Padd:       Padd: |
|--|--|---|---|--|---|--|
|  | 1974   |   |   |  |   |  |
| MW-2 (820-1876-1)  |  |   | Water   |  |   |  |
| MW-3 (820-1876-2)  | 9/10/21 12<br>Ce                               | 12.03<br>Central  | Water   | ×  |   |  |
| MW+4 (820-1876-3)  | 9/10/21 <sup>11</sup><br>Ce                    | 11 10<br>Central  | Water   | *  |   |  |
| MW 5 (820-1876-4)  | 9/10/21 12<br>Ce                               | 12:47<br>Central  | Water   | ×  |   |  |
| MW-6 (820-1878-5)  | 9/10/21 10<br>Ce                               | 10:30<br>Central  | Water   | ×  |   |  |
| Dup-1 (820-1878-6)   | 9/10/21 Ce                                     | Central   | Water   | ×  |   |  |
|  |  |   |   |  |   |  |
| Note: Since laboratory econoditations are subject to change Eurofine Xenco LLC places the curvership of method anelyte & accreditation compliance upon out subcontract labor   | laces the ownership of met                     | hod analyte & accredit  | ation compliance  | upon out subcontract laboratories. This sa   | atories. This sample shipmont is knyvarded under chain-of-custody. If the laboratory does not currently   | -of-custody If the laboratory  |
| etertion immediately 3 all requested accreditations are current to data, return the signed Chein of Curroly attesting to end complicance to Eurofee Xence I, LC.<br>Prossible Hezanti Identification Samph Unconfirmed   | <ul> <li>Lighted Chain of Custody a</li> </ul> | the second complete the second complete second s | and the classifier with the second | Kence LL appraising or other restructions we<br>Sampale Disposed ( A feer may to<br>Refurn To Cillont  | r resruesors wil be provided. Any enanges to accreditation status should be brought to Eu<br>A foe may be assessed if samples are refained longer than 1 month)<br>and Disposal By Lab Archive For Moon | istion status should be brought<br>istimed fornger them 1 mo<br>Archive For  |
| Deliverable Requested: I, II III IV, Other (specify)   | Primary Deliverable Rank                       | ank 2   |   | Special Instructions/QC Requirements.  |   |  |
| Empty Kit Relinquished by  | Date   |   | -   | Time:  | Mathod of Shipment  |  |
| Asharansona by At Us apples  |  | 00:11   | Company   | Recover & MA   | DataTime  | 14 21 1222 Company   |
| -  | Date/Time                                      |   | Company   | Received by V  | Date/Time:  | Company  |

Relinquehed by

Custody Seals Intact ∆ Yes ∧ No

Custody Seal No.

Deterlime

Company

Received by

Gun Jateo

Company

Ver 06/08/2021

Cooter Temperature(a) 😳 and Other Remarks.

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-1876-1 SDG Number:

List Source: Eurofins Xenco, Lubbock

Login Number: 1876 List Number: 1 Creator: Ruggles, Ashley

| Question   | Answer | Comment |
|--|--------|---------|
|  |        | Comment |
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is               | N/A    |         |

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

The cooler or samples do not appear to have been compromised or

tampered with.

Job Number: 820-1876-1 SDG Number:

| Login Number: 1876<br>List Number: 2<br>Creator: Phillips, Kerianna | List Source: Eurofins Xenco, Midland<br>List Creation: 09/14/21 12:19 PM | 4<br>5 |
|---|--|--------|
| Question  | Answer Comment   |        |
| The cooler's custody seal, if present, is intact.                   | True   |        |
| Sample custody seals, if present, are intact.                       | True   |        |

True

| Samples were received on ice.  | True |
|--|------|
| Cooler Temperature is acceptable.  | True |
| Cooler Temperature is recorded.  | True |
| COC is present.  | True |
| COC is filled out in ink and legible.  | True |
| COC is filled out with all pertinent information.                                | True |
| Is the Field Sampler's name present on COC?                                      | True |
| There are no discrepancies between the containers received and the COC.          | True |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True |
| Sample containers have legible labels.   | True |
| Containers are not broken or leaking.  | True |
| Sample collection date/times are provided.                                       | True |
| Appropriate sample containers are used.  | True |
| Sample bottles are completely filled.  | True |
| Sample Preservation Verified.  | True |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | True |

Received by OCD: 3/28/2022 9:18:57 AM

|                        | ust 02, 2021                | 2 |
|------------------------|-----------------------------|---|
| Plains All American    | Pipeline - Terracon         | 3 |
| Sample Delivery Group: | L1383914                    | 2 |
| Samples Received:      | 07/29/2021                  | Ę |
| Project Number:        | AR217009                    |   |
| Description:           | DCP Sec. 31 (SRS# 2009-084) | e |
| Report To:             | Brett Dennis                | : |
|                        | 5847 50th St.               | 8 |

Entire Report Reviewed By:

Drittine Boyd

Brittnie 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

Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1383914

DATE/TIME: 08/02/21 13:57 PAGE: 1 of 9

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Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1383914

DATE/TIME: 08/02/21 13:57 PAGE: 2 of 9

### SAMPLE SUMMARY

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|   |           |          | Collected by   | Collected date/time | e Received date | e/time         |   |
|---|-----------|----------|----------------|---------------------|-----------------|----------------|---|
| EFF-1 (07272021) L1383914-01 Air                  |           |          | Aaron Adams    | 07/27/21 10:55      | 07/29/21 09:0   | 0              | 1 |
| Method  | Batch     | Dilution | Preparation    | Analysis            | Analyst         | Location       |   |
|   |           |          | date/time      | date/time           |                 |                | 2 |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1713890 | 2000     | 07/29/21 17:27 | 07/29/21 17:27      | MBF             | Mt. Juliet, TN |   |

| <sup>2</sup> Tc |
|-----------------|
| ³Ss             |
| <sup>4</sup> Cn |
| ⁵Sr             |
| <sup>6</sup> Qc |
| <sup>7</sup> Gl |
| <sup>8</sup> Al |
| °Sc             |

SDG: L1383914

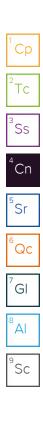
PAGE: 3 of 9

### CASE NARRATIVE

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.

Drittine Boyd

Brittnie L Boyd Project Manager



SDG: L1383914

DATE/TIME: 08/02/21 13:57 PAGE: 4 of 9

# SAMPLE RESULTS - 01

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### Volatile Organic Compounds (MS) by Method M18-Mod

| -                          |           |          |          |         |         |         |           |          |           |
|----------------------------|-----------|----------|----------|---------|---------|---------|-----------|----------|-----------|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2    | Result  | Result  | Qualifier | Dilution | Batch     |
| Analyte                    |           |          | ppbv     | ug/m3   | ppbv    | ug/m3   |           |          |           |
| Benzene                    | 71-43-2   | 78.10    | 400      | 1280    | 2120    | 6770    |           | 2000     | WG1713890 |
| Toluene                    | 108-88-3  | 92.10    | 1000     | 3770    | 2910    | 11000   |           | 2000     | WG1713890 |
| Ethylbenzene               | 100-41-4  | 106      | 400      | 1730    | ND      | ND      |           | 2000     | WG1713890 |
| m&p-Xylene                 | 1330-20-7 | 106      | 800      | 3470    | 3640    | 15800   |           | 2000     | WG1713890 |
| o-Xylene                   | 95-47-6   | 106      | 400      | 1730    | 1400    | 6070    |           | 2000     | WG1713890 |
| Methyl tert-butyl ether    | 1634-04-4 | 88.10    | 400      | 1440    | ND      | ND      |           | 2000     | WG1713890 |
| PH (GC/MS) Low Fraction    | 8006-61-9 | 101      | 400000   | 1650000 | 1030000 | 4250000 |           | 2000     | WG1713890 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |         | 98.5    |         |           |          | WG1713890 |
|                            |           |          |          |         |         |         |           |          |           |

Volatile Organic Compounds (MS) by Method M18-Mod

# QUALITY CONTROL SUMMARY

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### Method Blank (MB)

| (MB) R3685756-3 07 | 7/29/21 10:17 |
|--------------------|---------------|
|--------------------|---------------|

|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |  |
|----------------------------|-----------|--------------|--------|----------|--|
| Analyte                    | ppbv      |              | ppbv   | ppbv     |  |
| Benzene                    | U         |              | 0.0715 | 0.200    |  |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |  |
| MTBE                       | U         |              | 0.0647 | 0.200    |  |
| Toluene                    | U         |              | 0.0870 | 0.500    |  |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |  |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |  |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |  |
| (S) 1,4-Bromofluorobenzene | 96.5      |              |        | 60.0-140 |  |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3685756-1 07/29/2   | 21 08:58 • (LCS | D) R3685756- | 2 07/29/21 09 | :38      |           |             |               |                |       |            |
|----------------------------|-----------------|--------------|---------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                            | Spike Amount    | LCS Result   | LCSD Result   | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
| Analyte                    | ppbv            | ppbv         | ppbv          | %        | %         | %           |               |                | %     | %          |
| MTBE                       | 3.75            | 3.57         | 3.60          | 95.2     | 96.0      | 70.0-130    |               |                | 0.837 | 25         |
| Benzene                    | 3.75            | 3.69         | 3.71          | 98.4     | 98.9      | 70.0-130    |               |                | 0.541 | 25         |
| Toluene                    | 3.75            | 3.63         | 3.64          | 96.8     | 97.1      | 70.0-130    |               |                | 0.275 | 25         |
| Ethylbenzene               | 3.75            | 3.69         | 3.67          | 98.4     | 97.9      | 70.0-130    |               |                | 0.543 | 25         |
| m&p-Xylene                 | 7.50            | 7.34         | 7.33          | 97.9     | 97.7      | 70.0-130    |               |                | 0.136 | 25         |
| o-Xylene                   | 3.75            | 3.60         | 3.64          | 96.0     | 97.1      | 70.0-130    |               |                | 1.10  | 25         |
| TPH (GC/MS) Low Fraction   | 203             | 206          | 206           | 101      | 101       | 70.0-130    |               |                | 0.000 | 25         |
| (S) 1,4-Bromofluorobenzene |                 |              |               | 97.9     | 99.8      | 60.0-140    |               |                |       |            |

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### 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 Method Quantitation Limit.   |
| RDL                             | Reported Detection Limit.  |
| Rec.                            | Reported Detection Limit.  |
| RPD                             | Relative Percent Difference.   |
| SDG                             | Sample Delivery Group.   |
| (S)                             | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and<br>Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be<br>detected in all environmental media.   |
| U                               | Not detected at the Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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

SDG: L1383914

### Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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|-----|------|-----|----|-----|
|-----|------|-----|----|-----|

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| 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          |
| olorado                      | TN00003     | New York                    | 11742            |
| onnecticut                   | PH-0197     | North Carolina              | Env375           |
| lorida                       | E87487      | North Carolina <sup>1</sup> | DW21704          |
| eorgia                       | NELAP       | North Carolina <sup>3</sup> | 41               |
| eorgia <sup>1</sup>          | 923         | North Dakota                | R-140            |
| daho                         | TN00003     | Ohio-VAP                    | CL0069           |
| linois                       | 200008      | Oklahoma                    | 9915             |
| ndiana                       | C-TN-01     | Oregon                      | TN200002         |
| owa                          | 364         | Pennsylvania                | 68-02979         |
| Cansas                       | E-10277     | Rhode Island                | LAO00356         |
| Centucky <sup>16</sup>       | KY90010     | South Carolina              | 84004002         |
| Centucky <sup>2</sup>        | 16          | South Dakota                | n/a              |
| ouisiana                     | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                     | LA018       | Texas                       | T104704245-20-18 |
| laine                        | TN00003     | Texas <sup>5</sup>          | LAB0152          |
| laryland                     | 324         | Utah                        | TN000032021-11   |
| lassachusetts                | M-TN003     | Vermont                     | VT2006           |
| lichigan                     | 9958        | Virginia                    | 110033           |
| linnesota                    | 047-999-395 | Washington                  | C847             |
| lississippi                  | TN00003     | West Virginia               | 233              |
| lissouri                     | 340         | Wisconsin                   | 998093910        |
| lontana                      | CERT0086    | Wyoming                     | A2LA             |
| 2LA – ISO 17025              | 1461.01     | AIHA-LAP,LLC EMLAP          | 100789           |
| 2LA – ISO 17025 <sup>5</sup> | 1461.02     | DOD                         | 1461.01          |
| Canada                       | 1461.01     | USDA                        | P330-15-00234    |
| PA–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.

SDG: L1383914

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CHAIN OF CUSTODY RECORD

|           |                            | 21              | -              |   |                 |                          | Address:   |             |              | non Rd<br>N 37122 |             | R       | EQU               | ESTED    | <u> </u> |         |               |  | DUE DATE:<br>TEMP OF COO |                 |
|-----------|----------------------------|-----------------|----------------|---|-----------------|--------------------------|--|-------------|--------------|-------------------|-------------|---------|-------------------|----------|----------|---------|---------------|--|--------------------------|-----------------|
|           |                            |                 |                | and the second se |                 |                          |  |             |              |                   |             |         |                   |          |          |         |               |  | WHEN RECEIV              | /ED (°C)        |
| Offic     | e Location                 | Lub             | bock           |   |                 |                          | Phone:   | (800)       | 767-5        | 859               |             |         | - 1               |          |          |         |               |  |                          |                 |
| D. I.     |                            | Dee             | tt Der         | mic   |                 |                          | Contact:<br>SRS #:   |             | 2            | 009-084           |             |         |                   |          |          |         |               |  | Pa                       | ge <u>1</u> of  |
|           | ect Manager<br>pler's Name |                 | on Ac          |   |                 |                          | Sampler's Sig  | mature      |              | 003-004           | a.          |         | E                 |          |          |         |               |  |                          | 4               |
| Saint     | JIEL 2 Maine               | Adi             | UIIA           | ams   |                 |                          | Sumpler 5 Sig  | 1           | D            | m                 | hm          |         | 802               | Ð        |          |         |               |  |                          | [ 138 391       |
| Proie     | ect Number                 |                 |                | 1   | Project Name    |                          |  |             | 1 601        | No. Type          | of Containe | ers     | thoc              | extended |          |         |               |  |                          | 100             |
|           |                            | R217009         |                |   | -               | Sec. 31 (SRS# 200        | 09-084)  |             |              | 8                 |             |         | (EPA Method 8021) |          |          |         |               |  |                          |                 |
| Matrix    | Date                       | Time            | Comp           | Grab  | Identifyin      | g Marks of Sample        | e(s)   | Start Depth | End Depth    | tedlar bag        |             |         | BTEX (EP/         | TPH 8015 |          |         |               |  |                          | Lab Sample ID   |
| ~         |                            |                 | -              | x   | FFI             | -1 (07272021)            |  | 0           |              | 1                 | + +         | -       | X                 | X        | -        |         |               | +  | -                        | cab barripic ib |
| A         | 7/27/2021                  | 10:55           | +              |   | Cri             | - (01212022)             |  | +           | -            | 1                 | ++          | -       | ^                 | ~        |          |         |               |  |                          |                 |
| $\vdash$  |                            |                 | -              | =   | <u> </u>        |                          |  | +           | -            |                   |             | -       |                   |          | -        |         | $\rightarrow$ | -  | -                        |                 |
| $\vdash$  |                            | - /             | -              | +   | <u> </u>        |                          |  | +           | -            |                   | 4           |         | -                 |          |          | -       |               | -  |                          |                 |
| $\vdash$  |                            | -               | +              | +   |                 |                          |  | +           | -            | A                 | +           |         | -                 | -        |          |         | -             |  |                          |                 |
| $\vdash$  |                            | <u> </u>        | -              | +   |                 |                          |  | +           |              | +                 | +           | -       | -                 |          | -        |         |               | -  |                          |                 |
| $\vdash$  |                            |                 |                | $\vdash$  |                 |                          |  | -           | $\checkmark$ |                   | +           |         | -                 |          |          | V       |               |  |                          |                 |
|           |                            |                 |                |   | )               | -                        | and the second | 1/          | 1            |                   |             |         | _                 |          |          |         |               | -  |                          |                 |
|           |                            |                 |                |   |                 |                          |  |             |              |                   |             | _       | _                 |          | _        |         | 1             | $\leftarrow$   |                          |                 |
|           |                            |                 |                |   |                 |                          | _/   |             | N            | FE                |             | _       | _                 |          |          |         |               | X  |                          | -               |
| $\square$ |                            |                 |                |   |                 | ~                        | /  |             |              |                   |             | _       | _                 |          |          |         |               |  | $\checkmark$             | ·               |
| <b>r</b>  |                            |                 |                |   |                 |                          |  |             |              |                   |             |         |                   |          |          |         |               |  |                          |                 |
|           | IAROUND TIM                | E               |                | Æ   | Normal 48-Hou   | Ir Rush                  | 24-Hour Rush<br>Received by (Signature   | -           | TRRP         | Laborato          | Date:       | v Check | list              |          | NOTE     |         |               | the second s | tly to Plains F          | Inalina         |
| Belinqui  | shed by (Sanature)         | n. Phon         | N              |   | 7-27-21         | 17:20                    | received by (alguerar  | el          |              |                   |             |         |                   | - 2      | NOTE     | 5.      | t             | sin airec  | tiy to Plains P          | ipenne          |
| Relinqu   | Ished by (Signature)       | - Carlin        |                |   | Date:           | Time:                    | Received by (Signatur  | e)          |              |                   | Date:       | Th      | me:               |          | e-mai    | l resul | ts to:        |  |                          |                 |
|           |                            |                 |                |   |                 |                          |  |             |              |                   | Date:       |         | me:               |          |          |         |               |  | terracon.com             |                 |
| Relingu   | ished by (Signature)       |                 |                |   | Date:           | Time:                    | Received by (Signatur  | e)          |              |                   | Date:       | ľ       | mer.              |          |          |         |               | es@paa<br>nt@paal  |                          |                 |
| Relingu   | ished by (Signature)       |                 |                |   | Date:           | Time:                    | Received by (Signature   | eff.        |              |                   | Date: /     | TI      | me:               |          |          |         |               |  | alp.com                  | (               |
|           | NAMES IN THE REPORT OF     |                 |                |   |                 | 4                        | 2  | 790 r       | >            |                   | PE          | 9 1     | 09                | 00       |          | 2       |               |  |                          |                 |
| Matrix    |                            | W-Wastewater    |                | W - Wate  | r S+Soll        | L - Liquid               | A - Air Bag  | C - Charo   | coal tube    | я.                | Sludge      |         |                   |          |          |         |               |  |                          |                 |
| Containe  | r v                        | 0A - 40 ml vial |                | A/G - Am  |                 |                          | P/O - Plastic or other   |             |              |                   |             |         |                   |          |          |         |               | _  |                          |                 |
|           |                            |                 |                |   | Lubboo          | k Office = 584           | 7 50th Stre  | et 🔳        | Lubb         | ock, Te           | xas 794     | 24 ∎    | 806               | -300-    | 0140     | )       |               |  |                          |                 |
|           |                            |                 |                |   |                 | Res                      | sponsive m   | Reso        | ource        | ful m F           | Reliable    |         |                   |          |          |         |               |  |                          |                 |
| _         |                            | -               |                |   |                 |                          |  |             | 1            |                   |             |         |                   |          |          |         |               |  |                          |                 |
|           |                            |                 |                |   | Sample Pa       | ceipt Checklis           | t  |             |              |                   |             |         | 1                 | MA       | 2        |         |               |  |                          |                 |
|           |                            |                 |                |   | Present/Intact: | N If                     | Applicable   |             |              |                   |             |         | 1                 | 10119    |          |         |               |  |                          |                 |
|           |                            |                 | COC S<br>Bottl | lgned<br>les an   | i/Accurate:     | N VOA Zero<br>N Pres.Cor |  |             |              |                   |             |         |                   |          |          |         |               |  |                          |                 |
|           |                            |                 |                |   | ottles used: T  |                          |  |             |              |                   |             |         |                   |          |          |         |               |  |                          |                 |

Received by OCD: 3/28/2022 9:18:57 AM

# Pace Analytical<sup>®</sup> ANALYTICAL REPORT

Plains All American Pipeline - Terracon

Sample Delivery Group: Samples Received: Project Number:

Description:

L1395214 08/26/2021 AR217009 DCP Sec. 31 (SRS# 2009-084)

Report To:

Brett Dennis 5847 50th St. Suite 1 Lubbock, TX 79424

Entire Report Reviewed By:

Ayisha Raza 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

Released to Imaging: 3/3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1395214

09/0

DATE/TIME: 09/01/21 12:14

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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

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| 9  |
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|    |

| <sup>1</sup> Cp |
|-----------------|
| <sup>2</sup> Tc |
| <sup>3</sup> Ss |
| <sup>4</sup> Cn |
| ⁵Sr             |
| <sup>6</sup> Qc |
| <sup>7</sup> Gl |
| <sup>8</sup> AI |
| °Sc             |

Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon

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SDG: L1395214

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### SAMPLE SUMMARY

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| EFF-1 (08252021) L1395214-01 Air   |                        |           | Collected by<br>Brett Dennis     | Collected date/time<br>08/25/21 11:20 | Received dat<br>08/26/21 09: |                                  |
|--|------------------------|-----------|----------------------------------|---------------------------------------|------------------------------|----------------------------------|
| Method   | Batch                  | Dilution  | Preparation<br>date/time         | Analysis<br>date/time                 | Analyst                      | Location                         |
| Volatile Organic Compounds (MS) by Method M18-Mod<br>Volatile Organic Compounds (MS) by Method M18-Mod | WG1730160<br>WG1730751 | 80<br>400 | 08/26/21 23:19<br>08/27/21 16:59 | 08/26/21 23:19<br>08/27/21 16:59      | CEP<br>CAW                   | Mt. Juliet, TN<br>Mt. Juliet, TN |



Ср

Τс

SDG: L1395214 DATE/TIME: 09/01/21 12:14

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### CASE NARRATIVE

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.

Ayisha Raza Project Manager



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# SAMPLE RESULTS - 01

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Qc

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Sc

### Volatile Organic Compounds (MS) by Method M18-Mod

|                            | CAS #     | Mol. Wt. | RDL1     | RDL2   | Result  | Result  | Qualifier | Dilution | Batch     |
|----------------------------|-----------|----------|----------|--------|---------|---------|-----------|----------|-----------|
| Analyte                    |           |          | ppbv     | ug/m3  | ppbv    | ug/m3   |           |          |           |
| nzene                      | 71-43-2   | 78.10    | 16.0     | 51.1   | ND      | ND      |           | 80       | WG1730160 |
| luene                      | 108-88-3  | 92.10    | 40.0     | 151    | 2600    | 9790    |           | 80       | WG1730160 |
| thylbenzene                | 100-41-4  | 106      | 16.0     | 69.4   | 322     | 1400    |           | 80       | WG1730160 |
| l&p-Xylene                 | 1330-20-7 | 106      | 32.0     | 139    | 3860    | 16700   |           | 80       | WG1730160 |
| Xylene                     | 95-47-6   | 106      | 16.0     | 69.4   | 1490    | 6460    |           | 80       | WG1730160 |
| ethyl tert-butyl ether     | 1634-04-4 | 88.10    | 16.0     | 57.7   | ND      | ND      |           | 80       | WG1730160 |
| H (GC/MS) Low Fraction     | 8006-61-9 | 101      | 80000    | 330000 | 1470000 | 6070000 |           | 400      | WG1730751 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 155     |         | <u>J1</u> |          | WG1730160 |
| S) 1,4-Bromofluorobenzene  | 460-00-4  | 175      | 60.0-140 |        | 105     |         |           |          | WG1730751 |

Volatile Organic Compounds (MS) by Method M18-Mod

# QUALITY CONTROL SUMMARY

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### Method Blank (MB)

| (MB) R3697257-3 | 08/26/2110:37 |
|-----------------|---------------|
|                 |               |

| ( )                        |           |              |        |          |
|----------------------------|-----------|--------------|--------|----------|
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| MTBE                       | U         |              | 0.0647 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| (S) 1,4-Bromofluorobenzene | 97.1      |              |        | 60.0-140 |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3697257-1 08/26/    | 21 09:13 • (LCSI | D) R3697257- | 2 08/26/21 09: | :56      |           |             |               |                |       |            | 7  |
|----------------------------|------------------|--------------|----------------|----------|-----------|-------------|---------------|----------------|-------|------------|----|
|                            | Spike Amount     | LCS Result   | LCSD Result    | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits | GI |
| Analyte                    | ppbv             | ppbv         | ppbv           | %        | %         | %           |               |                | %     | %          |    |
| MTBE                       | 3.75             | 3.99         | 4.06           | 106      | 108       | 70.0-130    |               |                | 1.74  | 25         | 8  |
| Benzene                    | 3.75             | 4.00         | 4.08           | 107      | 109       | 70.0-130    |               |                | 1.98  | 25         | A  |
| Toluene                    | 3.75             | 4.00         | 4.06           | 107      | 108       | 70.0-130    |               |                | 1.49  | 25         | 9  |
| Ethylbenzene               | 3.75             | 4.09         | 4.16           | 109      | 111       | 70.0-130    |               |                | 1.70  | 25         | Sc |
| m&p-Xylene                 | 7.50             | 8.24         | 8.32           | 110      | 111       | 70.0-130    |               |                | 0.966 | 25         |    |
| o-Xylene                   | 3.75             | 4.01         | 4.09           | 107      | 109       | 70.0-130    |               |                | 1.98  | 25         |    |
| (S) 1,4-Bromofluorobenzene |                  |              |                | 99.0     | 99.0      | 60.0-140    |               |                |       |            |    |

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Volatile Organic Compounds (MS) by Method M18-Mod

### QUALITY CONTROL SUMMARY L1395214-01

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### Method Blank (MB)

| Method Blank (MB)          |           |              |        |          | 1 C D           |
|----------------------------|-----------|--------------|--------|----------|-----------------|
| (MB) R3697389-3 08/27/2    | 21 10:58  |              |        |          | Ср              |
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   | 2               |
| Analyte                    | ppbv      |              | ppbv   | ppbv     | Тс              |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |                 |
| (S) 1,4-Bromofluorobenzene | 95.8      |              |        | 60.0-140 | <sup>3</sup> Ss |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3697389-1 08/27/2   | 21 09:38 • (LCS | D) R3697389- | 2 08/27/2110: | 19       |           |             |               |                |      |            |
|----------------------------|-----------------|--------------|---------------|----------|-----------|-------------|---------------|----------------|------|------------|
|                            | Spike Amount    | LCS Result   | LCSD Result   | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD  | RPD Limits |
| Analyte                    | ppbv            | ppbv         | ppbv          | %        | %         | %           |               |                | %    | %          |
| TPH (GC/MS) Low Fraction   | 203             | 255          | 251           | 126      | 124       | 70.0-130    |               |                | 1.58 | 25         |
| (S) 1,4-Bromofluorobenzene |                 |              |               | 99.9     | 99.8      | 60.0-140    |               |                |      |            |

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### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

J1

Surrogate recovery limits have been exceeded; values are outside upper control limits.

SDG: L1395214 DATE/TIME: 09/01/21 12:14

### Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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| 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            |
| daho                          | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                       | 200008      | Oklahoma                    | 9915             |
| ndiana                        | C-TN-01     | Oregon                      | TN200002         |
| owa                           | 364         | Pennsylvania                | 68-02979         |
| Kansas                        | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup>        | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>         | 16          | South Dakota                | n/a              |
| ouisiana                      | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                      | LA018       | Texas                       | T104704245-20-18 |
| <i>l</i> aine                 | TN00003     | Texas <sup>5</sup>          | LAB0152          |
| flaryland                     | 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.

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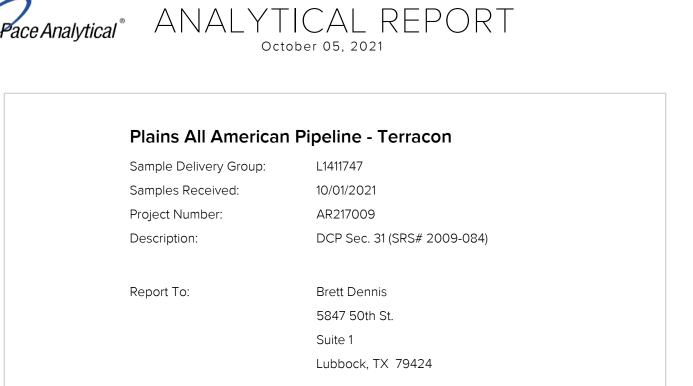
### F223

|         |  |            |      |       |  | Laboratory:<br>Address:                    | Pace<br>1206  | 5 Leba         | non Rd           |                  | REQU                   | YSIS<br>Jested | )                  | LAB USE ONLY<br>DUE DATE:            |
|---------|--|------------|------|-------|--|--|---------------|----------------|------------------|------------------|------------------------|----------------|--------------------|--------------------------------------|
| 20      |  | 211        |      | 2     | CON  |  | Mt. J         | uliet, 1       | N 3712           | 22               |                        |                |                    | TEMP OF COOLER<br>WHEN RECEIVED (°C) |
| 065-    | a Leastion                                     | Lubbo      | ck   |       |  | Phone:                                     | (800)         | 767-5          | 859              |                  |                        |                |                    |                                      |
| Offic   | e Location                                     |            | -CK  |       |  | Contact:                                   |               |                |                  |                  |                        |                |                    | Page <u>1</u> of                     |
|         | ect Manager                                    | Brett      |      |       |  | SRS #:                                     |               |                | 009-084          | 4                |                        |                |                    |                                      |
| Sam     | pler's Name                                    | Brett      | Den  | nis   |  | Sampler's Si                               | gnature       | 2              |                  |                  | 1 802                  | p              |                    |                                      |
| Proje   | ect Number<br>AR21                             | 7009       |      | F     | Project Name<br>DCP Sec. 31 (SRS#  | # 2009-084)                                |               |                |                  | be of Containers | Method                 | extended       |                    |                                      |
| Matrix  | Date   | Time       | Comp | Grab  | Identifying Marks of Sar   |  | Start Depth   | End Depth      | tedlar bag       |                  | BTEX (EPA Method 8021) | TPH 8015       |                    | LI3952<br>Lab Sample                 |
| 2       | 8/25/2021                                      | 11:20      | -    | x     | EFF-1 (08252021)   |  |               |                | 1                |                  | X                      | X              |                    | - 01                                 |
| A       | 8/25/2021                                      | 11.20      |      |       |  |  |               |                |                  |                  |                        |                |                    |                                      |
| H       |  | /          |      |       |  |  |               |                |                  |                  |                        |                |                    | 1                                    |
|         |  |            |      |       |  |  | -             |                | 1                |                  | -                      |                |                    |                                      |
|         | /  |            |      |       | 1  |  | +             |                | $\mathbf{k}$     |                  | +                      |                |                    |                                      |
| 1       |  | Samp       | le   | Recei | N If Applicable  |  | +             | $\checkmark$   | $\left  \right $ |                  | +                      | -              |                    |                                      |
| Ł       | COC Seal Pre<br>COC Signed/H                   | sent/Intac | st:_ | X.    | N VOA Zero Headspace: _YN Pres.Correct/Check: _Y   | N  | $\checkmark$  |                |                  | _                | +                      |                |                    | /                                    |
| ł       | Bottles arr:                                   | ive incace |      | 11    | N Pres.correct   | 7  | 1             | N              | FE               |                  |                        |                |                    |                                      |
| ŀ       | Correct bot<br>Sufficient<br>RAD Screen        |            |      | t     | NN   | $ \rightarrow $                            |               |                |                  |                  |                        |                |                    |                                      |
| 1       | RAD Screen                                     | <0.5 mm    | 1    | M     |  |  |               |                |                  |                  |                        |                |                    |                                      |
|         | NAROUND TIME                                   |            | _    | Ø     | Normal 48-Hour Rush  | 24-Hour Rush                               | 100           | TRR            | Labora           | atory Review Ch  | ecklist                |                | Yes No             | rectly to Plains Pipeline            |
| Relingu | uished by (Mignature)                          | 12         | 2    |       | 8/25/21 16:34  |  | in al         |                |                  |                  |                        |                | NOTES: Bill dir    | rectly to Plains Pipelifie           |
|         | uished by (Signature)                          |            |      |       | Date: Time:  | Received by (Signatu                       | ire)          |                |                  | Date:            | Time:                  |                | e-mail results to: | 01                                   |
| Relingu |  |            |      |       | Date: Time:  | Received by (Signatu                       | ire)          |                |                  | Date:            | Time:                  |                | algroves@p         | s@terracon.com<br>baalp.com          |
|         | uished by (Signature)                          |            |      |       | outer for the second se |  |               |                |                  |                  |                        |                | cjbryant@p         | and a second                         |
|         | uished by (Signature)                          |            |      |       |  |  |               |                |                  | Color.           | Time                   |                |                    |                                      |
| Relings | uished by (Signature)<br>uished by (Signature) |            |      | 2     | Date: Time:  | Received by (Signatu                       |               | th             |                  | 8/20             | 0 0G                   | 30             | maochoa@j          |                                      |
| Relings | -  | stewator   |      | W-Wat | Date: Time:  | N.   | Sa            | T<br>coal tube |                  | Date:<br>8 200   | 0 09                   | 3D             |                    |                                      |
| Relinqu | uished by (Signature)<br>ww-wa                 |            |      |       | Date: Time:  | pid A - Air Bag<br>P/O - Plastic or other_ | Sw.<br>c.char | coal tube      |                  | SI, - Sludge     |                        |                | maochoa@r          |                                      |

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Entire Report Reviewed By:

Project Number:

Description:

Report To:

Ayisha Raza 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

Released to Imaging: %/372022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1411747

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Ss Cn Sr Qc Gl AI Sc

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| <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 |

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### SAMPLE SUMMARY

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|   |           |          | Collected by   | Collected date/tim | e Received date | e/time         |
|---|-----------|----------|----------------|--------------------|-----------------|----------------|
| EFF-1 SEC. 31 L1411747-01 Air                     |           |          | Aaron Adams    | 09/30/21 16:13     | 10/01/21 09:0   | C              |
| Method  | Batch     | Dilution | Preparation    | Analysis           | Analyst         | Location       |
|   |           |          | date/time      | date/time          |                 |                |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1749970 | 2000     | 10/01/21 21:18 | 10/01/21 21:18     | CEP             | Mt. Juliet, TN |

| <sup>3</sup> Ss |
|-----------------|
| <sup>4</sup> Cn |
| <sup>5</sup> Sr |
| <sup>6</sup> Qc |
| <sup>7</sup> Gl |
| <sup>8</sup> Al |
| ⁰Sc             |

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### CASE NARRATIVE

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.

Ayisha Raza Project Manager



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# SAMPLE RESULTS - 01

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### Volatile Organic Compounds (MS) by Method M18-Mod

| -                          |           |          |          |         |         |         |           |          |           |  |  |  |
|----------------------------|-----------|----------|----------|---------|---------|---------|-----------|----------|-----------|--|--|--|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2    | Result  | Result  | Qualifier | Dilution | Batch     |  |  |  |
| Analyte                    |           |          | ppbv     | ug/m3   | ppbv    | ug/m3   |           |          |           |  |  |  |
| Benzene                    | 71-43-2   | 78.10    | 400      | 1280    | ND      | ND      |           | 2000     | WG1749970 |  |  |  |
| Toluene                    | 108-88-3  | 92.10    | 1000     | 3770    | 4780    | 18000   |           | 2000     | WG1749970 |  |  |  |
| Ethylbenzene               | 100-41-4  | 106      | 400      | 1730    | 807     | 3500    |           | 2000     | WG1749970 |  |  |  |
| m&p-Xylene                 | 1330-20-7 | 106      | 800      | 3470    | 6850    | 29700   |           | 2000     | WG1749970 |  |  |  |
| o-Xylene                   | 95-47-6   | 106      | 400      | 1730    | 2440    | 10600   |           | 2000     | WG1749970 |  |  |  |
| Methyl tert-butyl ether    | 1634-04-4 | 88.10    | 400      | 1440    | ND      | ND      |           | 2000     | WG1749970 |  |  |  |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 400000   | 1650000 | 1750000 | 7230000 |           | 2000     | WG1749970 |  |  |  |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |         | 93.0    |         |           |          | WG1749970 |  |  |  |
|                            |           |          |          |         |         |         |           |          |           |  |  |  |

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Volatile Organic Compounds (MS) by Method M18-Mod

# QUALITY CONTROL SUMMARY

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### Method Blank (MB)

| (MB) R3711626-3 10 | 0/01/21 11:49 |
|--------------------|---------------|
|--------------------|---------------|

|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
|----------------------------|-----------|--------------|--------|----------|
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| MTBE                       | U         |              | 0.0647 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | 0.149     | J            | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |
| (S) 1,4-Bromofluorobenzene | 87.0      |              |        | 60.0-140 |

### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3711626-1 10/01/21  | 10:23 • (LCSD) | R3711626-2 10 | /01/21 11:07 |          |           |             |               |                |       |            |
|----------------------------|----------------|---------------|--------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                            | Spike Amount   | LCS Result    | LCSD Result  | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
| Analyte                    | ppbv           | ppbv          | ppbv         | %        | %         | %           |               |                | %     | %          |
| MTBE                       | 3.75           | 4.04          | 3.96         | 108      | 106       | 70.0-130    |               |                | 2.00  | 25         |
| Benzene                    | 3.75           | 3.90          | 3.99         | 104      | 106       | 70.0-130    |               |                | 2.28  | 25         |
| Toluene                    | 3.75           | 4.04          | 4.03         | 108      | 107       | 70.0-130    |               |                | 0.248 | 25         |
| Ethylbenzene               | 3.75           | 4.27          | 4.21         | 114      | 112       | 70.0-130    |               |                | 1.42  | 25         |
| m&p-Xylene                 | 7.50           | 8.91          | 8.64         | 119      | 115       | 70.0-130    |               |                | 3.08  | 25         |
| o-Xylene                   | 3.75           | 4.39          | 4.33         | 117      | 115       | 70.0-130    |               |                | 1.38  | 25         |
| TPH (GC/MS) Low Fraction   | 203            | 246           | 244          | 121      | 120       | 70.0-130    |               |                | 0.816 | 25         |
| (S) 1,4-Bromofluorobenzene |                |               |              | 93.0     | 92.8      | 60.0-140    |               |                |       |            |

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### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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The identification of the analyte is acceptable; the reported value is an estimate.

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### Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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| 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            |
| daho                          | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                       | 200008      | Oklahoma                    | 9915             |
| Indiana                       | C-TN-01     | Oregon                      | TN200002         |
| owa                           | 364         | Pennsylvania                | 68-02979         |
| Kansas                        | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup>        | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>         | 16          | South Dakota                | n/a              |
| Louisiana                     | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                      | LA018       | Texas                       | T104704245-20-18 |
| Maine                         | TN00003     | Texas ⁵                     | 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.

SDG: L1411747

Relea

# D155

CHAIN OF CUSTODY RECORD

|             |           |         |        | Laboratory:    | Laboratory: ESC<br>Address: 12065 Lebanon Rd |  |             |              |                    | NALYS       |           |                 |          |           | LAB USE ONLY<br>DUE DATE: |   |   |  |
|-------------|-----------|---------|--------|----------------|--|--|-------------|--------------|--------------------|-------------|-----------|-----------------|----------|-----------|---------------------------|---|---|--|
|             |           |         |        |                |  | Address:   |             |              | anon Ko<br>TN 3712 |             | R         | EQUES           | TED      | -         | <u> </u>                  | -   | TEMP OF COOLER                          |  |
|             | -         |         |        |                |  |  |             | Junch,       | 114 J/16           |             | -         | -               | -        | -         | $\vdash$                  | _   | WHEN RECEIVED (°C)                      |  |
| fice Loo    | ation     | Lubb    | oock   |                |  | Phone:   | (800        | 0) 767-      | 5859               |             |           |                 | _        |           |                           |   |   |  |
|             |           |         |        |                |  | Contact:   |             | -1           |                    |             | · 1       |                 | Extended |           |                           |   | Page <u>1</u> of <u>1</u>               |  |
| oject M     | anager    | Bret    | t Den  | nis            |  | SRS #:   |             |              | 2009-084           |             |           |                 | ten      | 1         |                           |   | 1080                                    |  |
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| ject N      | umber     |         |        | Pro            | ject Name                                    |  |             | ne           | No Type            | e of Contai | are       | Method          | po       |           |                           |   |   |  |
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| T           |           | 17005   |        | -              |  | DUF JEL. JI  | T ÷         | T =          | bag                |             |           | - I '           | 2 A      |           |                           |   |   | in the second  |
| Da          | te        | Time    | Comp   | Grab           | Identifying M                                | Marks of Sample(s)   | Start Depth | End Depth    | ar                 |             |           | E X             | (EPA     |           |                           |   | 1 - A - A - A - A - A - A - A - A - A - | ·····································  |
|             |           |         | 8      | 5              |  | ,  | Start       | End          | tedlar             |             |           | BTEX            | E        |           |                           |   | Lab Sample ID                           | 1.11   |
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| 5750        | 2021      | 10,15   | +      |                |  |  | +           | +            |                    |             |           | ^               | <u>^</u> | -         |                           |   | -01                                     | Contraction of the Contraction o |
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| NAROUI      | ND TIME   |         |        | Nor            | mal 48-Hour F                                | Rush 24-Hour Rush  |             | TRRP         | Laborat            | ory Review  | v Checkli | ist             | -        | Yes       |                           | and the second se |   |  |
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| ished by (S | ignature) | MIL.    |        |                | Date   | Time: Received by (Signature   | 4           |              |                    | Date:       | Tim       | NA:             | _        |           |                           |   |   | 1  |
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| ished by (5 | ignature) |         |        |                | Date: 1                                      | Time: Received by (Signature   | 1           | 17           | 7/1                | Ent /       | I Tim     | àna             | _        |           | D@TER                     |   |   |  |
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|             | WW-Was    | tewater |        | W - Water      | S - Soil                                     | L-Liquid A-Ar Bag  | C - Chan    | coal tube    | 8.                 | Sludge      |           |                 |          |           |                           |   |   |  |
| r.          | V0A - 40  | ml vial |        | VG - Amber Gla |  |  |             |              |                    | 10.00       |           |                 |          |           |                           |   |   |  |
|             |           |         |        |                | Lubbook Offic                                | ce = 5827 50th Street, S   | uite 1      |              | ubbool             | Tavaa       | 70424     | - 0/            | 00 200   | 0440      |                           |   |   |  |
|             |           |         |        |                | LUDDOCK OTTIC                                | ie 🖩 3027 30th Street, 3   | unte        |              | ubboci             | , lexas     | 1 9424    |                 | 10-200   | -0140     |                           |   |   |  |
|             |           |         |        |                |  | Responsive   | Res         | ource        | ful m f            | Reliable    |           |                 |          |           |                           |   |   |  |
|             |           |         |        |                |  |  |             |              |                    |             |           |                 |          |           |                           | 0   | [                                       |  |
|             |           | · ·     |        |                |  |  |             |              |                    |             |           |                 |          |           | Y                         | ()  | V                                       |  |
|             |           |         |        |                | Sample Rece                                  | ipt Checklist  |             |              |                    |             |           |                 |          |           | t                         | TW  | 1U.                                     |  |
|             |           |         |        |                | sent/Intact: _Y                              | N If Applicable<br>N VOA Zero Headspace:   | Y           | N            |                    |             |           |                 |          |           | 1                         | 11  |   |  |
|             |           |         |        |                | courate:<br>ve intact:                       | N Pres.Correct/Check:  | Y_          | N            |                    |             |           |                 |          |           |                           |   |   |  |
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|             |           | Co      |        |                | les used: 1/                                 | N  |             |              |                    |             |           |                 |          |           |                           |   |   |  |
|             |           | Co      | ffic   | ient vo        | les used:<br>olume sent:<br>0.5 mR/hr:       | N<br>N<br>N  |             |              |                    | 284         | 1 5       | 30/             | 10       | _         | 11-                       |   |   |  |

Received by OCD: 3/28/2022 9:18:57 AM

# 🛟 eurofins

# Environment Testing America

# **ANALYTICAL REPORT**

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8 Lubbock, TX 79424 Tel: (806)794-1296

### Laboratory Job ID: 820-2844-1

Laboratory Sample Delivery Group: AR217009 Client Project/Site: DCP Sec 31

### For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

### Attn: Brett Dennis

VRAMER

Authorized for release by: 12/14/2021 4:52:27 PM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Ask-

The

Expert

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•

Laboratory Job ID: 820-2844-1 SDG: AR217009

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Coliform MCLs

- Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

### Warranties, Terms, and Conditions

Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

• Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

• Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

• EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

• Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

• The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

VRAMER

Jessica Kramer Project Manager 12/14/2021 4:52:27 PM

Laboratory Job ID: 820-2844-1 SDG: AR217009

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## **Definitions/Glossary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

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## Job ID: 820-2844-1 SDG: AR217009

## Qualifiers

| GC VOA    |  |   |
|-----------|--|---|
| Qualifier | Qualifier Description                                    |   |
| S1+       | Surrogate recovery exceeds control limits, high biased.  |   |
| U         | Indicates the analyte was analyzed for but not detected. | 5 |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|---|
| a              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery  |
| CFL            | Contains Free Liquid  |
| CFU            | Colony Forming Unit   |
| CNF            | Contains No Free Liquid   |
| DER            | Duplicate Error Ratio (normalized absolute difference)  |
| Dil Fac        | Dilution Factor   |
| DL             | Detection Limit (DoD/DOE)   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)   |
| EDL            | Estimated Detection Limit (Dioxin)  |
| LOD            | Limit of Detection (DoD/DOE)  |
| LOQ            | Limit of Quantitation (DoD/DOE)   |
| MCL            | EPA recommended "Maximum Contaminant Level"   |
| MDA            | Minimum Detectable Activity (Radiochemistry)  |
| MDC            | Minimum Detectable Concentration (Radiochemistry)   |
| MDL            | Method Detection Limit  |
| ML             | Minimum Level (Dioxin)  |
| MPN            | Most Probable Number  |
| MQL            | Method Quantitation Limit   |
| NC             | Not Calculated  |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)  |
| NEG            | Negative / Absent   |
| POS            | Positive / Present  |
| PQL            | Practical Quantitation Limit  |
| PRES           | Presumptive   |
| QC             | Quality Control   |
| RER            | Relative Error Ratio (Radiochemistry)   |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)   |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)   |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)   |
| TNTC           | Too Numerous To Count   |

**Case Narrative** 

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2844-1 SDG: AR217009

## Job ID: 820-2844-1

### Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative 820-2844-1

### Receipt

The samples were received on 12/10/2021 8:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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## **Client Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2844-1 SDG: AR217009

Matrix: Water

Lab Sample ID: 820-2844-1

## Client Sample ID: MW-2 Date Collected: 12/09/21 09:51 Date Received: 12/10/21 08:46

| Analyte   | Result              | Qualifier | RL       | MDL | Unit | D        | Prepared | Analyzed       | Dil Fac |
|---|---------------------|-----------|----------|-----|------|----------|----------|----------------|---------|
| Benzene   | <0.00200            | U         | 0.00200  |     | mg/L |          |          | 12/14/21 07:49 | 1       |
| Toluene   | <0.00200            | U         | 0.00200  |     | mg/L |          |          | 12/14/21 07:49 | 1       |
| Ethylbenzene  | <0.00200            | U         | 0.00200  |     | mg/L |          |          | 12/14/21 07:49 | 1       |
| m-Xylene & p-Xylene                                       | <0.00400            | U         | 0.00400  |     | mg/L |          |          | 12/14/21 07:49 | 1       |
| o-Xylene  | <0.00200            | U         | 0.00200  |     | mg/L |          |          | 12/14/21 07:49 | 1       |
| Xylenes, Total  | <0.00400            | U         | 0.00400  |     | mg/L |          |          | 12/14/21 07:49 | 1       |
| Surrogate   | %Recovery           | Qualifier | Limits   |     |      |          | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr)                               | 262                 | S1+       | 70 - 130 |     |      |          |          | 12/14/21 07:49 | 1       |
| 1,4-Difluorobenzene (Surr)                                | 182                 | S1+       | 70 - 130 |     |      |          |          | 12/14/21 07:49 | 1       |
| Method: Total BTEX - Total                                | BTEX Calcula        | tion      |          |     |      |          |          |                |         |
| Analyte   | Result              | Qualifier | RL       | MDL | Unit | D        | Prepared | Analyzed       | Dil Fac |
| Total BTEX  | <0.00400            | U         | 0.00400  |     | mg/L |          |          | 12/14/21 16:08 | 1       |
| ate Collected: 12/09/21 10:<br>ate Received: 12/10/21 08: |                     |           |          |     |      |          |          | Matrix         |         |
| Method: 8021B - Volatile O                                | -                   |           |          |     |      | _        |          |                |         |
| Analyte   |                     | Qualifier |          | MDL | Unit | <u>D</u> | Prepared | Analyzed       | Dil Fac |
| Benzene   | < 0.00200           |           | 0.00200  |     | mg/L |          |          | 12/14/21 08:16 | 1       |
| Toluene   | < 0.00200           |           | 0.00200  |     | mg/L |          |          | 12/14/21 08:16 | 1       |
| Ethylbenzene  | <0.00200            |           | 0.00200  |     | mg/L |          |          | 12/14/21 08:16 |         |
| m-Xylene & p-Xylene                                       | <0.00400            |           | 0.00400  |     | mg/L |          |          | 12/14/21 08:16 | 1       |
| o-Xylene  | < 0.00200           |           | 0.00200  |     | mg/L |          |          | 12/14/21 08:16 | 1       |
| Xylenes, Total  | <0.00400            | 0         | 0.00400  |     | mg/L |          |          | 12/14/21 08:16 | 1       |
| Surrogate   | %Recovery           | Qualifier | Limits   |     |      |          | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr)                               | 235                 | S1+       | 70 - 130 |     |      |          |          | 12/14/21 08:16 | 1       |
| 1,4-Difluorobenzene (Surr)                                | 171                 | S1+       | 70 - 130 |     |      |          |          | 12/14/21 08:16 | 1       |
| Method: Total BTEX - Total                                | <b>BTEX</b> Calcula | tion      |          |     |      |          |          |                |         |
| Analyte   | Result              | Qualifier | RL       | MDL | Unit | D        | Prepared | Analyzed       | Dil Fac |
| Total BTEX  | <0.00400            | U         | 0.00400  |     | mg/L |          |          | 12/14/21 16:08 | 1       |
| lient Sample ID: MW-4                                     | •                   |           |          |     |      |          | Lab Sam  | ole ID: 820-2  | 2844-3  |
| ate Collected: 12/09/21 11:<br>ate Received: 12/10/21 08: | 21                  |           |          |     |      |          |          | Matrix         |         |
| Method: 8021B - Volatile O                                | · · · ·             |           |          |     |      |          |          |                |         |
| Analyte   | Result              | Qualifier | RL       | MDL | Unit | D        | Prepared | Analyzed       | Dil Fac |
| Benzene   | <0.00200            |           | 0.00200  |     | mg/L |          |          | 12/14/21 08:43 |         |

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 08:43 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 08:43 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 08:43 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 12/14/21 08:43 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 08:43 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 12/14/21 08:43 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 268       | S1+       | 70 - 130 |     |      | - |          | 12/14/21 08:43 | 1       |
| 1,4-Difluorobenzene (Surr)  | 193       | S1+       | 70 - 130 |     |      |   |          | 12/14/21 08:43 | 1       |
|                             |           |           |          |     |      |   |          |                |         |

Eurofins Xenco, Lubbock

## **Client Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-2844-1 SDG: AR217009

### **Client Sample ID: MW-4** Date Collected: 12/09/21 11:21 Date Received: 12/10/21 08:46

| Method: Total BTEX - Total BT<br>Analyte |          | tion<br>Qualifier | RL      | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|--|----------|-------------------|---------|-----|------|---|----------|----------------|---------|
| Total BTEX                               | <0.00400 | U                 | 0.00400 |     | mg/L |   |          | 12/14/21 16:08 | 1       |
| Client Sample ID: MW-3                   |          |                   |         |     |      |   | Lab Sam  | ole ID: 820-2  | 844-4   |

### **Client Sample ID: MW-3** Date Collected: 12/09/21 12:03

Date Received: 12/10/21 08:46

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| Method: 8021B - Volatile O  | rganic Compo | unds (GC) |          |     |      |   |          |                |         |
|-----------------------------|--------------|-----------|----------|-----|------|---|----------|----------------|---------|
| Analyte                     | Result       | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                     | <0.00200     | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:10 | 1       |
| Toluene                     | <0.00200     | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:10 | 1       |
| Ethylbenzene                | <0.00200     | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:10 | 1       |
| m-Xylene & p-Xylene         | <0.00400     | U         | 0.00400  |     | mg/L |   |          | 12/14/21 09:10 | 1       |
| o-Xylene                    | <0.00200     | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:10 | 1       |
| Xylenes, Total              | <0.00400     | U         | 0.00400  |     | mg/L |   |          | 12/14/21 09:10 | 1       |
| Surrogate                   | %Recovery    | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 279          | S1+       | 70 - 130 |     |      |   |          | 12/14/21 09:10 | 1       |
| 1,4-Difluorobenzene (Surr)  | 202          | S1+       | 70 - 130 |     |      |   |          | 12/14/21 09:10 | 1       |
| Method: Total BTEX - Total  | BTEX Calcula | tion      |          |     |      |   |          |                |         |
| Analyte                     | Result       | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
| Total BTEX                  | < 0.00400    | U         | 0.00400  |     | mg/L |   |          | 12/14/21 16:08 | 1       |

## **Client Sample ID: MW-5**

Date Collected: 12/09/21 13:15 Date Received: 12/10/21 08:46

| Analyte                     | Result    | Qualifier | RL       | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------|----------------|---------|
| Benzene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:36 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:36 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:36 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 12/14/21 09:36 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   |          | 12/14/21 09:36 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   |          | 12/14/21 09:36 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 269       | S1+       | 70 - 130 |     |      | - |          | 12/14/21 09:36 | 1       |
| 1,4-Difluorobenzene (Surr)  | 190       | S1+       | 70 - 130 |     |      |   |          | 12/14/21 09:36 | 1       |

| Method: Total BTEX - Total B | EX Calcula | tion      |         |     |      |   |          |                |         |
|------------------------------|------------|-----------|---------|-----|------|---|----------|----------------|---------|
| Analyte                      | Result     | Qualifier | RL      | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
| Total BTEX                   | <0.00400   | U         | 0.00400 |     | mg/L |   |          | 12/14/21 16:08 | 1       |
| Client Sample ID: Dup-1      |            |           |         |     |      |   | _ab Samp | ole ID: 820-2  | 844-6   |

### Client Sample ID: Dup-1 Date Collected: 12/09/21 00:00 Date Received: 12/10/21 08:46

| Method: 8021B - Volatile Orgar | nic Compo | unds (GC) |         |     |      |   |          |                |         |
|--------------------------------|-----------|-----------|---------|-----|------|---|----------|----------------|---------|
| Analyte                        | Result    | Qualifier | RL      | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                        | <0.00200  | U         | 0.00200 |     | mg/L |   |          | 12/14/21 10:02 | 1       |
| Toluene                        | <0.00200  | U         | 0.00200 |     | mg/L |   |          | 12/14/21 10:02 | 1       |

Eurofins Xenco, Lubbock

Lab Sample ID: 820-2844-5

**Matrix: Water** 

Lab Sample ID: 820-2844-3 **Matrix: Water** 5 **Matrix: Water** 

Matrix: Water

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### Client Sample ID: Dup-1 Date Collected: 12/09/21 00:00 Date Received: 12/10/21 08:46

| Lab Sample ID: 820-2844-6 |
|---------------------------|
| Matrix: Water             |
| <br>                      |

| Analyte                     | Result                | Qualifier | RL             | MDL | Unit | D | Prepared | Analyzed                   | Dil Fac      |  |
|-----------------------------|-----------------------|-----------|----------------|-----|------|---|----------|----------------------------|--------------|--|
| Ethylbenzene                | <0.00200              | U         | 0.00200        |     | mg/L |   |          | 12/14/21 10:02             | 1            |  |
| m-Xylene & p-Xylene         | <0.00400              | U         | 0.00400        |     | mg/L |   |          | 12/14/21 10:02             | 1            |  |
| o-Xylene                    | <0.00200              | U         | 0.00200        |     | mg/L |   |          | 12/14/21 10:02             | 1            |  |
| Xylenes, Total              | <0.00400              | U         | 0.00400        |     | mg/L |   |          | 12/14/21 10:02             | 1            |  |
| Surrogate                   | %Recovery             | Qualifier | Limits         |     |      |   | Prepared | Analyzed                   | Dil Fac      |  |
| 4-Bromofluorobenzene (Surr) |                       | S1+       | 70 - 130       |     |      |   |          | 12/14/21 10:02             | 1            |  |
|                             | 201                   | •         |                |     |      |   |          |                            |              |  |
| 1,4-Difluorobenzene (Surr)  |                       | S1+       | 70 - 130       |     |      |   |          | 12/14/21 10:02             | 1            |  |
| 1,4-Difluorobenzene (Surr)  | 202                   | S1+       | 70 - 130       |     |      |   |          | 12/14/21 10:02             | 1            |  |
| ( )                         | 202<br>I BTEX Calcula | S1+       | 70 - 130<br>RL | MDL | Unit | D | Prepared | 12/14/21 10:02<br>Analyzed | 1<br>Dil Fac |  |

## **Surrogate Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

## Method: 8021B - Volatile Organic Compounds (GC) **Matrix: Water**

|  |                        |          | Percent Surrogate Recovery | (Acceptance Limits) |   |
|--|------------------------|----------|----------------------------|---------------------|---|
|  |                        | BFB1     | DFBZ1                      |                     |   |
| Lab Sample ID                            | Client Sample ID       | (70-130) | 70-130)                    |                     | 5 |
| 820-2844-1                               | MW-2                   | 262 S1+  | 82 S1+                     |                     |   |
| 820-2844-2                               | MW-6                   | 235 S1+  | 71 S1+                     |                     | 6 |
| 820-2844-3                               | MW-4                   | 268 S1+  | 93 S1+                     |                     |   |
| 820-2844-4                               | MW-3                   | 279 S1+  | 202 S1+                    |                     |   |
| 820-2844-5                               | MW-5                   | 269 S1+  | 90 S1+                     |                     |   |
| 820-2844-6                               | Dup-1                  | 281 S1+  | 202 S1+                    |                     | 8 |
| 880-9241-A-1 MS                          | Matrix Spike           | 221 S1+  | 63 S1+                     |                     | 0 |
| 880-9241-A-1 MSD                         | Matrix Spike Duplicate | 225 S1+  | 72 S1+                     |                     | 0 |
| LCS 880-14591/34                         | Lab Control Sample     | 187 S1+  | 123                        |                     | 3 |
| LCSD 880-14591/35                        | Lab Control Sample Dup | 187 S1+  | 115                        |                     |   |
| MB 880-14524/5-A                         | Method Blank           | 106      | 49 S1+                     |                     |   |
| MB 880-14591/39                          | Method Blank           | 129      | 75 S1+                     |                     |   |
| Ourse mater I amound                     |                        |          |                            |                     |   |
| Surrogate Legend<br>BFB = 4-Bromofluorob |                        |          |                            |                     |   |

omofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Job ID: 820-2844-1 SDG: AR217009

Prep Type: Total/NA

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## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Lab Sample ID: MB 880-14524/5-A

Matrix: Water

## Method: 8021B - Volatile Organic Compounds (GC)

| Analysis Batch: 14591       | МВ        | МВ        |          |     |      |   |                | Prep Batch:    | 14324   |
|-----------------------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| Analyte                     |           | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Benzene                     | <0.00200  | U         | 0.00200  |     | mg/L |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  |     | mg/L |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  |     | mg/L |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  |     | mg/L |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  |     | mg/L |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  |     | mg/L |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
|                             | MB        | МВ        |          |     |      |   |                |                |         |
| Surrogate                   | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 106       |           | 70 - 130 |     |      |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |
| 1,4-Difluorobenzene (Surr)  | 149       | S1+       | 70 - 130 |     |      |   | 12/13/21 07:35 | 12/13/21 11:04 | 1       |

### Lab Sample ID: MB 880-14591/39 Matrix: Water Analysis Batch: 14591

|                             | MB        | МВ        |          |       |      |   |          |                |         |
|-----------------------------|-----------|-----------|----------|-------|------|---|----------|----------------|---------|
| Analyte                     | Result    | Qualifier | RL       | MDL U | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                     | <0.00200  | U         | 0.00200  | r     | mg/L |   |          | 12/14/21 01:16 | 1       |
| Toluene                     | <0.00200  | U         | 0.00200  | r     | mg/L |   |          | 12/14/21 01:16 | 1       |
| Ethylbenzene                | <0.00200  | U         | 0.00200  | r     | mg/L |   |          | 12/14/21 01:16 | 1       |
| m-Xylene & p-Xylene         | <0.00400  | U         | 0.00400  | r     | mg/L |   |          | 12/14/21 01:16 | 1       |
| o-Xylene                    | <0.00200  | U         | 0.00200  | r     | mg/L |   |          | 12/14/21 01:16 | 1       |
| Xylenes, Total              | <0.00400  | U         | 0.00400  | r     | mg/L |   |          | 12/14/21 01:16 | 1       |
|                             | MB        | MB        |          |       |      |   |          |                |         |
| Surrogate                   | %Recovery | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 129       |           | 70 - 130 |       |      | - |          | 12/14/21 01:16 | 1       |
| 1,4-Difluorobenzene (Surr)  | 175       | S1+       | 70 - 130 |       |      |   |          | 12/14/21 01:16 | 1       |

### Lab Sample ID: LCS 880-14591/34 Matrix: Water Analysis Batch: 14591

|                     | Spike | LCS    | LCS       |      |   |      | %Rec.    |  |
|---------------------|-------|--------|-----------|------|---|------|----------|--|
| Analyte             | Added | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| Benzene             | 0.100 | 0.1098 |           | mg/L |   | 110  | 70 - 130 |  |
| Toluene             | 0.100 | 0.1093 |           | mg/L |   | 109  | 70 - 130 |  |
| Ethylbenzene        | 0.100 | 0.1092 |           | mg/L |   | 109  | 70 - 130 |  |
| m-Xylene & p-Xylene | 0.200 | 0.2343 |           | mg/L |   | 117  | 70 - 130 |  |
| o-Xylene            | 0.100 | 0.1150 |           | mg/L |   | 115  | 70 - 130 |  |

|                             | LCS       | LCS       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 187       | S1+       | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 123       |           | 70 - 130 |

## Lab Sample ID: LCSD 880-14591/35 Matrix: Water A

| Analysis Batch: 14591 |       |        |           |      |   |      |          |     |       |
|-----------------------|-------|--------|-----------|------|---|------|----------|-----|-------|
|                       | Spike | LCSD   | LCSD      |      |   |      | %Rec.    |     | RPD   |
| Analyte               | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |
| Benzene               | 0.100 | 0.1118 |           | mg/L |   | 112  | 70 - 130 | 2   | 20    |

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Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Job ID: 820-2844-1

## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

4 5 6

7

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

| Lab Sample ID: LCSD 88<br>Matrix: Water<br>Analysis Batch: 14591  | 0-14591/35           |           |          |        | C         | Client Sa    | Imple | ID: Lat   | Control<br>Prep Ty     |     |       |   |
|---|----------------------|-----------|----------|--------|-----------|--------------|-------|-----------|------------------------|-----|-------|---|
| Analysis Batch. 14001   |                      |           | Spike    | LCSD   | LCSD      |              |       |           | %Rec.                  |     | RPD   |   |
| Analyte   |                      |           | Added    | -      | Qualifier | Unit         | D     | %Rec      | Limits                 | RPD | Limit |   |
| Toluene   |                      |           | 0.100    | 0.1049 |           | mg/L         |       | 105       | 70 - 130               | 4   | 20    |   |
| Ethylbenzene  |                      |           | 0.100    | 0.1064 |           | mg/L         |       | 106       | 70 - 130               | 3   | 20    |   |
| m-Xylene & p-Xylene   |                      |           | 0.200    | 0.2255 |           | mg/L         |       | 113       | 70 - 130               | 4   | 20    |   |
| o-Xylene  |                      |           | 0.100    | 0.1131 |           | mg/L         |       | 113       | 70 - 130               | 2   | 20    |   |
|   | LCSD                 | LCSD      |          |        |           |              |       |           |                        |     |       |   |
| Surrogate   | %Recovery            |           | Limits   |        |           |              |       |           |                        |     |       |   |
| 4-Bromofluorobenzene (Surr)                                       |                      | S1+       | 70 - 130 |        |           |              |       |           |                        |     |       |   |
| 1,4-Difluorobenzene (Surr)  | 115                  |           | 70 - 130 |        |           |              |       |           |                        |     |       |   |
| Lab Sample ID: 880-9241<br>Matrix: Water<br>Analysis Batch: 14591 | MS                   | MS        |          |        |           |              | C     | lient Sa  | mple ID:  <br>Prep Ty  |     |       |   |
| Surrogate   | %Recovery            |           | Limits   |        |           |              |       |           |                        |     |       | 2 |
| 4-Bromofluorobenzene (Surr)                                       |                      | S1+       | 70 - 130 |        |           |              |       |           |                        |     |       |   |
| 1,4-Difluorobenzene (Surr)  | 163                  | S1+       | 70 - 130 |        |           |              |       |           |                        |     |       |   |
| Lab Sample ID: 880-9241<br>Matrix: Water                          | -A-1 MSD             |           |          |        |           | Client       | Samp  | ole ID: N | latrix Spil<br>Prep Ty |     |       |   |
| Analysis Batch: 14591   | Sample               | Sample    | Spike    | Men    | MSD       |              |       |           | %Rec.                  |     | RPD   |   |
| Analyte   | •                    | Qualifier | Added    |        | Qualifier | Unit         | D     | %Rec      | Limits                 | RPD | Limit |   |
| Benzene   | <0.00200             |           | 0.100    | 0.1432 |           | mg/L         |       |           |                        |     |       |   |
|   |                      |           | 0.100    | 0.1358 |           | mg/L         |       |           |                        |     |       |   |
| Toluene   | < 0.00200            | U         | 0.100    | 0.1000 |           |              |       |           |                        |     |       |   |
| Toluene<br>Ethylbenzene   | <0.00200<br><0.00200 |           | 0.100    | 0.1408 |           | 0            |       |           |                        |     |       |   |
|   |                      | U         |          |        |           | mg/L<br>mg/L |       |           |                        |     |       |   |

|                             | MSD       | MSD       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 225       | S1+       | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 172       | S1+       | 70 - 130 |

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## **QC Association Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2844-1 SDG: AR217009

## GC VOA

## Prep Batch: 14524

| Lab Sample ID<br>MB 880-14524/5-A | Client Sample ID<br>Method Blank | Prep Type<br>Total/NA | Matrix<br>Water | Method 5035 | Prep Batch |
|-----------------------------------|----------------------------------|-----------------------|-----------------|-------------|------------|
| Analysis Batch: 14591             |                                  |                       |                 |             |            |

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 820-2844-1        | MW-2                   | Total/NA  | Water  | 8021B  |            |
| 820-2844-2        | MW-6                   | Total/NA  | Water  | 8021B  |            |
| 820-2844-3        | MW-4                   | Total/NA  | Water  | 8021B  |            |
| 820-2844-4        | MW-3                   | Total/NA  | Water  | 8021B  |            |
| 820-2844-5        | MW-5                   | Total/NA  | Water  | 8021B  |            |
| 820-2844-6        | Dup-1                  | Total/NA  | Water  | 8021B  |            |
| MB 880-14524/5-A  | Method Blank           | Total/NA  | Water  | 8021B  | 14524      |
| MB 880-14591/39   | Method Blank           | Total/NA  | Water  | 8021B  |            |
| LCS 880-14591/34  | Lab Control Sample     | Total/NA  | Water  | 8021B  |            |
| LCSD 880-14591/35 | Lab Control Sample Dup | Total/NA  | Water  | 8021B  |            |
| 880-9241-A-1 MS   | Matrix Spike           | Total/NA  | Water  | 8021B  |            |
| 880-9241-A-1 MSD  | Matrix Spike Duplicate | Total/NA  | Water  | 8021B  |            |

### Analysis Batch: 14793

| Lab Sample ID | Client Sample ID | Ргер Туре | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 820-2844-1    | MW-2             | Total/NA  | Water  | Total BTEX |            |
| 820-2844-2    | MW-6             | Total/NA  | Water  | Total BTEX |            |
| 820-2844-3    | MW-4             | Total/NA  | Water  | Total BTEX |            |
| 820-2844-4    | MW-3             | Total/NA  | Water  | Total BTEX |            |
| 820-2844-5    | MW-5             | Total/NA  | Water  | Total BTEX |            |
| 820-2844-6    | Dup-1            | Total/NA  | Water  | Total BTEX |            |

```
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```

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2844-1 SDG: AR217009

## Client Sample ID: MW-2 Date Collected: 12/09/21 09:51 Date Received: 12/10/21 08:46

Project/Site: DCP Sec 31

| Prep Type<br>Total/NA | Batch<br>Type<br>Analysis | Batch<br>Method<br>8021B | Run | Dil<br>Factor | Initial<br>Amount<br>5 mL | Final<br>Amount<br>5 mL | Batch<br>Number<br>14591 | Prepared<br>or Analyzed<br>12/14/21 07:49 | Analyst<br>MR | Lab<br>XEN MID |
|-----------------------|---------------------------|--------------------------|-----|---------------|---------------------------|-------------------------|--------------------------|---|---------------|----------------|
| Total/NA              | Analysis                  | Total BTEX               |     | 1             |                           |                         | 14793                    | 12/14/21 16:08                            | AJ            | XEN MID        |

### Client Sample ID: MW-6 Date Collected: 12/09/21 10:42 Date Received: 12/10/21 08:46

|                       | Batch                   | Batch        |     | Dil    | Initial        | Final          | Batch           | Prepared                      |               |                |
|-----------------------|-------------------------|--------------|-----|--------|----------------|----------------|-----------------|-------------------------------|---------------|----------------|
| Prep Type<br>Total/NA | <b>Type</b><br>Analysis | Method 8021B | Run | Factor | Amount<br>5 mL | Amount<br>5 mL | Number<br>14591 | or Analyzed<br>12/14/21 08:16 | Analyst<br>MR | Lab<br>XEN MID |
| Total/NA              | Analysis                | Total BTEX   |     | 1      |                |                | 14793           | 12/14/21 16:08                | AJ            | XEN MID        |

### Client Sample ID: MW-4 Date Collected: 12/09/21 11:21

Date Received: 12/10/21 08:46

|           | Batch    | Batch      |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|------------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method     | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 8021B      |     | 1      | 5 mL    | 5 mL   | 14591  | 12/14/21 08:43 | MR      | XEN MID |
| Total/NA  | Analysis | Total BTEX |     | 1      |         |        | 14793  | 12/14/21 16:08 | AJ      | XEN MID |

## Client Sample ID: MW-3

Date Collected: 12/09/21 12:03 Date Received: 12/10/21 08:46

|           | Batch    | Batch      |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|------------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method     | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 8021B      |     | 1      | 5 mL    | 5 mL   | 14591  | 12/14/21 09:10 | MR      | XEN MID |
| Total/NA  | Analysis | Total BTEX |     | 1      |         |        | 14793  | 12/14/21 16:08 | AJ      | XEN MID |

## Client Sample ID: MW-5

Date Collected: 12/09/21 13:15 Date Received: 12/10/21 08:46

|           | Batch    | Batch      |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|------------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method     | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 8021B      |     | 1      | 5 mL    | 5 mL   | 14591  | 12/14/21 09:36 | MR      | XEN MID |
| Total/NA  | Analysis | Total BTEX |     | 1      |         |        | 14793  | 12/14/21 16:08 | AJ      | XEN MID |

### Client Sample ID: Dup-1 Date Collected: 12/09/21 00:00 Date Received: 12/10/21 08:46

| Prep Type | Batch<br>Type | Batch<br>Method | Run | Dil<br>Factor | Initial<br>Amount | Final<br>Amount | Batch<br>Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|---------------|-----------------|-----|---------------|-------------------|-----------------|-----------------|----------------------|---------|---------|
| Total/NA  | Analysis      | 8021B           |     | 1             | 5 mL              | 5 mL            | 14591           | 12/14/21 10:02       | MR      | XEN MID |
| Total/NA  | Analysis      | Total BTEX      |     | 1             |                   |                 | 14793           | 12/14/21 16:08       | AJ      | XEN MID |

### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

SDG: AR217009 Lab Sample ID: 820-2844-1

**Matrix: Water** 

Matrix: Water

Matrix: Water

## Lab Sample ID: 820-2844-4

Lab Sample ID: 820-2844-5

Lab Sample ID: 820-2844-6

Lab Sample ID: 820-2844-2

Lab Sample ID: 820-2844-3

Matrix: Water

Matrix: Water

Matrix: Water

Eurofins Xenco, Lubbock

## **Accreditation/Certification Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2844-1 SDG: AR217009

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## Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority<br>Texas<br>The following analytes are included in this<br>the agency does not offer certification. |   | ogram                                 | Identification Number                                | Expiration Date<br>06-30-22<br>This list may include analytes for which |  |
|---|---|---------------------------------------|--|---|--|
|   |   | ELAP                                  | T104704400-21-22                                     |   |  |
|   |   |                                       |  |   |  |
| • •   | • | rt, but the laboratory is r           | not certified by the governing authority.            | This list may include analytes for which                                |  |
| • •   | • | rt, but the laboratory is r<br>Matrix | not certified by the governing authority.<br>Analyte | This list may include analytes for which                                |  |

## **Method Summary**

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-2844-1 SDG: AR217009

| Nethod    | Method Description              | Protocol | Laboratory |
|-----------|---------------------------------|----------|------------|
| 3021B     | Volatile Organic Compounds (GC) | SW846    | XEN MID    |
| otal BTEX | Total BTEX Calculation          | TAL SOP  | XEN MID    |
| 5030B     | Purge and Trap                  | SW846    | XEN MID    |

### **Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates. TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Lubbock

## Sample Summary

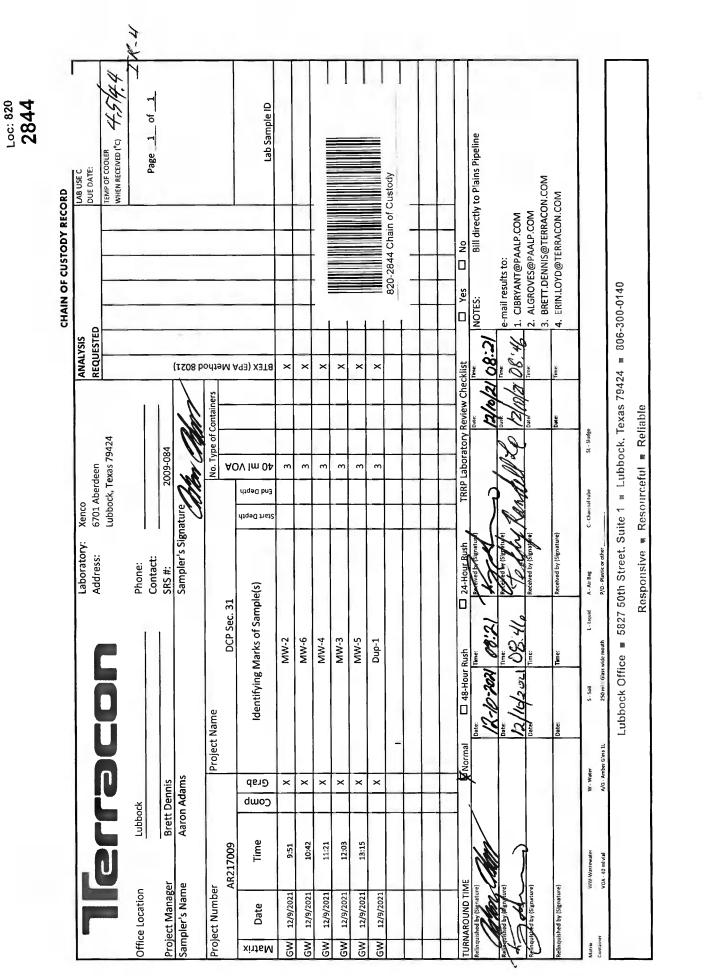
Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

| Job ID: 820-2844-1 |   |
|--------------------|---|
| SDG: AR217009      | ) |

| ob l | ID: 820-2844-1 |
|------|----------------|
| S    | DG: AR217009   |

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| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 820-2844-1    | MW-2             | Water  | 12/09/21 09:51 | 12/10/21 08:46 |
| 820-2844-2    | MW-6             | Water  | 12/09/21 10:42 | 12/10/21 08:46 |
| 820-2844-3    | MW-4             | Water  | 12/09/21 11:21 | 12/10/21 08:46 |
| 820-2844-4    | MW-3             | Water  | 12/09/21 12:03 | 12/10/21 08:46 |
| 820-2844-5    | MW-5             | Water  | 12/09/21 13:15 | 12/10/21 08:46 |
| 820-2844-6    | Dup-1            | Water  | 12/09/21 00:00 | 12/10/21 08:46 |



12/14/2021

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Job Number: 820-2844-1 SDG Number: AR217009

List Source: Eurofins Xenco, Lubbock

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Login Number: 2844 List Number: 1 Creator: Lee, Randell

<6mm (1/4").

| Question   | Answer | Comment |    |
|--|--------|---------|----|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |    |
| Sample custody seals, if present, are intact.                                    | N/A    |         |    |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         | 8  |
| Samples were received on ice.  | True   |         |    |
| Cooler Temperature is acceptable.  | True   |         | 9  |
| Cooler Temperature is recorded.  | True   |         |    |
| COC is present.  | True   |         |    |
| COC is filled out in ink and legible.  | True   |         |    |
| COC is filled out with all pertinent information.                                | True   |         |    |
| Is the Field Sampler's name present on COC?                                      | True   |         |    |
| There are no discrepancies between the containers received and the COC.          | True   |         |    |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         | 13 |
| Sample containers have legible labels.   | True   |         | 14 |
| Containers are not broken or leaking.  | True   |         |    |
| Sample collection date/times are provided.                                       | True   |         |    |
| Appropriate sample containers are used.  | True   |         |    |
| Sample bottles are completely filled.  | True   |         |    |
| Sample Preservation Verified.  | N/A    |         |    |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |    |
| Containers requiring zero headspace have no headspace or bubble is               | True   |         |    |

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## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2844-1 SDG Number: AR217009

## Login Number: 2844 List Source: Eurofins Xenco, Midland List Number: 2 List Creation: 12/13/21 07:54 AM Creator: Lowe, Katie

| Question   | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact.                                | True   |         |
| Sample custody seals, if present, are intact.                                    | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is               | True   |         |

<6mm (1/4").

Received by OCD: 3/28/2022 9:18:57 AM

# 🛟 eurofins

## Environment Testing America

## ANALYTICAL REPORT

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8 Lubbock, TX 79424 Tel: (806)794-1296

## Laboratory Job ID: 820-2845-1

Laboratory Sample Delivery Group: AR217009 Client Project/Site: DCP Sec 31

## For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

## Attn: Brett Dennis

VRAMER

Authorized for release by: 12/17/2021 1:59:11 PM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Visit us at: www.eurofinsus.com/Env

LINKS

Review your project results through

**Total** Access

**Have a Question?** 

Ask-

The

Expert

Released to Imaging: 8/3/2022 2:26:44 PM

Laboratory Job ID: 820-2845-1 SDG: AR217009

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Coliform MCLs

- Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

### Warranties, Terms, and Conditions

Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

• Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

• Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

• EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

• Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

• The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

VRAMER

Jessica Kramer Project Manager 12/17/2021 1:59:11 PM

Laboratory Job ID: 820-2845-1 SDG: AR217009

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Eurofins Xenco, Lubbock 12/17/2021

Contains No Free Liquid

Detection Limit (DoD/DOE)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number Method Quantitation Limit

Not Calculated

Negative / Absent

Positive / Present Practical Quantitation Limit

Presumptive

**Quality Control** 

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

**Dilution Factor** 

Duplicate Error Ratio (normalized absolute difference)

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

CNF

DER

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

ML

MPN

MQL NC

ND

NEG

POS

PQL PRES

QC

RL

RPD

TEF

TEQ

TNTC

RER

Dil Fac DL

DL, RA, RE, IN

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| ceived by OC                      | CD: 3/28/2022 9:18:57 AM Page 2  | 201 of 249 | 1 |
|-----------------------------------|--|------------|---|
|                                   | Definitions/Glossary   |            |   |
| Client: Terrac<br>Project/Site: I | con Consulting Eng & ScientistsJob ID: 820-2DCP Sec 31SDG: AR2                             |            |   |
| Qualifiers                        |  |            | 3 |
| GC/MS Semi                        | VOA  | _          |   |
| Qualifier                         | Qualifier Description  |            |   |
| *_                                | LCS and/or LCSD is outside acceptance limits, low biased.                                  |            |   |
| *1                                | LCS/LCSD RPD exceeds control limits.   |            | 5 |
| *3                                | ISTD response or retention time outside acceptable limits.                                 |            |   |
| S1-                               | Surrogate recovery exceeds control limits, low biased.                                     |            |   |
| U                                 | Indicates the analyte was analyzed for but not detected.                                   |            |   |
| Glossary                          |  |            |   |
| Abbreviation                      | These commonly used abbreviations may or may not be present in this report.                |            | 0 |
| ¤                                 | Listed under the "D" column to designate that the result is reported on a dry weight basis |            | D |
| %R                                | Percent Recovery   |            |   |
| CFL                               | Contains Free Liquid   |            | 9 |
| CFU                               | Colony Forming Unit  |            |   |
|                                   |  |            |   |

Eurofins Xenco, Lubbock

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**Case Narrative** 

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2845-1 SDG: AR217009

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4

### Job ID: 820-2845-1

### Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative 820-2845-1

#### Receipt

The samples were received on 12/10/2021 8:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was  $4.4^{\circ}$ C

### GC/MS Semi VOA

Method 8270D\_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-34187 and analytical batch 860-34198 recovered outside control limits for the following analytes: Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene.

Method 8270D\_SIM: The laboratory's SOP allows one of the base/neutral surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW-4 (820-2845-3). These results have been reported and qualified.

Method 8270D\_SIM: The laboratory control sample duplicate (LCSD) recovered outside control limit for Benzo[k]fluoranthene. The laboratory control sample (LCS) passed. Therefore, the samples have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## **Client Sample Results**

RL

0.000184

MDL Unit

mg/L

D

Prepared

12/14/21 12:02

12/14/21 12:02

12/14/21 12:05

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Result Qualifier

<0.000184 U

53

<0.000188 U

### **Client Sample ID: MW-2** Date Collected: 12/09/21 09:51

Date Received: 12/10/21 08:46

Analyte

1-Methylnaphthalene

| Nitrobenzene-d5        | 128       |            | 46 - 151 |      | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
|------------------------|-----------|------------|----------|------|----------------|----------------|---------|
| 2-Fluorobiphenyl       | 128       |            | 54 - 146 |      | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Surrogate              | %Recovery | Qualifier  | Limits   |      | Prepared       | Analyzed       | Dil Fac |
| Pyrene                 | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Phenanthrene           | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Naphthalene            | <0.00368  | U          | 0.00368  | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.000184 | U *3 *1    | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Fluorene               | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Fluoranthene           | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Dibenzofuran           | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Dibenz(a,h)anthracene  | <0.000184 | U *3 *1    | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Chrysene               | <0.000184 | U *1       | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Benzo[k]fluoranthene   | <0.000184 | U *- *3 *1 | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Benzo[g,h,i]perylene   | 0.000232  | *3 *1      | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Benzo[b]fluoranthene   | 0.000272  | *3 *1      | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Benzo[a]pyrene         | <0.000184 | U *3 *1    | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Benzo[a]anthracene     | <0.000184 | U *1       | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Anthracene             | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Acenaphthylene         | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| Acenaphthene           | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| 2-Methylnaphthalene    | <0.000184 | U          | 0.000184 | mg/L | 12/14/21 12:02 | 12/16/21 12:24 | 1       |
| i mourjinapricilaiono  | 0.000101  | •          | 0.000101 |      |                |                |         |

### **Client Sample ID: MW-6**

p-Terphenyl-d14

Pyrene

### Date Collected: 12/09/21 10:42 **Date Rece**

| Date Collected: 12/09/21 10:42<br>Date Received: 12/10/21 08:46 |                     |            |           |     |      |   |                | Matrix         | : Water |
|---|---------------------|------------|-----------|-----|------|---|----------------|----------------|---------|
| Method: 8270D SIM - Semivo                                      | olatile Organic Con | npounds (G | C/MS SIM) |     |      |   |                |                |         |
| Analyte   | Result              | Qualifier  | RL        | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
| 1-Methylnaphthalene   | <0.000188           | U          | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| 2-Methylnaphthalene   | <0.000188           | U          | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Acenaphthene  | <0.000188           | U          | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Acenaphthylene  | <0.000188           | U          | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Anthracene  | <0.000188           | U          | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Benzo[a]anthracene  | <0.000188           | U *1       | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Benzo[a]pyrene  | <0.000188           | U *1       | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Benzo[b]fluoranthene  | <0.000188           | U *1       | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Benzo[g,h,i]perylene  | <0.000188           | U *1       | 0.000188  |     | mg/L |   | 12/14/21 12:05 | 12/14/21 19:38 | 1       |

51 - 139

| • •                    |  |  |                                      | •                                    |   |                                      |
|------------------------|--|--|--------------------------------------|--------------------------------------|---|--------------------------------------|
| Benzo[g,h,i]perylene   | <0.000188  | U *1                                   | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Benzo[k]fluoranthene   | <0.000188  | U *- *1                                | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Chrysene               | <0.000188  | U *1                                   | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Dibenz(a,h)anthracene  | <0.000188  | U *1                                   | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Dibenzofuran           | <0.000188  | U                                      | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Fluoranthene           | <0.000188  | U                                      | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Fluorene               | <0.000188  | U                                      | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Indeno[1,2,3-cd]pyrene | <0.000188  | U *1                                   | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Naphthalene            | <0.00376   | U                                      | 0.00376                              | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
| Phenanthrene           | <0.000188  | U                                      | 0.000188                             | mg/L                                 | 12/14/21 12:05  | 12/14/21 19:38                       |
|                        | Benzo[k]fluoranthene<br>Chrysene<br>Dibenz(a,h)anthracene<br>Dibenzofuran<br>Fluoranthene<br>Fluorene<br>Indeno[1,2,3-cd]pyrene<br>Naphthalene | Benzo[k]fluoranthene         <0.000188 | Benzo[k]fluoranthene       <0.000188 | Benzo[k]fluoranthene       <0.000188 | Benzo[k]fluoranthene         <0.000188         U *- *1         0.000188         mg/L           Chrysene         <0.000188 | Benzo[k]fluoranthene       <0.000188 |

Eurofins Xenco, Lubbock

12/14/21 19:38

Job ID: 820-2845-1 SDG: AR217009

## Lab Sample ID: 820-2845-1

Analyzed

12/16/21 12:24

12/16/21 12:24

Lab Sample ID: 820-2845-2

1

1

1

1

1

1

1

1

1

1

Matrix: Water

Dil Fac

1

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5

0.000188

mg/L

Job ID: 820-2845-1

Lab Sample ID: 820-2845-2

Lab Sample ID: 820-2845-3

SDG: AR217009

Matrix: Water

Matrix: Water

## **Client Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### **Client Sample ID: MW-6** Date Collected: 12/09/21 10:42

Date Received: 12/10/21 08:46

| Surrogate        | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl | 123       |           | 54 - 146 | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| Nitrobenzene-d5  | 113       |           | 46 - 151 | 12/14/21 12:05 | 12/14/21 19:38 | 1       |
| p-Terphenyl-d14  | 55        |           | 51 _ 139 | 12/14/21 12:05 | 12/14/21 19:38 | 1       |

### **Client Sample ID: MW-4**

Date Collected: 12/09/21 11:21

## Date Received: 12/10/21 08:46 Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

| Analyte                | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| 1-Methylnaphthalene    | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| 2-Methylnaphthalene    | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Acenaphthene           | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Acenaphthylene         | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Anthracene             | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Benzo[a]anthracene     | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Benzo[a]pyrene         | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Benzo[b]fluoranthene   | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Benzo[g,h,i]perylene   | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Benzo[k]fluoranthene   | <0.000183 | U *- *1   | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Chrysene               | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Dibenz(a,h)anthracene  | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Dibenzofuran           | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Fluoranthene           | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Fluorene               | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.000183 | U *1      | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Naphthalene            | <0.00366  | U         | 0.00366  |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Phenanthrene           | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Pyrene                 | <0.000183 | U         | 0.000183 |     | mg/L |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Surrogate              | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| 2-Fluorobiphenyl       | 114       |           | 54 - 146 |     |      |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| Nitrobenzene-d5        | 108       |           | 46 - 151 |     |      |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |
| p-Terphenyl-d14        | 44        | S1-       | 51 _ 139 |     |      |   | 12/14/21 12:08 | 12/14/21 19:57 | 1       |

## **Client Sample ID: MW-3**

Date Collected: 12/09/21 12:03

Date Received: 12/10/21 08:46

| Method: 8270D SIM - Semivol | atile Organic Com | pounds (G | C/MS SIM) |     |      |   |                |                |         |
|-----------------------------|-------------------|-----------|-----------|-----|------|---|----------------|----------------|---------|
| Analyte                     | Result            | Qualifier | RL        | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
| 1-Methylnaphthalene         | <0.000186         | U         | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| 2-Methylnaphthalene         | <0.000186         | U         | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Acenaphthene                | <0.000186         | U         | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Acenaphthylene              | <0.000186         | U         | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Anthracene                  | <0.000186         | U         | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Benzo[a]anthracene          | <0.000186         | U *1      | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Benzo[a]pyrene              | <0.000186         | U *1      | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Benzo[b]fluoranthene        | <0.000186         | U *1      | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Benzo[g,h,i]perylene        | <0.000186         | U *1      | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Benzo[k]fluoranthene        | <0.000186         | U *- *1   | 0.000186  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |

Eurofins Xenco, Lubbock

Lab Sample ID: 820-2845-4

Matrix: Water

Released to Imaging: 8/3/2022 2:26:44 PM

### **Client Sample ID: MW-3** Date Collected: 12/09/21 12:03

Date Received: 12/10/21 08:46

| Method: 8270D SIM - Semivolatile Org | ganic Compounds (GC/N | IS SIM) (Continued) |  |
|--------------------------------------|-----------------------|---------------------|--|
|                                      |                       |                     |  |

| Analyte                | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| Chrysene               | <0.000186 | U *1      | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Dibenz(a,h)anthracene  | <0.000186 | U *1      | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Dibenzofuran           | <0.000186 | U         | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Fluoranthene           | <0.000186 | U         | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Fluorene               | <0.000186 | U         | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.000186 | U *1      | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Naphthalene            | <0.00373  | U         | 0.00373  |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Phenanthrene           | <0.000186 | U         | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Pyrene                 | <0.000186 | U         | 0.000186 |     | mg/L |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Surrogate              | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| 2-Fluorobiphenyl       | 119       |           | 54 - 146 |     |      |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Nitrobenzene-d5        | 114       |           | 46 _ 151 |     |      |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| p-Terphenyl-d14        | 53        |           | 51 - 139 |     |      |   | 12/14/21 12:11 | 12/14/21 20:17 | 1       |
| Client Sample ID: MW-5 |           |           |          |     |      |   | Lab San        | nple ID: 820-2 | 2845-5  |

### Client Sample ID: MW-5

#### Date Collected: 12/09/21 13:15 Date Received: 12/10/21 08:46

| Analyte                | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|-----------|-----------|----------|-----|------|---|----------------|----------------|---------|
| 1-Methylnaphthalene    | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| 2-Methylnaphthalene    | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Acenaphthene           | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Acenaphthylene         | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Anthracene             | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Benzo[a]anthracene     | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Benzo[a]pyrene         | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Benzo[b]fluoranthene   | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Benzo[g,h,i]perylene   | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Benzo[k]fluoranthene   | <0.000189 | U *- *1   | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Chrysene               | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Dibenz(a,h)anthracene  | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Dibenzofuran           | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Fluoranthene           | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Fluorene               | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.000189 | U *1      | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Naphthalene            | <0.00378  | U         | 0.00378  |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Phenanthrene           | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Pyrene                 | <0.000189 | U         | 0.000189 |     | mg/L |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Surrogate              | %Recovery | Qualifier | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |
| 2-Fluorobiphenyl       | 122       |           | 54 - 146 |     |      |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |
| Nitrobenzene-d5        | 115       |           | 46 - 151 |     |      |   | 12/14/21 12:14 | 12/14/21 20:36 | 1       |

12/14/21 12:14 12/14/21 20:36

Job ID: 820-2845-1 SDG: AR217009

## Lab Sample ID: 820-2845-4

Matrix: Water

Matrix: Water

p-Terphenyl-d14

51 - 139

54

1

## **Client Sample Results**

## Client Sample ID: Dup-1 Date Collected: 12/09/21 00:00

Date Received: 12/10/21 08:46

Job ID: 820-2845-1 SDG: AR217009

## Lab Sample ID: 820-2845-6

Matrix: Water

| Analyte                | Result    | Qualifier  | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac | 5  |
|------------------------|-----------|------------|----------|-----|------|---|----------------|----------------|---------|----|
| 1-Methylnaphthalene    | <0.000190 | U          | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| 2-Methylnaphthalene    | <0.000190 | U          | 0.000190 | l   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Acenaphthene           | <0.000190 | U          | 0.000190 | I   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Acenaphthylene         | <0.000190 | U          | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Anthracene             | <0.000190 | U          | 0.000190 | I   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Benzo[a]anthracene     | <0.000190 | U *1       | 0.000190 | I   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       | 8  |
| Benzo[a]pyrene         | <0.000190 | U *3 *1    | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Benzo[b]fluoranthene   | 0.000265  | *3 *1      | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       | 0  |
| Benzo[g,h,i]perylene   | <0.000190 | U *3 *1    | 0.000190 | I   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       | 3  |
| Benzo[k]fluoranthene   | <0.000190 | U *- *3 *1 | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Chrysene               | <0.000190 | U *1       | 0.000190 | I   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Dibenz(a,h)anthracene  | <0.000190 | U *3 *1    | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Dibenzofuran           | <0.000190 | U          | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Fluoranthene           | <0.000190 | U          | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Fluorene               | <0.000190 | U          | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Indeno[1,2,3-cd]pyrene | <0.000190 | U *3 *1    | 0.000190 |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Naphthalene            | <0.00380  | U          | 0.00380  |     | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       | 13 |
| Phenanthrene           | <0.000190 | U          | 0.000190 | l   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Pyrene                 | <0.000190 | U          | 0.000190 | I   | mg/L |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Surrogate              | %Recovery | Qualifier  | Limits   |     |      |   | Prepared       | Analyzed       | Dil Fac |    |
| 2-Fluorobiphenyl       | 117       |            | 54 - 146 |     |      |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| Nitrobenzene-d5        | 112       |            | 46 - 151 |     |      |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |
| p-Terphenyl-d14        | 58        |            | 51 - 139 |     |      |   | 12/14/21 12:17 | 12/16/21 12:41 | 1       |    |

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## **Surrogate Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2845-1 SDG: AR217009

### Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) Matrix: Water

| _                 |                        |          |          | Percent Surrogat | e Recovery (Acceptar |
|-------------------|------------------------|----------|----------|------------------|----------------------|
|                   |                        | FBP      | NBZ      | TPHd14           |                      |
| ab Sample ID      | Client Sample ID       | (54-146) | (46-151) | (51-139)         |                      |
| 0-2845-1          | MW-2                   | 128      | 113      | 53               |                      |
| -2845-2           | MW-6                   | 123      | 113      | 55               |                      |
| 0-2845-3          | MW-4                   | 114      | 108      | 44 S1-           |                      |
| 0-2845-4          | MW-3                   | 119      | 114      | 53               |                      |
| 0-2845-5          | MW-5                   | 122      | 115      | 54               |                      |
| 0-2845-6          | Dup-1                  | 117      | 112      | 58               |                      |
| S 860-34187/2-A   | Lab Control Sample     | 128      | 126      | 90               |                      |
| CSD 860-34187/3-A | Lab Control Sample Dup | 121      | 121      | 83               |                      |
| MB 860-34187/1-A  | Method Blank           | 142      | 132      | 104              |                      |
|                   |                        |          |          |                  |                      |

Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5

TPHd14 = p-Terphenyl-d14

Prep Type: Total/NA

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## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

### Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

## Lab Sample ID: MB 860-34187/1-A

Matrix: Water Analysis Batch: 34198

| Analysis Batch: 34198  |           |           |          |     |      |   |                | Prep Batch     | n: 34187 |   |
|------------------------|-----------|-----------|----------|-----|------|---|----------------|----------------|----------|---|
|                        | MB        | MB        |          |     |      |   |                |                |          |   |
| Analyte                | Result    | Qualifier | RL       | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac  | Ξ |
| 1-Methylnaphthalene    | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| 2-Methylnaphthalene    | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        | - |
| Acenaphthene           | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Acenaphthylene         | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Anthracene             | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Benzo[a]anthracene     | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Benzo[a]pyrene         | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Benzo[b]fluoranthene   | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Benzo[g,h,i]perylene   | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Benzo[k]fluoranthene   | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Chrysene               | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Dibenz(a,h)anthracene  | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Dibenzofuran           | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Fluoranthene           | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Fluorene               | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Indeno[1,2,3-cd]pyrene | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Naphthalene            | <0.00364  | U         | 0.00364  |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Phenanthrene           | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
| Pyrene                 | <0.000182 | U         | 0.000182 |     | mg/L |   | 12/14/21 11:50 | 12/14/21 17:41 | 1        |   |
|                        |           |           |          |     |      |   |                |                |          |   |

|                  | МВ        | МВ        |          |                |                |         |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| Surrogate        | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
| 2-Fluorobiphenyl | 142       |           | 54 - 146 | 12/14/21 11:50 | 12/14/21 17:41 | 1       |
| Nitrobenzene-d5  | 132       |           | 46 _ 151 | 12/14/21 11:50 | 12/14/21 17:41 | 1       |
| p-Terphenyl-d14  | 104       |           | 51 _ 139 | 12/14/21 11:50 | 12/14/21 17:41 | 1       |

### Lab Sample ID: LCS 860-34187/2-A Matrix: Water Analysis Batch: 34198

| Analysis Batch: 34198  |        |         |           |      |   |      | Prep Batch: 34187   |
|------------------------|--------|---------|-----------|------|---|------|---------------------|
|                        | Spike  | LCS     | LCS       |      |   |      | %Rec.               |
| Analyte                | Added  | Result  | Qualifier | Unit | D | %Rec | Limits              |
| 1-Methylnaphthalene    | 0.0182 | 0.02116 |           | mg/L |   | 116  | 75 - 149            |
| 2-Methylnaphthalene    | 0.0182 | 0.02034 |           | mg/L |   | 112  | 74 - 148            |
| Acenaphthene           | 0.0182 | 0.02121 |           | mg/L |   | 117  | 73 <sub>-</sub> 145 |
| Acenaphthylene         | 0.0182 | 0.02195 |           | mg/L |   | 121  | 78 - 143            |
| Anthracene             | 0.0182 | 0.02350 |           | mg/L |   | 129  | 77 - 157            |
| Benzo[a]anthracene     | 0.0182 | 0.02324 |           | mg/L |   | 128  | 71 <sub>-</sub> 142 |
| Benzo[a]pyrene         | 0.0182 | 0.02214 |           | mg/L |   | 122  | 76 - 160            |
| Benzo[b]fluoranthene   | 0.0182 | 0.02221 |           | mg/L |   | 122  | 78 - 158            |
| Benzo[g,h,i]perylene   | 0.0182 | 0.02091 |           | mg/L |   | 115  | 74 - 158            |
| Benzo[k]fluoranthene   | 0.0182 | 0.02104 |           | mg/L |   | 116  | 79 - 148            |
| Chrysene               | 0.0182 | 0.02147 |           | mg/L |   | 118  | 70 - 160            |
| Dibenz(a,h)anthracene  | 0.0182 | 0.02216 |           | mg/L |   | 122  | 76 - 149            |
| Dibenzofuran           | 0.0182 | 0.02171 |           | mg/L |   | 119  | 77 _ 141            |
| Fluoranthene           | 0.0182 | 0.02440 |           | mg/L |   | 134  | 67 - 152            |
| Fluorene               | 0.0182 | 0.02274 |           | mg/L |   | 125  | 56 - 173            |
| Indeno[1,2,3-cd]pyrene | 0.0182 | 0.02070 |           | mg/L |   | 114  | 72 - 152            |
| Naphthalene            | 0.0182 | 0.02105 |           | mg/L |   | 116  | 70 - 151            |
| Phenanthrene           | 0.0182 | 0.02278 |           | mg/L |   | 125  | 74 - 165            |

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Prep Type: Total/NA

**Client Sample ID: Method Blank** 

5 6 7

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

## **QC Sample Results**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2845-1 SDG: AR217009

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## Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

| Lab Sample ID: LCS 860-34 | +18// <b>2-A</b> |           |          |         |           |      | Client  | Sample    | ID: Lab Co          |          |                   |
|---------------------------|------------------|-----------|----------|---------|-----------|------|---------|-----------|---------------------|----------|-------------------|
| Matrix: Water             |                  |           |          |         |           |      |         |           |                     | ype: Tot |                   |
| Analysis Batch: 34198     |                  |           |          |         |           |      |         |           |                     | Batch:   | 34187             |
|                           |                  |           | Spike    | LCS     | LCS       |      |         |           | %Rec.               |          |                   |
| Analyte                   |                  |           | Added    |         | Qualifier | Unit | D       | %Rec      | Limits              |          |                   |
| Pyrene                    |                  |           | 0.0182   | 0.02281 |           | mg/L |         | 125       | 66 - 148            |          |                   |
|                           | LCS              | LCS       |          |         |           |      |         |           |                     |          |                   |
| Surrogate                 | %Recovery        | Qualifier | Limits   |         |           |      |         |           |                     |          |                   |
| 2-Fluorobiphenyl          | 128              |           | 54 _ 146 |         |           |      |         |           |                     |          |                   |
| Nitrobenzene-d5           | 126              |           | 46 _ 151 |         |           |      |         |           |                     |          |                   |
| p-Terphenyl-d14           | 90               |           | 51 - 139 |         |           |      |         |           |                     |          |                   |
| Lab Sample ID: LCSD 860-  | 34187/3-A        |           |          |         |           | Clie | ent Sam | ple ID: I | _ab Contro          | I Sample | e Duj             |
| Matrix: Water             |                  |           |          |         |           |      |         |           | Prep 1              | ype: Tot | tal/N/            |
| Analysis Batch: 34198     |                  |           |          |         |           |      |         |           | Prep                | Batch:   | 3418 <sup>-</sup> |
|                           |                  |           | Spike    | LCSD    | LCSD      |      |         |           | %Rec.               |          | RPI               |
| Analyte                   |                  |           | Added    | Result  | Qualifier | Unit | D       | %Rec      | Limits              | RPD      | Lim               |
| 1-Methylnaphthalene       |                  |           | 0.0182   | 0.02244 |           | mg/L |         | 123       | 75 _ 149            | 6        | 3                 |
| 2-Methylnaphthalene       |                  |           | 0.0182   | 0.02178 |           | mg/L |         | 120       | 74 - 148            | 7        | 3                 |
| Acenaphthene              |                  |           | 0.0182   | 0.02177 |           | mg/L |         | 120       | 73 _ 145            | 3        | 3                 |
| Acenaphthylene            |                  |           | 0.0182   | 0.02220 |           | mg/L |         | 122       | 78 - 143            | 1        | 3                 |
| Anthracene                |                  |           | 0.0182   | 0.02154 |           | mg/L |         | 118       | 77 _ 157            | 9        | 3                 |
| Benzo[a]anthracene        |                  |           | 0.0182   | 0.01598 | *1        | mg/L |         | 88        | 71 _ 142            | 37       | 3                 |
| Benzo[a]pyrene            |                  |           | 0.0182   | 0.01461 | *1        | mg/L |         | 80        | 76 - 160            | 41       | 3                 |
| Benzo[b]fluoranthene      |                  |           | 0.0182   | 0.01480 | *1        | mg/L |         | 81        | 78 - 158            | 40       | 3                 |
| Benzo[g,h,i]perylene      |                  |           | 0.0182   | 0.01351 | *1        | mg/L |         | 74        | 74 - 158            | 43       | 3                 |
| Benzo[k]fluoranthene      |                  |           | 0.0182   | 0.01381 | *- *1     | mg/L |         | 76        | 79 <sub>-</sub> 148 | 42       | 3                 |
| Chrysene                  |                  |           | 0.0182   | 0.01463 | *1        | mg/L |         | 80        | 70 - 160            | 38       | 3                 |
| Dibenz(a,h)anthracene     |                  |           | 0.0182   | 0.01412 | *1        | mg/L |         | 78        | 76 - 149            | 44       | 3                 |
| Dibenzofuran              |                  |           | 0.0182   | 0.02191 |           | mg/L |         | 121       | 77 _ 141            | 1        | 3                 |
| Fluoranthene              |                  |           | 0.0182   | 0.02075 |           | mg/L |         | 114       | 67 _ 152            | 16       | 3                 |
| Fluorene                  |                  |           | 0.0182   | 0.02230 |           | mg/L |         | 123       | 56 - 173            | 2        | 3                 |
| Indeno[1,2,3-cd]pyrene    |                  |           | 0.0182   | 0.01351 | *1        | mg/L |         | 74        | 72 - 152            | 42       | 3                 |
| Naphthalene               |                  |           | 0.0182   | 0.02163 |           | mg/L |         | 119       | 70 - 151            | 3        | 3                 |
| Phenanthrene              |                  |           | 0.0182   | 0.02141 |           | mg/L |         | 118       | 74 - 165            | 6        | 3                 |
|                           |                  |           |          |         |           |      |         |           |                     |          |                   |

|                  | LCSD      | LCSD      |          |
|------------------|-----------|-----------|----------|
| Surrogate        | %Recovery | Qualifier | Limits   |
| 2-Fluorobiphenyl | 121       |           | 54 - 146 |
| Nitrobenzene-d5  | 121       |           | 46 - 151 |
| p-Terphenyl-d14  | 83        |           | 51 _ 139 |

## **QC Association Summary**

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

## **GC/MS Semi VOA**

## Prep Batch: 34187

| Lab Sample ID         | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-----------------------|------------------------|-----------|--------|--------|------------|
| 820-2845-1            | MW-2                   | Total/NA  | Water  | 3511   |            |
| 820-2845-2            | MW-6                   | Total/NA  | Water  | 3511   |            |
| 820-2845-3            | MW-4                   | Total/NA  | Water  | 3511   |            |
| 820-2845-4            | MW-3                   | Total/NA  | Water  | 3511   |            |
| 820-2845-5            | MW-5                   | Total/NA  | Water  | 3511   |            |
| 820-2845-6            | Dup-1                  | Total/NA  | Water  | 3511   |            |
| MB 860-34187/1-A      | Method Blank           | Total/NA  | Water  | 3511   |            |
| LCS 860-34187/2-A     | Lab Control Sample     | Total/NA  | Water  | 3511   |            |
| LCSD 860-34187/3-A    | Lab Control Sample Dup | Total/NA  | Water  | 3511   |            |
| Analysis Batch: 34198 |                        |           |        |        |            |

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method    | Prep Batch |
|--------------------|------------------------|-----------|--------|-----------|------------|
| 820-2845-2         | MW-6                   | Total/NA  | Water  | 8270D SIM | 34187      |
| 820-2845-3         | MW-4                   | Total/NA  | Water  | 8270D SIM | 34187      |
| 820-2845-4         | MW-3                   | Total/NA  | Water  | 8270D SIM | 34187      |
| 820-2845-5         | MW-5                   | Total/NA  | Water  | 8270D SIM | 34187      |
| MB 860-34187/1-A   | Method Blank           | Total/NA  | Water  | 8270D SIM | 34187      |
| LCS 860-34187/2-A  | Lab Control Sample     | Total/NA  | Water  | 8270D SIM | 34187      |
| LCSD 860-34187/3-A | Lab Control Sample Dup | Total/NA  | Water  | 8270D SIM | 34187      |

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method    | Prep Batch |
|---------------|------------------|-----------|--------|-----------|------------|
| 820-2845-1    | MW-2             | Total/NA  | Water  | 8270D SIM | 34187      |
| 820-2845-6    | Dup-1            | Total/NA  | Water  | 8270D SIM | 34187      |

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Job ID: 820-2845-1

SDG: AR217009

Client: Terracon Consulting Eng & Scientists

## Lab Chronicle

| Job ID: 820-2845-1 |
|--------------------|
| SDG: AR217009      |

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 820-2845-3

Lab Sample ID: 820-2845-4

Lab Sample ID: 820-2845-5

Lab Sample ID: 820-2845-6

## **Client Sample ID: MW-2** Date Collected: 12/09/21 09:51

Project/Site: DCP Sec 31

| Date | <b>Received:</b> | 12/10/21 | 08:46 |
|------|------------------|----------|-------|
|------|------------------|----------|-------|

|           | Batch    | Batch     |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|-----------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Ргер Туре | Туре     | Method    | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Prep     | 3511      |     |        | 54.4 mL | 2.0 mL | 34187  | 12/14/21 12:02 | MG      | XEN STF |
| Total/NA  | Analysis | 8270D SIM |     | 1      |         |        | 34522  | 12/16/21 12:24 | T1S     | XEN STF |

### **Client Sample ID: MW-6** Date Collected: 12/09/21 10:42 Date Received: 12/10/21 08:46

|           | Batch    | Batch     |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|-----------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method    | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Prep     | 3511      |     |        | 53.3 mL | 2.0 mL | 34187  | 12/14/21 12:05 | MG      | XEN STF |
| Total/NA  | Analysis | 8270D SIM |     | 1      |         |        | 34198  | 12/14/21 19:38 | LPL     | XEN STF |

## **Client Sample ID: MW-4**

Date Collected: 12/09/21 11:21

Date Received: 12/10/21 08:46

|           | Batch    | Batch     |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|-----------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method    | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Prep     | 3511      |     |        | 54.7 mL | 2.0 mL | 34187  | 12/14/21 12:08 | MG      | XEN STF |
| Total/NA  | Analysis | 8270D SIM |     | 1      |         |        | 34198  | 12/14/21 19:57 | LPL     | XEN STF |

### **Client Sample ID: MW-3**

Date Collected: 12/09/21 12:03

Date Received: 12/10/21 08:46

|           | Batch    | Batch     |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|-----------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method    | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Prep     | 3511      |     |        | 53.7 mL | 2.0 mL | 34187  | 12/14/21 12:11 | MG      | XEN STF |
| Total/NA  | Analysis | 8270D SIM |     | 1      |         |        | 34198  | 12/14/21 20:17 | LPL     | XEN STF |

## **Client Sample ID: MW-5** Date Collected: 12/09/21 13:15

Date Received: 12/10/21 08:46

| Ргер Туре | Batch<br>Type | Batch<br>Method | Run | Dil<br>Factor | Initial<br>Amount | Final<br>Amount | Batch<br>Number | Prepared<br>or Analyzed | Analyst | Lab     |
|-----------|---------------|-----------------|-----|---------------|-------------------|-----------------|-----------------|-------------------------|---------|---------|
| Total/NA  | Prep          | 3511            |     |               | 52.9 mL           | 2.0 mL          | 34187           | 12/14/21 12:14          | MG      | XEN STF |
| Total/NA  | Analysis      | 8270D SIM       |     | 1             |                   |                 | 34198           | 12/14/21 20:36          | LPL     | XEN STF |

### **Client Sample ID: Dup-1** Date Collected: 12/09/21 00:00 Date Received: 12/10/21 08:46

|           | Batch    | Batch     |     | Dil    | Initial | Final  | Batch  | Prepared       |         |         |
|-----------|----------|-----------|-----|--------|---------|--------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method    | Run | Factor | Amount  | Amount | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Prep     | 3511      |     |        | 52.7 mL | 2.0 mL | 34187  | 12/14/21 12:17 | MG      | XEN STF |
| Total/NA  | Analysis | 8270D SIM |     | 1      |         |        | 34522  | 12/16/21 12:41 | T1S     | XEN STF |

### Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-2845-1 SDG: AR217009

## Laboratory: Eurofins Xenco, Stafford

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Ithority                                      | F                   | Program         | Identification Number                        | Expiration Date        |
|---|---------------------|-----------------|--|------------------------|
| xas   | 1                   | NELAP           | T104704215-21-44                             | 06-30-22               |
| The following analytes the agency does not of | fer certification.  |                 | ied by the governing authority. This list ma | ay include analytes fo |
| Analysis Method                               | Pron Mothod         | Matrix          | Analyta                                      |                        |
| Analysis Method                               | Prep Method         | Matrix          | Analyte                                      |                        |
| Analysis Method<br>8270D SIM                  | Prep Method<br>3511 | Matrix<br>Water | Analyte<br>1-Methylnaphthalene               |                        |
|   | ·                   |                 | ,  |                        |

Eurofins Xenco, Lubbock

## **Method Summary**

### Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31

Job ID: 820-2845-1 SDG: AR217009

| Method   | Method Description                         | Protocol | Laboratory |
|----------|--|----------|------------|
| 270D SIM | Semivolatile Organic Compounds (GC/MS SIM) | SW846    | XEN STF    |
| 511      | Microextraction of Organic Compounds       | SW846    | XEN STF    |

### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

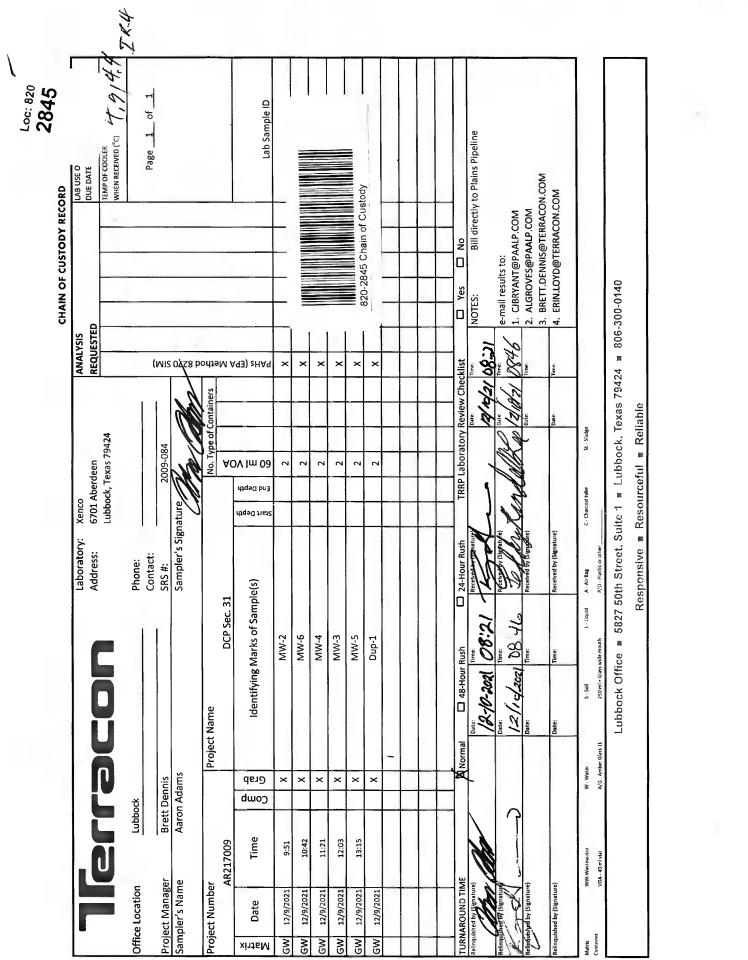
3DG. AR217009

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Eurofins Xenco, Lubbock

Client: Terracon Consulting Eng & Scientists Project/Site: DCP Sec 31 Job ID: 820-2845-1 SDG: AR217009

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 820-2845-1    | MW-2             | Water  | 12/09/21 09:51 | 12/10/21 08:46 |
| 820-2845-2    | MW-6             | Water  | 12/09/21 10:42 | 12/10/21 08:46 |
| 820-2845-3    | MW-4             | Water  | 12/09/21 11:21 | 12/10/21 08:46 |
| 820-2845-4    | MW-3             | Water  | 12/09/21 12:03 | 12/10/21 08:46 |
| 820-2845-5    | MW-5             | Water  | 12/09/21 13:15 | 12/10/21 08:46 |
| 820-2845-6    | Dup-1            | Water  | 12/09/21 00:00 | 12/10/21 08:46 |



| (Sub Contract Lab)   |  |  | <u> 9</u> 2  | Leb Pik:<br>Kramer Jessika<br>F-Mei:       | 2                                       |  |                               |                              |                           |                             | SCOC No.  |                               |  | Γ  |
|--|--|--|--|--|---|--|-------------------------------|------------------------------|---------------------------|-----------------------------|---|-------------------------------|--|----|
| etving<br>6<br>far Dr<br>(Tei)<br>(Tei)  |  |  | •  | į  | ł                                       |  |                               | Carrier Tr                   | Carrier Tracking No(s):   | 8                           | 820-2752.1  | 21                            |  |    |
| kir Dr<br>(Tel)<br>(Tel) (Lab ID)  |  |  | <u></u>  | vsica. knam                                | er@eurofi                               | inset.com                                  |                               | Starts of Origin:<br>Teorass |                           |                             | Page 1 of 1   | :                             |  | ]  |
| lar Dr<br>(Tel)<br>Minortion - Clent D (Lab ID)  |  |  |  | Accedita<br>NELAP                          | tiona Raquit<br>Tastas                  | ad (See note                               | ц                             |                              |                           |                             | Jeb ft<br>820-2845  | .                             |  | Γ  |
| (Tei)<br>Montion - Clent D (Leb ID)  |  |  |  |  |   |  | lvsis Re                      | Analvsis Requested           | _                         |                             | Preservation Cod  |                               | 9  | Γ  |
| (Tel)<br>Mostion - Client D (Lab ID)   |  |  |  |  | <b> </b>                                |  | F                             |                              |                           |                             | A HCL<br>B NaOH<br>C Zh Asstate   |                               | M Hexane<br>N Nome<br>O Autholo              |    |
| (Tel)<br>Micertion - Clent ID (Lato ID)  |  |  |  | •<br>•                                     |   |  |                               |                              |                           |                             |   | X                             | Ne204S                                       |    |
| ifficention - Client D (Lab ID)  |  |  |  |  |   |  | _                             |                              |                           |                             | G Amoritar  | Arki                          | K MEZSZUG<br>S M2SO4<br>T TSP Dovincelantic  |    |
| ifficention - Cilent D (Lato ID)   |  |  |  | an<br>Argan                                | -                                       |  |                               |                              |                           |                             |   |                               | L Acetone<br>V NaCAA                         |    |
| thoeffon - Clent ID (Lab ID)   |  |  |  |  |   |  |                               |                              |                           |                             | K EDTA<br>L EDA   |                               | W pH4-9<br>Z other (specify)                 |    |
|  |  |  |  | Sale<br>ge ui≯                             |   |  |                               |                              |                           |                             | Other   |                               |  |    |
| · · · ·  |  |  | eithe<br>Bathathathathathathathathathathathathatha   | ાંદ પ્રાથમ<br>ોન્ટ્ર સાન્ટ                 | 1185 <b>1</b> 018_0                     |  |                               |                              |                           |                             | a - 194   |                               |  |    |
|  |  | seargie (Croamp,<br>Time Ground                              | 튤  | Ţ  | 8270                                    |  |                               |                              |                           |                             | Spe   | ecial Inst                    | Special Instructions/Note:                   | :  |
| MW-2 (820-2845-1)  |  |  | Water  |  | ×                                       |  |                               |                              |                           |                             | 1<br>1<br>1<br>1  |                               |  | l. |
| MW45 (820-2845-2) 12/  | 12/9/21  | 10:42<br>Cantral   | Water  |  | ×                                       |  |                               |                              |                           |                             | Temp.   | D                             | IR ID HOU-272                                | 72 |
| MW-4 (820-2845-3) 12/  | 12/9/21  | 11.21<br>Central   | Water  |  | ×                                       |  |                               |                              |                           |                             | C/F-+0.0  | ).0<br>+ad Tem                | C/F-+0.0                                     |    |
| MW-3 (820-2845-4) 12/  | 12/9/21 12   | 12:03<br>Central   | Water  |  | ×                                       |  |                               |                              |                           |                             |   |                               | •  |    |
| MW-5 (820-2845-5) 12/  | 12/9/21  | 13:16<br>Cantral   | Water  |  | ×                                       |  |                               |                              |                           |                             |   |                               |  |    |
| Dup-1 (820-2845-8) 12  | 12/9/21 Ce   | Central  | Water  |  | ×                                       |  |                               |                              |                           |                             |   |                               |  |    |
|  |  |  |  |  |   |  |                               |                              |                           |                             |   |                               |  |    |
|  |  |  |  |  |   |  |                               |                              |                           |                             |   |                               |  |    |
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| Possible Hazard Identification   |  |  |  |  | deta big                                | osel (A fe                                 | e mey be                      | 1056966R                     | ( if sentp                | an es                       | teined longer   | r then 1 p                    | (danada)                                     |    |
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| Empty Kit Reinquéshed by:  | Date:  |  |  |  |   |  |                               | Ĭ                            | Method of Shipment        | Ment                        |   |                               |  | T  |
| ha Readill La  | 12/0/21  | 17.  |  |  | Received by:                            |  |                               |                              | <u>B</u>                  | DeterTime:                  |   |                               | Company                                      |    |
|  | $\vdash$   | -  | Company  |  | The                                     | 5  | M                             | 0                            |                           | 2711                        | 121 13  | 1315                          | 入計   |    |
|  | Tme:   |  | Company  |  | Aq parents                              |  |                               |                              |                           | el unit /                   |   |                               | Company                                      |    |
| Custody Seals Intact Custody Seal No.<br>△ Yes △ No  |  |  |  |  | ogder Tem                               | Coder Temperature(s) "C and Other Remarks: | and Other (                   | temarter:                    |                           |                             |   |                               |  |    |
|  |  |  |  |  |   |  |                               |                              |                           |                             |   | ſ                             | Ver 06/08/2021                               |    |
|  |  |  |  |  | 14                                      | 12<br>13                                   |                               |                              | 9                         | 8                           | 6<br>7  | 5                             |  | 2  |

.

#### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2845-1 SDG Number: AR217009

SDG Number: AR217009
Login Number: 2845
List Source: Eurofins Xenco, Lubbock
List Number: 1

Creator: Lee, Randell

<6mm (1/4").

| Question   | Answer | Comment |
|--|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is               | True   |         |

#### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

MS/MSDs

<6mm (1/4").

Job Number: 820-2845-1 SDG Number: AR217009

| Login Number: 2845<br>List Number: 2<br>Creator: Rubio, Yuri                   |        |         | List Source: Eurofins Xenco, Stafford<br>List Creation: 12/11/21 02:45 PM |  |
|--|--------|---------|---|--|
| Question   | Answer | Comment |   |  |
| The cooler's custody seal, if present, is intact.                              | True   |         |   |  |
| Sample custody seals, if present, are intact.                                  | True   |         |   |  |
| The cooler or samples do not appear to have been compromised or tampered with. | True   |         |   |  |
| Samples were received on ice.  | True   |         |   |  |

True

| •   |      |     |
|---|------|-----|
| Cooler Temperature is acceptable.   | True |     |
| Cooler Temperature is recorded.   | True | 2.4 |
| COC is present.   | True |     |
| COC is filled out in ink and legible.   | True |     |
| COC is filled out with all pertinent information.                             | True |     |
| Is the Field Sampler's name present on COC?                                   | True |     |
| There are no discrepancies between the containers received and the COC.       | True |     |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True |     |
| Sample containers have legible labels.  | True |     |
| Containers are not broken or leaking.   | True |     |
| Sample collection date/times are provided.                                    | True |     |
| Appropriate sample containers are used.                                       | True |     |
| Sample bottles are completely filled.   | True |     |
| Sample Preservation Verified.   | True |     |
| There is sufficient vol. for all requested analyses, incl. any requested      | True |     |

Containers requiring zero headspace have no headspace or bubble is

Received by OCD: 3/28/2022 9:18:57 AM

| Plains All American    | Pipeline - Terracon |  |
|------------------------|---------------------|--|
| Sample Delivery Group: | L1423939            |  |
| Samples Received:      | 10/29/2021          |  |
| Project Number:        | AR217009            |  |
| Description:           | DCP Sec. 31         |  |
| Report To:             | Brett Dennis        |  |
|                        | 5847 50th St.       |  |
|                        | Suite 1             |  |
|                        | Lubbock, TX 79424   |  |

Entire Report Reviewed By:

Ayisha Raza 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

Released to Imaging: 3/2022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1423939

DATE/TIME: 11/01/21 17:49 PAGE: 1 of 9

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| 0        |      |    |       |

| Cp: Cover Page                                    | 1 |
|---|---|
| Tc: Table of Contents                             | 2 |
| Ss: Sample Summary                                | 3 |
| Cn: Case Narrative                                | 4 |
| Sr: Sample Results                                | 5 |
| EFF-1 (10282021) L1423939-01                      | 5 |
| Qc: Quality Control Summary                       | 6 |
| Volatile Organic Compounds (MS) by Method M18-Mod | 6 |
| GI: Glossary of Terms                             | 7 |
| Al: Accreditations & Locations                    | 8 |
| Sc: Sample Chain of Custody                       | 9 |

Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon PROJECT: AR217009 SDG: L1423939

D. 11/

DATE/TIME: 11/01/21 17:49

PAGE: 2 of 9 Received by OCD: 3/28/2022 9:18:57 AM

## SAMPLE SUMMARY

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|   |           |          | Collected by   | Collected date/time | Received date  | /time          |   |
|---|-----------|----------|----------------|---------------------|----------------|----------------|---|
| EFF-1 (10282021) L1423939-01 Air                  |           |          | Aaron Adams    | 10/28/21 10:15      | 10/29/21 09:00 | C              | 1 |
| Method  | Batch     | Dilution | Preparation    | Analysis            | Analyst        | Location       |   |
|   |           |          | date/time      | date/time           |                |                | 2 |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1765786 | 2000     | 10/30/21 00:50 | 10/30/21 00:50      | FKG            | Mt. Juliet, TN |   |



Ср

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### CASE NARRATIVE

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.

Ayisha Raza Project Manager



SDG: L1423939

DA 11/0 PAGE: 4 of 9

# SAMPLE RESULTS - 01

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### Volatile Organic Compounds (MS) by Method M18-Mod

| 0                          |           |          |          |         |        |         |           |          |           |
|----------------------------|-----------|----------|----------|---------|--------|---------|-----------|----------|-----------|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2    | Result | Result  | Qualifier | Dilution | Batch     |
| Analyte                    |           |          | ppbv     | ug/m3   | ppbv   | ug/m3   |           |          |           |
| Benzene                    | 71-43-2   | 78.10    | 400      | 1280    | 1650   | 5270    |           | 2000     | WG1765786 |
| Toluene                    | 108-88-3  | 92.10    | 1000     | 3770    | 2130   | 8020    |           | 2000     | WG1765786 |
| Ethylbenzene               | 100-41-4  | 106      | 400      | 1730    | ND     | ND      |           | 2000     | WG1765786 |
| m&p-Xylene                 | 1330-20-7 | 106      | 800      | 3470    | 2620   | 11400   |           | 2000     | WG1765786 |
| o-Xylene                   | 95-47-6   | 106      | 400      | 1730    | 893    | 3870    |           | 2000     | WG1765786 |
| Methyl tert-butyl ether    | 1634-04-4 | 88.10    | 400      | 1440    | ND     | ND      |           | 2000     | WG1765786 |
| TPH (GC/MS) Low Fraction   | 8006-61-9 | 101      | 400000   | 1650000 | 756000 | 3120000 |           | 2000     | WG1765786 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |         | 98.9   |         |           |          | WG1765786 |
|                            |           |          |          |         |        |         |           |          |           |

#### Sample Narrative:

L1423939-01 WG1765786: Lowest possible dilution due to sample matrix.

Volatile Organic Compounds (MS) by Method M18-Mod

# QUALITY CONTROL SUMMARY

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#### Method Blank (MB)

| (MB) R3723323-3 10/29/2110:46 |
|-------------------------------|
|                               |

|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
|----------------------------|-----------|--------------|--------|----------|
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| MTBE                       | U         |              | 0.0647 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |
| (S) 1,4-Bromofluorobenzene | 96.7      |              |        | 60.0-140 |

#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3723323-1 10/29/2   | LCS) R3723323-1 10/29/21 09:25 • (LCSD) R3723323-2 10/29/21 10:06 |            |             |          |           |             |               |                |       |            |
|----------------------------|---|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                            | Spike Amount  | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
| Analyte                    | ppbv  | ppbv       | ppbv        | %        | %         | %           |               |                | %     | %          |
| MTBE                       | 3.75  | 4.54       | 4.57        | 121      | 122       | 70.0-130    |               |                | 0.659 | 25         |
| Benzene                    | 3.75  | 4.56       | 4.59        | 122      | 122       | 70.0-130    |               |                | 0.656 | 25         |
| Toluene                    | 3.75  | 4.58       | 4.61        | 122      | 123       | 70.0-130    |               |                | 0.653 | 25         |
| Ethylbenzene               | 3.75  | 4.75       | 4.77        | 127      | 127       | 70.0-130    |               |                | 0.420 | 25         |
| m&p-Xylene                 | 7.50  | 9.50       | 9.53        | 127      | 127       | 70.0-130    |               |                | 0.315 | 25         |
| o-Xylene                   | 3.75  | 4.58       | 4.62        | 122      | 123       | 70.0-130    |               |                | 0.870 | 25         |
| TPH (GC/MS) Low Fraction   | 203   | 243        | 245         | 120      | 121       | 70.0-130    |               |                | 0.820 | 25         |
| (S) 1,4-Bromofluorobenzene |   |            |             | 98.7     | 99.0      | 60.0-140    |               |                |       |            |

SDG: L1423939 DATE/TIME: 11/01/21 17:49 PAGE: 6 of 9

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#### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL"<br>(Below Detectable Levels). The information in the results column should always be accompanied by either an MDL<br>(Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect<br>or report for this analyte. |
| Uncertainty<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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

SDG: L1423939

## Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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|--------|-----|--------|--|
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| 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            |
| daho                          | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                       | 200008      | Oklahoma                    | 9915             |
| ndiana                        | C-TN-01     | Oregon                      | TN200002         |
| lowa                          | 364         | Pennsylvania                | 68-02979         |
| Kansas                        | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup>        | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>         | 16          | South Dakota                | n/a              |
| ouisiana                      | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                      | LA018       | Texas                       | T104704245-20-18 |
| Maine                         | TN00003     | Texas ⁵                     | LAB0152          |
| Maryland                      | 324         | Utah                        | TN000032021-11   |
| Massachusetts                 | M-TN003     | Vermont                     | VT2006           |
| Michigan                      | 9958        | Virginia                    | 110033           |
| Vinnesota                     | 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.

SDG: L1423939

DAT 11/01/ PAGE: 8 of 9

|                     |  | _                 |                          |                       |                      |  | Laboratory:   | ESC                |  |        |             |           | 10.000            | LYSIS                 |   |       |              |              |                           | B USE ONLY                        | ٦    |
|---------------------|--|-------------------|--------------------------|-----------------------|----------------------|--|---|--------------------|--|--------|-------------|-----------|-------------------|-----------------------|---|-------|--------------|--------------|---------------------------|-----------------------------------|------|
|                     |  |                   |                          |                       |                      |  | Address:  | 100                |  |        |             |           | REQ               | UESTE                 | D                                       |       |              |              |                           | E DATE:                           | _    |
|                     |  |                   |                          |                       | Labc<br>Addr         |  |   |                    | Mt. Juliet, TN 37122   |        |             |           |                   |                       |   |       |              |              |                           | NP OF COOLER<br>IEN RECEIVED (°C) |      |
| Office Location     | Lut                                    | bock              |                          |                       |                      |  | Phone:  | ne: (800) 767-5859 |  |        |             |           | 5                 |                       |   |       |              |              |                           | -                                 |      |
| roject Manager      | 0                                      |                   |                          |                       |                      | Contact:   |   |                    |  |        |             |           | nde               |                       |   |       |              |              | Page <u>1</u> of <u>1</u> |                                   |      |
| ampler's Name       |  | ett Der<br>ron Ac |                          |                       |                      |  | SRS #:  |                    | _  | 009-08 | 84          |           | _                 | Exte                  |   |       |              |              |                           |                                   |      |
| , and a             | Adi                                    | ION AC            | ams                      |                       |                      |  | Sampler's Sig   | nature             | 2  | •      | 1           | la        | 8021              | 15)                   |   |       |              |              |                           |                                   | -    |
| oject Number        |  |                   | Pro                      | oject Name            |                      |  |   | 0                  | O h  | 20     | m           | 111       | - <sup>8</sup> Po | od 80                 |   |       |              |              |                           | J060                              |      |
|                     | 217009                                 |                   | 1.10                     | Jeet Name             | D                    | CD Cas 2   | ale de la composition   |                    | 3  | 62,758 | /pe of C    | ontainers | BTEX (EPA Method  | Method 8015) Extended |   |       |              |              |                           |                                   | 1    |
| Date                |  | d                 |                          | 1.5                   | 0                    | CP Sec. 3  |   | E I                | 1/2  | bag    |             |           | PAN               | MA                    |   |       |              |              | $\vdash$                  | 1100000                           | -    |
| Date                | Time                                   | Comp              | Grab                     | Identi                | ifying Marks         | s of Samp  | ole(s)  | Start Depth        | End Depth  | tedlar |             |           | X (E              | H (EPA                |   |       |              |              |                           | 1423939                           |      |
|                     |  | 1                 |                          |                       | 12                   |  |   | Star               | End  | tec    |             |           | BTE               | HdT                   |   |       |              |              | Lab Sample ID             | 300                               |      |
| 10/28/2021          | 10:15                                  |                   | x                        |                       | EFF-1 (102           | 82021)   |   |                    |  | х      |             |           | X                 | x                     |   |       |              |              |                           | -01                               | 1    |
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|                     |  |                   | -                        |                       | 1941 C - 18-1        | ~  |   |                    |  |        | 1           | -         | -                 | 1.5.2                 | 1000                                    |       | in the       | X            | -                         | -/                                | -    |
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| AROUND TIME         |  |                   | Norm                     | nal 🗆 48              | -Hour Rush           |  | 24-Hour Rush  |                    | TODO   |        |             |           |                   |                       |   |       | _            |              |                           |                                   | -    |
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| hed by (Signature)  | 10mm                                   |                   |                          | 10-28-                | -2/ 3:               | 45   | T.Rob   | erts               | on   | (      |             | 10/29/    | 2 0               | l                     |   |       |              | an un eu     |                           |                                   |      |
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| i sa miej           |  | Date: Time:       |                          |                       |                      |  | Received by (Signature)   | TY?                | -  |        | D           | ate:      | Time:             |                       | - · · · · · · · · · · · · · · · · · · · |       |              | RRACON       |                           |                                   |      |
| WW-Waste            | nu stor                                | -                 | and at a                 |                       |                      |  |   | E!                 | the star   |        | _           |           |                   |                       | 5. AA                                   | RON.A | DAMS         | @TERR/       | ACON.                     |                                   |      |
| VOA - 40 m          |  |                   | Water<br>• Amber Glass 1 | S-Soil                |                      | L - Liquid   | A - Air Bag   | C - Charco         | al tube  | 5      | SL - Skudge |           |                   |                       |   |       |              |              |                           | ent-1                             | . 0) |
| and a subscription  | 1                                      |                   |                          |                       | I = Glass wide mouth |  | P/O - Plastic or other  | Bar 7              | -  |        |             |           |                   |                       |   | _     |              |              |                           | 70-                               | ñ    |
|                     |  |                   |                          | Lubbock               | Office .             | 5827 50  | th Street, Su   | ite 1              | = Li   | bboo   | ck, Te      | xas 79    | 424 m             | 806                   | -300-0                                  | 140   | -            | Sector an    |                           |                                   | +    |
|                     |  |                   |                          |                       |                      | Re   | sponsive 🔳  | Reso               | urcef  | ul m   | Relia       | ble       | 2                 | 185                   | 4                                       | 773   | 2            | 4120         | \$7                       |                                   |      |
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Received by OCD: 3/28/2022 9:18:57 AM

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Report To:

Description:

Brett Dennis 5847 50th St. Suite 1 Lubbock, TX 79424

Entire Report Reviewed By:

Chu, foph Junem

Chris McCord 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

Released to Imaging: %/372022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1436389

DATE/TIME: 12/03/21 22:31 PAGE: 1 of 10

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**ИЕ:** 2:31 PAGE: 2 of 10

## SAMPLE SUMMARY

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| EFF-1 (11302021) L1436389-01 Air                  |           |          | Collected by<br>Brett Dennis | Collected date/time 11/30/21 12:40 | Received date 12/01/21 10:00 |                |
|---|-----------|----------|------------------------------|------------------------------------|------------------------------|----------------|
| Method  | Batch     | Dilution | Preparation<br>date/time     | Analysis<br>date/time              | Analyst                      | Location       |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1783045 | 80       | 12/02/21 13:46               | 12/02/21 13:46                     | FKG                          | Mt. Juliet, TN |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1783670 | 800      | 12/02/21 19:11               | 12/02/21 19:11                     | DAH                          | Mt. Juliet, TN |



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SDG: L1436389 DATE/TIME:

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### CASE NARRATIVE

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.

Chris McCord Project Manager



SDG: L1436389 DATE/TIME: 12/03/21 22:31 PAGE: 4 of 10

# SAMPLE RESULTS - 01

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#### Volatile Organic Compounds (MS) by Method M18-Mod

| -                          |           |          |          |        |         |         |           |          |           |
|----------------------------|-----------|----------|----------|--------|---------|---------|-----------|----------|-----------|
|                            | CAS #     | Mol. Wt. | RDL1     | RDL2   | Result  | Result  | Qualifier | Dilution | Batch     |
| Analyte                    |           |          | ppbv     | ug/m3  | ppbv    | ug/m3   |           |          |           |
| lenzene                    | 71-43-2   | 78.10    | 16.0     | 51.1   | 1460    | 4660    |           | 80       | WG1783045 |
| Foluene                    | 108-88-3  | 92.10    | 40.0     | 151    | 2560    | 9640    |           | 80       | WG1783045 |
| thylbenzene                | 100-41-4  | 106      | 16.0     | 69.4   | 385     | 1670    |           | 80       | WG1783045 |
| ı&p-Xylene                 | 1330-20-7 | 106      | 32.0     | 139    | 3580    | 15500   |           | 80       | WG1783045 |
| -Xylene                    | 95-47-6   | 106      | 16.0     | 69.4   | 1240    | 5380    |           | 80       | WG1783045 |
| PH (GC/MS) Low Fraction    | 8006-61-9 | 101      | 160000   | 661000 | 1130000 | 4670000 |           | 800      | WG1783670 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 131     |         |           |          | WG1783045 |
| (S) 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |        | 98.8    |         |           |          | WG1783670 |
|                            |           |          |          |        |         |         |           |          |           |

SDG: L1436389 DATE/TIME: 12/03/21 22:31 PAGE: 5 of 10 Volatile Organic Compounds (MS) by Method M18-Mod

# QUALITY CONTROL SUMMARY

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#### Method Blank (MB)

| (MB) R3736321-3 12/0 | 2/21 10:13 |
|----------------------|------------|
|----------------------|------------|

| · · /                      |           |              |        |          |
|----------------------------|-----------|--------------|--------|----------|
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| (S) 1,4-Bromofluorobenzene | 90.6      |              |        | 60.0-140 |

#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3736321-1 12/02    | /21 08:50 • (LCSE | D) R3736321-2 | 2 12/02/21 09:3 | 2        |           |             |               |                |       |            |    |
|---------------------------|-------------------|---------------|-----------------|----------|-----------|-------------|---------------|----------------|-------|------------|----|
|                           | Spike Amount      | LCS Result    | LCSD Result     | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits | 7  |
| Analyte                   | ppbv              | ppbv          | ppbv            | %        | %         | %           |               |                | %     | %          | 6  |
| Benzene                   | 3.75              | 4.42          | 4.50            | 118      | 120       | 70.0-130    |               |                | 1.79  | 25         |    |
| Toluene                   | 3.75              | 4.62          | 4.58            | 123      | 122       | 70.0-130    |               |                | 0.870 | 25         | 8  |
| Ethylbenzene              | 3.75              | 4.53          | 4.49            | 121      | 120       | 70.0-130    |               |                | 0.887 | 25         | 1  |
| m&p-Xylene                | 7.50              | 9.08          | 9.09            | 121      | 121       | 70.0-130    |               |                | 0.110 | 25         | 9  |
| o-Xylene                  | 3.75              | 4.45          | 4.50            | 119      | 120       | 70.0-130    |               |                | 1.12  | 25         | ĨS |
| (S) 1,4-Bromofluorobenzer | ne                |               |                 | 91.8     | 92.1      | 60.0-140    |               |                |       |            |    |

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Volatile Organic Compounds (MS) by Method M18-Mod

#### QUALITY CONTROL SUMMARY L1436389-01

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#### Method Blank (MB)

| Method Blank (MB)          | J         |              |        |          |                 |
|----------------------------|-----------|--------------|--------|----------|-----------------|
| (MB) R3736663-3 12/02/2    | 21 10:13  |              |        |          | СР              |
|                            | MB Result | MB Qualifier | MB MDL | MB RDL   | 2               |
| Analyte                    | ppbv      |              | ppbv   | ppbv     | Тс              |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |                 |
| (S) 1,4-Bromofluorobenzene | 90.6      |              |        | 60.0-140 | <sup>3</sup> SS |

#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3736663-1 12/02/2   | 1 08:50 • (LCSI | D) R3736663-2 | 2 12/02/21 09:3 | 32       |           |             |               |                |       |            |
|----------------------------|-----------------|---------------|-----------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                            | Spike Amount    | LCS Result    | LCSD Result     | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
| Analyte                    | ppbv            | ppbv          | ppbv            | %        | %         | %           |               |                | %     | %          |
| TPH (GC/MS) Low Fraction   | 203             | 254           | 255             | 125      | 126       | 70.0-130    |               |                | 0.393 | 25         |
| (S) 1,4-Bromofluorobenzene |                 |               |                 | 91.8     | 92.1      | 60.0-140    |               |                |       |            |

DATE/TIME: 12/03/21 22:31

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#### 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.  |
|---------------------------------|--|
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>(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<br>observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will<br>be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.  |
| Quality Control<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
|                                 |  |
| Qualifier                       | Description  |

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

SDG: L1436389

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Sc

| 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            |
| daho                          | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                       | 200008      | Oklahoma                    | 9915             |
| ndiana                        | C-TN-01     | Oregon                      | TN200002         |
| lowa                          | 364         | Pennsylvania                | 68-02979         |
| Kansas                        | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup>        | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>         | 16          | South Dakota                | n/a              |
| ouisiana                      | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana                      | LA018       | Texas                       | T104704245-20-18 |
| Maine                         | TN00003     | Texas ⁵                     | LAB0152          |
| Maryland                      | 324         | Utah                        | TN000032021-11   |
| Massachusetts                 | M-TN003     | Vermont                     | VT2006           |
| Michigan                      | 9958        | Virginia                    | 110033           |
| Vinnesota                     | 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.

SDG: L1436389

DAT 12/03 PAGE: 9 of 10

|                    |                    |                                   |           | 2         | DCON  | Address:                                |             |           | TN 3712         | 2        |   | REQU              |          |       |     |         |               |         | TEMP OF COOLER<br>WHEN RECEIVED (°C) |
|--------------------|--------------------|-----------------------------------|-----------|-----------|---|---|-------------|-----------|-----------------|----------|---|-------------------|----------|-------|-----|---------|---------------|---------|--------------------------------------|
| Offic              | e Location         | Lub                               | bock      |           |   | Phone:<br>Contact:                      | (800)       | ) 767-    | 5859            |          |   |                   |          |       |     |         |               |         | Page <u>1</u> of _                   |
| Proje              | ect Manag          | er Bre                            | tt Der    | nnis      |   | SRS #:                                  |             |           | 2009-084        | L.       | _                                       |                   |          |       |     |         |               |         |                                      |
| Samp               | oler's Nam         | e Bre                             | tt Der    | nnis      |   | Sampler's Sig                           | nature      | e)        | $\sim$          |          |   | 8021)             | _        |       |     |         |               |         |                                      |
| Proje              | ect Numbe          | er<br>AR217009                    |           |           | Project Name<br>DCP Sec. 31 (SRS                                    | # 2009-084)                             |             |           | No. Type<br>Beg | e of Con | ntainers                                | (EPA Method 8021) | extended |       |     |         |               |         | L14363                               |
| Matrix             | Date               | Time                              | Comp      | Grab      | Identifying Marks of Sar  | nple(s)                                 | Start Depth | End Depth | tedlar bi       |          |   | BTEX (EP/         | TPH 8015 |       |     |         |               |         | Lab Sample II                        |
|                    | 11/30/2021         | 12:40                             |           | Х         | EFF-1 (11302021)  |   |             |           | 1               |          |   | x                 | х        |       |     |         |               |         |                                      |
|                    |                    |                                   | -         |           | <u> </u>  |   | -           |           |                 |          | -                                       |                   |          |       | -   | -       | -             | _       |                                      |
| $\vdash$           |                    | -/                                | +         | $\square$ | <u> </u>  |   | +           | +         | $\vdash$        | A        |   |                   |          |       | -   | -+      | +             | -       |                                      |
| $\vdash$           |                    | /                                 | +         |           |   |   | +           | +         | И               | -        | +                                       |                   |          |       | -   | +       | +             | -       |                                      |
| H                  |                    | /                                 | +         |           |   |   |             | 1         |                 |          | -                                       |                   |          |       |     | -       | -             |         |                                      |
| $\square$          | 1                  |                                   |           | - ti      |   |   | 1           |           |                 |          | - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 |                   |          |       | X   |         |               |         | /                                    |
|                    | /                  |                                   | 12        | 8.53      |   |   | X           |           |                 |          |   |                   |          |       |     | X       |               |         |                                      |
|                    | /                  |                                   | -         |           |   |   | -           | N         | FE              | +        | -                                       |                   |          |       | _   | -       | Y             |         |                                      |
| И                  |                    |                                   | +         | $\vdash$  |   | $\sim$                                  | -           | +         |                 | -        |   | +                 | _        |       | +   | +       | +             | 4       |                                      |
| TURN               | AROUND TI          | ME                                |           | à         | Normal 48-Hour Rush   | 24-Hour Rush                            |             | TRR       | P Laborat       | tory Rev | l<br>view Che                           | cklist            |          | P     | Yes |         |               |         |                                      |
| Relinqu            | ished by Signatur  |                                   | 2         |           | - 11/30/21 Hr 16:2  | P Received by Stragure                  | ert         | a         |                 | Date     | hly                                     | 10                | -        | NOTE  | S:  | B       | Bill dire     | ectly t | to Plains Pipeline                   |
| Relinqui           | ished by (Signatur | re)                               |           |           | Date: Time:   | Received by (Signature                  | )           |           |                 | Date     | ĸ                                       | Time:             |          | e-mai |     |         |               |         |                                      |
| Relinqu            | ished by (Signatur | re)                               |           |           | Date: Time:   | Received by (Signature                  | )           |           | 7.5             | Date     | r:                                      | Time:             |          |       |     | algrove | 1.1.1.1.1.1.1 |         | acon.com                             |
|                    |                    |                                   |           |           |   |   |             | -         |                 |          |   | -                 |          |       | 4   | ibryan  | nt@pa         | alp.co  | om                                   |
| Relinqu            | ished by (Signatur | re)                               |           |           | Date: Time:   | Received by (Signature                  | 1           |           |                 | Date     |   | Time:             |          |       | 1   | maoch   | oa@p          | aalp.o  | com                                  |
| Matrix<br>Containe | e :                | WW-Wastewater<br>VQA - 40 ml vial |           | W - Wat   | ter S - Soll L - Liqui<br>niber Glass 11. 250 ml = Glass wide mouth | d A - Air Bag<br>P/O - Plastic or other | C - Charo   | coal tube | 8               | - Shudge |   |                   |          |       | 28  | 68      | 5             | 50      | 12-1154                              |
|                    |                    |                                   |           |           | Lubbock Office  | 5847 50th Stree                         | et m l      | Lubb      | ock, Te         | exas 7   | 9424                                    | 806               | -300     | -0140 |     |         |               |         |                                      |
|                    |                    |                                   |           |           |   | Responsive 🔳                            | Reso        | ource     | eful 🔳          | Reliat   | ble                                     |                   |          | 1     | 1.1 |         |               |         |                                      |
|                    |                    |                                   |           | 1000      |   |   |             |           |                 |          |   |                   |          |       |     |         |               |         |                                      |
|                    |                    | 20 Seal Prese                     | the state | ampl      | e Receipt Checklist DKHZ  | ,                                       |             |           |                 |          |   |                   |          |       |     |         |               |         |                                      |

Received by OCD: 3/28/2022 9:18:57 AM

|                            | <b>line - Terracon</b><br>44522 |  |
|----------------------------|---------------------------------|--|
| Sample Delivery Group: L14 |                                 |  |
| · · · ·                    | 44522                           |  |
| Samples Received: 12       |                                 |  |
|                            | 21/2021                         |  |
| Project Number: AF         | 217009                          |  |
| Description: DO            | P Sec. 31                       |  |
| Report To: Br              | ett Dennis                      |  |
| 58                         | 47 50th St.                     |  |
| Su                         | ite 1                           |  |

Entire Report Reviewed By: Chu, forf men

Chris McCord 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

Released to Imaging: 3/2022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1444522

DATE/TIME: 12/30/21 16:33 PAGE: 1 of 9

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Released to Imaging: 0/3/2022 2:26:44 PM Plains All American Pipeline - Terracon

PROJECT: AR217009

SDG: L1444522 DATE/TIME:

12/30/21 16:33

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## SAMPLE SUMMARY

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| EFF-1 (1222021) L1444522-01 Air                   |           |          | Collected by<br>Aaron Adams | Collected date/time 12/20/21 09:00 | Received date 12/21/21 10:15 | /time          | 1 |
|---|-----------|----------|-----------------------------|------------------------------------|------------------------------|----------------|---|
| Method  | Batch     | Dilution | Preparation<br>date/time    | Analysis<br>date/time              | Analyst                      | Location       | 2 |
| Volatile Organic Compounds (MS) by Method M18-Mod | WG1792997 | 4000     | 12/21/21 15:17              | 12/21/21 15:17                     | FKG                          | Mt. Juliet, TN |   |

| <sup>3</sup> Ss |
|-----------------|
| <sup>4</sup> Cn |
| <sup>5</sup> Sr |
| <sup>6</sup> Qc |
| <sup>7</sup> Gl |
| <sup>8</sup> AI |
| <sup>9</sup> Sc |

Τс

SDG: L1444522

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### CASE NARRATIVE

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.

Chris McCord Project Manager



SDG: L1444522 DATE/TIME: 12/30/21 16:33

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# SAMPLE RESULTS - 01

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Qc

Gl

A

Sc

### Volatile Organic Compounds (MS) by Method M18-Mod

|                        | CAS #     | Mol. Wt. | RDL1     | RDL2    | Result  | Result   | Qualifier | Dilution | Batch     |
|------------------------|-----------|----------|----------|---------|---------|----------|-----------|----------|-----------|
| alyte                  |           |          | ppbv     | ug/m3   | ppbv    | ug/m3    |           |          |           |
| zene                   | 71-43-2   | 78.10    | 800      | 2560    | ND      | ND       |           | 4000     | WG1792997 |
| Jene                   | 108-88-3  | 92.10    | 2000     | 7530    | 149000  | 561000   |           | 4000     | WG1792997 |
| lylbenzene             | 100-41-4  | 106      | 800      | 3470    | 27500   | 119000   |           | 4000     | WG1792997 |
| o-Xylene               | 1330-20-7 | 106      | 1600     | 6940    | 67800   | 294000   |           | 4000     | WG1792997 |
| ylene                  | 95-47-6   | 106      | 800      | 3470    | 19500   | 84500    |           | 4000     | WG1792997 |
| (GC/MS) Low Fraction   | 8006-61-9 | 101      | 800000   | 3300000 | 5260000 | 21700000 |           | 4000     | WG1792997 |
| 1,4-Bromofluorobenzene | 460-00-4  | 175      | 60.0-140 |         | 97.1    |          |           |          | WG1792997 |

Volatile Organic Compounds (MS) by Method M18-Mod

# QUALITY CONTROL SUMMARY

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Тс

Ss

Cn

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<sup>°</sup>Qc

#### Method Blank (MB)

| (MB) R3743611-3 12/ | 21/21 10:22 |
|---------------------|-------------|
|---------------------|-------------|

|                            | MB Result | MB Qualifier | MB MDL | MB RDL   |
|----------------------------|-----------|--------------|--------|----------|
| Analyte                    | ppbv      |              | ppbv   | ppbv     |
| Benzene                    | U         |              | 0.0715 | 0.200    |
| Ethylbenzene               | U         |              | 0.0835 | 0.200    |
| Toluene                    | U         |              | 0.0870 | 0.500    |
| m&p-Xylene                 | U         |              | 0.135  | 0.400    |
| o-Xylene                   | U         |              | 0.0828 | 0.200    |
| TPH (GC/MS) Low Fraction   | U         |              | 39.7   | 200      |
| (S) 1,4-Bromofluorobenzene | 94.4      |              |        | 60.0-140 |

#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

| (LCS) R3743611-1 12/21/2   | 1 09:01 • (LCSD) | R3743611-2 1 | 2/21/21 09:42 |          |           |             |               |                |       |            | 7               |
|----------------------------|------------------|--------------|---------------|----------|-----------|-------------|---------------|----------------|-------|------------|-----------------|
|                            | Spike Amount     | LCS Result   | LCSD Result   | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits | <sup>′</sup> GI |
| Analyte                    | ppbv             | ppbv         | ppbv          | %        | %         | %           |               |                | %     | %          |                 |
| Benzene                    | 3.75             | 4.35         | 4.37          | 116      | 117       | 70.0-130    |               |                | 0.459 | 25         | 8               |
| Toluene                    | 3.75             | 4.37         | 4.42          | 117      | 118       | 70.0-130    |               |                | 1.14  | 25         | A               |
| Ethylbenzene               | 3.75             | 4.31         | 4.34          | 115      | 116       | 70.0-130    |               |                | 0.694 | 25         | 9               |
| m&p-Xylene                 | 7.50             | 8.68         | 8.75          | 116      | 117       | 70.0-130    |               |                | 0.803 | 25         | Sc              |
| o-Xylene                   | 3.75             | 4.26         | 4.30          | 114      | 115       | 70.0-130    |               |                | 0.935 | 25         |                 |
| TPH (GC/MS) Low Fraction   | 203              | 241          | 243           | 119      | 120       | 70.0-130    |               |                | 0.826 | 25         |                 |
| (S) 1,4-Bromofluorobenzene | ç                |              |               | 95.8     | 94.6      | 60.0-140    |               |                |       |            |                 |

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#### 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 Method Quantitation Limit.   |
| 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 Sample Detection Limit.  |
| 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<br>for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or<br>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<br>no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL"<br>(Below Detectable Levels). The information in the results column should always be accompanied by either an MDL<br>(Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect<br>or report for this analyte. |
| Uncertainty<br>(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<br>Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or<br>analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not<br>being performed on your samples typically, but on laboratory generated material.  |
| Sample Chain of<br>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.  |
| Qualifier                       | Description  |

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

SDG: L1444522

## Received by OCD: 3/28/2022 9:18:57 AMCCREDITATIONS & LOCATIONS

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|-----------------|---|
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| 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            |
| ldaho                  | TN00003     | Ohio-VAP                    | CL0069           |
| llinois                | 200008      | Oklahoma                    | 9915             |
| ndiana                 | C-TN-01     | Oregon                      | TN200002         |
| lowa                   | 364         | Pennsylvania                | 68-02979         |
| Kansas                 | E-10277     | Rhode Island                | LAO00356         |
| Kentucky <sup>16</sup> | KY90010     | South Carolina              | 84004002         |
| Kentucky <sup>2</sup>  | 16          | South Dakota                | n/a              |
| ouisiana               | AI30792     | Tennessee <sup>14</sup>     | 2006             |
| ouisiana               | LA018       | Texas                       | T104704245-20-18 |
| Maine                  | TN00003     | Texas ⁵                     | 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             |
| 42LA – ISO 17025       | 1461.01     | AIHA-LAP,LLC EMLAP          | 100789           |
| A2LA – ISO 17025 ⁵     | 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.

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PAGE: 8 of 9 Received by OCD: 3/28/2022 9:18:57 AM

## E099

| Office Location       Lubback       Phone       1000 767-5833       1000 767-5833         Project Manager       Bent Dennis       Contact:       2009-084       1000 767-5833         Sampler's Name       Aaron Adams       Sampler's Signature       1000 767-5833       1000 767-5833         Project Name       Aaron Adams       Sampler's Signature       1000 767-5833       1000 767-5833         Project Name       Aaron Adams       Sampler's Signature       1000 767-5833       1000 767-5833         Project Name       Aaron Adams       Sampler's Signature       1000 767-5833       1000 767-583         Project Name       DCP Sec 31       1000 767-583       1000 767-583       1000 767-583         Project Name       DCP Sec 31       1000 767-583       1000 767-583       1000 767-583         Project Name       Def Sec 31       100 775-590 700 700 700 700 700 700 700 700 700 7   |   | 21        |   |   |  | Laboratory:<br>Address:  | 120                  | 65 Lebanon       | Rd             | 1.111 - 414                          | UESTED   | HAIN OF CUS  |  | RD<br>USE ONLY<br>E DATE:  |
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| Percent anager Brett Dennis Brett Dennis Stampler's Signature Aron Adams Sampler's Aron Adams Sample       | Lubbock   |           |   | Mt. Juliet, TN 37122<br>(800) 767-5859  |  | nex.   |                      |                  |                | TEMP OF COOLER<br>WHEN RECEIVED (oC) |  |  |  |  |
| Name       Sampler's Signature       Output         Project Name       Project Name       DCP Sec 31       Image: Signature       Image: Signat  | Project Manager   |           |   | 5.91条   | 10 fg C  | Contact:   | -                    |                  |                |                                      | -  |  |  | Ramo 1 of  |
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| WW Waterwater     W Water     S - Sul     Lipped     A - Arting     C - Outcode look     Job / Job / S     4. ERIN.LOYD@TERRACON.COM       VOA - 49 art load     AVG - Andrear Class 10     20 art - Class 10 arcs     S - Stage       VOA - 49 art load     AVG - Andrear Class 10     20 art - Class 10 arcs     S - Stage       VOA - 49 art load     AVG - Andrear Class 10     PO - Ruite or other     S - Stage       Lubbook Office = 5827 50th Street, Suite 1 = Lubbook, Texas 79424 = 806-300-0140       Responsive = Resourceful = Reliable       SO 88     3753     6198       Amb       Amb   | uished by (Signature)   | 26117     | Norm                                      | 12/20/201<br>Date:  | Time:<br>10:00<br>Time:  | Received by (Signature) Received by (Signature)  | Ţ                    | RRP Laborat      | Date;          | Tane.                                | NOTE   | ES: Bil  | ll directly to Pla   | ains Pipeline  |
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## APPENDIX D

Terracon Standard of Care, Limitation, and Reliance

#### **Standard of Care**

Terracon's services will be performed in a manner consistent with generally-accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, our client, as set forth in our proposal and were not intended to be in strict conformance with ASTM E1903-11.

#### **Additional Scope Limitations**

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this confirmation sampling. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

#### Reliance

This report has been prepared for the exclusive use of Plains All American Pipeline LP; and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Plains All American Pipeline LP and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Master Services Agreement (026450-04810-PMLP.2.17), dated August 3, 2011, between Terracon and Plains All American Pipeline LP. The limitation of liability defined in the Terms and Conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Action 93406

| CONDITIONS                 |  |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|
| Operator:                  | OGRID:   |  |  |  |  |  |
| PLAINS MARKETING L.P.      | 34053  |  |  |  |  |  |
| 333 Clay Street Suite 1900 | Action Number:   |  |  |  |  |  |
| Houston, TX 77002          | 93406  |  |  |  |  |  |
|                            | Action Type:   |  |  |  |  |  |
|                            | [UE-GWA] Ground Water Abatement (GROUND WATER ABATEMENT) |  |  |  |  |  |

#### CONDITIONS

| Created<br>By | Condition  | Condition<br>Date |
|---------------|--|-------------------|
| nvelez        | Review of 2021 ANNUAL GROUNDWATER MONITORING REPORT: Content satisfactory Contractor anticipated actions approved by OCD and are as follows; 1. Continue manual PSH recovery from monitoring well MW-1 2. Collect monthly effluent air samples of SVE emissions and analyze for TPH and BTEX 3. Continue gauging MW-2, MW-4, and MW-5 for the presence of PSH, purged, and sampling quarterly for BTEX in 2022 4. Sample MW-3 and MW-6 on a semiannual basis 5. Submit Annual Groundwater Monitoring Report to NMOCD no later than March 31, 2023. | 8/3/2022          |