

# 2023 Annual Groundwater Monitoring Report

**REVIEWED**

By Mike Buchanan at 4:36 pm, Aug 01, 2024

## Plains All American Pipeline, LP DCP Plant to Lea Station 6-Inch Section 31

Lea County, New Mexico  
Unit Letter "K", Section 31, Township 20 South, Range 37 East  
Latitude 32.52733 North, Longitude 103.2906 West  
Plains SRS #: 2009-084  
NMOCD Reference #: 1RP-2166  
NMOCD Incident ID #: nAPP2109734163

Review of the DCP Plant to Lea Station 6-Inch Section 31: content satisfactory

1. Continue to conduct groundwater monitoring on a semi-annual schedule for MW-3 and MW-6. Conduct quarterly monitoring events for MW-2, MW-4 and MW-5.
2. For MW-1, conduct AFR events on a monthly schedule as prescribed.
3. Continue to run and conduct O&M of the SVE system with emission sampling.
4. Submit the 2024 annual report to OCD by April 1, 2025.

Prepared By:

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Midland • San Antonio • Lubbock • Hobbs • Lafayette

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## 1.0 INTRODUCTION & SITE DESCRIPTION

Etech Environmental & Safety Solutions (Etech), on behalf of Plains All American Pipeline, LP (Plains), has prepared this *2023 Annual Groundwater Monitoring Report* for the DCP Plant to Lea Station 6-Inch Section 31 Release Site in accordance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an *Annual Monitoring Report* by April 1st of each year.

The legal description of the 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 32.52733° North latitude and 103.2906° West longitude. A "Site Location Map" is provided as Figure 1.

## 2.0 BACKGROUND INFORMATION

On April 2, 2009, 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 six (6) feet in width by eight (8) feet in length. Plains initially classified the release as "non-reportable". On further investigation, Plains reclassified the release as "reportable", notified the NMOCD Hobbs District 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 was released from the pipeline, with no recovery.

On April 15, 2009, one (1) soil boring (SB-1) was advanced approximately 10 feet west of the release point to evaluate the vertical extent of impacted soil. During advancement of the soil boring, groundwater was encountered at approximately 77 feet below ground surface (bgs). Temporary casing was installed in the soil boring to obtain a preliminary groundwater sample. On April 16, 2009, a groundwater sample (SB-1) was collected from the temporary casing and submitted to the laboratory for analysis of total dissolved solids (TDS); chloride; 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 required by the New Mexico Office of the State Engineer (NMOSE). Laboratory analytical results indicated a benzene concentration of 1.915 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 Release Site.

On June 2, 2009, following advancement of the soil boring, excavation of hydrocarbon-impacted soil commenced. Excavated soil was stockpiled on-site on a plastic liner to mitigate the potential leaching of the contaminants into the vadose zone. Approximately 1,400 cubic yards (cy) of soil was stockpiled on-site, pending final disposition. The final dimensions of the excavation were approximately 77 feet in width, approximately 80 feet in length, and 15 feet in depth.

On September 21 through September 23, 2009, Plains installed and developed four (4) monitor wells (MW-1 through MW-4) at the Release Site, as approved by the NMOCD. Soil samples were collected at five (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.

Monitor well MW-1 was installed on the floor of the excavation, at approximately 15 feet bgs, to a total depth of approximately 86 feet bgs. Soil samples collected at 25, 35, 45, 55, 65, and 75 feet 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 mg/kg for the soil sample collected at 25 feet bgs to 13.444 mg/kg for the soil sample collected at 55 feet bgs. TPH concentrations ranged from 286 mg/kg for the soil sample collected at 25 feet bgs to 1,538 mg/kg for the soil sample collected at 55 feet bgs.

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

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

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

On January 25, 2011, one (1) additional monitor well (MW-5) was installed to further monitor the down-gradient migration of the PSH plume. Monitor well MW-5 is located approximately 60 feet to the southeast (down-gradient) of the release point. The monitor well was installed to a total depth of approximately 95 feet bgs. Soil samples collected at 15, 25, 45, 65, and 75 feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL in each of the submitted soil samples. PSH was not observed in monitor well MW-5.

On September 11, 2013, one (1) additional monitor well (MW-6) was installed to further monitor the down-gradient migration of the PSH plume. Monitor well MW-6 is located approximately 95 feet to the east (cross-gradient) of the release point. The monitor well was installed to a total depth of approximately 100 feet bgs. Soil samples collected at five (5), 40, and 75 feet 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 monitor well MW-6.

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 were collected from the SVE unit to ensure compliance with New Mexico Environment Department (NMED) Air Quality Bureau Action Levels. Results of effluent sample analyses are summarized in Table 3.

In February 2023, Etech, at the request of Plains, assumed project management and oversight responsibilities for groundwater remediation activities at the DCP Plant to Lea Station 6-Inch Section 31.

Currently, a total of six (6) monitor wells (MW-1 through MW-6) are located at the DCP Plant to Lea Station 6-Inch Section 31 Release Site. Monitor wells MW-2, MW-4, and MW-5 are gauged and sampled on a quarterly schedule. A semi-annual monitoring schedule was approved by the NMOCD for monitor wells MW-3 and MW-6 in August 2022. Monitor well MW-1 is gauged monthly but not sampled due to the presence of PSH.

### **3.0 FIELD ACTIVITIES**

#### **3.1 Product Recovery Efforts**

A measurable thickness of PSH was detected in monitor well MW-1 during the initial site investigation. Manual recovery of PSH from MW-1 commenced in October 2009, and approximately 5,783 gallons (138 barrels) of PSH have been recovered since inception. Approximately 91.0 gallons of dissolved-phase hydrocarbon-impacted groundwater and 2.27 gallons of PSH were recovered by manual recovery from MW-1 during the 2023 reporting period. The average PSH thickness measured in monitor well MW-1 during the reporting period was 0.93 feet, and the maximum PSH thickness observed was 1.15 feet on July 28, 2023. Groundwater gauging and recovery data for monitor well MW-1 is summarized in Table 4.

An Aggressive Fluid Recovery (AFR) event was conducted on monitor well MW-1 in August 2023. During the AFR event, a submersible pump was utilized to conduct a prolonged recovery event consisting of approximately 5-7 hours of pumping. A total of approximately 350 gallons (8.33 bbls) of hydrocarbon-impacted groundwater were recovered from the monitor well during the event. The recovered fluid was pumped directly into the on-site polystyrene aboveground storage tank (AST), pending transport to an NMOCD-approved disposal facility.

In September 2012, an MDPE unit was installed on monitor 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 Incident #nAPP2109730917), and the location of the unit was alternated periodically until an SVE was installed at the aforementioned 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 NMED Air Quality Bureau (AQB) Action Levels.

Effluent air samples are collected from the exhaust port of the SVE system during each monthly recovery event. Emission mass calculations resulted in a decrease in average emissions of TPH from 2.25 tons/year in 2022 to 0.93 tons/year in 2023. The average emission volume decreased from 2.11 gal/day in 2022 to 0.86 gal/day in 2023. Effluent air samples were below the AQB criteria of 10 tons of TPH per year throughout the 2023 reporting period. Laboratory analytical results for effluent air samples are summarized in Table 3, and laboratory analytical reports are provided in Appendix B.

### **3.2 Groundwater Monitoring**

The on-site monitor wells were gauged and sampled on March 29 and 30 (1Q2023); June 21 (2Q2023); September 19 (3Q2023); and December 7, 2023 (4Q2023). The groundwater monitoring events consisted of measuring static water levels in the on-site monitor wells (MW-1 through MW-6), checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Purged water was placed into the on-site AST and disposed of at an NMOCD-approved disposal facility.

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 (4) cycles of five (5) minutes each. Each groundwater sample collected was placed in laboratory-supplied containers appropriate to the analysis requested and placed on ice in a cooler.

Locations of the groundwater monitor wells and the inferred groundwater elevations, which were constructed from measurements collected during the 2023 quarterly sampling events, are depicted in Figures 2A through 2D. The maps indicate a general groundwater gradient of 0.002 to 0.003 feet/foot to the south-southeast, as measured between monitor wells MW-2 and MW-4. Groundwater elevation and PSH thickness data is summarized in Table 1.

Based on sampling criteria provided by the NMOCD, none of the on-site monitor wells were subject to monitoring for polycyclic aromatic hydrocarbons (PAH) during the reporting period.

### **4.0 LABORATORY RESULTS**

Groundwater samples collected from the on-site monitor wells during the quarterly monitoring events were delivered to Permian Basin Environmental Lab (PBEL) and/or Pace Analytical in Midland, Texas, for determination of BTEX constituent concentrations by Environmental Protection Agency (EPA) Method SW846-8021b. A summary of laboratory analytical results is presented in Table 2. "Groundwater Concentration" maps are provided as Figures 3A through 3D. Laboratory analytical reports are provided as Appendix A.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC).

**Monitor Well MW-1**

Monitor well MW-1 was not sampled during the 2023 reporting period due to the presence of PSH in the well.

**Monitor Well MW-2**

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

**Monitor Well MW-3**

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

**Monitor Well MW-4**

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

**Monitor Well MW-5**

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

**Monitor Well MW-6**

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

**5.0 SUMMARY**

This report presents the results of the monitoring activities for the 2023 annual monitoring period. Currently, there are six (6) groundwater monitor wells (MW-1 through MW-6) on-site. Monitor well MW-1 was not sampled in 2022 due to the presence of PSH in the well. Monitor wells MW-2, MW-4, and MW-5 were sampled during all four quarters of the monitoring period. Monitor wells MW-3 and MW-6 are on a semi-annual monitoring schedule and were not sampled during 2Q2023. The results of these sampling events are summarized above.

Groundwater gauging data collected during the monitoring period indicates a general gradient of approximately 0.002 to 0.003 feet/foot to the south-southeast as measured between monitor wells MW-2 and MW-4.

During the reporting period, approximately 91.0 gallons of dissolved-phase hydrocarbon-impacted groundwater and 2.27 gallons of PSH were recovered by manual recovery from monitor well MW-1. The average PSH thickness measured in monitor well MW-1 during the reporting period was 0.93 feet, and the maximum PSH thickness observed was 1.15 feet on July 28, 2023.

An AFR event was conducted on monitor well MW-1 in August 2023. A total of approximately 350 gallons (8.33 bbls) of hydrocarbon-impacted groundwater were recovered from the monitor well during the event.

Effluent air samples collected from the exhaust port of the SVE system during the monitoring period indicated a decrease in average emissions of TPH from 2.25 tons/year in 2022 to 0.93 tons/year in 2023. The average emission volume decreased from 2.11 gal/day in 2022 to 0.86 gal/day in 2023. Effluent air samples were below the AQB criteria of 10 tons of TPH per year throughout the 2023 reporting period.

Review of laboratory analytical results from groundwater samples collected during the reporting period indicated BTEX constituent concentrations were less than NMOCD regulatory standards in all submitted groundwater samples.

None of the on-site monitor wells were subject to PAH monitoring during the reporting period.

## **6.0 ANTICIPATED ACTIONS**

Monitor wells MW-2, MW-4, and MW-5 will continue to be monitored and sampled quarterly. Monitor wells MW-3 and MW-6 will be sampled on a semi-annual basis.

In lieu of manual recovery, monthly AFR events will be conducted from monitor well MW-1 in an effort to control the down-gradient migration of the dissolved-phase plume.

Recovery by SVE and monthly emission sampling will continue from monitor well MW-1.

Results from the 2024 sampling events will be reported in the *2024 Annual Monitoring Report*, which will be submitted to the NMOCD by April 1, 2025.

## 7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *2023 Annual Groundwater Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains All American Pipeline, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Etech and/or Plains All American Pipeline, LP.

## **8.0 DISTRIBUTION**

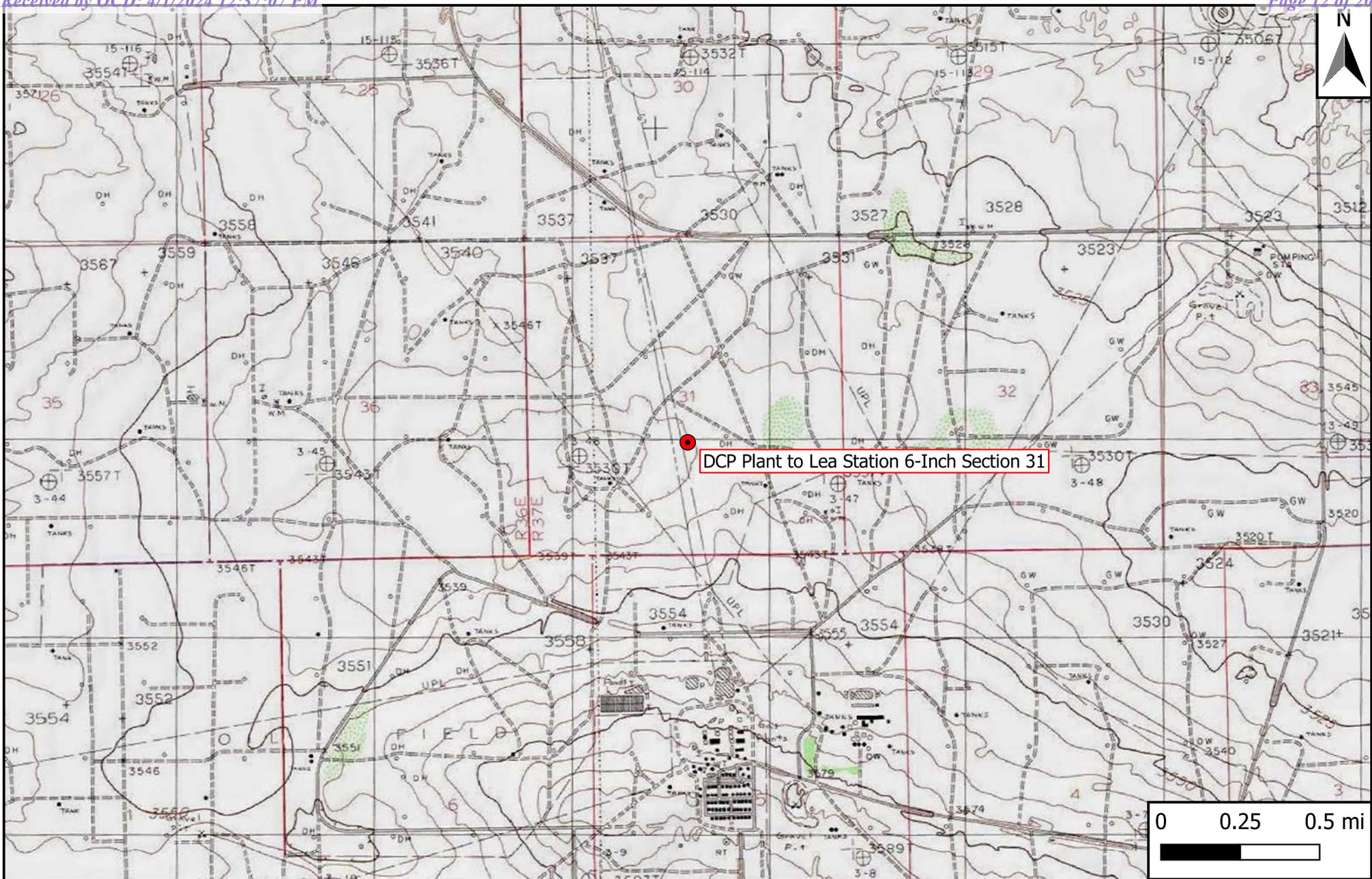
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*(Electronic Submission)*

# Figure 1 Site Location Map



Legend  
 ● Site Location

**Figure 1**  
 Site Location Map  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico



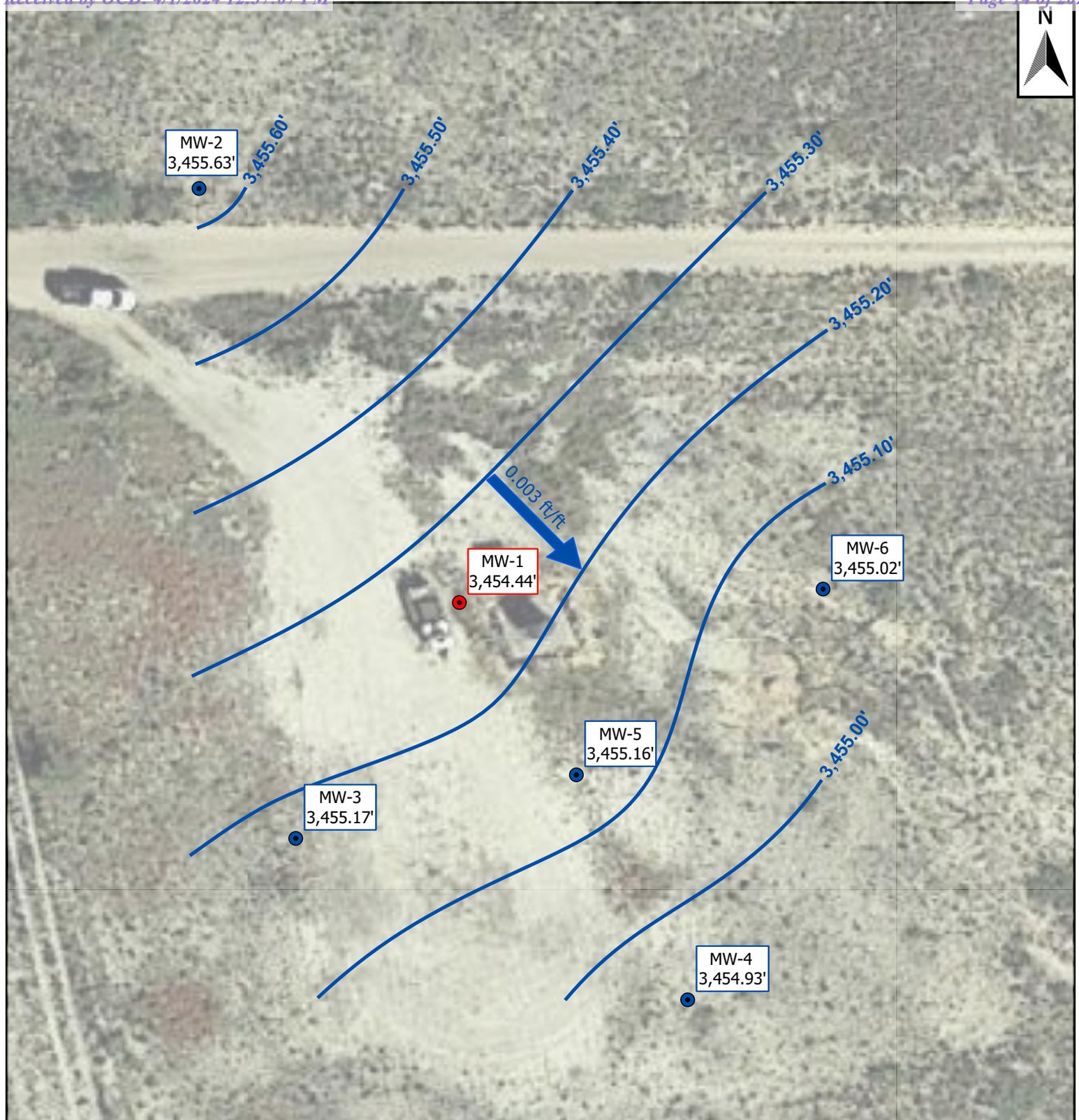
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Checked: jwl

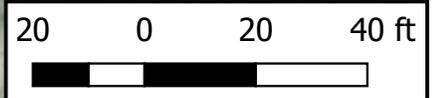
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## **Figures 2A - 2D**

### **Inferred Groundwater Gradient Maps**



**Notes:**  
 All measurements are in feet above mean sea level.  
 Groundwater gradient magnitude measured between monitor wells MW-2 and MW-4.  
 Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.



Legend	
<span style="color: blue;">●</span>	Monitor Well
<span style="color: red;">●</span>	Recovery Well
<span style="color: blue;">➔</span>	Groundwater Gradient/Magnitude
<span style="color: blue;">—</span>	Groundwater Elevation Contour (ft)

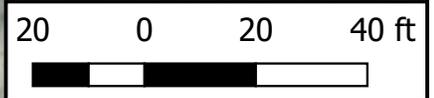
**Figure 2A**  
 Inferred Groundwater Gradient Map – 1Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico

Environmental & Safety Solutions, Inc.

Drafted: bja      Checked: jwl      Date: 3/28/24



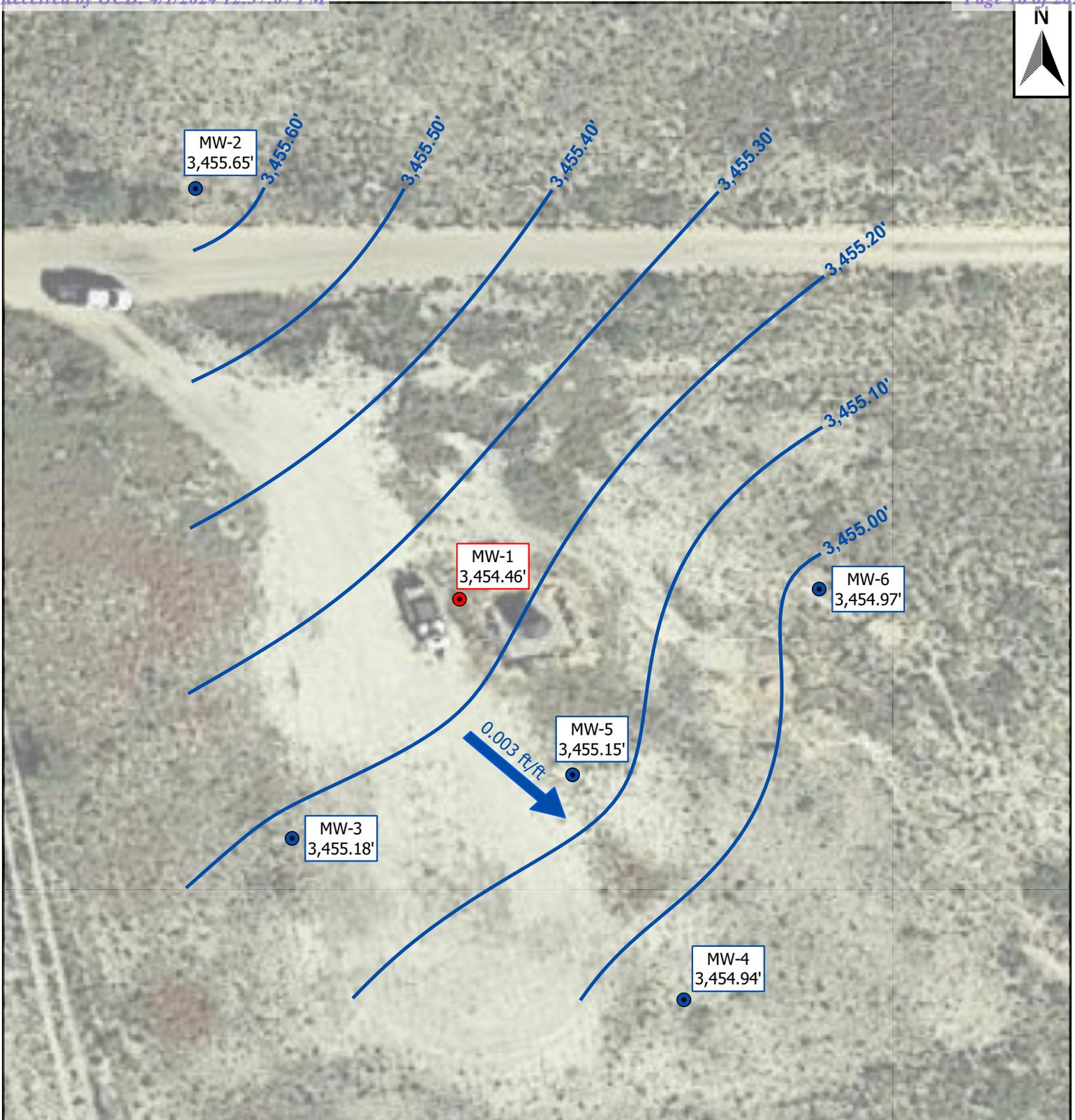
**Notes:**  
 All measurements are in feet above mean sea level.  
 Groundwater gradient magnitude measured between monitor wells MW-2 and MW-4.  
 Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.



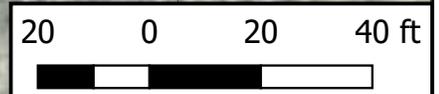
Legend	
	Monitor Well
	Recovery Well
	Groundwater Gradient/Magnitude
	Groundwater Elevation Contour (ft)

**Figure 2B**  
 Inferred Groundwater Gradient Map – 2Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico

Drafted: bja      Checked: jwl      Date: 3/28/24



**Notes:**  
 All measurements are in feet above mean sea level.  
 Groundwater gradient magnitude measured between monitor wells MW-2 and MW-4.  
 Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.



Legend	
<span style="color: blue;">●</span>	Monitor Well
<span style="color: red;">●</span>	Recovery Well
<span style="color: blue;">➔</span>	Groundwater Gradient/Magnitude
<span style="color: blue;">—</span>	Groundwater Elevation Contour (ft)

**Figure 2C**  
 Inferred Groundwater Gradient Map – 3Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico



Drafted: bja      Checked: jwl      Date: 3/28/24



**Notes:**  
 All measurements are in feet above mean sea level.  
 Groundwater gradient magnitude measured between monitor wells MW-2 and MW-4.  
 Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.



Legend	
<span style="color: blue;">●</span>	Monitor Well
<span style="color: red;">●</span>	Recovery Well
<span style="color: blue;">➔</span>	Groundwater Gradient/Magnitude
<span style="color: blue;">—</span>	Groundwater Elevation Contour (ft)

**Figure 2D**  
 Inferred Groundwater Gradient Map – 4Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico


  
**eTECH**  
 Environmental & Safety Solutions, Inc.

Drafted: bja      Checked: jwl      Date: 3/28/24

## **Figures 3A - 3D**

### **Groundwater Concentration Maps**



**MW-2**  
 3/30/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

**MW-1**  
 3/30/2023  
 NS: PSH 0.86'

**MW-6**  
 3/30/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

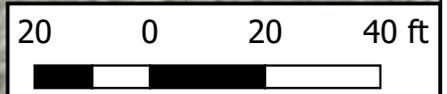
**MW-5**  
 3/30/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

**MW-3**  
 3/30/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

**MW-4**  
 3/30/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200



**Notes:**  
 All concentrations are reported in mg/L.  
 Concentrations in **BOLD** exceeded NMOCD regulatory limits.  
 Monitor well MW-1 was not sampled due to the presence of PSH.



**Legend**

-  Monitor Well (MW)
-  Recovery Well
-  Free Phase Plume

**Figure 3A**  
 Groundwater Concentration Map – 1Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico



Drafted: bja      Checked: jwl      Date: 4/18/23



**MW-2**  
 6/21/2023  
 Benzene: <0.00500  
 Toluene: <0.00500  
 Ethylbenzene: <0.00500  
 Total Xylenes: <0.00500

**MW-1**  
 6/21/2023  
 NS: PSH 1.14'

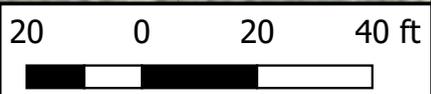
**MW-6**  
 NS

**MW-5**  
 6/21/2023  
 Benzene: <0.00500  
 Toluene: <0.00500  
 Ethylbenzene: <0.00500  
 Total Xylenes: <0.00500

**MW-3**  
 NS

**MW-4**  
 6/21/2023  
 Benzene: <0.00500  
 Toluene: <0.00500  
 Ethylbenzene: <0.00500  
 Total Xylenes: <0.00500

**Notes:**  
 All concentrations are reported in mg/L.  
 Concentrations in **BOLD** exceeded NMOC regulatory limits.  
 NS: Not Sampled  
 Monitor well MW-1 was not sampled due to the presence of PSH.  
 Monitor wells MW-3 and MW-6 are sampled on a semi-annual schedule.



**Legend**  
 Monitor Well  
 Recovery Well  
 Free Phase Plume

**Figure 3B**  
 Groundwater Concentration Map – 2Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico



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**MW-2**  
 9/19/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

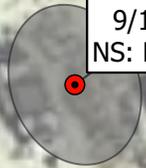
**MW-1**  
 9/19/2023  
 NS: PSH 0.88'

**MW-6**  
 9/19/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

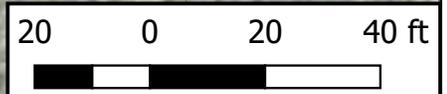
**MW-5**  
 9/19/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

**MW-3**  
 9/19/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200

**MW-4**  
 9/19/2023  
 Benzene: <0.00100  
 Toluene: <0.00100  
 Ethylbenzene: <0.00100  
 Total Xylenes: <0.00200



**Notes:**  
 All concentrations are reported in mg/L.  
 Concentrations in **BOLD** exceeded NMOCD regulatory limits.  
 Monitor well MW-1 was not sampled due to the presence of PSH.



**Legend**

- Monitor Well
- Recovery Well
- Free Phase Plume

**Figure 3C**  
 Groundwater Concentration Map – 3Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico



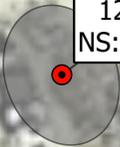
Drafted: bja      Checked: jwl      Date: 9/25/23



**MW-2**  
 12/7/2023  
 Benzene: <0.000190  
 Toluene: <0.000412  
 Ethylbenzene: <0.000160  
 Total Xylenes: <0.000510



**MW-1**  
 12/7/2023  
 NS: PSH 0.06'



**MW-6**  
 12/7/2023  
 Benzene: <0.000190  
 Toluene: <0.000412  
 Ethylbenzene: <0.000160  
 Total Xylenes: <0.000510



**MW-5**  
 12/7/2023  
 Benzene: <0.000190  
 Toluene: <0.000412  
 Ethylbenzene: <0.000160  
 Total Xylenes: <0.000510



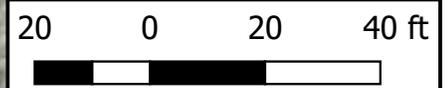
**MW-3**  
 12/7/2023  
 Benzene: <0.000190  
 Toluene: <0.000412  
 Ethylbenzene: <0.000160  
 Total Xylenes: <0.000510



**MW-4**  
 12/7/2023  
 Benzene: <0.000190  
 Toluene: <0.000412  
 Ethylbenzene: <0.000160  
 Total Xylenes: <0.000510



**Notes:**  
 All concentrations are reported in mg/L.  
 Concentrations in **BOLD** exceeded NMOCD regulatory limits.  
 Monitor well MW-1 was not sampled due to the presence of PSH.



- Legend**
- Monitor Well
  - Recovery Well
  - Free Phase Plume

**Figure 3D**  
 Groundwater Concentration Map – 4Q2023  
 Plains All American Pipeline, LP  
 DCP Plant to Lea Station 6-Inch Section 31  
 GPS: 32.52733,-103.29060  
 Lea County, New Mexico



Drafted: bja      Checked: jwl      Date: 2/7/24

## Tables 1 - 4

**Table 1**  
**Groundwater Elevation & PSH<sup>1</sup> Thickness Summary**

**DCP Plant to Lea Station 6-Inch Sec. 31**  
**Lea County, New Mexico**  
**Plains SRS #: 2009-084**  
**Etech Project #: 14743**  
**NMOCD<sup>2</sup> Incident ID #: nAPP2109734163**

*All elevation measurements are in feet above mean sea level*

Monitoring Well (Well Diameter ")	Date Gauged	Top of Casing (TOC) <sup>3</sup> Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation
MW-1 (4")	03/10/2022	3,539.59	85.09	85.95	0.86	3,454.37
	06/13/2022		85.00	86.00	1.00	3,454.44
	09/06/2022		84.49	85.13	0.64	3,455.00
	02/10/2023		85.09	86.19	1.10	3,454.34
	03/29/2023		85.02	85.88	0.86	3,454.44
	06/21/2023		85.02	86.16	1.14	3,454.40
	09/19/2023		85.00	85.88	0.88	3,454.46
	12/07/2023		85.10	85.16	0.06	3,454.48
MW-2 (2")	03/10/2022	3,539.37	-	83.78	-	3,455.59
	06/13/2022		-	83.71	-	3,455.66
	09/06/2022		-	83.77	-	3,455.60
	02/10/2023		-	83.79	-	3,455.58
	03/29/2023		-	83.74	-	3,455.63
	06/21/2023		-	83.76	-	3,455.61
	09/19/2023		-	83.72	-	3,455.65
	12/07/2023		-	83.88	-	3,455.49
MW-3 (2")	03/10/2022	3,539.28	-	84.00	-	3,455.28
	6/13/2022		-	84.10	-	3,455.18
	09/06/2022		-	84.11	-	3,455.17
	02/10/2023		-	84.15	-	3,455.13
	03/29/2023		-	84.11	-	3,455.17
	06/21/2023		-	84.15	-	3,455.13
	09/19/2023		-	84.10	-	3,455.18
	12/07/2023		-	84.24	-	3,455.04
MW-4 (2")	03/10/2022	3,540.07	-	85.16	-	3,454.91
	06/13/2022		-	85.05	-	3,455.02
	09/06/2022		-	85.13	-	3,454.94
	02/10/2023		-	85.19	-	3,454.88
	03/29/2023		-	85.14	-	3,454.93
	06/21/2023		-	85.19	-	3,454.88
	09/19/2023		-	85.13	-	3,454.94
	12/07/2023		-	85.25	-	3,454.82
MW-5 (4")	03/10/2022	3,539.90	-	84.79	-	3,455.11
	06/13/2022		-	84.68	-	3,455.22
	09/06/2022		-	84.74	-	3,455.16
	02/10/2023		-	84.83	-	3,455.07
	03/29/2023		-	84.74	-	3,455.16
	06/21/2023		-	84.74	-	3,455.16
	09/19/2023		-	84.75	-	3,455.15
	12/07/2023		-	84.92	-	3,454.98
MW-6 (2")	03/10/2022	3,540.82	-	85.58	-	3,455.24
	06/13/2022		-	85.55	-	3,455.27
	09/06/2022		-	85.60	-	3,455.22
	02/10/2023		-	85.68	-	3,455.14
	03/29/2023		-	85.80	-	3,455.02
	06/21/2023		-	85.62	-	3,455.20
	09/19/2023		-	85.85	-	3,454.97
	12/07/2023		-	85.74	-	3,455.08

**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.

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

**DCP Plant to Lea Station 6-Inch Sec. 31**  
**Lea County, New Mexico**  
**Plains SRS #: 2009-084**  
**Etech Project #: 17473**  
**NMOCD<sup>2</sup> Incident ID #: nAPP2109734163**

All concentrations are in milligrams per liter (mg/L)

Monitoring Well	Date Sampled	EPA SW846-8021B						
		Benzene	Toluene	Ethylbenzene	M,P-Xylenes	O-Xylenes	Total Xylenes	Total BTEX
<b>NMOCD RRAL CRITERIA<sup>3</sup></b>		<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>TOTAL XYLENES 0.62</b>			<b>NE<sup>4</sup></b>
MW-1	03/10/22	Not Sampled due to presence of PSH						
	06/13/22							
	09/08/22							
	02/10/23							
	03/30/23							
	06/21/23							
	09/19/23							
12/07/23								
MW-2	03/10/22	<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
	06/13/22	<0.000408	0.000614 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/08/22	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/10/23	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.0100	<0.0100
	03/30/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/21/23	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.0100
	09/19/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
12/07/23	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510	
MW-3	03/10/22	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400
	06/13/22	Inadvertently Not Sampled						
	09/08/22	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/10/23	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.0100	<0.0100
	03/30/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/21/23	Well Not Sampled (Semi-Annual Schedule)						
	09/19/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
12/07/23	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510	
MW-4	03/10/22	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400
	06/13/22	<0.000408	0.000620 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/08/22	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/10/23	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.0100	<0.0100
	03/30/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/21/23	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.0100
	09/19/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	12/07/23	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510
MW-5	03/10/22	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400
	06/13/22	<0.000408	0.000957 J	<0.000657	<0.000629	<0.000642	<0.000642	0.000957
	DUP-1	<0.000408	0.000684 J	<0.000657	<0.000629	<0.000642	<0.000642	0.000684
	09/08/22	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	DUP-1	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/10/23	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.0100	<0.0100
	03/30/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/21/23	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.0100
	09/19/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	12/07/23	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510
	DUP-1	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510
	03/10/22	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400
	06/13/22	Inadvertently Not Sampled						
09/08/22	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	
02/10/23	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.0100	<0.0100	
03/30/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	
06/21/23	Well Not Sampled (Semi-Annual Schedule)							
09/19/23	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	
12/07/23	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510	

**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**  
**SVE<sup>1</sup> Emission Analytical Summary - BTEX<sup>2</sup> & TPH<sup>3</sup>**

**DCP Plant to Lea Station 6-Inch Sec. 31**  
**Lea County, New Mexico**  
**Etech Project #: 17473**  
**Plains SRS#: 2009-084**  
**NMOCD Incident ID#: nAPP2109734163**

Sample I.D.	Sample Date	Laboratory	BTEX / TPH (mg/m <sup>3</sup> )	Emission Mass <sup>4</sup> (tons/year)	Emission Volume (gal/day)
<b>New Mexico Environment Department (NMED) Air Quality Burea (AQB) Action Level requiring an Air Permit</b>				<b>10</b>	<b>-</b>
EFF-1 (03323)	03/03/2023	Eurofins Xenco	Benzene - 0.359	0.000244	0.000184
			Toluene - 0.275	0.000187	0.000141
			Ethylbenzene - <0.230	0.00	0.00
			Total Xylene - 0.784	0.000534	0.000534
			Total BTEX - 1.42	0.000965	0.000965
			TPH - GRO - 575	0.391421	0.361421
EFF-1 (051523)	05/15/2023	PBEL	Benzene - 0.255	0.000174	0.000131
			Toluene - 0.182	0.000124	0.000093
			Ethylbenzene - <0.500	0.00	0.00
			Total Xylene - 0.430	0.000293	0.000220
			Total BTEX - 0.867	0.000590	0.000444
			TPH - GRO - NA	NA	NA
EFF-1 (060223)	06/20/2023	Pace	Benzene - 2.48	0.00169	0.00127
			Toluene - 1.95	0.00133	0.000998
			Ethylbenzene - 0.51	0.000345	0.000259
			Total Xylene - 6.25	0.00425	0.00320
			Total BTEX - 11.2	0.00762	0.00573
			TPH - GRO - 2,340	1.59	1.47
EFF-1 (072823)	07/28/2023	Pace	Benzene - 0.594	0.000404	0.000304
			Toluene - 1.10	0.000749	0.000563
			Ethylbenzene - 0.43	0.000295	0.000222
			Total Xylene - 4.39	0.00299	0.00225
			Total BTEX - 6.52	0.00444	0.00334
			TPH - GRO - 810	0.55	0.51

**Notes:**

- SVE: Soil Vapor Extraction
  - BTEX: Benzene, toluene, ethylbenzene, total xylene analyzed by EPA Method 8021B
  - TPH: Total petroleum hydrocarbons analyzed by EPA Method 8015
  - Emission Mass calculated assuming flowrate 1.1073 (m<sup>3</sup>/min) and constituent concentration were constant for the entirety of a year.
- NA: Indicates constituent 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**  
**SVE<sup>1</sup> Emission Analytical Summary - BTEX<sup>2</sup> & TPH<sup>3</sup>**

**DCP Plant to Lea Station 6-Inch Sec. 31**  
**Lea County, New Mexico**  
**Etech Project #: 17473**  
**Plains SRS#: 2009-084**  
**NMOCD Incident ID#: nAPP2109734163**

Sample I.D.	Sample Date	Laboratory	BTEX / TPH (mg/m <sup>3</sup> )	Emission Mass <sup>4</sup> (tons/year)	Emission Volume (gal/day)
<b>New Mexico Environment Department (NMED) Air Quality Burea (AQB) Action Level requiring an Air Permit</b>				<b>10</b>	<b>-</b>
EFF-1 (082523)	08/25/2023	Pace	Benzene - 1.25	0.000851	0.000640
			Toluene - 1.13	0.000769	0.000578
			Ethylbenzene - 0.41	0.000278	0.000209
			Total Xylene - 5.34	0.00364	0.00273
			Total BTEX - 8.13	0.00553	0.00416
			TPH - GRO - 1,310	0.89	0.82
EFF-1 (092923)	09/29/2023	Pace	Benzene - <0.639	0.00	0.00
			Toluene - 0.258	0.000176	0.000132
			Ethylbenzene - 0.101	0.0000688	0.0000517
			Total Xylene - 1.02	0.000694	0.000522
			Total BTEX - 1.38	0.000939	0.000706
			TPH - GRO - 673	0.458	0.424
EFF-1 (112023)	11/20/2023	PBEL	Benzene - <0.00400	0.00	0.00
			Toluene - <0.0100	0.00	0.00
			Ethylbenzene - <0.0100	0.00	0.00
			Total Xylene - <0.0200	0.00	0.00
			Total BTEX - <0.0200	0.00	0.00
			TPH - GRO - NA	NA	NA
EFF-1 (122823)	12/28/2023	Pace	Benzene - 0.543	0.000370	0.000278
			Toluene - 1.31	0.000892	0.000670
			Ethylbenzene - 0.46	0.000310	0.000233
			Total Xylene - 3.12	0.00212	0.00160
			Total BTEX - 5.43	0.00370	0.00278
			TPH - GRO - 2,480	1.69	1.56
<b>2023 TPH Average:</b>				<b>0.93</b>	<b>0.86</b>

**Notes:**

- SVE: Soil Vapor Extraction
  - BTEX: Benzene, toluene, ethylbenzene, total xylene analyzed by EPA Method 8021B
  - TPH: Total petroleum hydrocarbons analyzed by EPA Method 8015
  - Emission Mass calculated assuming flowrate 1.1073 (m<sup>3</sup>/min) and constituent concentration were constant for the entirety of a year.
- NA: Indicates constituent 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, PSH<sup>2</sup> Thickness & Recovery Summary**

DCP Plant to Lea Station 6-Inch Sec. 31  
 Lea County, New Mexico  
 Plains SRS #: 2009-084  
 Etech Project #: 17473  
 NMOCD<sup>3</sup> Incident ID #: nAPP2109734163

*All measurements are in feet above mean sea level*

Monitoring Well	Date	Top of Casing (TOC) <sup>4</sup> Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	PID <sup>5</sup> Reading	SVE Unit Hours of Operation	Total Fluid Recovery (gallons)	PSH Recovered (gallons)
MW-1	01/27/2022	3,540.25	85.01	85.88	0.87	4,374.0	1,510.0	5.00	0.14
	02/24/2022		85.18	85.97	0.79	874.5	1,512.0	5.00	0.13
	03/28/2022		84.67	85.26	0.59	475.2	1,517.0	5.00	0.10
	04/25/2022		84.98	85.62	0.64	727.9	1,514.0	10.0	0.10
	05/19/2022		84.82	85.35	0.53	411.4	1,514.0	5.00	0.086
	06/13/2022		85.00	86.00	1.00	-	-	-	-
	06/29/2022		84.94	86.00	1.06	128.5	1,515.0	5.00	0.17
	08/22/2022		84.76	85.51	0.75	-	-	5.00	0.12
	09/06/2022		84.49	85.13	0.64	-	-	-	-
	09/29/2022		84.47	85.14	0.67	-	686.1	5.00	0.11
	10/20/2022		84.57	85.34	0.77	374.4	1,131.7	5.00	0.13
	11/28/2022		84.60	85.49	0.89	637.8	-	5.00	0.15
	02/10/2023		85.09	86.19	1.10	-	-	-	0.18
	03/03/2023		-	-	-	-	-	5.0	0.15
	03/29/2023		85.02	85.88	0.86	-	-	11.0	0.14
	05/09/2023		-	-	-	-	-	5.0	0.15
	05/15/2023		84.71	85.49	0.78	-	4,593.8	4.50	0.13
	05/30/2023		84.88	85.79	0.91	-	4,950.9	5.00	0.15
	06/21/2023		85.02	86.16	1.14	-	-	5.00	0.19
	07/28/2023		85.01	86.16	1.15	-	5,842.0	5.00	0.19
	08/07/2023		84.72	85.48	0.76	-	-	350	0.12
	08/22/2023		-	-	-	-	-	5.0	0.15
	08/25/2023		84.70	85.50	0.80	-	6,290.7	5.00	0.13
09/19/2023	85.00	85.88	0.88	-	-	5.00	0.14		
10/09/2023	-	-	-	-	-	25.0	0.16		
11/20/2023	85.14	86.21	1.07	-	7,030.1	5.00	0.17		
12/28/2023	84.72	85.45	0.73	-	-	5.00	0.12		
			<b>2023 Average PSH Thickness</b>	<b>0.93</b>	<b>2023 Totals Recovered</b>	<b>441</b>	<b>2.27</b>		

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

**Appendix A**  
**Laboratory Analytical Reports**  
**(Groundwater)**

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Joel Lowry

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Plains-DCP Sec. 31

Project Number: 17473

Location: Lea County, NM

Lab Order Number: 3D03010



**Current Certification**

Report Date: 04/17/23

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: Plains-DCP Sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4	3D03010-01	Water	03/30/23 08:25	04-03-2023 14:40
MW-6	3D03010-02	Water	03/30/23 10:00	04-03-2023 14:40
MW-3	3D03010-03	Water	03/30/23 08:45	04-03-2023 14:40
MW-5	3D03010-04	Water	03/30/23 09:25	04-03-2023 14:40
MW-2	3D03010-05	Water	03/30/23 10:10	04-03-2023 14:40

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-4**  
**3D03010-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	102 %		80-120		P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	98.9 %		80-120		P3D0603	04/06/23 10:11	04/06/23 23:56	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-6**  
**3D03010-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	104 %		80-120		P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	97.2 %		80-120		P3D0603	04/06/23 10:11	04/07/23 00:17	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-3**  
**3D03010-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	102 %		80-120		P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	99.9 %		80-120		P3D0606	04/06/23 11:35	04/07/23 03:05	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-5**  
**3D03010-04 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	103 %		80-120		P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	97.9 %		80-120		P3D0606	04/06/23 11:35	04/07/23 03:27	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-2**  
**3D03010-05 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:48	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:48	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:48	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:48	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 03:48	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>101 %</i>	<i>80-120</i>		<i>P3D0606</i>	<i>04/06/23 11:35</i>	<i>04/07/23 03:48</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>		<i>97.3 %</i>	<i>80-120</i>		<i>P3D0606</i>	<i>04/06/23 11:35</i>	<i>04/07/23 03:48</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3D0603 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P3D0603-BLK1)**

Prepared & Analyzed: 04/06/23

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.111		"	0.120		92.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.123		"	0.120		103	80-120			

**LCS (P3D0603-BS1)**

Prepared & Analyzed: 04/06/23

Benzene	0.118	0.00100	mg/L	0.100		118	80-120			
Toluene	0.112	0.00100	"	0.100		112	80-120			
Ethylbenzene	0.113	0.00100	"	0.100		113	80-120			
Xylene (p/m)	0.225	0.00200	"	0.200		112	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.120		93.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.120		102	80-120			

**LCS Dup (P3D0603-BSD1)**

Prepared & Analyzed: 04/06/23

Benzene	0.120	0.00100	mg/L	0.100		120	80-120	1.28	20	
Toluene	0.119	0.00100	"	0.100		119	80-120	5.95	20	
Ethylbenzene	0.119	0.00100	"	0.100		119	80-120	5.28	20	
Xylene (p/m)	0.239	0.00200	"	0.200		119	80-120	6.05	20	
Xylene (o)	0.111	0.00100	"	0.100		111	80-120	6.13	20	
Surrogate: 4-Bromofluorobenzene	0.115		"	0.120		95.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.120		102	80-120			

**Calibration Blank (P3D0603-CCB1)**

Prepared & Analyzed: 04/06/23

Benzene	0.180		ug/l							
Toluene	0.320		"							
Ethylbenzene	0.570		"							
Xylene (p/m)	1.00		"							
Xylene (o)	0.580		"							
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			

Permian Basin Environmental Lab, L.P.

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 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3D0603 - \*\*\* DEFAULT PREP \*\*\***

<b>Calibration Blank (P3D0603-CCB2)</b>			Prepared & Analyzed: 04/06/23							
Benzene	0.170		ug/l							
Toluene	0.180		"							
Ethylbenzene	0.270		"							
Xylene (p/m)	0.630		"							
Xylene (o)	0.330		"							
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		98.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.9	80-120			

<b>Calibration Check (P3D0603-CCV1)</b>			Prepared & Analyzed: 04/06/23							
Benzene	0.115	0.00100	mg/L	0.100		115	80-120			
Toluene	0.112	0.00100	"	0.100		112	80-120			
Ethylbenzene	0.106	0.00100	"	0.100		106	80-120			
Xylene (p/m)	0.224	0.00200	"	0.200		112	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	0.117		"	0.120		97.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.124		"	0.120		103	80-120			

<b>Calibration Check (P3D0603-CCV2)</b>			Prepared & Analyzed: 04/06/23							
Benzene	0.0938	0.00100	mg/L	0.100		93.8	80-120			
Toluene	0.0903	0.00100	"	0.100		90.3	80-120			
Ethylbenzene	0.0861	0.00100	"	0.100		86.1	80-120			
Xylene (p/m)	0.183	0.00200	"	0.200		91.4	80-120			
Xylene (o)	0.0846	0.00100	"	0.100		84.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.118		"	0.120		98.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.1	80-120			

<b>Calibration Check (P3D0603-CCV3)</b>			Prepared: 04/06/23 Analyzed: 04/07/23							
Benzene	0.106	0.00100	mg/L	0.100		106	80-120			
Toluene	0.105	0.00100	"	0.100		105	80-120			
Ethylbenzene	0.101	0.00100	"	0.100		101	80-120			
Xylene (p/m)	0.214	0.00200	"	0.200		107	80-120			
Xylene (o)	0.0994	0.00100	"	0.100		99.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.127		"	0.120		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		98.9	80-120			

Permian Basin Environmental Lab, L.P.

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 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3D0603 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike (P3D0603-MS1)</b>	<b>Source: 3C28006-01</b>			Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.116	0.00100	mg/L	0.100	ND	116	80-120			
Toluene	0.115	0.00100	"	0.100	ND	115	80-120			
Ethylbenzene	0.120	0.00100	"	0.100	ND	120	80-120			
Xylene (p/m)	0.235	0.00200	"	0.200	ND	117	80-120			
Xylene (o)	0.104	0.00100	"	0.100	ND	104	80-120			
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	80-120			

<b>Matrix Spike Dup (P3D0603-MSD1)</b>	<b>Source: 3C28006-01</b>			Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.106	0.00100	mg/L	0.100	ND	106	80-120	9.04	20	
Toluene	0.106	0.00100	"	0.100	ND	106	80-120	8.25	20	
Ethylbenzene	0.111	0.00100	"	0.100	ND	111	80-120	7.57	20	
Xylene (p/m)	0.220	0.00200	"	0.200	ND	110	80-120	6.51	20	
Xylene (o)	0.0981	0.00100	"	0.100	ND	98.1	80-120	5.82	20	
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		107	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			

**Batch P3D0606 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P3D0606-BLK1)</b>				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.2	80-120			

Permian Basin Environmental Lab, L.P.

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 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3D0606 - \*\*\* DEFAULT PREP \*\*\***

**LCS (P3D0606-BS1)**

Prepared: 04/06/23 Analyzed: 04/07/23

Benzene	0.0980	0.00100	mg/L	0.100		98.0	80-120			
Toluene	0.0975	0.00100	"	0.100		97.5	80-120			
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120			
Xylene (p/m)	0.202	0.00200	"	0.200		101	80-120			
Xylene (o)	0.0910	0.00100	"	0.100		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	0.127		"	0.120		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.5	80-120			

**LCS Dup (P3D0606-BSD1)**

Prepared: 04/06/23 Analyzed: 04/07/23

Benzene	0.0974	0.00100	mg/L	0.100		97.4	80-120	0.645	20	
Toluene	0.0972	0.00100	"	0.100		97.2	80-120	0.308	20	
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120	0.500	20	
Xylene (p/m)	0.202	0.00200	"	0.200		101	80-120	0.0248	20	
Xylene (o)	0.0912	0.00100	"	0.100		91.2	80-120	0.165	20	
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.1	80-120			

**Calibration Blank (P3D0606-CCB1)**

Prepared: 04/06/23 Analyzed: 04/07/23

Benzene	0.120		ug/l							
Toluene	0.240		"							
Ethylbenzene	0.500		"							
Xylene (p/m)	1.00		"							
Xylene (o)	0.520		"							
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		98.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.3	80-120			

**Calibration Blank (P3D0606-CCB2)**

Prepared: 04/06/23 Analyzed: 04/07/23

Benzene	0.150		ug/l							
Toluene	0.200		"							
Ethylbenzene	0.330		"							
Xylene (p/m)	0.670		"							
Xylene (o)	0.410		"							
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.3	80-120			

Permian Basin Environmental Lab, L.P.

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Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3D0606 - \*\*\* DEFAULT PREP \*\*\***

<b>Calibration Check (P3D0606-CCV1)</b>			Prepared: 04/06/23 Analyzed: 04/07/23							
Benzene	0.106	0.00100	mg/L				80-120			
Toluene	0.105	0.00100	"				80-120			
Ethylbenzene	0.101	0.00100	"				80-120			
Xylene (p/m)	0.214	0.00200	"				80-120			
Xylene (o)	0.0994	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.127		"	0.120		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		98.9	80-120			

<b>Calibration Check (P3D0606-CCV2)</b>			Prepared: 04/06/23 Analyzed: 04/07/23							
Benzene	0.112	0.00100	mg/L				80-120			
Toluene	0.112	0.00100	"				80-120			
Ethylbenzene	0.108	0.00100	"				80-120			
Xylene (p/m)	0.226	0.00200	"				80-120			
Xylene (o)	0.104	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		107	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		99.4	80-120			

<b>Calibration Check (P3D0606-CCV3)</b>			Prepared: 04/06/23 Analyzed: 04/07/23							
Benzene	0.0994	0.00100	mg/L				80-120			
Toluene	0.0977	0.00100	"				80-120			
Ethylbenzene	0.0941	0.00100	"				80-120			
Xylene (p/m)	0.199	0.00200	"				80-120			
Xylene (o)	0.0914	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.8	80-120			

<b>Matrix Spike (P3D0606-MS1)</b>			Source: 3D03010-03		Prepared: 04/06/23 Analyzed: 04/07/23					
Benzene	0.0960	0.00100	mg/L	0.100	ND	96.0	80-120			
Toluene	0.0928	0.00100	"	0.100	ND	92.8	80-120			
Ethylbenzene	0.0921	0.00100	"	0.100	ND	92.1	80-120			
Xylene (p/m)	0.179	0.00200	"	0.200	ND	89.5	80-120			
Xylene (o)	0.0808	0.00100	"	0.100	ND	80.8	80-120			
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.7	80-120			

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3D0606 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike Dup (P3D0606-MSD1)</b>	<b>Source: 3D03010-03</b>			<b>Prepared: 04/06/23 Analyzed: 04/07/23</b>						
Benzene	0.0942	0.00100	mg/L	0.100	ND	94.2	80-120	1.88	20	
Toluene	0.0911	0.00100	"	0.100	ND	91.1	80-120	1.85	20	
Ethylbenzene	0.0929	0.00100	"	0.100	ND	92.9	80-120	0.800	20	
Xylene (p/m)	0.181	0.00200	"	0.200	ND	90.6	80-120	1.23	20	
Xylene (o)	0.0826	0.00100	"	0.100	ND	82.6	80-120	2.19	20	
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: Plains-DCP Sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**Notes and Definitions**

- ROI Received on Ice
- pH1 The Regulatory Holding time for pH is 15 minutes, Analysis should be done in the field.
- NPBEL C Chain of Custody was not generated at PBELAB
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:  Date: 4/17/2023

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235



**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Joel Lowry

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: DCP sec. 31

Project Number: 17473

Location: RURAL LEA COUNTY, NM

Lab Order Number: 3F29013



**Current Certification**

Report Date: 07/17/23

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW2	3F29013-01	Water	06/21/23 13:30	06-29-2023 13:09
MW4	3F29013-02	Water	06/21/23 12:46	06-29-2023 13:09
MW5	3F29013-03	Water	06/21/23 11:10	06-29-2023 13:09

8260 BTEX analysis was subcontracted to ALS Houston. Their report is attached after the Chain of Custody These samples were analyzed 2 days after holding time expiration. Their TCEQ TNI certification number can be found here:

[https://www.tceq.texas.gov/assets/public/compliance/compliance\\_support/qa/labs/als\\_svcs\\_houston.pdf](https://www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/labs/als_svcs_houston.pdf)

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: DCP sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW2**  
**3F29013-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	ND	0.00500	mg/L	1	P3G1713	07/07/23 13:47	07/07/23 13:47	EPA 8260B	O-04, SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1713	07/07/23 13:47	07/07/23 13:47	EPA 8260B	O-04, SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1713	07/07/23 13:47	07/07/23 13:47	EPA 8260B	O-04, SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1713	07/07/23 13:47	07/07/23 13:47	EPA 8260B	O-04, SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1713	07/07/23 13:47	07/07/23 13:47	EPA 8260B	O-04, SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1713	07/07/23 13:47	07/07/23 13:47	EPA 8260B	O-04, SUB-13

Permian Basin Environmental Lab, L.P.

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 Odessa TX, 79765

Project: DCP sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW4**  
**3F29013-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:09	07/07/23 14:09	EPA 8260B	O-04, SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:09	07/07/23 14:09	EPA 8260B	O-04, SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1713	07/07/23 14:09	07/07/23 14:09	EPA 8260B	O-04, SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:09	07/07/23 14:09	EPA 8260B	O-04, SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:09	07/07/23 14:09	EPA 8260B	O-04, SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:09	07/07/23 14:09	EPA 8260B	O-04, SUB-13

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: DCP sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW5**  
**3F29013-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:32	07/07/23 14:32	EPA 8260B	O-04, SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:32	07/07/23 14:32	EPA 8260B	O-04, SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1713	07/07/23 14:32	07/07/23 14:32	EPA 8260B	O-04, SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:32	07/07/23 14:32	EPA 8260B	O-04, SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:32	07/07/23 14:32	EPA 8260B	O-04, SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1713	07/07/23 14:32	07/07/23 14:32	EPA 8260B	O-04, SUB-13

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**Notes and Definitions**

- SUB-13 Subcontract of analyte/analysis to ALS Houston.
- ROI Received on Ice
- pH1 The Regulatory Holding time for pH is 15 minutes, Analysis should be done in the field.
- O-04 This sample was analyzed outside the EPA recommended holding time.
- NPBEL C Chain of Custody was not generated at PBELAB
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:  Date: 7/17/2023

Brent Barron, Laboratory Director/Technical Director

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

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

July 10, 2023

Brent Barron  
Permian Basin Environmental Lab, LP  
10014 SCR 1213  
Midland, TX 79706

Work Order: **HS23070254**

Laboratory Results for: **3F29013**

Dear Brent Barron,

ALS Environmental received 3 sample(s) on Jul 07, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL  
Anna Kinchen  
Project Manager

**ALS Houston, US**

Date: 10-Jul-23

**Client:** Permian Basin Environmental Lab, LP  
**Project:** 3F29013  
**Work Order:** HS23070254

**SAMPLE SUMMARY**

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23070254-01	3F29013-01	Water		21-Jun-2023 13:30	07-Jul-2023 09:20	<input type="checkbox"/>
HS23070254-02	3F29013-02	Water		21-Jun-2023 12:46	07-Jul-2023 09:20	<input type="checkbox"/>
HS23070254-03	3F29013-03	Water		21-Jun-2023 11:10	07-Jul-2023 09:20	<input type="checkbox"/>

**ALS Houston, US**

Date: 10-Jul-23

---

**Client:** Permian Basin Environmental Lab, LP  
**Project:** 3F29013  
**Work Order:** HS23070254

**CASE NARRATIVE**

---

**GCMS Volatiles by Method SW8260**

**Batch ID: R440835**

- Samples received and run out of hold.
-

**ALS Houston, US**

Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP  
 Project: 3F29013  
 Sample ID: 3F29013-01  
 Collection Date: 21-Jun-2023 13:30

**ANALYTICAL REPORT**  
 WorkOrder:HS23070254  
 Lab ID:HS23070254-01  
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>VOLATILES - SW8260C</b>		<b>Method:SW8260</b>				Analyst: PC
Benzene	ND	H	0.0050	mg/L	1	07-Jul-2023 13:47
Ethylbenzene	ND	H	0.0050	mg/L	1	07-Jul-2023 13:47
m,p-Xylene	ND	H	0.010	mg/L	1	07-Jul-2023 13:47
o-Xylene	ND	H	0.0050	mg/L	1	07-Jul-2023 13:47
Toluene	ND	H	0.0050	mg/L	1	07-Jul-2023 13:47
Xylenes, Total	ND	H	0.0050	mg/L	1	07-Jul-2023 13:47
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>104</i>		<i>70-126</i>	<i>%REC</i>	<i>1</i>	<i>07-Jul-2023 13:47</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>94.1</i>		<i>82-124</i>	<i>%REC</i>	<i>1</i>	<i>07-Jul-2023 13:47</i>
<i>Surr: Dibromofluoromethane</i>	<i>98.7</i>		<i>77-123</i>	<i>%REC</i>	<i>1</i>	<i>07-Jul-2023 13:47</i>
<i>Surr: Toluene-d8</i>	<i>106</i>		<i>82-127</i>	<i>%REC</i>	<i>1</i>	<i>07-Jul-2023 13:47</i>

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

**ALS Houston, US**

Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP  
 Project: 3F29013  
 Sample ID: 3F29013-02  
 Collection Date: 21-Jun-2023 12:46

**ANALYTICAL REPORT**  
 WorkOrder:HS23070254  
 Lab ID:HS23070254-02  
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>VOLATILES - SW8260C</b>		<b>Method:SW8260</b>				Analyst: PC
Benzene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:09
Ethylbenzene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:09
m,p-Xylene	ND	H	0.010	mg/L	1	07-Jul-2023 14:09
o-Xylene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:09
Toluene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:09
Xylenes, Total	ND	H	0.0050	mg/L	1	07-Jul-2023 14:09
Surr: 1,2-Dichloroethane-d4	102		70-126	%REC	1	07-Jul-2023 14:09
Surr: 4-Bromofluorobenzene	95.2		82-124	%REC	1	07-Jul-2023 14:09
Surr: Dibromofluoromethane	98.2		77-123	%REC	1	07-Jul-2023 14:09
Surr: Toluene-d8	109		82-127	%REC	1	07-Jul-2023 14:09

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

**ALS Houston, US**

Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP  
 Project: 3F29013  
 Sample ID: 3F29013-03  
 Collection Date: 21-Jun-2023 11:10

**ANALYTICAL REPORT**  
 WorkOrder:HS23070254  
 Lab ID:HS23070254-03  
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>VOLATILES - SW8260C</b>		<b>Method:SW8260</b>				Analyst: PC
Benzene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:32
Ethylbenzene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:32
m,p-Xylene	ND	H	0.010	mg/L	1	07-Jul-2023 14:32
o-Xylene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:32
Toluene	ND	H	0.0050	mg/L	1	07-Jul-2023 14:32
Xylenes, Total	ND	H	0.0050	mg/L	1	07-Jul-2023 14:32
Surr: 1,2-Dichloroethane-d4	104		70-126	%REC	1	07-Jul-2023 14:32
Surr: 4-Bromofluorobenzene	93.5		82-124	%REC	1	07-Jul-2023 14:32
Surr: Dibromofluoromethane	98.5		77-123	%REC	1	07-Jul-2023 14:32
Surr: Toluene-d8	108		82-127	%REC	1	07-Jul-2023 14:32

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

ALS Houston, US

Date: 10-Jul-23

**Client:** Permian Basin Environmental Lab, LP  
**Project:** 3F29013  
**WorkOrder:** HS23070254

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
<b>Batch ID:</b> R440835 ( 0 )		<b>Test Name :</b> VOLATILES - SW8260C			<b>Matrix:</b> Water	
HS23070254-01	3F29013-01	21 Jun 2023 13:30			07 Jul 2023 13:47	1
HS23070254-02	3F29013-02	21 Jun 2023 12:46			07 Jul 2023 14:09	1
HS23070254-03	3F29013-03	21 Jun 2023 11:10			07 Jul 2023 14:32	1

**ALS Houston, US**

Date: 10-Jul-23

**Client:** Permian Basin Environmental Lab, LP  
**Project:** 3F29013  
**WorkOrder:** HS23070254

**QC BATCH REPORT**

<b>Batch ID:</b> R440835 ( 0 )	<b>Instrument:</b> VOA9	<b>Method:</b> VOLATILES - SW8260C
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<b>MBLK</b>		Sample ID: <b>VBLKW-230707</b>			Units: <b>ug/L</b>		Analysis Date: <b>07-Jul-2023 13:02</b>			
Client ID:		Run ID: <b>VOA9_440835</b>			SeqNo: <b>7409148</b>		PrepDate:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	5.0								
Ethylbenzene	ND	5.0								
m,p-Xylene	ND	10								
o-Xylene	ND	5.0								
Toluene	ND	5.0								
Xylenes, Total	ND	5.0								
Surr: 1,2-Dichloroethane-d4	51.91	0	50	0	104	70 - 130				
Surr: 4-Bromofluorobenzene	48.02	0	50	0	96.0	82 - 115				
Surr: Dibromofluoromethane	49.72	0	50	0	99.4	73 - 126				
Surr: Toluene-d8	53.07	0	50	0	106	81 - 120				

<b>LCS</b>		Sample ID: <b>VLCSW-230707</b>			Units: <b>ug/L</b>		Analysis Date: <b>07-Jul-2023 12:17</b>			
Client ID:		Run ID: <b>VOA9_440835</b>			SeqNo: <b>7409147</b>		PrepDate:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.26	5.0	20	0	106	74 - 120				
Ethylbenzene	21.3	5.0	20	0	107	77 - 117				
m,p-Xylene	44.94	10	40	0	112	77 - 122				
o-Xylene	22.42	5.0	20	0	112	75 - 119				
Toluene	21.76	5.0	20	0	109	77 - 118				
Xylenes, Total	67.35	5.0	60	0	112	75 - 122				
Surr: 1,2-Dichloroethane-d4	56.24	0	50	0	112	70 - 130				
Surr: 4-Bromofluorobenzene	52.1	0	50	0	104	82 - 115				
Surr: Dibromofluoromethane	54.38	0	50	0	109	73 - 126				
Surr: Toluene-d8	51.35	0	50	0	103	81 - 120				

**ALS Houston, US**

Date: 10-Jul-23

**Client:** Permian Basin Environmental Lab, LP  
**Project:** 3F29013  
**WorkOrder:** HS23070254

**QC BATCH REPORT**

**Batch ID:** R440835 ( 0 )      **Instrument:** VOA9      **Method:** VOLATILES - SW8260C

<b>MS</b>		Sample ID: <b>HS23070249-01MS</b>			Units: <b>ug/L</b>		Analysis Date: <b>07-Jul-2023 16:01</b>			
Client ID:		Run ID: <b>VOA9_440835</b>			SeqNo: <b>7409156</b>		PrepDate:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.9	5.0	20	0	104	70 - 127				
Ethylbenzene	22.29	5.0	20	0	111	70 - 124				
m,p-Xylene	45.92	10	40	0	115	70 - 130				
o-Xylene	22.35	5.0	20	0	112	70 - 124				
Toluene	22.33	5.0	20	0	112	70 - 123				
Xylenes, Total	68.27	5.0	60	0	114	70 - 130				
Surr: 1,2-Dichloroethane-d4	50.11	0	50	0	100	70 - 126				
Surr: 4-Bromofluorobenzene	49.54	0	50	0	99.1	82 - 124				
Surr: Dibromofluoromethane	49.61	0	50	0	99.2	77 - 123				
Surr: Toluene-d8	56.11	0	50	0	112	82 - 127				

<b>MSD</b>		Sample ID: <b>HS23070249-01MSD</b>			Units: <b>ug/L</b>		Analysis Date: <b>07-Jul-2023 16:24</b>			
Client ID:		Run ID: <b>VOA9_440835</b>			SeqNo: <b>7409157</b>		PrepDate:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.42	5.0	20	0	102	70 - 127	20.9	2.31	20	
Ethylbenzene	21.97	5.0	20	0	110	70 - 124	22.29	1.44	20	
m,p-Xylene	45.71	10	40	0	114	70 - 130	45.92	0.444	20	
o-Xylene	22.11	5.0	20	0	111	70 - 124	22.35	1.09	20	
Toluene	21.44	5.0	20	0	107	70 - 123	22.33	4.03	20	
Xylenes, Total	67.82	5.0	60	0	113	70 - 130	68.27	0.653	20	
Surr: 1,2-Dichloroethane-d4	50.18	0	50	0	100	70 - 126	50.11	0.147	20	
Surr: 4-Bromofluorobenzene	50.6	0	50	0	101	82 - 124	49.54	2.12	20	
Surr: Dibromofluoromethane	49.78	0	50	0	99.6	77 - 123	49.61	0.328	20	
Surr: Toluene-d8	54.65	0	50	0	109	82 - 127	56.11	2.64	20	

The following samples were analyzed in this batch: HS23070254-01      HS23070254-02      HS23070254-03

**ALS Houston, US**

Date: 10-Jul-23

**Client:** Permian Basin Environmental Lab, LP  
**Project:** 3F29013  
**WorkOrder:** HS23070254

**QUALIFIERS,  
ACRONYMS, UNITS**

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

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

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

ALS Houston, US

Date: 10-Jul-23

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

<b>Agency</b>	<b>Number</b>	<b>Expire Date</b>
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352; 2022-2023	31-Jul-2023
Louisiana	03087-2023	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US

Date: 10-Jul-23

Sample Receipt Checklist

Work Order ID: HS23070254

Date/Time Received: 07-Jul-2023 09:20

Client Name: Permian Basin Lab

Received by: Paresh M. Giga

Completed By: /S/ Ragen Giga	07-Jul-2023 10:57	Reviewed by: /S/ Anna Kinchen	10-Jul-2023 09:54
eSignature	Date/Time	eSignature	Date/Time

Matrices: **water**

Carrier name: **FedEx Priority Overnight**

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- VOA/TX1005/TX1006 Solids in hermetically sealed vials? Yes  No  Not Present
- Chain of custody present? Yes  No  1 Page(s)
- Chain of custody signed when relinquished and received? Yes  No
- Samplers name present on COC? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No

Temperature(s)/Thermometer(s):	5.8uc/5.7c	IR31
Cooler(s)/Kit(s):	Red	
Date/Time sample(s) sent to storage:	07/07/2023 11:30	

- Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted
- Water - pH acceptable upon receipt? Yes  No  N/A
- pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes: **Proceed with analyses (sample past Hold Time)**

Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_

Contacted By: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments:

Corrective Action:



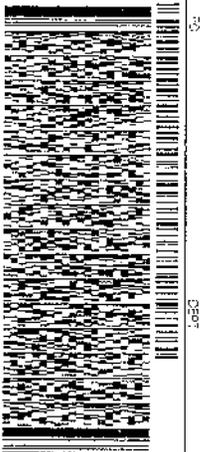
ORIGIN ID: MAF4 (432) 865-7235  
 BREVET BARSTON  
 1400 ROCKWELL HWY  
 MCKINNEY, TX 75069  
 UNITED STATES US

SHIP DATE: 06 JUL 23  
 ACT WT: 39.00 LB  
 CDD: 7071388891674410

BILL RECEIPT

TO SAMPLE RECEIVING  
 ALS-HOUSTON  
 10450 STANCLIFF RD  
 HOUSTON TX 77099  
 (281) 530-9615 REF

3334094092



DEPT



TRK# 7726 5118 3520  
 THU - 06 JUL 4:30P  
 STANDARD OVERNIGHT

XA SGRA 77099  
 TX-US IAH



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**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Joel Lowry

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Plains-DCP Sec. 31

Project Number: 17473

Location: Lea County, NM

Lab Order Number: 3119025



**Current Certification**

Report Date: 09/22/23

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: Plains-DCP Sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	3119025-01	Water	09/19/23 08:00	09-19-2023 14:16
MW-3	3119025-02	Water	09/19/23 08:30	09-19-2023 14:16
MW-4	3119025-03	Water	09/19/23 09:00	09-19-2023 14:16
MW-5	3119025-04	Water	09/19/23 09:30	09-19-2023 14:16
MW-6	3119025-05	Water	09/19/23 10:30	09-19-2023 14:16

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-2**  
**3119025-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	92.4 %		80-120		P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	96.7 %		80-120		P312010	09/20/23 10:20	09/21/23 08:39	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-3**  
**3119025-02 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	90.9 %		80-120		P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	95.2 %		80-120		P312010	09/20/23 10:20	09/21/23 09:02	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-4**  
**3119025-03 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:10	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:10	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:10	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:10	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:10	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.9 %			<i>P312104</i>	<i>09/21/23 09:38</i>	<i>09/21/23 13:10</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>		95.8 %			<i>P312104</i>	<i>09/21/23 09:38</i>	<i>09/21/23 13:10</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-5**  
**3119025-04 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:33	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:33	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:33	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:33	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:33	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.0 %			<i>P312104</i>	<i>09/21/23 09:38</i>	<i>09/21/23 13:33</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>		95.9 %			<i>P312104</i>	<i>09/21/23 09:38</i>	<i>09/21/23 13:33</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**MW-6**  
**3119025-05 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	94.5 %		80-120		P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	95.6 %		80-120		P312104	09/21/23 09:38	09/21/23 13:57	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3I2010 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P3I2010-BLK1)** Prepared: 09/20/23 Analyzed: 09/21/23

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.111		"	0.120		92.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.5	80-120			

**LCS (P3I2010-BS1)** Prepared & Analyzed: 09/20/23

Benzene	0.0976	0.00100	mg/L	0.100		97.6	80-120			
Toluene	0.0931	0.00100	"	0.100		93.1	80-120			
Ethylbenzene	0.0956	0.00100	"	0.100		95.6	80-120			
Xylene (p/m)	0.191	0.00200	"	0.200		95.5	80-120			
Xylene (o)	0.0844	0.00100	"	0.100		84.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.1	80-120			

**LCS Dup (P3I2010-BSD1)** Prepared: 09/20/23 Analyzed: 09/21/23

Benzene	0.0941	0.00100	mg/L	0.100		94.1	80-120	3.63	20	
Toluene	0.0902	0.00100	"	0.100		90.2	80-120	3.11	20	
Ethylbenzene	0.0935	0.00100	"	0.100		93.5	80-120	2.17	20	
Xylene (p/m)	0.186	0.00200	"	0.200		93.1	80-120	2.55	20	
Xylene (o)	0.0817	0.00100	"	0.100		81.7	80-120	3.28	20	
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		92.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.2	80-120			

**Calibration Blank (P3I2010-CCB1)** Prepared & Analyzed: 09/20/23

Benzene	0.0900		ug/l							
Toluene	0.0500		"							
Ethylbenzene	0.0900		"							
Xylene (p/m)	0.100		"							
Xylene (o)	0.0800		"							
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.5	80-120			

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3I2010 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Blank (P3I2010-CCB2)**

Prepared: 09/20/23 Analyzed: 09/21/23

Benzene	0.130		ug/l							
Toluene	0.100		"							
Ethylbenzene	0.0500		"							
Xylene (p/m)	0.0800		"							
Xylene (o)	0.100		"							
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.5	80-120			

**Calibration Check (P3I2010-CCV1)**

Prepared & Analyzed: 09/20/23

Benzene	0.0897	0.00100	mg/L	0.100		89.7	80-120			
Toluene	0.0933	0.00100	"	0.100		93.3	80-120			
Ethylbenzene	0.0956	0.00100	"	0.100		95.6	80-120			
Xylene (p/m)	0.200	0.00200	"	0.200		99.9	80-120			
Xylene (o)	0.0912	0.00100	"	0.100		91.2	80-120			
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.4	80-120			

**Calibration Check (P3I2010-CCV2)**

Prepared: 09/20/23 Analyzed: 09/21/23

Benzene	0.0881	0.00100	mg/L	0.100		88.1	80-120			
Toluene	0.0941	0.00100	"	0.100		94.1	80-120			
Ethylbenzene	0.0974	0.00100	"	0.100		97.4	80-120			
Xylene (p/m)	0.202	0.00200	"	0.200		101	80-120			
Xylene (o)	0.0931	0.00100	"	0.100		93.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.4	80-120			

**Calibration Check (P3I2010-CCV3)**

Prepared: 09/20/23 Analyzed: 09/21/23

Benzene	0.0894	0.00100	mg/L	0.100		89.4	80-120			
Toluene	0.0943	0.00100	"	0.100		94.3	80-120			
Ethylbenzene	0.0978	0.00100	"	0.100		97.8	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200		100	80-120			
Xylene (o)	0.0924	0.00100	"	0.100		92.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.4	80-120			

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3I2010 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike (P3I2010-MS1)</b>	<b>Source: 3I15006-01</b>			<b>Prepared: 09/20/23 Analyzed: 09/21/23</b>						
Benzene	0.0991	0.00100	mg/L	0.100	ND	99.1	80-120			
Toluene	0.0910	0.00100	"	0.100	ND	91.0	80-120			
Ethylbenzene	0.0932	0.00100	"	0.100	ND	93.2	80-120			
Xylene (p/m)	0.182	0.00200	"	0.200	ND	91.1	80-120			
Xylene (o)	0.0792	0.00100	"	0.100	ND	79.2	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.100		"	0.120		83.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.8	80-120			

<b>Matrix Spike Dup (P3I2010-MSD1)</b>	<b>Source: 3I15006-01</b>			<b>Prepared: 09/20/23 Analyzed: 09/21/23</b>						
Benzene	0.0913	0.00100	mg/L	0.100	ND	91.3	80-120	8.21	20	
Toluene	0.0865	0.00100	"	0.100	ND	86.5	80-120	5.00	20	
Ethylbenzene	0.0887	0.00100	"	0.100	ND	88.7	80-120	4.97	20	
Xylene (p/m)	0.175	0.00200	"	0.200	ND	87.7	80-120	3.81	20	
Xylene (o)	0.0759	0.00100	"	0.100	ND	75.9	80-120	4.32	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.102		"	0.120		85.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.4	80-120			

**Batch P3I2104 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P3I2104-BLK1)</b>	<b>Prepared &amp; Analyzed: 09/21/23</b>									
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.111		"	0.120		92.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.8	80-120			

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3I2104 - \*\*\* DEFAULT PREP \*\*\***

**LCS (P3I2104-BS1)**

Prepared & Analyzed: 09/21/23

Benzene	0.0985	0.00100	mg/L	0.100		98.5	80-120			
Toluene	0.0957	0.00100	"	0.100		95.7	80-120			
Ethylbenzene	0.101	0.00100	"	0.100		101	80-120			
Xylene (p/m)	0.198	0.00200	"	0.200		99.1	80-120			
Xylene (o)	0.0869	0.00100	"	0.100		86.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.3	80-120			

**LCS Dup (P3I2104-BSD1)**

Prepared & Analyzed: 09/21/23

Benzene	0.0946	0.00100	mg/L	0.100		94.6	80-120	4.13	20	
Toluene	0.0912	0.00100	"	0.100		91.2	80-120	4.87	20	
Ethylbenzene	0.0956	0.00100	"	0.100		95.6	80-120	5.12	20	
Xylene (p/m)	0.189	0.00200	"	0.200		94.5	80-120	4.80	20	
Xylene (o)	0.0829	0.00100	"	0.100		82.9	80-120	4.75	20	
Surrogate: 4-Bromofluorobenzene	0.111		"	0.120		92.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.9	80-120			

**Calibration Blank (P3I2104-CCB1)**

Prepared & Analyzed: 09/21/23

Benzene	0.0900		ug/l							
Toluene	0.130		"							
Ethylbenzene	0.0700		"							
Xylene (p/m)	0.100		"							
Xylene (o)	0.120		"							
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.8	80-120			

**Calibration Blank (P3I2104-CCB2)**

Prepared & Analyzed: 09/21/23

Benzene	0.120		ug/l							
Toluene	0.130		"							
Ethylbenzene	0.0900		"							
Xylene (p/m)	0.0900		"							
Xylene (o)	0.140		"							
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		92.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.4	80-120			

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
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 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3I2104 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Check (P3I2104-CCV1)**

Prepared & Analyzed: 09/21/23

Benzene	0.0891	0.00100	mg/L	0.100		89.1	80-120			
Toluene	0.0947	0.00100	"	0.100		94.7	80-120			
Ethylbenzene	0.0990	0.00100	"	0.100		99.0	80-120			
Xylene (p/m)	0.204	0.00200	"	0.200		102	80-120			
Xylene (o)	0.0931	0.00100	"	0.100		93.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		90.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.0	80-120			

**Calibration Check (P3I2104-CCV2)**

Prepared & Analyzed: 09/21/23

Benzene	0.0881	0.00100	mg/L	0.100		88.1	80-120			
Toluene	0.0932	0.00100	"	0.100		93.2	80-120			
Ethylbenzene	0.0958	0.00100	"	0.100		95.8	80-120			
Xylene (p/m)	0.197	0.00200	"	0.200		98.6	80-120			
Xylene (o)	0.0914	0.00100	"	0.100		91.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		95.1	80-120			

**Calibration Check (P3I2104-CCV3)**

Prepared & Analyzed: 09/21/23

Benzene	0.0878	0.00100	mg/L	0.100		87.8	80-120			
Toluene	0.0907	0.00100	"	0.100		90.7	80-120			
Ethylbenzene	0.0932	0.00100	"	0.100		93.2	80-120			
Xylene (p/m)	0.194	0.00200	"	0.200		96.8	80-120			
Xylene (o)	0.0889	0.00100	"	0.100		88.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.6	80-120			

**Matrix Spike (P3I2104-MS1)**

Source: 3119025-03

Prepared & Analyzed: 09/21/23

Benzene	0.0913	0.00100	mg/L	0.100	ND	91.3	80-120			
Toluene	0.0883	0.00100	"	0.100	ND	88.3	80-120			
Ethylbenzene	0.0922	0.00100	"	0.100	ND	92.2	80-120			
Xylene (p/m)	0.183	0.00200	"	0.200	ND	91.6	80-120			
Xylene (o)	0.0799	0.00100	"	0.100	ND	79.9	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		95.2	80-120			

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: Plains-DCP Sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P3I2104 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike Dup (P3I2104-MSD1)</b>	<b>Source: 3I19025-03</b>			<b>Prepared &amp; Analyzed: 09/21/23</b>						
Benzene	0.0862	0.00100	mg/L	0.100	ND	86.2	80-120	5.72	20	
Toluene	0.0806	0.00100	"	0.100	ND	80.6	80-120	9.12	20	
Ethylbenzene	0.0832	0.00100	"	0.100	ND	83.2	80-120	10.2	20	
Xylene (p/m)	0.165	0.00200	"	0.200	ND	82.4	80-120	10.6	20	
Xylene (o)	0.0713	0.00100	"	0.100	ND	71.3	80-120	11.4	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		88.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.1	80-120			

Permian Basin Environmental Lab, L.P.

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E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: Plains-DCP Sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**Notes and Definitions**

- ROI Received on Ice
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- pH1 The Regulatory Holding time for pH is 15 minutes, Analysis should be done in the field.
- NPBEL C Chain of Custody was not generated at PBELAB
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:  Date: 9/22/2023

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

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Project Manager: Joel Lowry

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Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235





# ANALYTICAL REPORT

December 27, 2023

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

## Plains All American Pipeline - ETECH

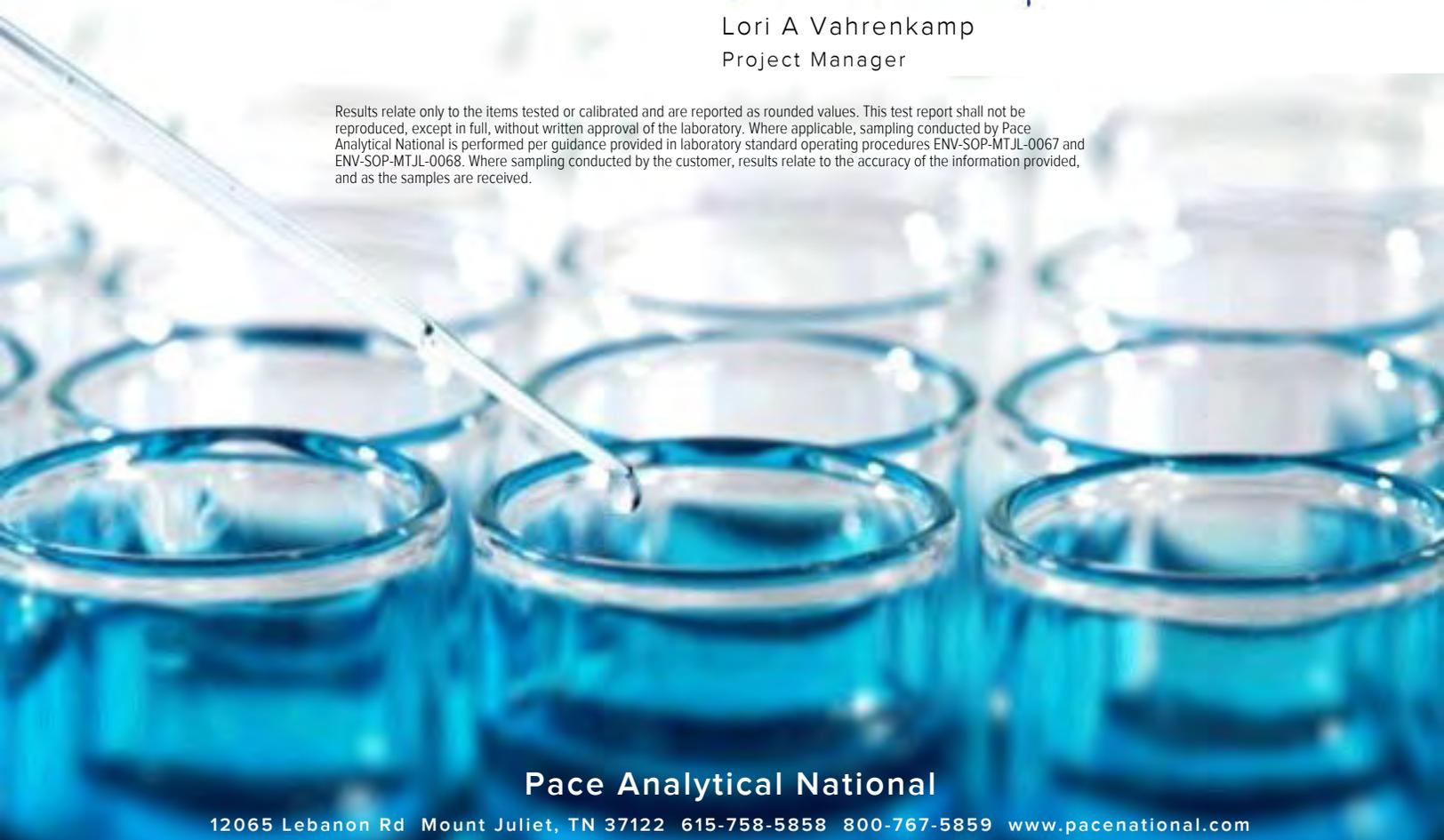
Sample Delivery Group: L1686256  
 Samples Received: 12/09/2023  
 Project Number: SRS #2009-084  
 Description: DCP Plant to Lea Station 6" Section 31

Report To: Kimble Thrash  
 PO Box 62228  
 Midland, TX 79711

Entire Report Reviewed By:

Lori A Vahrenkamp  
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

<b>Cp: Cover Page</b>	<b>1</b>	
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	
<b>Cn: Case Narrative</b>	<b>4</b>	
<b>Sr: Sample Results</b>	<b>5</b>	
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<b>MW-3 L1686256-03</b>	<b>6</b>	
<b>MW-4 L1686256-04</b>	<b>7</b>	
<b>MW-5 L1686256-05</b>	<b>8</b>	
<b>MW-6 L1686256-06</b>	<b>9</b>	
<b>DUP-1 L1686256-07</b>	<b>10</b>	
<b>TRIP BLANK L1686256-08</b>	<b>11</b>	
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<b>Volatile Organic Compounds (GC) by Method 8021B</b>	<b>12</b>	
<b>Gl: Glossary of Terms</b>	<b>13</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>14</b>	
<b>Sc: Sample Chain of Custody</b>	<b>15</b>	

MW-2 L1686256-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 21:50	12/15/23 21:50	ACG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-3 L1686256-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 22:13	12/15/23 22:13	ACG	Mt. Juliet, TN

4 Cn

5 Sr

MW-4 L1686256-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 22:36	12/15/23 22:36	ACG	Mt. Juliet, TN

6 Qc

7 Gl

MW-5 L1686256-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 22:58	12/15/23 22:58	ACG	Mt. Juliet, TN

8 Al

9 Sc

MW-6 L1686256-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 23:21	12/15/23 23:21	ACG	Mt. Juliet, TN

DUP-1 L1686256-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 23:44	12/15/23 23:44	ACG	Mt. Juliet, TN

TRIP BLANK L1686256-08 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by				Collected date/time	Received date/time	
Volatile Organic Compounds (GC) by Method 8021B	WG2190177	1	12/15/23 13:31	12/15/23 13:31	AV	Mt. Juliet, TN

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

Lori A Vahrenkamp  
Project Manager

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

Collected date/time: 12/07/23 09:25

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	12/15/2023 21:50	<a href="#">WG2190177</a>
Toluene	U		0.000412	0.00100	1	12/15/2023 21:50	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 21:50	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 21:50	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	103			79.0-125		12/15/2023 21:50	<a href="#">WG2190177</a>

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

Collected date/time: 12/07/23 11:15

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	12/15/2023 22:13	<a href="#">WG2190177</a>
Toluene	U		0.000412	0.00100	1	12/15/2023 22:13	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 22:13	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 22:13	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	102			79.0-125		12/15/2023 22:13	<a href="#">WG2190177</a>

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

Collected date/time: 12/07/23 12:35

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	1	12/15/2023 22:36	<a href="#">WG2190177</a>
Toluene	U		0.000412	0.00100	1	12/15/2023 22:36	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 22:36	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 22:36	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	103			79.0-125		12/15/2023 22:36	<a href="#">WG2190177</a>

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

Collected date/time: 12/07/23 14:00

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	12/15/2023 22:58	<a href="#">WG2190177</a>
Toluene	U		0.000412	0.00100	1	12/15/2023 22:58	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 22:58	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 22:58	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	102			79.0-125		12/15/2023 22:58	<a href="#">WG2190177</a>

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

Collected date/time: 12/07/23 10:30

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	12/15/2023 23:21	<a href="#">WG2190177</a>
Toluene	U		0.000412	0.00100	1	12/15/2023 23:21	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 23:21	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 23:21	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	102			79.0-125		12/15/2023 23:21	<a href="#">WG2190177</a>

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

Collected date/time: 12/07/23 14:01

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	12/15/2023 23:44	<a href="#">WG2190177</a>
Toluene	U		0.000412	0.00100	1	12/15/2023 23:44	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 23:44	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 23:44	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	102			79.0-125		12/15/2023 23:44	<a href="#">WG2190177</a>

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

Collected date/time: 12/07/23 00:00

L1686256

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	1	12/15/2023 13:31	<a href="#">WG2190177</a>
Toluene	0.000632	J	0.000412	0.00100	1	12/15/2023 13:31	<a href="#">WG2190177</a>
Ethylbenzene	U		0.000160	0.000500	1	12/15/2023 13:31	<a href="#">WG2190177</a>
Total Xylene	U		0.000510	0.00150	1	12/15/2023 13:31	<a href="#">WG2190177</a>
(S) a,a,a-Trifluorotoluene(PID)	102			79.0-125		12/15/2023 13:31	<a href="#">WG2190177</a>

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

Volatile Organic Compounds (GC) by Method 8021B

[L1686256-02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R4013233-3 12/15/23 11:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	102			79.0-125

Laboratory Control Sample (LCS)

(LCS) R4013233-1 12/15/23 10:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Benzene	0.0500	0.0471	94.2	77.0-122	
Toluene	0.0500	0.0433	86.6	80.0-121	
Ethylbenzene	0.0500	0.0483	96.6	80.0-123	
Total Xylene	0.150	0.139	92.7	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			101	79.0-125	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

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

Qualifier Description

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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



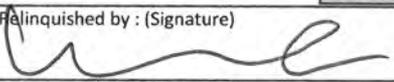
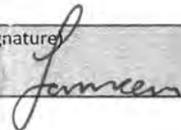
<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

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

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

Company Name/Address: <b>Plains All American Pipeline - ETECH</b> PO Box 62228 Midland, TX 79711		Billing Information: Accounts Payable 333 Clay St Suite 1600 Houston, TX 77002		Pres Chk		Analysis / Container / Preservative						Chain of Custody Page 1 of 1			
Report to: <b>Kimble Thrash</b>		Email To: kimble@etechnv.com										 PEOPLE ADVANCING SCIENCE  <b>MT JULIET, TN</b> 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubfs/pas-standard-terms.pdf">https://info.pacelabs.com/hubfs/pas-standard-terms.pdf</a>			
Project Description: DCP Plant to Lea Station 6" Section 31		City/State Collected: <b>LEA COUNTY, NM</b>		Please Circle: PT MT CT ET								SDG #			
Phone: <b>432 894 9996</b>		Client Project # <b>SRS #2009-084</b>		Lab Project # <b>PLAINSETECH-NM GW</b>								<b>J048</b>			
Collected by (print): <b>KIMBLE THRASH</b>		Site/Facility ID # <b>SRS #2009-084</b>		P.O. #								Account #			
Collected by (signature):		<b>Rush?</b> (Lab MUST Be Notified)		Quote #								Template: T242877			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		<input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Date Results Needed								Prelogin: P1041690 PM: 3587 - Lori A Vahrenkamp PB:			
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs							Shipped Via: <b>Courier</b>	

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative						Remarks	Sample # (lab only)
<del>MW-2</del>	<del>G</del>	<del>GW</del>	<del>N/A</del>	<del>12-7-23</del>	<del>0925</del>	<del>3</del>	<del>X</del>							
MW-2	G	GW	N/A	12-7-23	0925	3	X							01
MW-3	G	GW	N/A	12-7-23	1115	3	X							02
MW-4	G	GW	N/A	12-7-23	1235	3	X							03
MW-5	G	GW	N/A	12-7-23	1400	3	X							04
MW-6	G	GW	N/A	12-7-23	1030	3	X							05
DUP-1	G	GW	N/A	12-7-23	1401	3	X							06
TRIP BLANK		GW				2	X							07
<b>XXX END OF COC XXX</b>														

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: Order Includes: 7xGW for BTEX, plus 1xTrip Blank				pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headpace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # <b>526 9662 1615</b>											
Relinquished by: (Signature) 		Date: <b>12-8-23</b>	Time: <b>1300</b>	Received by: (Signature) 		Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>2</b> <input type="checkbox"/> HCl/MeOH <input type="checkbox"/> TBR		Temp: _____ °C Bottles Received: _____ <b>CCAS 2.5 + 0 = 2.5</b>					
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Temp: _____ °C		If preservation required by Login: Date/Time					
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) 		Date: <b>12/9/23</b>	Time: <b>0900</b>	Hold:		Condition: NCF / OK			

**Appendix B**  
**Laboratory Analytical Reports**  
**(Air Emissions)**



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joel Lowry  
Etech Environmental & Safety Solutions  
PO BOX 62228  
Midland, Texas 79711

Generated 3/10/2023 11:53:08 AM

## JOB DESCRIPTION

DCP Sec 31  
SDG NUMBER Lea County NM

## JOB NUMBER

860-44413-1

Eurofins Houston  
4145 Greenbriar Dr  
Stafford TX 77477

See page two for job notes and contact information.



# Eurofins Houston

## Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated  
3/10/2023 11:53:08 AM

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Laboratory Job ID: 860-44413-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

## Qualifiers

## GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
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: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

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**Job ID: 860-44413-1**

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**Laboratory: Eurofins Houston**

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**Narrative**

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**Job Narrative**  
**860-44413-1**

**Receipt**

The sample was received on 3/4/2023 9:12 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 19.6°C

**GC/MS VOA**

Method 8260C\_GRO: The following sample was analyzed outside of analytical holding time due to receiving sample out of holding time: EFF-1 (03323) (860-44413-1).

Method 8260C\_GRO: The following sample was received outside of holding time: EFF-1 (03323) (860-44413-1).

Method 8260C\_MOD: The following sample was analyzed outside of analytical holding time due to receiving sample outside of holding time: EFF-1 (03323) (860-44413-1).

Method 8260C\_MOD: The following sample was received outside of holding time: EFF-1 (03323) (860-44413-1).

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



### Detection Summary

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

**Client Sample ID: EFF-1 (03323 )**

**Lab Sample ID: 860-44413-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	575	H	12.2	6.11	ppm v/v	1		8260C GRO	Total/NA
Benzene	0.359	J H	3.13	0.313	ppm v/v	1		8260C	Total/NA
Toluene	0.275	J H	2.65	0.265	ppm v/v	1		8260C	Total/NA
m,p-Xylenes	0.784	J H	4.61	0.461	ppm v/v	1		8260C	Total/NA
Xylenes, Total	0.784	J H	4.61	0.461	ppm v/v	1		8260C	Total/NA

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This Detection Summary does not include radiochemical test results.

Eurofins Houston

### Client Sample Results

Client: Etech Environmental & Safety Solutions  
 Project/Site: DCP Sec 31

Job ID: 860-44413-1  
 SDG: Lea County NM

**Client Sample ID: EFF-1 (03323)**

**Lab Sample ID: 860-44413-1**

Date Collected: 03/03/23 12:10

Matrix: Air

Date Received: 03/04/23 09:12

Sample Container: Tedlar Bag 1L

**Method: SW846 8260C GRO - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics</b>	<b>575</b>	<b>H</b>	12.2	6.11	ppm v/v			03/07/23 14:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		60 - 140					03/07/23 14:54	1

**Method: SW846 8260C - Volatile Organic Compounds (GCMS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>0.359</b>	<b>J H</b>	3.13	0.313	ppm v/v			03/07/23 14:54	1
<b>Toluene</b>	<b>0.275</b>	<b>J H</b>	2.65	0.265	ppm v/v			03/07/23 14:54	1
Ethylbenzene	<0.230	U H	2.30	0.230	ppm v/v			03/07/23 14:54	1
<b>m,p-Xylenes</b>	<b>0.784</b>	<b>J H</b>	4.61	0.461	ppm v/v			03/07/23 14:54	1
o-Xylene	<0.230	U H	2.30	0.230	ppm v/v			03/07/23 14:54	1
<b>Xylenes, Total</b>	<b>0.784</b>	<b>J H</b>	4.61	0.461	ppm v/v			03/07/23 14:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105		70 - 135					03/07/23 14:54	1

### Surrogate Summary

Client: Etech Environmental & Safety Solutions  
 Project/Site: DCP Sec 31

Job ID: 860-44413-1  
 SDG: Lea County NM

**Method: 8260C - Volatile Organic Compounds (GCMS)**

Matrix: Air

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (70-135)
860-44413-1	EFF-1 (03323)	105
LCS 860-92970/3	Lab Control Sample	106
LCSD 860-92970/4	Lab Control Sample Dup	107
MB 860-92970/6	Method Blank	103

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

**Method: 8260C GRO - Volatile Organic Compounds (GC/MS)**

Matrix: Air

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (60-140)
860-44413-1	EFF-1 (03323)	96
LCS 860-92971/4	Lab Control Sample	104
LCSD 860-92971/5	Lab Control Sample Dup	94
MB 860-92971/7	Method Blank	98

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

### QC Sample Results

Client: Etech Environmental & Safety Solutions  
 Project/Site: DCP Sec 31

Job ID: 860-44413-1  
 SDG: Lea County NM

#### Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-92970/6  
 Matrix: Air  
 Analysis Batch: 92970

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.313	U	3.13	0.313	ppm v/v			03/07/23 14:08	1
Toluene	<0.265	U	2.65	0.265	ppm v/v			03/07/23 14:08	1
Ethylbenzene	<0.230	U	2.30	0.230	ppm v/v			03/07/23 14:08	1
m,p-Xylenes	<0.461	U	4.61	0.461	ppm v/v			03/07/23 14:08	1
o-Xylene	<0.230	U	2.30	0.230	ppm v/v			03/07/23 14:08	1
Xylenes, Total	<0.461	U	4.61	0.461	ppm v/v			03/07/23 14:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 135		03/07/23 14:08	1

Lab Sample ID: LCS 860-92970/3  
 Matrix: Air  
 Analysis Batch: 92970

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	15.7	13.43		ppm v/v		86	70 - 125
Toluene	13.3	11.66		ppm v/v		88	70 - 125
Ethylbenzene	11.5	9.914		ppm v/v		86	70 - 125
m,p-Xylenes	11.5	9.991		ppm v/v		87	70 - 125
o-Xylene	11.5	9.784		ppm v/v		85	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 135

Lab Sample ID: LCSD 860-92970/4  
 Matrix: Air  
 Analysis Batch: 92970

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	15.7	14.12		ppm v/v		90	70 - 125	5	35
Toluene	13.3	11.81		ppm v/v		89	70 - 125	1	35
Ethylbenzene	11.5	9.920		ppm v/v		86	70 - 125	0	35
m,p-Xylenes	11.5	9.958		ppm v/v		86	70 - 125	0	35
o-Xylene	11.5	9.737		ppm v/v		85	70 - 125	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 135

#### Method: 8260C GRO - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-92971/7  
 Matrix: Air  
 Analysis Batch: 92971

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<6.11	U	12.2	6.11	ppm v/v			03/07/23 14:08	1

Eurofins Houston

### QC Sample Results

Client: Etech Environmental & Safety Solutions  
 Project/Site: DCP Sec 31

Job ID: 860-44413-1  
 SDG: Lea County NM

**Method: 8260C GRO - Volatile Organic Compounds (GC/MS) (Continued)**

Lab Sample ID: MB 860-92971/7  
 Matrix: Air  
 Analysis Batch: 92971

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		60 - 140		03/07/23 14:08	1

Lab Sample ID: LCS 860-92971/4  
 Matrix: Air  
 Analysis Batch: 92971

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics	122	114.7		ppm v/v		94	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		60 - 140

Lab Sample ID: LCSD 860-92971/5  
 Matrix: Air  
 Analysis Batch: 92971

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics	122	104.9		ppm v/v		86	60 - 140	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		60 - 140

### QC Association Summary

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

#### GC/MS VOA

##### Analysis Batch: 92970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-44413-1	EFF-1 (03323 )	Total/NA	Air	8260C	
MB 860-92970/6	Method Blank	Total/NA	Air	8260C	
LCS 860-92970/3	Lab Control Sample	Total/NA	Air	8260C	
LCSD 860-92970/4	Lab Control Sample Dup	Total/NA	Air	8260C	

##### Analysis Batch: 92971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-44413-1	EFF-1 (03323 )	Total/NA	Air	8260C GRO	
MB 860-92971/7	Method Blank	Total/NA	Air	8260C GRO	
LCS 860-92971/4	Lab Control Sample	Total/NA	Air	8260C GRO	
LCSD 860-92971/5	Lab Control Sample Dup	Total/NA	Air	8260C GRO	

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### Lab Chronicle

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

**Client Sample ID: EFF-1 (03323 )**

**Lab Sample ID: 860-44413-1**

**Date Collected: 03/03/23 12:10**

**Matrix: Air**

**Date Received: 03/04/23 09:12**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	92970	03/07/23 14:54	JBS	EET HOU
Total/NA	Analysis	8260C GRO		1	5 mL	5 mL	92971	03/07/23 14:54	JBS	EET HOU

**Laboratory References:**

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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### Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

#### Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-04-23
Florida	NELAP	E871002	06-30-23
Louisiana	NELAP	03054	06-30-23
Louisiana (All)	NELAP	03054	06-30-23
Oklahoma	State	1306	08-31-23
Texas	NELAP	T104704215-22-48	06-30-23
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	P330-22-00025	03-02-23 *

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



### Method Summary

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GCMS)	SW846	EET HOU
8260C GRO	Volatile Organic Compounds (GC/MS)	SW846	EET HOU
5030C	Collection/Prep Tedlar Bag (P&T)	SW846	EET HOU

**Protocol References:**

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

**Laboratory References:**

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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### Sample Summary

Client: Etech Environmental & Safety Solutions  
Project/Site: DCP Sec 31

Job ID: 860-44413-1  
SDG: Lea County NM

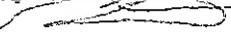
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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-44413-1	EFF-1 (03323)	Air	03/03/23 12:10	03/04/23 09:12

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 		3/3/23 2:45	2 	Fedex	
3 Fedex		3/4/23 09:14	4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

### Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 860-44413-1  
SDG Number: Lea County NM

**Login Number: 44413**  
**List Number: 1**  
**Creator: Rubio, Yuri**

**List Source: Eurofins Houston**

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.	False	Thermal preservation not required.
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.	False	No time on COC, logged in per container labels.
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	

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**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Joel Lowry

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: DCP sec. 31

Project Number: 17473

Location: Lea County, NM

Lab Order Number: 3E15005



**Current Certification**

Report Date: 05/26/23

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EFF-1 (051523)	3E15005-01	Air	05/15/23 09:00	05-15-2023 12:30

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: DCP sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**EFF-1 (051523)**  
**3E15005-01 (Air)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**Organics by GC**

<b>Benzene</b>	<b>0.255</b>	0.500	ppmv	1	P3E2602	05/18/23 10:00	05/18/23 10:00	EPA 8021B	SUB-8, J
<b>Toluene</b>	<b>0.182</b>	0.200	ppmv	1	P3E2602	05/18/23 10:00	05/18/23 10:00	EPA 8021B	SUB-8, J
Ethylbenzene	ND	0.500	ppmv	1	P3E2602	05/18/23 10:00	05/18/23 10:00	EPA 8021B	SUB-8
<b>Xylene (p/m)</b>	<b>0.353</b>	1.00	ppmv	1	P3E2602	05/18/23 10:00	05/18/23 10:00	EPA 8021B	SUB-8, J
<b>Xylene (o)</b>	<b>0.0770</b>	0.500	ppmv	1	P3E2602	05/18/23 10:00	05/18/23 10:00	EPA 8021B	SUB-8, J

Permian Basin Environmental Lab, L.P.

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.*

1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Permian Basin Environmental Lab, L.P.

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.*

1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**Notes and Definitions**

- SUB-8 Subcontract of analyte/analysis to A&B Labs Houston.
- NPBEL C Chain of Custody was not generated at PBELAB
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:  Date: 5/26/2023

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.*

1400 Rankin HWY Midland, TX 79701 432-686-7235







# ANALYTICAL REPORT

June 07, 2023

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

## Plains All American Pipeline - ETECH

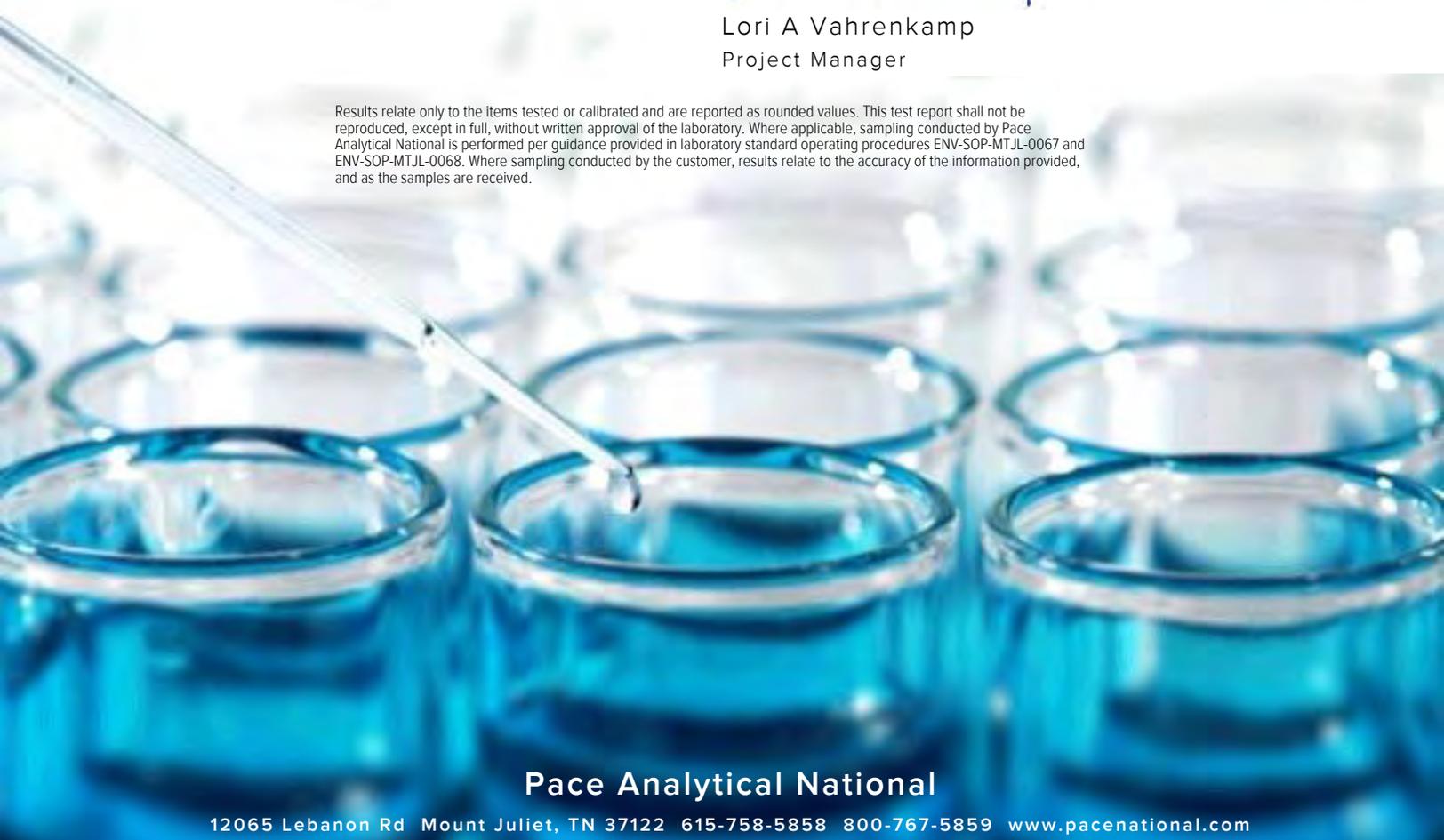
Sample Delivery Group: L1622526  
 Samples Received: 06/03/2023  
 Project Number:  
 Description: Tedlars, New Mexico Samples

Report To: Joel Lowery  
 PO Box 62228  
 Midland, TX 79711

Entire Report Reviewed By:

Lori A Vahrenkamp  
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

<b>Cp: Cover Page</b>	<b>1</b>	
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	
<b>Cn: Case Narrative</b>	<b>4</b>	
<b>Tr: TRRP Summary</b>	<b>5</b>	
TRRP form R	<b>6</b>	
TRRP form S	<b>7</b>	
TRRP Exception Reports	<b>8</b>	
<b>Sr: Sample Results</b>	<b>9</b>	
EFF-1(060223) L1622526-01	<b>9</b>	
<b>Qc: Quality Control Summary</b>	<b>10</b>	
<b>Volatile Organic Compounds (MS) by Method TO-15</b>	<b>10</b>	
<b>Gl: Glossary of Terms</b>	<b>11</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>12</b>	
<b>Sc: Sample Chain of Custody</b>	<b>13</b>	
		

# SAMPLE SUMMARY

EFF-1(060223) L1622526-01 Air

Collected by	Collected date/time	Received date/time
	06/02/23 09:30	06/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2072009	400	06/06/23 05:52	06/06/23 05:52	DBB	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Tr

<sup>6</sup>Sr

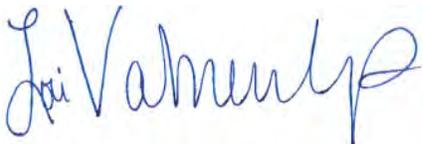
<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

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.



Lori A Vahrenkamp  
Project Manager

Sample Delivery Group (SDG) Narrative

Sample received in tedlar bag.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L1622526-01</a>	<a href="#">EFF-1(060223)</a>	TO-15

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

# Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. cleanup methods, and
  - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  - a. LCS spiking amounts,
  - b. Calculated %R for each analyte, and
  - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a. Samples associated with the MS/MSD clearly identified,
  - b. MS/MSD spiking amounts,
  - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d. Calculated %Rs and relative percent differences (RPDs), and
  - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  - a. The amount of analyte measured in the duplicate,
  - b. The calculated RPD, and
  - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Lori A Vahrenkamp  
Project Manager

# Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 06/07/2023 14:02					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1622526-01					
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2072009					
#1	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.  
 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);  
 3. NA = Not applicable;  
 4. NR = Not reviewed;  
 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

# Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 06/07/2023 14:02					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1622526-01					
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2072009					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
<p>1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);</p> <p>3. NA = Not applicable;</p> <p>4. NR = Not reviewed;</p> <p>5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>							

# Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 06/07/2023 14:02	
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1622526-01	
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2072009	
ER # <sup>1</sup>	Description		
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.		
	<p>1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);</p> <p>3. NA = Not applicable;</p> <p>4. NR = Not reviewed;</p> <p>5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>		

Collected date/time: 06/02/23 09:30

L1622526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	80.0	256	776	2480		400	<a href="#">WG2072009</a>
TPH (GC/MS) Low Fraction	8006-61-9	101	80000	330000	566000	2340000		400	<a href="#">WG2072009</a>
Ethylbenzene	100-41-4	106	80.0	347	117	507		400	<a href="#">WG2072009</a>
MTBE	1634-04-4	88.10	80.0	288	ND	ND		400	<a href="#">WG2072009</a>
Toluene	108-88-3	92.10	200	753	517	1950		400	<a href="#">WG2072009</a>
Xylenes, Total	1330-20-7	106.16	240	1040	1440	6250		400	<a href="#">WG2072009</a>
m&p-Xylene	1330-20-7	106	160	694	1150	4990		400	<a href="#">WG2072009</a>
o-Xylene	95-47-6	106	80.0	347	295	1280		400	<a href="#">WG2072009</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				<a href="#">WG2072009</a>

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

Volatile Organic Compounds (MS) by Method TO-15

[L1622526-01](#)

Method Blank (MB)

(MB) R3933187-3 06/05/23 20:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
Ethylbenzene	U		0.0835	0.200
MTBE	U		0.0647	0.200
Toluene	U		0.0870	0.500
Xylenes, Total	U		0.135	0.600
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	94.4			60.0-140

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

(LCS) R3933187-1 06/05/23 19:47 • (LCSD) R3933187-2 06/05/23 20:17

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	3.65	3.57	97.3	95.2	70.0-130			2.22	25
TPH (GC/MS) Low Fraction	188	177	175	94.1	93.1	70.0-130			1.14	25
Ethylbenzene	3.75	3.68	3.63	98.1	96.8	70.0-130			1.37	25
MTBE	3.75	3.79	3.74	101	99.7	70.0-130			1.33	25
Toluene	3.75	3.73	3.74	99.5	99.7	70.0-130			0.268	25
Xylenes, Total	11.3	11.2	11.1	99.1	98.2	70.0-130			0.897	25
m&p-Xylene	7.50	7.32	7.25	97.6	96.7	70.0-130			0.961	25
o-Xylene	3.75	3.84	3.81	102	102	70.0-130			0.784	25
(S) 1,4-Bromofluorobenzene				99.9	100	60.0-140				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Tr

<sup>6</sup> Sr

<sup>7</sup> Qc

<sup>8</sup> Gl

<sup>9</sup> Al

<sup>10</sup> 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.
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 for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

Qualifier Description

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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



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

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

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

### Plains All American Pipeline - ETECH

PO Box 62228  
Midland, TX 79711

Billing Information:

Accounts Payable  
333 Clay St  
Suite 1600  
Houston, TX 77002

Pres  
Chk

Analysis / Container / Preservative

Chain of Custody

Report to:  
Joel Lowery

Email To:  
joel@etechenv.com;miquel@etechenv.com;zac

Project Description:  
Tedlars, New Mexico Samples

City/State  
Collected: *Lea County*

Please Circle:  
PT MT CT ET

Phone:  
*(575) 264-9884*

Client Project #  
*17473*

Lab Project #  
PLAINSETECH - NM AIR

Collected by (print):  
*Oried Ontiveros*

Site/Facility ID #  
*DLP #31*

P.O. #  
*2009-084*

Collected by (signature):  
*[Signature]*

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

Immediately  
Packed on Ice N  Y

TO-15TEDLAR Tedlar



MT JULIET, TN

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

SDG #  
*L1627526*  
H169

Acctnum: PLAINSETECH

Template: T230533

Prelogin: P1000245

PM: 3587 - Lori A Vahrenkamp

PB:

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Centre
<i>EFF-1 (060223)</i>	<i>Grab</i>	<i>Air</i>		<i>6/2/23</i>	<i>9:30</i>	<i>1</i>
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				
		<i>Air</i>				

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

Remarks:

Samples returned via:  
 UPS  FedEx  Courier

Tracking # *6337 2249 9864*

pH \_\_\_\_\_ Temp \_\_\_\_\_  
Flow \_\_\_\_\_ Other \_\_\_\_\_

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VOA Zero Headspace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Relinquished by: (Signature)  
*[Signature]*

Date: *6-2-23* Time: *10:00*

Received by: (Signature)  
*BCox*

Trip Blank Received: Yes/No  
 HCL/MeOH  
TBR

Relinquished by: (Signature)

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: (Signature)

Temp: *15.1* °C Bottles Received: *1*

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: (Signature)  
*[Signature]*

Date: *6/3/23* Time: *0900*

Hold: \_\_\_\_\_ Condition: NCF / OK



# ANALYTICAL REPORT

July 31, 2023

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

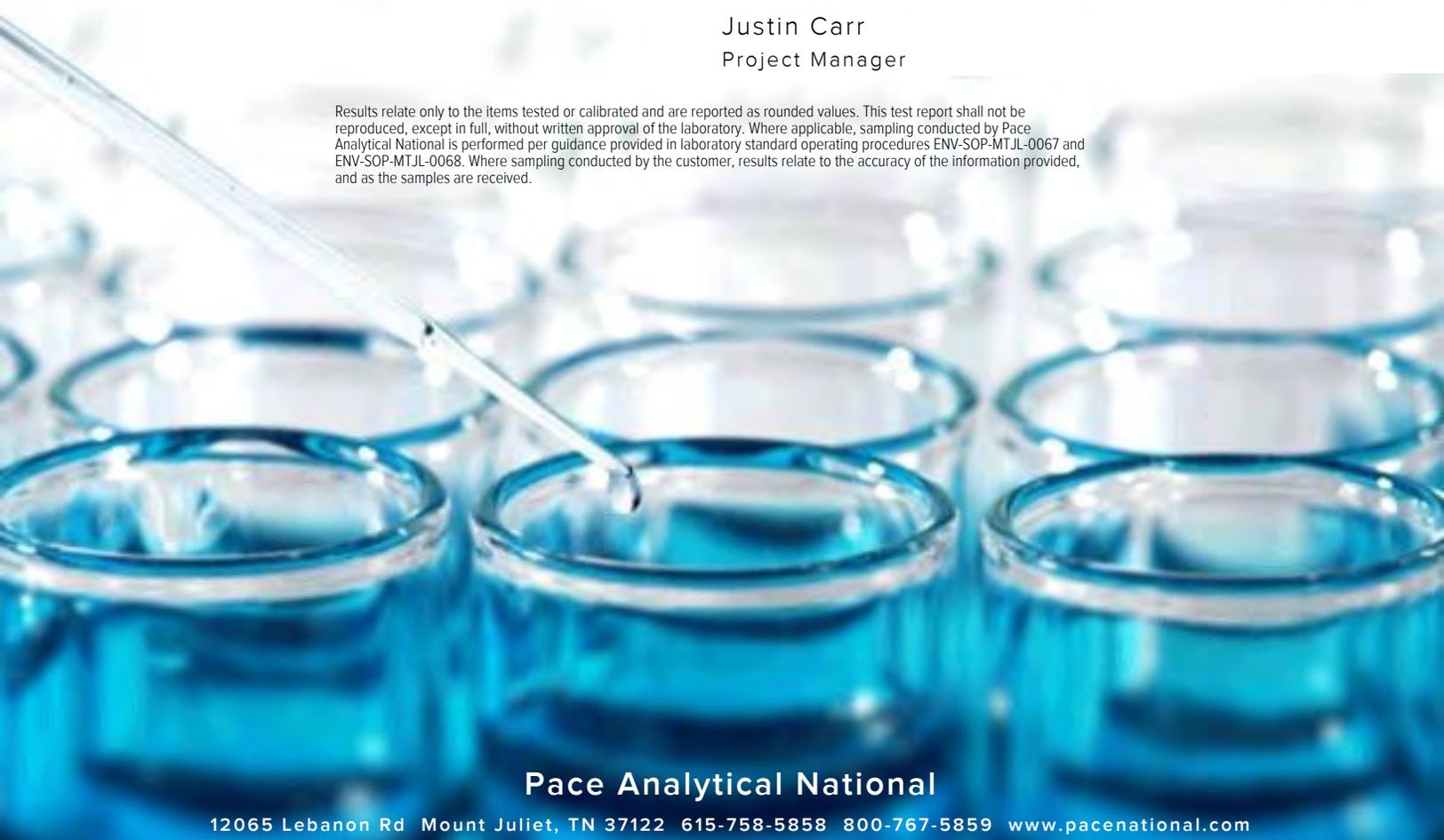
## Plains All American Pipeline - ETECH

Sample Delivery Group: L1640337  
 Samples Received: 07/29/2023  
 Project Number: 174763  
 Description: Tedlars, New Mexico Samples  
 Site: DCP #31  
 Report To: Joel Lowery  
 PO Box 62228  
 Midland, TX 79711

Entire Report Reviewed By:

Justin Carr  
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

<b>Cp: Cover Page</b>	1	
<b>Tc: Table of Contents</b>	2	
<b>Ss: Sample Summary</b>	3	
<b>Cn: Case Narrative</b>	4	
<b>Tr: TRRP Summary</b>	5	
TRRP form R	6	
TRRP form S	7	
TRRP Exception Reports	8	
<b>Sr: Sample Results</b>	9	
EFF-1(072823) L1640337-01	9	
<b>Qc: Quality Control Summary</b>	10	
Volatile Organic Compounds (MS) by Method TO-15	10	
<b>Gl: Glossary of Terms</b>	11	
<b>Al: Accreditations &amp; Locations</b>	12	
<b>Sc: Sample Chain of Custody</b>	13	
		

# SAMPLE SUMMARY

EFF-1(072823) L1640337-01 Air

Collected by	Collected date/time	Received date/time
Miguel Ramirez	07/28/23 08:40	07/29/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2104007	100	07/29/23 23:39	07/29/23 23:39	JAP	Mt. Juliet, TN

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Tr
- <sup>6</sup>Sr
- <sup>7</sup>Qc
- <sup>8</sup>Gl
- <sup>9</sup>Al
- <sup>10</sup>Sc

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.



Justin Carr  
Project Manager

### Sample Delivery Group (SDG) Narrative

Sample received in tedlar bag.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L1640337-01</a>	<a href="#">EFF-1(072823)</a>	TO-15

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

# Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. cleanup methods, and
  - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  - a. LCS spiking amounts,
  - b. Calculated %R for each analyte, and
  - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a. Samples associated with the MS/MSD clearly identified,
  - b. MS/MSD spiking amounts,
  - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d. Calculated %Rs and relative percent differences (RPDs), and
  - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  - a. The amount of analyte measured in the duplicate,
  - b. The calculated RPD, and
  - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Justin Carr  
Project Manager

# Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 07/31/2023 17:07					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1640337-01					
Reviewer Name: Justin Carr		Prep Batch Number(s): WG2104007					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.  
 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);  
 3. NA = Not applicable;  
 4. NR = Not reviewed;  
 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

# Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 07/31/2023 17:07					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1640337-01					
Reviewer Name: Justin Carr		Prep Batch Number(s): WG2104007					
#1	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
<p>1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);</p> <p>3. NA = Not applicable;</p> <p>4. NR = Not reviewed;</p> <p>5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>							

# Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 07/31/2023 17:07	
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1640337-01	
Reviewer Name: Justin Carr		Prep Batch Number(s): WG2104007	
ER # <sup>1</sup>	Description		
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.		
<p>1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);</p> <p>3. NA = Not applicable;</p> <p>4. NR = Not reviewed;</p> <p>5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>			

Collected date/time: 07/28/23 08:40

L1640337

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	20.0	63.9	186	594		100	<a href="#">WG2104007</a>
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	196000	810000		100	<a href="#">WG2104007</a>
Ethylbenzene	100-41-4	106	20.0	86.7	100	434		100	<a href="#">WG2104007</a>
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	<a href="#">WG2104007</a>
Toluene	108-88-3	92.10	50.0	188	292	1100		100	<a href="#">WG2104007</a>
Xylenes, Total	1330-20-7	106.16	60.0	261	1010	4390		100	<a href="#">WG2104007</a>
m&p-Xylene	1330-20-7	106	40.0	173	789	3420		100	<a href="#">WG2104007</a>
o-Xylene	95-47-6	106	20.0	86.7	219	949		100	<a href="#">WG2104007</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				<a href="#">WG2104007</a>

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

Volatile Organic Compounds (MS) by Method TO-15

[L1640337-01](#)

Method Blank (MB)

(MB) R3954651-3 07/29/23 09:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
Ethylbenzene	U		0.0835	0.200
MTBE	U		0.0647	0.200
Toluene	U		0.0870	0.500
Xylenes, Total	U		0.135	0.600
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	98.5			60.0-140

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

(LCS) R3954651-1 07/29/23 08:16 • (LCSD) R3954651-2 07/29/23 09:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	3.88	3.83	103	102	70.0-130			1.30	25
TPH (GC/MS) Low Fraction	188	177	174	94.1	92.6	70.0-130			1.71	25
Ethylbenzene	3.75	3.83	3.88	102	103	70.0-130			1.30	25
MTBE	3.75	3.83	3.78	102	101	70.0-130			1.31	25
Toluene	3.75	3.80	3.80	101	101	70.0-130			0.000	25
Xylenes, Total	11.3	11.6	11.6	103	103	70.0-130			0.000	25
m&p-Xylene	7.50	7.73	7.72	103	103	70.0-130			0.129	25
o-Xylene	3.75	3.83	3.83	102	102	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				99.4	99.7	60.0-140				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Tr

<sup>6</sup> Sr

<sup>7</sup> Qc

<sup>8</sup> Gl

<sup>9</sup> Al

<sup>10</sup> 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.
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 for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

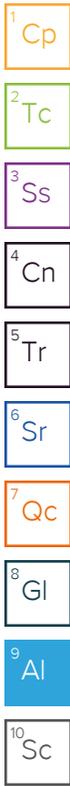
- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Tr
- 6 Sr
- 7 Qc
- 8 Gl
- 9 Al
- 10 Sc

Qualifier Description

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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



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

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

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





# ANALYTICAL REPORT

August 31, 2023

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

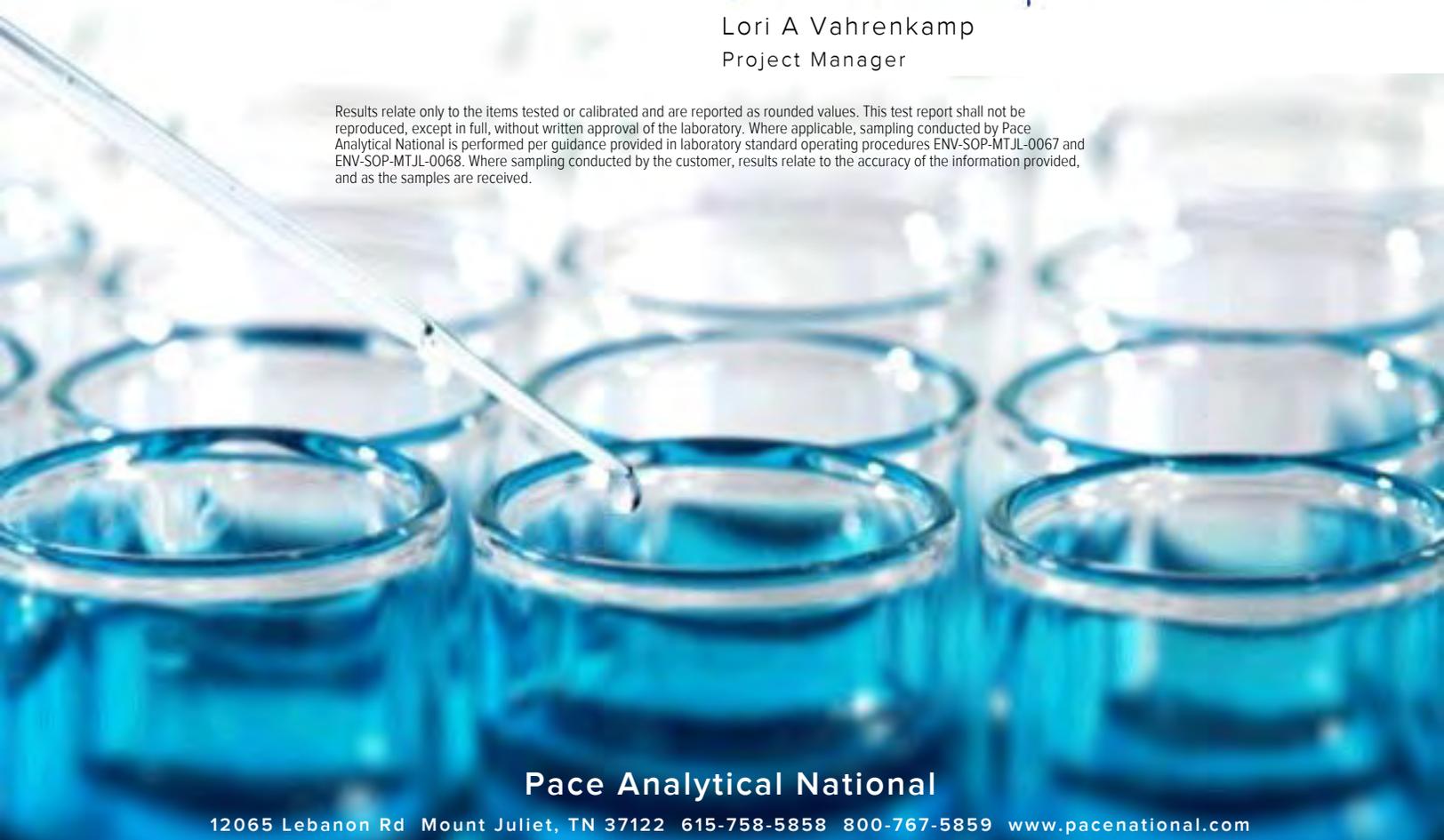
## Plains All American Pipeline - ETECH

Sample Delivery Group: L1650106  
 Samples Received: 08/26/2023  
 Project Number: 2009-084  
 Description: Tedlars, New Mexico Samples  
 Site: DCP#31  
 Report To: Joel Lowery  
 PO Box 62228  
 Midland, TX 79711

Entire Report Reviewed By:

Lori A Vahrenkamp  
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

<b>Cp: Cover Page</b>	1	
<b>Tc: Table of Contents</b>	2	
<b>Ss: Sample Summary</b>	3	
<b>Cn: Case Narrative</b>	4	
<b>Tr: TRRP Summary</b>	5	
TRRP form R	6	
TRRP form S	7	
TRRP Exception Reports	8	
<b>Sr: Sample Results</b>	9	
EFF1(082523) L1650106-01	9	
<b>Qc: Quality Control Summary</b>	10	
Volatile Organic Compounds (MS) by Method TO-15	10	
<b>Gl: Glossary of Terms</b>	11	
<b>Al: Accreditations &amp; Locations</b>	12	
<b>Sc: Sample Chain of Custody</b>	13	
		

# SAMPLE SUMMARY

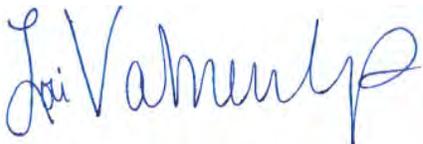
EFF1(082523) L1650106-01 Air

Collected by	Collected date/time	Received date/time
Miguel Ramirez	08/25/23 08:10	08/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2121579	100	08/26/23 20:23	08/26/23 20:23	DBB	Mt. Juliet, TN

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Tr
- <sup>6</sup>Sr
- <sup>7</sup>Qc
- <sup>8</sup>Gl
- <sup>9</sup>Al
- <sup>10</sup>Sc

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.



Lori A Vahrenkamp  
Project Manager

Sample Delivery Group (SDG) Narrative

Sample received in tedlar bag.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L1650106-01</a>	<a href="#">EFF1(082523)</a>	TO-15

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

# Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. cleanup methods, and
  - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  - a. LCS spiking amounts,
  - b. Calculated %R for each analyte, and
  - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a. Samples associated with the MS/MSD clearly identified,
  - b. MS/MSD spiking amounts,
  - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d. Calculated %Rs and relative percent differences (RPDs), and
  - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  - a. The amount of analyte measured in the duplicate,
  - b. The calculated RPD, and
  - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Lori A Vahrenkamp  
Project Manager

# Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 08/31/2023 15:45					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1650106-01					
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2121579					
#1	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.  
 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);  
 3. NA = Not applicable;  
 4. NR = Not reviewed;  
 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

# Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 08/31/2023 15:45					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1650106-01					
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2121579					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

# Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 08/31/2023 15:45	
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1650106-01	
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2121579	
ER # <sup>1</sup>	Description		
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.		
<p>1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);</p> <p>3. NA = Not applicable;</p> <p>4. NR = Not reviewed;</p> <p>5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>			

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	20.0	63.9	392	1250		100	<a href="#">WG2121579</a>
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	316000	1310000		100	<a href="#">WG2121579</a>
Ethylbenzene	100-41-4	106	20.0	86.7	94.3	409		100	<a href="#">WG2121579</a>
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	<a href="#">WG2121579</a>
Toluene	108-88-3	92.10	50.0	188	300	1130		100	<a href="#">WG2121579</a>
Xylenes, Total	1330-20-7	106.16	60.0	261	1230	5340		100	<a href="#">WG2121579</a>
m&p-Xylene	1330-20-7	106	40.0	173	1000	4340		100	<a href="#">WG2121579</a>
o-Xylene	95-47-6	106	20.0	86.7	235	1020		100	<a href="#">WG2121579</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		130				<a href="#">WG2121579</a>

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

Volatile Organic Compounds (MS) by Method TO-15

[L1650106-01](#)

Method Blank (MB)

(MB) R3966148-3 08/26/23 11:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.200
TPH (GC/MS) Low Fraction	39.7	J	39.7	200
Ethylbenzene	U		0.0835	0.200
MTBE	U		0.0647	0.200
Toluene	U		0.0870	0.500
Xylenes, Total	U		0.135	0.600
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	104			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

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

(LCS) R3966148-1 08/26/23 10:09 • (LCSD) R3966148-2 08/26/23 10:39

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	3.29	3.41	87.7	90.9	70.0-130			3.58	25
TPH (GC/MS) Low Fraction	188	179	182	95.2	96.8	70.0-130			1.66	25
Ethylbenzene	3.75	3.46	3.67	92.3	97.9	70.0-130			5.89	25
MTBE	3.75	3.41	3.54	90.9	94.4	70.0-130			3.74	25
Toluene	3.75	3.60	3.74	96.0	99.7	70.0-130			3.81	25
Xylenes, Total	11.3	11.6	12.2	103	108	70.0-130			5.04	25
m&p-Xylene	7.50	7.74	8.14	103	109	70.0-130			5.04	25
o-Xylene	3.75	3.84	4.05	102	108	70.0-130			5.32	25
(S) 1,4-Bromofluorobenzene				113	110	60.0-140				

7 Qc

8 Gl

9 Al

10 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.
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 for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

Qualifier Description

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



**Plains All American Pipeline - ETECH**

PO Box 62228  
Midland, TX 79711

Billing Information:

Accounts Payable  
333 Clay St  
Suite 1600  
Houston, TX 77002

Pres  
Chk

Report to:  
**Joel Lowery**

Email To:  
joel@etechnv.com;miguel@etechnv.com;zac

Project Description:  
**Tedlars, New Mexico Samples**

City/State  
Collected:

Please Circle:  
PT MT CT ET

Phone:  
**575-318-1735**

Client Project #  
**2009-084**

Lab Project #  
**PLAINSETECH - NM AIR**

Collected by (print):  
**Miguel Ramirez**

Site/Facility ID #  
**DCP # 31**

P.O. #

Collected by (signature):  
*[Signature]*

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

Quote #

\_\_\_ Same Day \_\_\_ Five Day  
\_\_\_ Next Day \_\_\_ 5 Day (Rad Only)  
\_\_\_ Two Day \_\_\_ 10 Day (Rad Only)  
\_\_\_ Three Day

Date Results Needed

Immediately  
Packed on Ice N  Y \_\_\_

No.  
of  
Cnts

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
EFF1 (082523)	G	Air		8/25/23	8:10	1 X
		Air				
		Air				
		Air				
		Air				
		Air				
		Air				
		Air				
		Air				
		Air				

TO-15 TEDLAR Tedlar

Analysis / Container / Preservative

Chain of Custody



**MT JULIET, TN**

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

SDG # **L1650106**  
**H095**

Acctnum: **PLAINSETECH**

Template: **T230533**

Prelogin: **P1000245**

PM: **3587 - Lori A Vahrenkamp**

PB:

Shipped Via: **FedEX Ground**

Remarks | Sample # (lab only)

-01

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

Remarks:

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

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

Sample Receipt Checklist

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

Samples returned via:  
\_\_\_ UPS \_\_\_ FedEx \_\_\_ Courier

Tracking # **6337 2249 9020**

Relinquished by: (Signature)  
*[Signature]*

Date: **8-25** Time: **8:38**

Received by: (Signature)  
*[Signature]*

Trip Blank Received: Yes/No  
HCL / MeOH  
TBR

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Temp: °C **AMB** Bottles Received: **1**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: Time:

Received for lab by: (Signature)  
*[Signature]*

Date: **8/26/23** Time: **0900**

Hold: Condition: **NCF / OK**



# ANALYTICAL REPORT

October 05, 2023

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

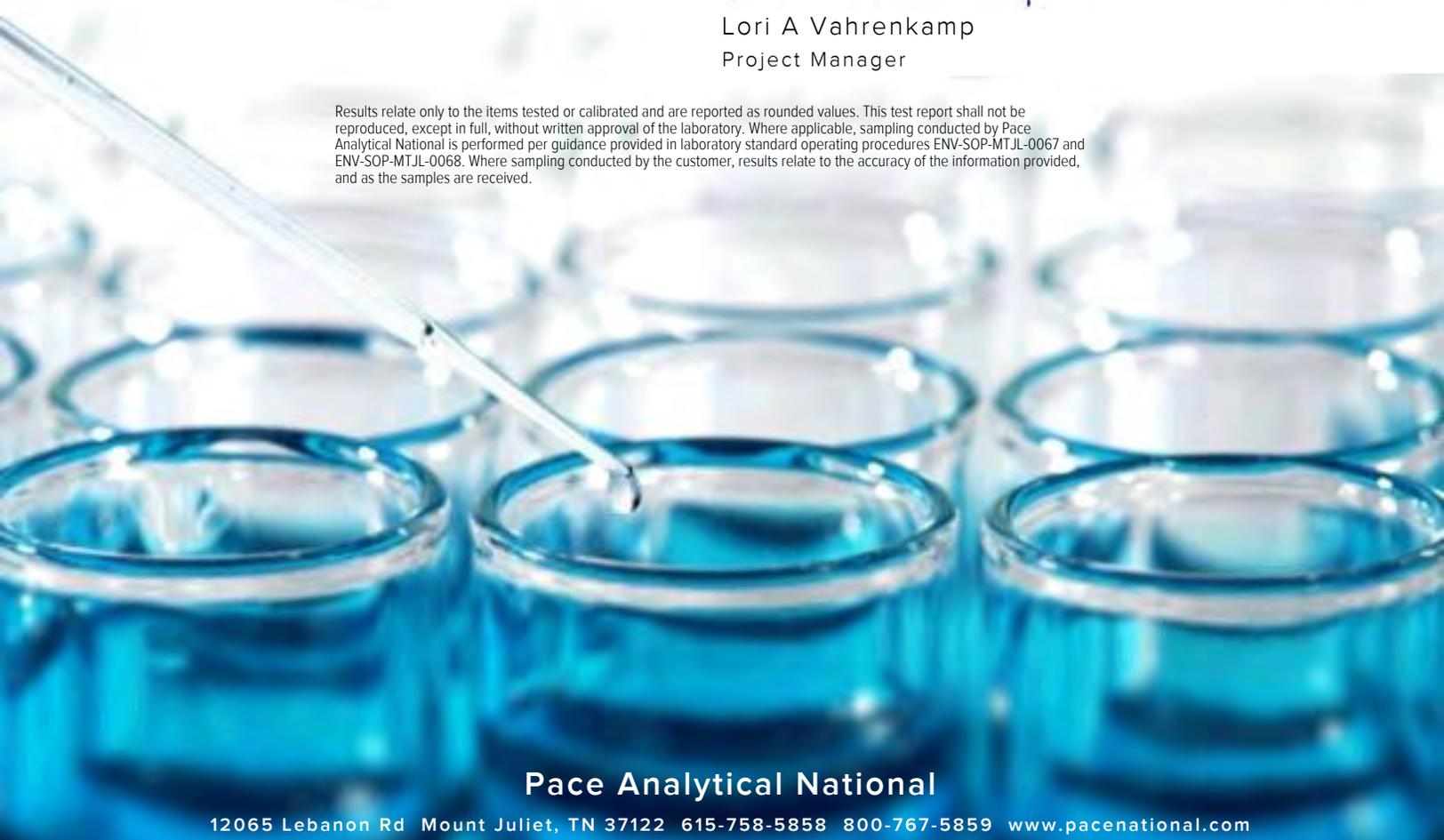
## Plains All American Pipeline - ETECH

Sample Delivery Group: L1661255  
 Samples Received: 09/30/2023  
 Project Number: 2009-084  
 Description: Tedlars, New Mexico Samples  
 Site: DCP # 31  
 Report To: Joel Lowery  
 PO Box 62228  
 Midland, TX 79711

Entire Report Reviewed By:

Lori A Vahrenkamp  
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

<b>Cp: Cover Page</b>	<b>1</b>	
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	
<b>Cn: Case Narrative</b>	<b>4</b>	
<b>Tr: TRRP Summary</b>	<b>5</b>	
TRRP form R	<b>6</b>	
TRRP form S	<b>7</b>	
TRRP Exception Reports	<b>8</b>	
<b>Sr: Sample Results</b>	<b>9</b>	
EFF 1 (092923) L1661255-01	<b>9</b>	
<b>Qc: Quality Control Summary</b>	<b>10</b>	
<b>Volatile Organic Compounds (MS) by Method TO-15</b>	<b>10</b>	
<b>Gl: Glossary of Terms</b>	<b>12</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>13</b>	
<b>Sc: Sample Chain of Custody</b>	<b>14</b>	
		

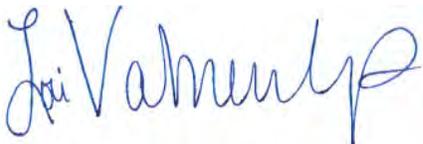
EFF 1 (092923) L1661255-01 Air

Collected by Miguel Ramirez  
Collected date/time 09/29/23 10:00  
Received date/time 09/30/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2142374	1	09/30/23 20:02	09/30/23 20:02	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2142766	100	10/01/23 15:19	10/01/23 15:19	DAH	Mt. Juliet, TN

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Tr
- <sup>6</sup>Sr
- <sup>7</sup>Qc
- <sup>8</sup>Gl
- <sup>9</sup>Al
- <sup>10</sup>Sc

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.



Lori A Vahrenkamp  
Project Manager

Sample Delivery Group (SDG) Narrative

Sample received in tedlar bag.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L1661255-01</a>	<a href="#">EFF 1 (092923)</a>	TO-15

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

# Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. cleanup methods, and
  - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  - a. LCS spiking amounts,
  - b. Calculated %R for each analyte, and
  - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a. Samples associated with the MS/MSD clearly identified,
  - b. MS/MSD spiking amounts,
  - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d. Calculated %Rs and relative percent differences (RPDs), and
  - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  - a. The amount of analyte measured in the duplicate,
  - b. The calculated RPD, and
  - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Lori A Vahrenkamp  
Project Manager

# Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 10/05/2023 16:59					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1661255-01					
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2142374 and WG2142766					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.  
 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);  
 3. NA = Not applicable;  
 4. NR = Not reviewed;  
 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

# Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 10/05/2023 16:59					
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1661255-01					
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2142374 and WG2142766					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

# Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 10/05/2023 16:59	
Project Name: Tedlars, New Mexico Samples		Laboratory Job Number: L1661255-01	
Reviewer Name: Lori A Vahrenkamp		Prep Batch Number(s): WG2142374 and WG2142766	
ER # <sup>1</sup>	Description		
1	TO-15 WG2142374 1,4-Bromofluorobenzene L1661255-01: Percent Recovery is outside of established control limits.		
<p>1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);</p> <p>3. NA = Not applicable;</p> <p>4. NR = Not reviewed;</p> <p>5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>			

Collected date/time: 09/29/23 10:00

L1661255

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	<a href="#">WG2142374</a>
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	163000	673000		100	<a href="#">WG2142766</a>
Ethylbenzene	100-41-4	106	0.200	0.867	23.4	101		1	<a href="#">WG2142374</a>
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	<a href="#">WG2142374</a>
Toluene	108-88-3	92.10	0.500	1.88	68.6	258		1	<a href="#">WG2142374</a>
Xylenes, Total	1330-20-7	106.16	60.0	261	235	1020		100	<a href="#">WG2142766</a>
m&p-Xylene	1330-20-7	106	40.0	173	187	811		100	<a href="#">WG2142766</a>
o-Xylene	95-47-6	106	0.200	0.867	48.3	209		1	<a href="#">WG2142374</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		444		<u>J1</u>		<a href="#">WG2142374</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.5				<a href="#">WG2142766</a>

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

Volatile Organic Compounds (MS) by Method TO-15

[L1661255-01](#)

Method Blank (MB)

(MB) R3980057-3 09/30/23 09:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	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
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	100			60.0-140

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

(LCS) R3980057-1 09/30/23 07:55 • (LCSD) R3980057-2 09/30/23 08:34

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	4.57	4.51	122	120	70.0-130			1.32	25
Ethylbenzene	3.75	4.66	4.64	124	124	70.0-130			0.430	25
MTBE	3.75	4.49	4.56	120	122	70.0-130			1.55	25
Toluene	3.75	4.46	4.46	119	119	70.0-130			0.000	25
o-Xylene	3.75	4.50	4.51	120	120	70.0-130			0.222	25
(S) 1,4-Bromofluorobenzene				100	99.7	60.0-140				

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

Volatile Organic Compounds (MS) by Method TO-15

[L1661255-01](#)

Method Blank (MB)

(MB) R3981097-2 10/01/23 11:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
TPH (GC/MS) Low Fraction	U		39.7	200
Xylenes, Total	0.139	U	0.135	0.600
m&p-Xylene	0.139	U	0.135	0.400
(S) 1,4-Bromofluorobenzene	96.1			60.0-140

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

(LCS) R3981097-1 10/01/23 10:33 • (LCSD) R3981097-3 10/01/23 12:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
TPH (GC/MS) Low Fraction	188	186	199	98.9	106	70.0-130			6.75	25
Xylenes, Total	11.3	12.4	13.2	110	117	70.0-130			6.25	25
m&p-Xylene	7.50	8.48	8.92	113	119	70.0-130			5.06	25
(S) 1,4-Bromofluorobenzene				99.6	103	60.0-140				

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Tr

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

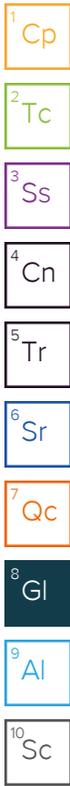
Guide to Reading and Understanding Your Laboratory Report

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.
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 for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.



Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

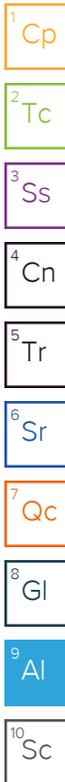
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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





**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Joel Lowry

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: DCP sec. 31

Project Number: 17473

Location: Lea County, NM

Lab Order Number: 3K20011



**Current Certification**

Report Date: 12/04/23

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EFF-1 (112023)	3K20011-01	Air	11/20/23 13:16	11-20-2023 16:30

TO-15 BTEX analysis were subcontracted to A&B Houston. Their current certification can be found here:  
[https://www.tceq.texas.gov/assets/public/compliance/compliance\\_support/qa/labs/a&b\\_env.pdf](https://www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/labs/a&b_env.pdf)

E Tech Environmental & Safety Solutions, Inc. [1]  
 13000 West County Road 100  
 Odessa TX, 79765

Project: DCP sec. 31  
 Project Number: 17473  
 Project Manager: Joel Lowry

**EFF-1 (112023)**  
**3K20011-01 (Air)**

Analyte	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Result	Limit							

**Permian Basin Environmental Lab, L.P.**

**EPA TO-15**

Benzene	ND	0.00400	ppm	1	P3L0414	11/27/23 12:00	11/27/23 12:00	TO-15	SUB-8
Ethylbenzene	ND	0.0100	ppm	1	P3L0414	11/27/23 12:00	11/27/23 12:00	TO-15	SUB-8
Xylene (p/m)	ND	0.0200	ppm	1	P3L0414	11/27/23 12:00	11/27/23 12:00	TO-15	SUB-8
Xylene (o)	ND	0.0100	ppm	1	P3L0414	11/27/23 12:00	11/27/23 12:00	TO-15	SUB-8
Toluene	ND	0.0100	ppm	1	P3L0414	11/27/23 12:00	11/27/23 12:00	TO-15	SUB-8

Permian Basin Environmental Lab, L.P.

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.*

1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Permian Basin Environmental Lab, L.P.

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.*

1400 Rankin HWY Midland, TX 79701 432-686-7235

E Tech Environmental & Safety Solutions, Inc. [1]  
13000 West County Road 100  
Odessa TX, 79765

Project: DCP sec. 31  
Project Number: 17473  
Project Manager: Joel Lowry

**Notes and Definitions**

- SUB-8 Subcontract of analyte/analysis to A&B Labs Houston.
- NPBEL C Chain of Custody was not generated at PBELAB
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:  Date: 12/4/2023

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.





CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
1400 Rankin HWY
Midland, Texas 79701

Phone: 432-686-7235
PBELAB\_SUB\_COC\_V2

Project Manager: Brent Barron
Company Name: PBEL
Company Address: 1400 Rankin HWY
City/State/Zip: Midland Texas 79701
Telephone No: 432-661-4184
Fax No:
Sampler Signature: N/A
e-mail: brentbarron@pbelab.com

Project Name: SUBCONTRACT
Project #:
Project Loc:
PO #:
Report Format: X Standard [ ] TRRP [ ] NPDES

Table with columns: ORDER #, LAB # (lab use only), FIELD CODE, Beginning Depth, Ending Depth, Date Sampled, Time Sampled, Field Filtered, Total #. of Containers, Preservation & # of Containers (ICE, HNO3 250 poly 1, HCl 3 40mL VOA, H2SO4 1 AMBER 500/250POLY, NaOH/Ascorbic Acid 250ML P, Na2S2O3, NONE, NONE 3 AMBER VOAA VIALS), Matrix (DW-Drinking Water S-L-Sludge, GW - Groundwater S-Soil/Solid, NP-Non-Potable Specify Other), Analyze For, 24 HOUR RUSH/PAH ONLY, STANDARD.

Please run PAH in rush please because of holding time.

Table with columns: Relinquished by, Date, Time, Received by, Date, Time. Includes entries for Brent Barron.

Laboratory Comments table with rows for Sample Containers Intact?, VOCs Free of Headspace?, Labels on container(s), Custody seals on container(s), Custody seals on cooler(s), Sample Hand Delivered, by Sampler/Client Rep., by Courier?, Temperature Upon Receipt, Received, Adjusted.

# Laboratory Analysis Report

Total Number of Pages: 7

Job ID : 23112448



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

### Client Project Name : Subcontract

<b>Report To :</b>	Client Name:	Permian Basin Environmental Lab, LP	P.O.#.:
	Attn:	Brent Barron	Sample Collected By:
	Client Address:	1400 Rankin Hwy	Date Collected: 11/20/23
	City, State, Zip:	Midland, Texas, 79701	

### A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
3K20011	Air	23112448.01

Released By: Senthikumar Sevukan  
 Title: Vice President Operations  
 Date: 12/01/2023

Analyst: Amit Bembde



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/13/2023; Expires: 3/31/2024  
 Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

ab-q210-0321

Date Received : 11/22/2023 10:02

LABORATORY TEST RESULTS									
		Job ID : 23112448				Date: 12/1/2023			
Client Name :		Permian Basin Environmental Lab, LP				Attn : Brent Barron			
Project Name:		Subcontract							
Client Sample ID:		3K20011			Lab Sample ID:		23112448.01		
Date Collected:		11/20/23			Sample Matrix:		Air		
Time Collected:		13:16							
Other Information:									
Test Method	Parameter/Test Description	M.W.	Results(nl)	RptLimit(nl)	InjVol(cc)	ug/M3	ppm	Q	Date/Time
<b>EPA TO-15 Volatile Organic Compounds in Air by GCMS</b>									
	Benzene	78.11	BRL	0.2	50CC	< 12.8	< 0.0040		11/27/23
	Ethylbenzene	106.17	BRL	0.5	50CC	< 43.4	< 0.0100		11/27/23
	m- & p-Xylenes	106.17	BRL	1	50CC	< 86.8	< 0.0200		11/27/23
	o-Xylene	106.17	BRL	0.5	50CC	< 43.4	< 0.0100		11/27/23
	Toluene	92.14	BRL	0.5	50CC	< 37.7	< 0.0100		11/27/23
	Xylenes	106.17	BRL	0.5	50CC	< 43.4	< 0.0100		11/27/23
Total [VOC] calculated			BRL			12.779	< 0.004		

QUALITY CONTROL CERTIFICATE



Job ID : 23112448

Date : 12/1/2023

Analysis : Volatile Organic Compounds in Air by GCMS Method : EPA TO-15 Reporting Units : nL

QC Batch ID : Qb23113014 Created Date : 11/30/23 Created By : AVBembde

Samples in This QC Batch : 23112448.01

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Xylenes	1330-20-7	BRL	nL	1	0.5		
Benzene	71-43-2	BRL	nL	1	0.2		
Toluene	108-88-3	BRL	nL	1	0.5		
Ethylbenzene	100-41-4	BRL	nL	1	0.5		
m- & p-Xylenes	179601-23-1	BRL	nL	1	1		
o-Xylene	95-47-6	BRL	nL	1	0.5		

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Benzene	5	5.35	107	5	5.36	107	0.2	30	69-119	
Toluene	5	5.34	107	5	5.30	106	0.8	30	62-127	
Ethylbenzene	5	5.57	111	5	5.48	110	1.6	30	70-124	
m- & p-Xylenes	10	10.9	109	10	10.9	109	0.4	30	61-134	
o-Xylene	5	5.71	114	5	5.68	114	0.5	30	67-125	

**LABORATORY TERM AND QUALIFIER DEFINITION REPORT**



Job ID : 23112448

Date: 12/1/2023

**General Term Definition**

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
J	Estimation. Below calibration range but above MDL	RptLimit	Reporting Limit
LCS	Laboratory Check Standard	SDL	Sample Detection Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight	UQL	Unadjusted Upper Quantitation Limit
MQL	Unadjusted Minimum Quantitation Limit		

**Qualifier Definition**

--



### Sample Condition Checklist

A&B JobID : <b>23112448</b>		Date Received : <b>11/22/2023</b>	Time Received : <b>10:02AM</b>									
Client Name : <b>Permian Basin Environmental Lab, LP</b>												
Temperature : <b>18.7°C</b>		Sample pH : <b>NA</b>										
Thermometer ID : <b>IR5</b>		pH Paper ID : <b>NA</b>										
Perservative :		Lot# :										
	<b>Check Points</b>			<b>Yes</b>	<b>No</b>	<b>N/A</b>						
<b>1.</b>	<b>Cooler Seal present and signed.</b>					X						
<b>2.</b>	<b>Sample(s) in a cooler.</b>				X							
<b>3.</b>	<b>If yes, ice in cooler.</b>					X						
<b>4.</b>	<b>Sample(s) received with chain-of-custody.</b>			X								
<b>5.</b>	<b>C-O-C signed and dated.</b>			X								
<b>6.</b>	<b>Sample(s) received with signed sample custody seal.</b>				X							
<b>7.</b>	<b>Sample containers arrived intact. (If No comment)</b>			X								
<b>8.</b>	<b>Matrix:</b>	<b>Water</b>	<b>Soil</b>	<b>Liquid</b>	<b>Sludge</b>	<b>Solid</b>	<b>Cassette</b>	<b>Tube</b>	<b>Bulk</b>	<b>Badge</b>	<b>Food</b>	<b>Other</b>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>9.</b>	<b>Samples were received in appropriate container(s)</b>			X								
<b>10.</b>	<b>Sample(s) were received with Proper preservative</b>					X						
<b>11.</b>	<b>All samples were tagged or labeled.</b>			X								
<b>12.</b>	<b>Sample ID labels match C-O-C ID's.</b>				X							
<b>13.</b>	<b>Bottle count on C-O-C matches bottles found.</b>			X								
<b>14.</b>	<b>Sample volume is sufficient for analyses requested.</b>			X								
<b>15.</b>	<b>Samples were received with in the hold time.</b>			X								
<b>16.</b>	<b>VOA vials completely filled.</b>					X						
<b>17.</b>	<b>Sample accepted.</b>			X								
<b>18.</b>	<b>Has client been contacted about sub-out</b>					X						

**Comments : Include actions taken to resolve discrepancies/problem:**  
 Other: Air (Clear Tedlar Bags). ~EV 11/22/2023. Sample ID= "EFF-1". ~ANS 11/22/23

Brought by : FedEx  
 Received by : EValdez

Check in by/date : EValdez / 11/22/2023

ab-s005-0321

Phone : 713-453-6060

www.ablabs.com



**CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST**

Permian Basin Environmental Lab, LP  
1400 Rankin HWY  
Midland, Texas 79701

Phone: 432-686-7235  
PBELAB\_SUB\_COC\_V2

Project Manager: Brent Barron  
Company Name: PBEL  
Company Address: 1400 Rankin HWY  
City/State/Zip: Midland Texas 79701  
Telephone No: 432-661-4184  
Sampler Signature: N/A

Project Name: SUBCONTRACT  
Project #: \_\_\_\_\_  
Project Loc: \_\_\_\_\_  
PO #: \_\_\_\_\_  
Report Format:  Standard  TRRP  NPDES

Fax No: \_\_\_\_\_  
e-mail: brentbarron@pbelab.com

ORDER #	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers							Matrix	Analyze For:	STANDARD
								ICE	HNO <sub>3</sub> 250 poly 1	HCl 3.40mL VOA	H <sub>2</sub> SO <sub>4</sub> 1 AMBER 500/250POLY	NaOH/Ascorbic Acid 250ML P	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	NONE			
018	3K20011			11/20/2023	13:16		1						X		AIR	X	X

**Job ID:23112448**



11/22/2023 Permian Basin Environme AMS

Please run PAH in rush please because of holding time.

Relinquished by: Brent Barron	Date 11/21/23	Time 17:00	Received by: <i>FEA</i>	Date	Time
Relinquished by: <i>FEA</i>	Date 11/21/23	Time 10:02	Received by: <i>FEA</i>	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Laboratory Comments:	
Sample Containers Intact?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
VOCs Free of Headspace?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Labels on container(s)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Custody seals on container(s)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Custody seals on cooler(s)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sample Hand Delivered by Sampler/Client Rep.?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
by Courier? UPS DHL FedEx Lone Star	<input checked="" type="checkbox"/> FedEx
Temperature Upon Receipt:	Received: 17.7 °C
Adjusted:	17.7 °C Factor: 230292780





# ANALYTICAL REPORT

January 04, 2024

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

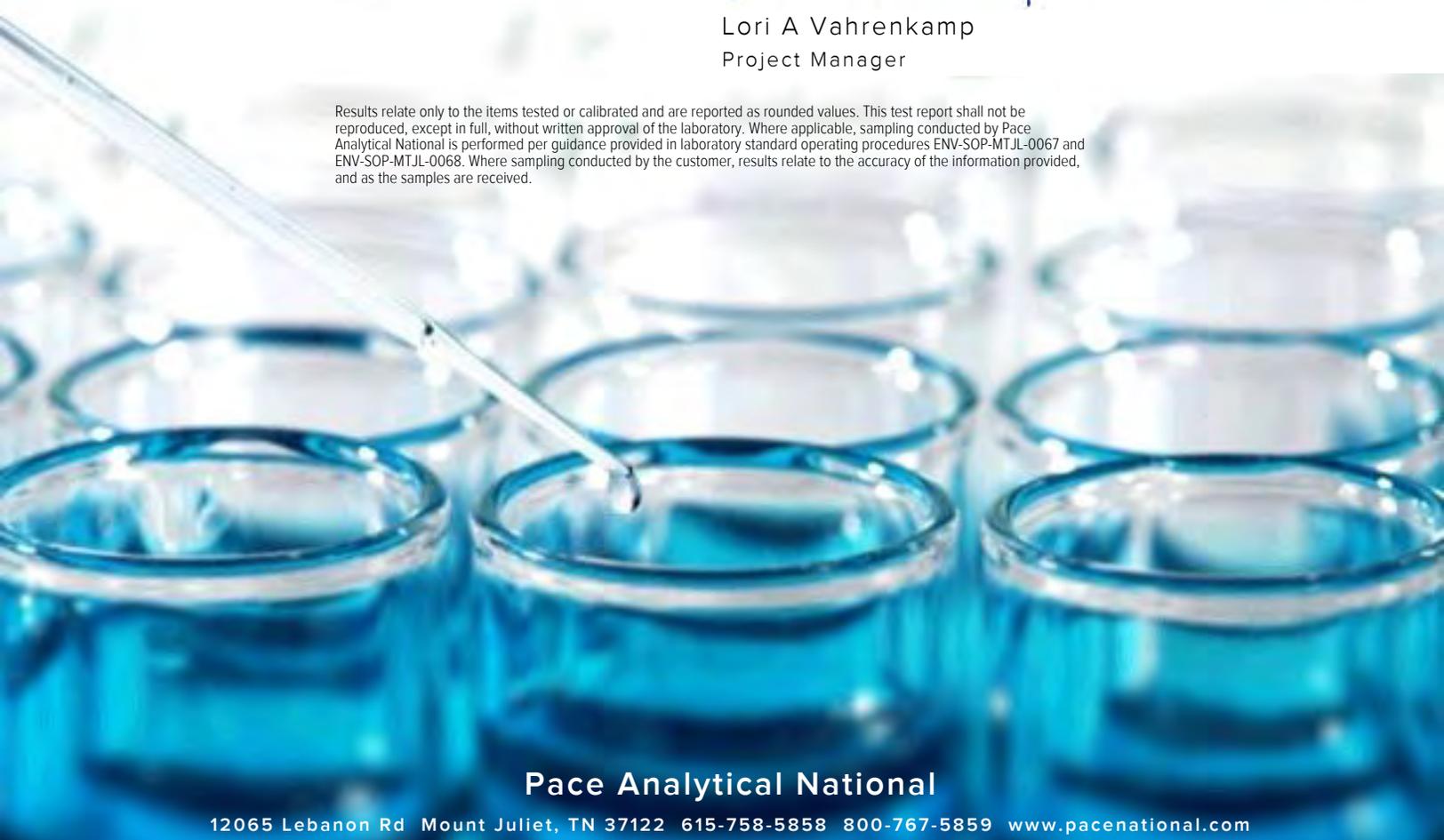
## Plains All American Pipeline - ETECH

Sample Delivery Group: L1692064  
 Samples Received: 12/29/2023  
 Project Number: SRS #2009-084  
 Description: DCP Plant to Lea Station 6" Section 31  
 Site: SRS #2009-084  
 Report To: Kimble Thrash  
 PO Box 62228  
 Midland, TX 79711

Entire Report Reviewed By:

Lori A Vahrenkamp  
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

<b>Cp: Cover Page</b>	1	
<b>Tc: Table of Contents</b>	2	
<b>Ss: Sample Summary</b>	3	
<b>Cn: Case Narrative</b>	4	
<b>Sr: Sample Results</b>	5	
<b>EFF-1 (122823) L1692064-01</b>	5	
<b>Qc: Quality Control Summary</b>	6	
<b>Volatile Organic Compounds (MS) by Method M18-Mod</b>	6	
<b>Gl: Glossary of Terms</b>	7	
<b>Al: Accreditations &amp; Locations</b>	8	
<b>Sc: Sample Chain of Custody</b>	9	
		
		

# SAMPLE SUMMARY

EFF-1 (122823) L1692064-01 Air

Collected by: Kimble Thrash  
Collected date/time: 12/28/23 11:00  
Received date/time: 12/29/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method M18-Mod	WG2199300	500	01/02/24 17:15	01/02/24 17:15	JAP	Mt. Juliet, TN

- <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

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.

Lori A Vahrenkamp  
Project Manager

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

Collected date/time: 12/28/23 11:00

L1692064

Volatile Organic Compounds (MS) by Method M18-Mod

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	100	319	170	543		500	<a href="#">WG2199300</a>
Toluene	108-88-3	92.10	250	942	348	1310		500	<a href="#">WG2199300</a>
Ethylbenzene	100-41-4	106	100	434	105	455		500	<a href="#">WG2199300</a>
m&p-Xylene	179601-23-1	106	200	867	583	2530		500	<a href="#">WG2199300</a>
o-Xylene	95-47-6	106	100	434	136	590		500	<a href="#">WG2199300</a>
Methyl tert-butyl ether	1634-04-4	88.10	100	360	ND	ND		500	<a href="#">WG2199300</a>
TPH (GC/MS) Low Fraction	8006-61-9	101	100000	413000	600000	2480000		500	<a href="#">WG2199300</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.9				<a href="#">WG2199300</a>

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

Sample Narrative:

L1692064-01 WG2199300: Non-target compounds too high to run at a lower dilution.

Volatile Organic Compounds (MS) by Method M18-Mod

[L1692064-01](#)

Method Blank (MB)

(MB) R4018913-3 01/02/24 09:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.200
Toluene	U		0.0870	0.500
Ethylbenzene	U		0.0835	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Methyl tert-butyl ether	U		0.0647	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	91.1			60.0-140

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

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

(LCS) R4018913-1 01/02/24 08:21 • (LCSD) R4018913-2 01/02/24 09:01

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	3.60	3.61	96.0	96.3	70.0-130			0.277	25
Toluene	3.75	3.68	3.68	98.1	98.1	70.0-130			0.000	25
Ethylbenzene	3.75	3.79	3.76	101	100	70.0-130			0.795	25
m&p-Xylene	7.50	7.64	7.63	102	102	70.0-130			0.131	25
o-Xylene	3.75	3.81	3.76	102	100	70.0-130			1.32	25
Methyl tert-butyl ether	3.75	3.58	3.55	95.5	94.7	70.0-130			0.842	25
TPH (GC/MS) Low Fraction	188	156	156	83.0	83.0	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				93.6	92.8	60.0-140				

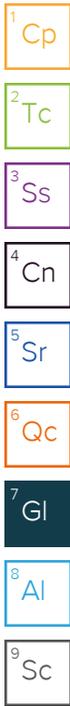
Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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



Qualifier Description

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

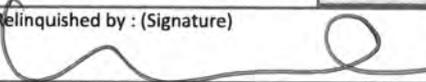
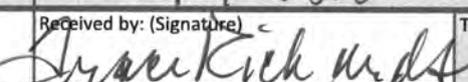
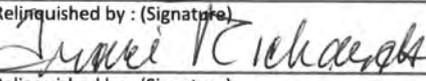
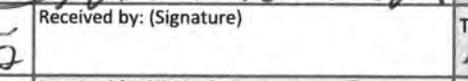
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Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North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

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

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

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



Company Name/Address: <b>Plains All American Pipeline - ETECH</b>  PO Box 62228 Midland, TX 79711		Billing Information: <b>Accounts Payable</b> 333 Clay St Suite 1600 Houston, TX 77002		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page 1 of 1					
Report to: <b>Kimble Thrash</b>		Email To: kimble@etechnv.com														 <b>MT JULIET, TN</b> 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubs/pas-standard-terms.pdf">https://info.pacelabs.com/hubs/pas-standard-terms.pdf</a>					
Project Description: <b>DCP Plant to Lea Station 6" Section 31</b>		City/State Collected: <b>LEA COUNTY, NM</b>		Please Circle: PT MT CT ET												SDG # <b>U1692064</b> <b>H034</b>					
Phone: 432-894-9996		Client Project # <b>SRS #2009-084</b>		Lab Project # <b>PLAINSETECH-NM GW</b>		<b>8021B</b>										Acctnum: <b>PLAINSETECH</b>					
Collected by (print): <b>KIMBLE THRASH</b>		Site/Facility ID # <b>SRS #2009-084</b>		P.O. #												Template:					
Collected by (signature): 		<b>Rush?</b> (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #												Prelogin:					
Immediately Packed on Ice <input checked="" type="checkbox"/> N <input type="checkbox"/> Y		Date Results Needed		No. of Cntrs												PM: <b>3587 - Lori A Vahrenkamp</b>					
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	Cntrs											Shipped Via: <b>Courier</b>			
<b>EFF-1 (122823)</b>		G	AIR	N/A	12-28-2023	1100	1	X											Remarks		
<b>*** END OF COC ***</b>																			Sample # (lab only)		
																			01		
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # <b>6426 8308 9342</b>		pH _____ Temp _____ Flow _____ Other _____		<b>Sample Receipt Checklist</b> COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N													
Relinquished by: (Signature) 		Date: <b>12/28/23</b>	Time: <b>1600</b>	Received by: (Signature) 		Trip Blank Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> HCL / MeOH TBR												If preservation required by Login: Date/Time			
Relinquished by: (Signature) 		Date: <b>12/28/23</b>	Time: <b>4:55</b>	Received by: (Signature) 		Temp: °C <b>AMB</b>		Bottles Received: <b>1</b>													
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) 		Date: <b>12/29/23</b>		Time: <b>0900</b>												Hold: Condition: NCF / <input checked="" type="checkbox"/> OK	

**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 328409

**CONDITIONS**

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 328409
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

**CONDITIONS**

Created By	Condition	Condition Date
michael.buchanan	Review of the DCP Plant to Lea Station 6-Inch Section 31: content satisfactory 1. Continue to conduct groundwater monitoring on a semi-annual schedule for MW-3 and MW-6. Conduct quarterly monitoring events for MW-2, MW-4 and MW-5. 2. For MW-1, conduct AFR events on a monthly schedule as prescribed. 3. Continue to run and conduct O&M of the SVE system with emission sampling. 4. Submit the 2024 annual report to OCD by April 1, 2025.	8/1/2024