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**REVIEWED**

By Mike Buchanan at 11:34 am, Aug 19, 2024

## 2023 Annual Groundwater Monitoring Report

Lovington Deep 6"  
Lea County, New Mexico  
SRS # 2002-10312  
NMOCD REF. # AP-037, nAPP2109530339

Prepared For:  
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March 4, 2024

Review of the 2023 Annual Groundwater Monitoring Report for Lovington Deep 6": content satisfactory

1. Continue to remove PSH by MDPE events as scheduled for the site.
2. Conduct groundwater monitoring events quarterly for BTEX and PAH analyses.
3. Submit the 2024 annual monitoring report to OCD by April 1, 2025.



2023 ANNUAL GROUNDWATER MONITORING REPORT

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SRS # 2002-10312  
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NMOCD – New Mexico Oil Conservation Division

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## 1. INTRODUCTION AND SITE HISTORY

The Lovington Deep 6", hereinafter referred to as the "site", is located approximately 5.8 miles southwest of Lovington, New Mexico in Unit H, Section 6, Township 16 South, and Range 36 East. A release of crude oil from the Plains Deep 6" pipeline occurred on property which is owned by Chevron and primarily utilized as pasture/range with intermittent oil production facilities. The site is located within the West Lovington oil field and has no residence or surface water located within a 1,000-foot radius of the release point. The remediation area is surrounded by a barbed wire fence and is gated.

The site is situated within a physiographic region that is on the extreme south-western portion of the Southern High Plains as it grades into the Edwards Plateau to the south and southeast and the Chihuahuan Desert of the Trans-Pecos Region to the southwest.

The topography proximal to the site is typical of the Southern High Plains, essentially flat with shallow depressions, or playa lakes, dotting the landscape. The prominent surface features on the Southern High Plains are the approximately 19,250 ephemeral playa lakes; however, the density of the playa lakes diminishes toward the southern extent of the Southern High Plains. During periods of rainfall, the playa lakes accumulate sheet runoff from watershed areas ranging in size from less than one (1) square mile to several square miles. Only a small portion of drainage from rainfall occurs by streams. Playa lakes that collect storm water runoff can act as a recharge mechanism for groundwater.

The average elevation of the site area is approximately 3,915 feet above mean sea level with a slight slope generally to the southeast. The regional slope of the land surface in the Southern High Plains is approximately 100 feet per mile in the generally southeast direction.

In December 2002, a reported release of approximately 25 barrels (bbls) of crude oil occurred at the site due to corrosion of the Plains Deep 6" pipeline. Ten (10) bbls of crude oil was recovered during initial response activities. Approximately 6,000 square feet of surface area was impacted by the release. During the initial remediation phase, soil that was impacted by the release was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm for treatment. Soil remediation activities were initiated by Environmental Plus, Inc. (EPI) in 2003 and the soil phase of site remediation was closed in October 2005.

On February 5, 2007, Talon/LPE was retained by Plains Pipeline, L.P. (Plains) to assume groundwater remediation activities at the Lovington Deep 6" release site. Groundwater remediation activities at the site were previously conducted by EPI.

## 1.1 Site Geology

The surficial deposits in Lea County are composed of Blackwater Draw (Illinoian) sediments, Ogallala sediments and undivided Quaternary alluvium, which is also termed 'cover sands'. The soil in the upper two (2) feet at the site is composed of gravelly loam that contains abundant eroded gravel to cobble size caliche fragments. Below the topsoil is predominately unconsolidated sand to weakly cemented sandstone, which has undergone calichification of varying extent.

Below the Blackwater Draw Formation is the Ogallala Formation of Miocene to Pliocene age. The Ogallala Formation was deposited from sediments eroded from the Southern Rockies and consists mostly of eolian sediments, silty to very fine sand or loess. During the middle to late Miocene, Ogallala sediments were deposited by fluvial mechanism as paleovalley fill, which is composed of gravelly to sandy braided stream deposits that trend west to east across the Southern High Plains. During the late Miocene, the west to east drainage was diverted (captured) by the Pecos River. Subsequently, the Pecos River basin has experienced deflation, which facilitated eolian deposition on the Southern High Plains during the Pliocene.

## 1.2 Previous Environmental Investigations

During initial assessment activities to delineate the extent of impacted soil at the site, six (6) soil borings were advanced from December 27, 2002, through January 2, 2004. During the assessment, soil boring BH-1 encountered groundwater that was impacted by phase separated hydrocarbons (PSH). Subsequently, soil boring BH-1 was completed as groundwater monitor well, MW-2. Soil borings BH-2, BH-4, BH-5, and BH-6 were advanced in order to delineate the extent of impacted groundwater and those soil borings were completed as groundwater monitor wells MW-1, MW-3, MW-4, and MW-5 respectively.

During November and December 2004, six (6) groundwater monitor wells (MW-6 through MW-11) were installed to further delineate the lateral extent of groundwater impacts at the site. In July 2006, six (6) additional groundwater monitor wells (MW-12 through MW-17) were installed to complete assessment of the areal extent of impacted groundwater.

Subsequent groundwater monitoring events indicated that benzene concentrations in the down-gradient sentinel monitor wells (MW-12 and MW-18) consistently exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard. Therefore, two (2) additional monitor wells MW-19 and MW-20 were installed further down-gradient on August 27, 2018.

PSH recovery operations have been performed at the site since March 2003, initially from hand bailing followed by a recovery system that utilized skimmers with bladder pumps. In April 2010, a pneumatic total fluid pump was installed in monitor well MW-2. Due to an insignificant increase in PSH production and because the total fluid pump increased groundwater production, the total fluids pump was removed from MW-2 in September 2010 and replaced with a skimmer and bladder pump. In order to help reduce down-gradient dissolved-phase concentrations, air sparge bubblers were installed in monitor wells MW-10 and MW-12 in January 2011.

At the end of 2012, there were six (6) skimmers with bladder pumps operating in monitor wells MW-2, MW-13, MW-14, MW-15, MW-16, and MW-17. During 2012, three (3) Mobile Dual Phase Extraction (MDPE) events were conducted on site. A total of approximately 27 bbls of liquid and vapor PSH were recovered during these events, and five (5) bbls of crude oil was recovered during 2012 by the skimmer pump system.

Because the MDPE events have proven to be far more efficient at PSH recovery, the on-site recovery system was removed completely in January 2013. MDPE events are now conducted on a monthly basis. On February 20, 2016, a new compressor was installed for the air sparge bubblers in monitoring wells MW-10, MW-12, and MW-18.

For 2022, during the quarters one (1) through three (3), there were two (2) air sparge bubblers operating in MW-18 and MW-19. The air sparge bubblers were removed in the fourth quarter of 2022. In 2022, MDPE events recovered an estimated total of 52.48 bbls of PSH consisting of 13.21 bbls of liquid and 39.26 bbls of vapor phase PSH.

During 2023, a total of 12 MDPE events were conducted. A total of 41.07 bbls of PSH were recovered which consisted of 14.00 bbls of liquid PSH and 27.07 bbls of vapor. To date, approximately 570.22 bbls of PSH have been recovered during the described remediation efforts.

### 1.3 Regulatory Framework

Groundwater analytical data from this site was evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards.

NMWQCC Groundwater Standards	
Compound	Milligrams per Liter
Benzene	0.010
Toluene	0.750
Ethylbenzene	0.750
Total Xylenes	0.620
PAH (Naphthalene)	0.030
PAH (Benzo[a]pyrene)	0.0007

The following sections provide summaries of the groundwater monitoring activities conducted at the site as well as analytical results from each groundwater sampling event of 2023. Analytical results for the four (4) sampling events are summarized in Table 2 and Table 3 in [Appendix B](#), and Figures 3a through 3d in [Appendix A](#). Laboratory analytical data reports and chain of custody documentation are included in [Appendix C](#).

## 2. SITE ACTIVITIES

The sections that follow summarize groundwater monitoring, PSH recovery and site assessment activities conducted at the site during the year 2023. The primary function of groundwater monitoring activities is to collect depth to fluid measurements and collect groundwater samples for laboratory analysis. The objective of groundwater monitoring is to evaluate the status of the dissolved-phase and PSH plume in order to verify the effectiveness of the groundwater remediation system as to inhibiting plume migration, reducing the volume of PSH impacting the groundwater and determining if modifications to the remediation system would improve its performance and efficiency if necessary.

### 2.1 Groundwater Monitoring Activities

A total of four (4) groundwater monitoring events were conducted by Talon/LPE in 2023. The events occurred in: March, June, Septmeber, and December.

During the March 2023 groundwater monitoring event, all 20 monitor wells were gauged. A total of 14 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were purged and sampled. Due to the presence of PSH, four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17) were not sampled. It was noted that two (2) monitor wells (MW-6 and MW-10) were dry when gauged therefore were not purged or sampled. Details of the gauging, purging, and sampling activities are presented in [Section 2.2](#).

During the June 2023 groundwater monitoring event, all 20 monitor wells were gauged. A total of 13 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were purged and sampled. Due to the presence of PSH, four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17) were not sampled. It was noted that two (2) monitor wells (MW-6 and MW-10) were dry when gauged and monitor well MW-7 did not have enough water to sample; therefore, the aforementioned wells were not purged or sampled. Details of the gauging, purging, and sampling activities are presented in [Section 2.2](#).

During the Septmeber 2023 groundwater monitoring event, all 20 monitor wells were gauged. A total of 13 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were purged and sampled. Due to the presence of PSH, four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17) were not sampled. It was noted that two (2) monitor wells (MW-6 and MW-10) were dry when gauged and monitor well MW-7 did not have enough water to sample; therefore, the aforementioned wells were not purged or sampled. Details of the gauging, purging, and sampling activities are presented in [Section 2.2](#).

During the December 2023 groundwater monitoring event, all 20 monitor wells were gauged. A total of 13 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were purged and sampled. Due to the presence of PSH, four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17) were not sampled. It was noted that two (2) monitor wells (MW-6 and MW-10) were dry when gauged and monitor well MW-7 did not have enough water to sample; therefore, the aforementioned wells were not purged or sampled. Details of the gauging, purging, and sampling activities are presented in [Section 2.2](#).

## **2.2 Groundwater Gauging, Purging, and Sampling Procedures**

During each groundwater monitoring event, all monitor wells were measured with an oil/water interface probe to determine static water levels and to determine the thickness of PSH accumulations, if present. The data collected from these measurements was used to construct groundwater gradient maps and PSH thickness maps. The results of the measured depths to fluids collected during the four (4) events conducted in 2023 are incorporated in Table 1 - Groundwater Gauging Data - Historical included in [Appendix B](#).

Subsequent to gauging, all monitor wells not impacted with PSH were purged a minimum of three (3) casing volumes using a 12-volt, submersible pump equipped with vinyl tubing. The purge pump and tubing were decontaminated with Alconox detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in on-site 55-gallon drums. After the groundwater monitoring event, all retained water was placed into the on-site storage tank and removed with a vacuum truck for disposal at Gandy Marley, an NMOCD approved facility.

Groundwater samples were collected from all monitor wells using dedicated disposable polyethylene bailers. Each groundwater sample was contained in laboratory supplied sample containers with the appropriate preservative required for the analysis requested.

The groundwater samples were maintained on ice, in the custody of Talon/LPE personnel, until they were delivered to Eurofins in Carlsbad, New Mexico for the 1st quarter and to Permian Basin Environmental Labs in Midland, Texas for the 2nd, 3rd, and 4th quarters, for analysis. The groundwater samples collected during all four (4) events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by Environmental Protection Agency (EPA) Method SW-846 8021B.

### 2.3 Phase Separated Hydrocarbon Recovery

Initial PSH recovery was conducted at the in 2003 by hand bailing. In 2007, an automated skimmer/bladder pump recovery system was installed at the site. The system utilized six (6) skimmers with bladder pumps in monitor wells MW-2 and MW-13 through MW-17 for recovery of PSH and to inhibit migration of the PSH plume. The skimmer assembly consisted of bladder pumps combined with 24-inch traveling float specific gravity skimmers attachments. The skimmer system was powered by a single-phase, 230-volt, 7.5 HP, two-stage reciprocating air compressor.

Currently, MDPE events are conducted monthly. This system utilizes vapor pulled by vacuum combined with propane to power an internal combustion engine. In addition, it also powers a compressor and the blower used to create a vacuum for vapor recovery. Compressed air from the system drives pneumatic pumps placed in the various wells containing PSH. Fluid recovered by the pumps is retained in an on-site 1,500-gallon poly tank. The poly tank is equipped with a high level shut off switch to prevent overflow and is located within a secondary containment compound that is outfitted with a poly-liner. Recovered groundwater and PSH is removed from the poly tank and transported to an NMOCD approved disposal facility, Gandy Marley, via vacuum truck at the end of each MDPE event.

During 2023 the quarterly PSH and groundwater recovery totals are as follows:

- 1<sup>st</sup> Quarter – 13.09 bbls PSH and 68.10 bbls of groundwater
- 2<sup>nd</sup> Quarter – 9.48 bbls PSH and 78.62 bbls of groundwater
- 3<sup>rd</sup> Quarter – 11.05 bbls PSH and 78.57 bbls of groundwater
- 4<sup>th</sup> Quarter – 7.46 bbls PSH and 75.98 bbls of groundwater

Twelve (12) MDPE events, in which liquid and vapor PSH were recovered, were conducted on site during 2023. The individual MDPE event recovery totals are as follows:

- January 10, 2023 – 2.20 bbls vapor, 1.07 bbls liquid
- February 23, 2023 – 2.96 bbls vapor, 0.93 bbls liquid
- March 7, 2023 – 3.65 bbls vapor, 2.29 bbls liquid
- April 4, 2023 – 1.94 bbls vapor, 1.45 bbls liquid
- May 23, 2023 – 1.39 bbls vapor, 0.76 bbls liquid
- June 14, 2023 – 2.08 bbls vapor, 1.86 bbls liquid

July 11, 2023 – 2.22 bbls vapor, 0.55 bbls liquid  
August 3, 2023 – 3.37 bbls vapor, 1.31 bbls liquid  
September 6, 2023 – 2.32 bbls vapor, 1.29 bbls liquid  
October 9, 2023 – 1.50 bbls vapor, 1.00 bbls liquid  
November 9, 2023 – 1.19 bbls vapor, 0.83 bbls liquid  
December 7, 2023 – 2.27 bbls vapor, 0.67 bbls liquid

In 2023, an estimated total of 41.07 bbls of PSH were recovered during the MDPE events.

Historically, approximately 570.22 bbls of PSH, which consists of 288.86 bbls of vapor phase and 281.35 bbls of liquid phase PSH, have been recovered from the site.

### 3. GROUNDWATER MONITORING RESULTS

The results of the laboratory analyses are summarized in Table 2 – Groundwater Analytical Data - Historical in [Appendix B](#). Laboratory analytical data reports and chain of custody documentation are provided in [Appendix C](#).

The following sections present the results from the monitoring of the first water-bearing zone underlying the site.

#### 3.1 Physical Characteristics of the First Water-Bearing Zone

The primary groundwater resource under the Southern High Plains, which includes the site, is referred to as the Ogallala Aquifer or High Plains Aquifer. The Southern portion of the Ogallala Aquifer underlies an area of about 29,000 square miles in western Texas and eastern New Mexico, which encompasses all or part of 31 counties in Texas and six (6) counties in New Mexico.

The Ogallala Aquifer has experienced acute depletion from extensive irrigation and urban demand, which have exceeded the average annual recharge rate. Recharge of the Ogallala Aquifer on the Southern High Plains occurs predominately from rainfall runoff that accumulates in ephemeral streams and playa lakes, as well as direct recharge in areas that contain permeable soils such as sand hills. Recharge rates vary depending on mechanism, but averages from 0 to 1.6 inches per year.

The Ogallala Aquifer is generally unconfined and the potentiometric surface mimics the topography with a regional flow direction from the general northwest to the general southeast. The mean regional gradient is 15 feet per mile and the typical groundwater velocity averages seven (7) inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot and specific yield averages 16%. The depth to groundwater at the site has historically ranged from 60 to 65 feet below ground surface (bgs) and the groundwater flow direction is generally to the east. The saturated thickness of the Ogallala formation on the High Plains ranges from 25 feet to 175 feet. The variable thickness is due to the irregularly eroded Triassic surface that underlies it.

The composition of Ogallala groundwater is defined as mixed-cation- $\text{HCO}_3$ . Therefore, Ogallala groundwater is considered hard. Problems with scale have occurred with residential and commercial water systems that use Ogallala groundwater and treatment strategies are often employed to reduce the effects of scale. The typical total dissolved solids of Ogallala groundwater in the Hobbs-Lovington area is generally less than 1,000 mg/L (parts per million (ppm)) in areas not impacted by oil-field brines. The pH of Ogallala water averages 7.3.

### 3.2 Groundwater Gradient and Flow Direction

The depth to fluid measurements was collected during each of the four (4) groundwater monitoring events during the year 2023. The results of the fluid level measurements are summarized in Table 1 - Groundwater Gauging Data - Historical in [Appendix B](#).

Potentiometric surface maps were constructed from the four (4) quarterly water level measurement data sets:

- March 01, 2023
- June 05, 2023
- Septmeber 05, 2023
- December 05, 2023

These maps are Figures 2a, 2b, 2c, and 2d presented in [Appendix A](#).

Based on fluid level measurements at the site, the groundwater flow direction within the first water-bearing zone underlying the site between March 2023 and December 2023 was east with an average gradient of 0.0031 feet per foot (ft/ft), or approximately 16.37 feet per mile. Groundwater levels at the subject site have exhibited a decrease of an average of 0.79 feet for the year 2023.

### 3.3 Phase Separated Hydrocarbons

Groundwater measurements were obtained using an oil/water interface probe, which was also used to determine the presence of PSH.

During the March 2023 sampling event, PSH was observed in four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17). PSH thickness in these wells ranged from 0.01 feet to 1.58 feet.

During the June 2023 sampling event, PSH was observed in four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17). PSH thickness in these wells ranged from 0.01 feet to 1.14 feet.

During the Septmeber 2023 sampling event, PSH was observed in four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17). PSH thickness in these wells ranged from 0.02 feet to 5.09 feet.

During the December 2023 sampling event, PSH was observed in four (4) monitor wells (MW-2, MW-13, MW-14, and MW-17). PSH thickness in these wells ranged from 0.02 feet to 2.97 feet.

PSH plume maps are presented as Figures 3a, 3b, 3c, and 3d in [Appendix A](#).

### 3.4 Groundwater Sampling Results

During the March 2023 sampling event, 14 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were sampled. Groundwater samples collected from these wells exhibited the following analytical results:

- Benzene concentrations were below the applicable laboratory MDLs in all wells sampled. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any monitor wells sampled this quarter.
- Toluene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-7, MW-8, MW-11, and MW-20 which exhibited toluene concentrations of 0.000688 mg/L, 0.000911 mg/L, 0.000416 mg/L, and 0.000372 mg/L, respectively. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Ethylbenzene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-3, MW-15, and MW-19 which exhibited Ethylbenzene concentrations of 0.0164 mg/L, 0.00352 mg/L, and 0.00149 mg/L, respectively. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations ranged from below the laboratory MDL in wells MW-7, MW-8, MW-9, MW-11, and MW-20 to 0.00823 mg/L in MW-3. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

During the June 2023 sampling event, 13 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were sampled. Groundwater samples collected from these wells exhibited the following analytical results:

- Benzene concentrations were below the applicable laboratory MDLs in all wells sampled. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any monitor wells sampled this quarter.
- Toluene concentrations were below the applicable laboratory MDLs in all wells sampled. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.

- Ethylbenzene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-3 and MW-15, which exhibited ethylbenzene concentrations of 0.00373 mg/L and 0.00148 mg/L, respectively. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations were below the applicable laboratory MDLs in all wells sampled. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

During the Septmeber 2023 sampling event, 13 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were sampled. Groundwater samples collected from these wells exhibited the following analytical results:

- Benzene concentrations were below the applicable laboratory MDLs in all wells sampled. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any monitor wells sampled this quarter.
- Toluene concentrations were below the applicable laboratory MDLs in all wells sampled. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Ethylbenzene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-3, which exhibited an ethylbenzene concentration of 0.00740 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-3, which exhibited xylene concentrations of 0.00286 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

During the December 2023 sampling event, 13 monitor wells (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-11, MW-12, MW-15, MW-16, MW-18, MW-19, and MW-20) were sampled. Groundwater samples collected from these wells exhibited the following analytical results:

- Benzene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-18, which exhibited a benzene concentration of 0.00107 mg/L. Benzene concentrations did not exceed the NMWQCC groundwater standard of 0.010 mg/L in any monitor wells sampled this quarter.
- Toluene concentrations were below the applicable laboratory MDLs in all wells sampled. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.

- Ethylbenzene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-3 and MW-15, which exhibited ethylbenzene concentrations of 0.00250 mg/L and 0.00100 mg/L, respectively. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any monitor wells sampled this quarter.
- Xylene concentrations were below the applicable laboratory MDLs in all wells with the exception of MW-19, which exhibited a xylene concentration of 0.00127 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any monitor wells sampled this quarter.

The results of the laboratory analyses are summarized in Table 2 – Groundwater Analytical Data - Historical in [Appendix B](#). Laboratory analytical data reports and chain of custody documentation are provided in [Appendix C](#).

## 4. CONCLUSIONS AND RECOMMENDATIONS

The following section presents a summary of the groundwater monitoring events conducted at the site and provides recommendations for future actions.

### 4.1 Summary of Findings

- The groundwater flow direction is generally to the east with an average gradient of 0.0031 feet per foot based on the water level measurement data collected in 2023.
- Groundwater levels at the subject site have decreased slightly for the year 2023.
- PSH has impacted monitor wells MW-2, MW-13, MW-14, and MW-17 in 2023. PSH levels and extent have fluctuated in 2023. The PSH plume is well defined.
- Approximately 41.07 bbls of PSH was removed from the site during the year 2023

### 4.2 Recommendations

Based upon the results of the quarterly groundwater monitoring and PSH recovery efforts, Talon/LPE proposes the following actions:

- Continue PSH recovery via monthly MDPE events.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives.



## APPENDIX A

### Figures



Drafted: 2/14/2023

1 in = 80 ft

Drafted By: JAI

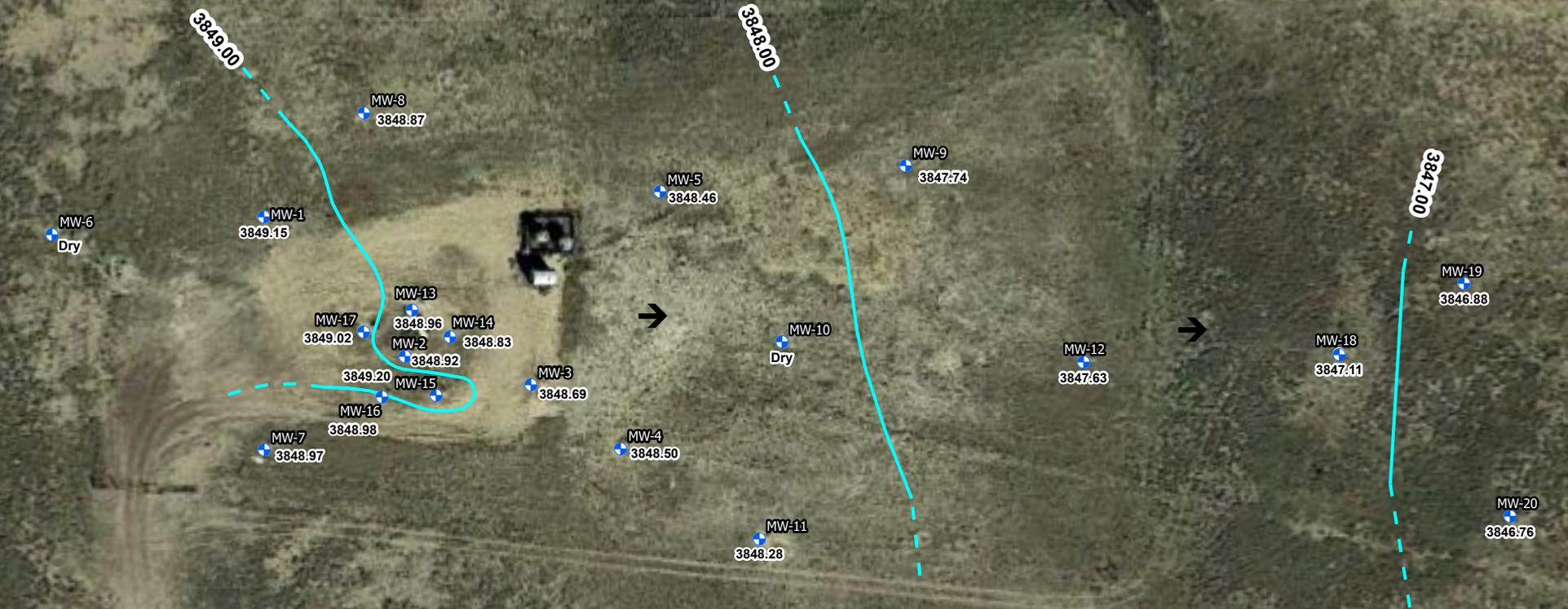
Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542  
 Figure 1 - Site Plan



Drafted: 5/18/2023  
 1 in = 80 ft  
 Drafted By: IJR

Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542  
 Figure 2a - Groundwater Gradient Map (03/01/2023)



**Legend**

- Monitor Well
- Known Groundwater Gradient Contour Line
- Likely Groundwater Gradient Contour Line
- 3849.00 Groundwater Elevation (fmsl)
- Groundwater Flow Direction



Drafted: 8/3/2023  
 1 in = 80 ft  
 Drafted By: IJR

Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542  
 Figure 2b - Groundwater Gradient Map (06/05/2023)



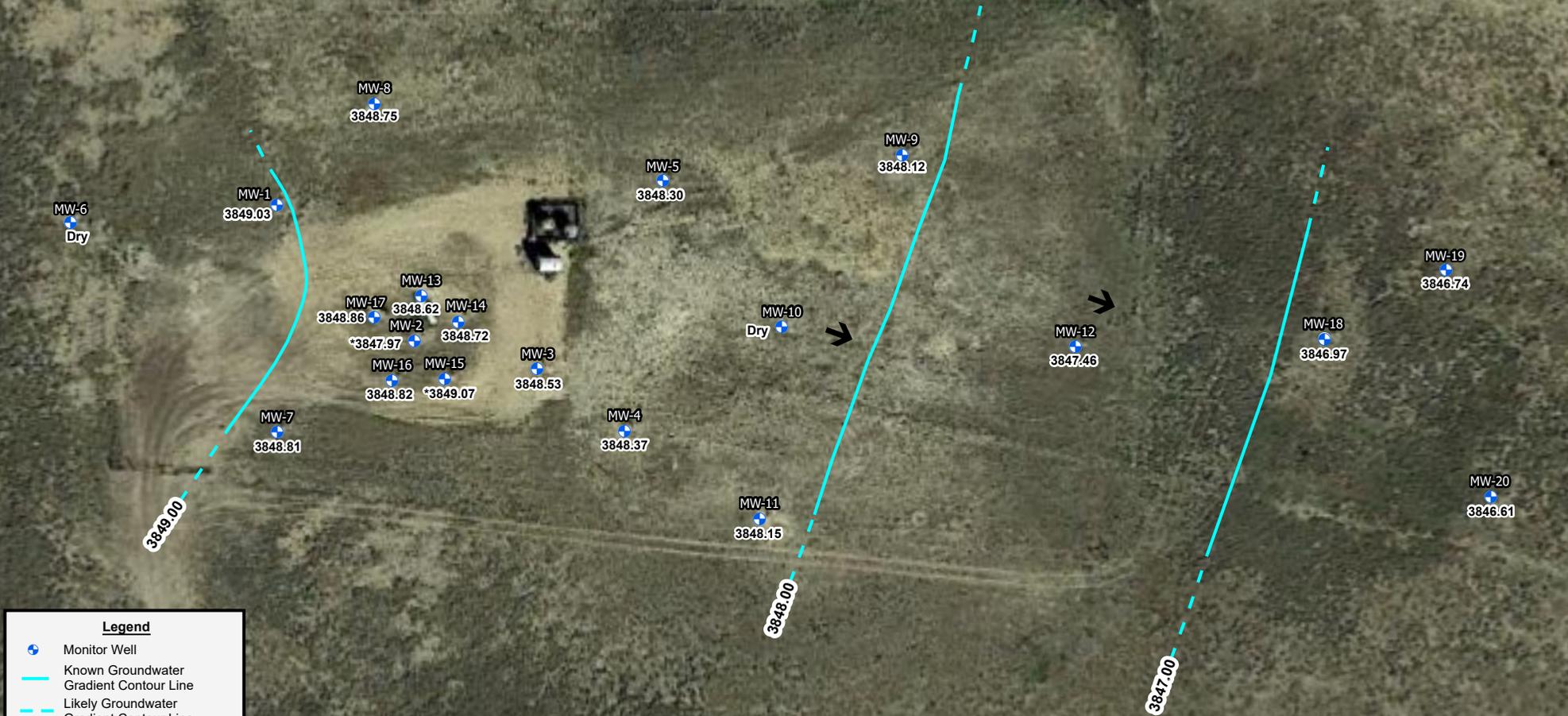
**Legend**

- Monitor Well
- Known Groundwater Gradient Contour Line
- Likely Groundwater Gradient Contour Line
- 3849.00 Groundwater Elevation (fmsl)
- Groundwater Flow Direction



Drafted: 10/26/2023  
 1 in = 80 ft  
 Drafted By: IJR

Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542  
 Figure 2c - Groundwater Gradient Map (09/05/2023)



**Legend**

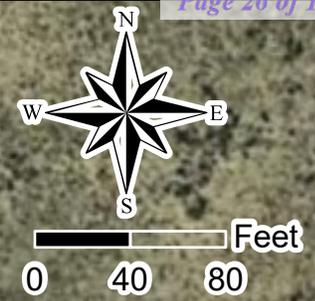
- Monitor Well
- Known Groundwater Gradient Contour Line
- Likely Groundwater Gradient Contour Line

3849.00 Groundwater Elevation (fmsl)  
 \*3849.00 Elevation not used for gradient  
 Groundwater Flow Direction



Drafted: 3/4/2024  
 1 in = 80 ft  
 Drafted By: JAI

Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542  
 Figure 2d - Groundwater Gradient Map (12/05/2023)



**Legend**

- Monitor Well
- Known Extent of PSH Contour Line
- 0.0 PSH Plume Thickness (ft)



Drafted: 3/4/2024  
 1 in = 80 ft  
 Drafted By: JAI

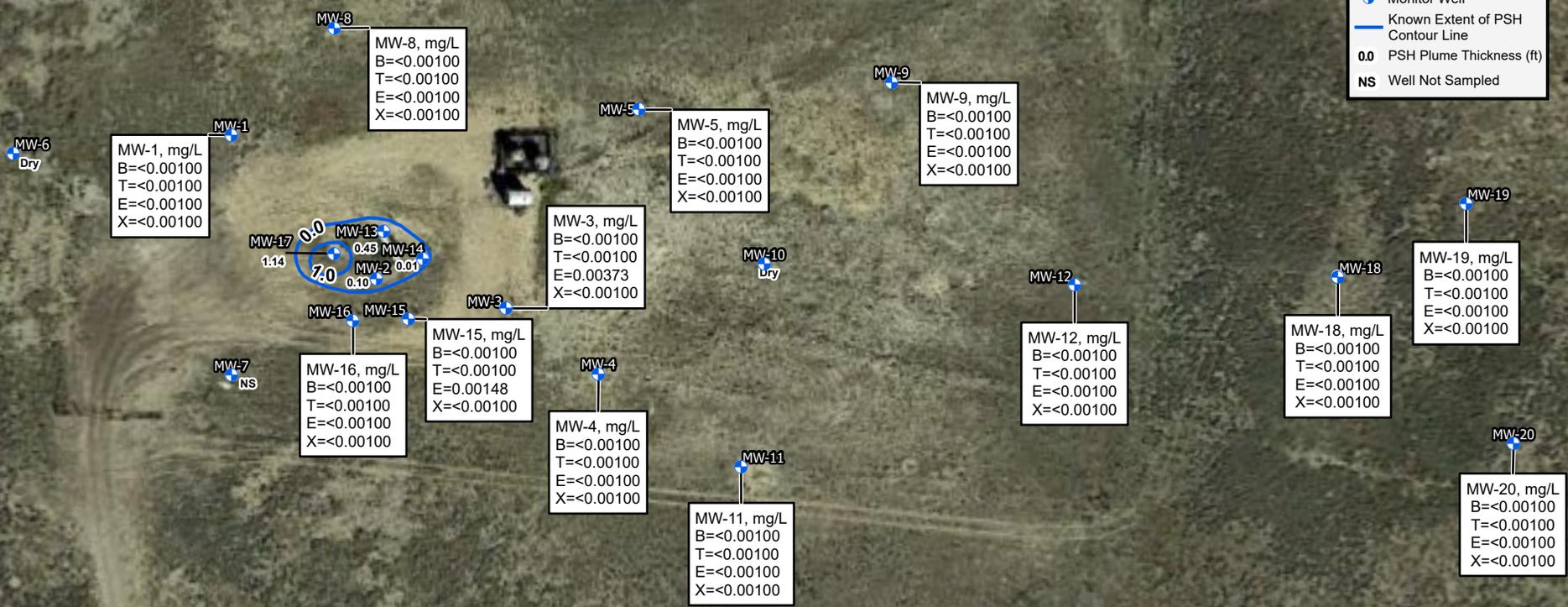
Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542

Figure 3a - PSH Thickness and Groundwater Concentration Map (03/01-02/2023)



**Legend**

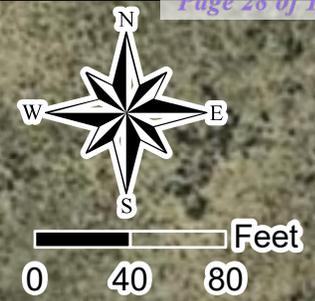
- Monitor Well
- Known Extent of PSH Contour Line
- 0.0** PSH Plume Thickness (ft)
- NS** Well Not Sampled



Drafted: 3/4/2024  
 1 in = 80 ft  
 Drafted By: JAI

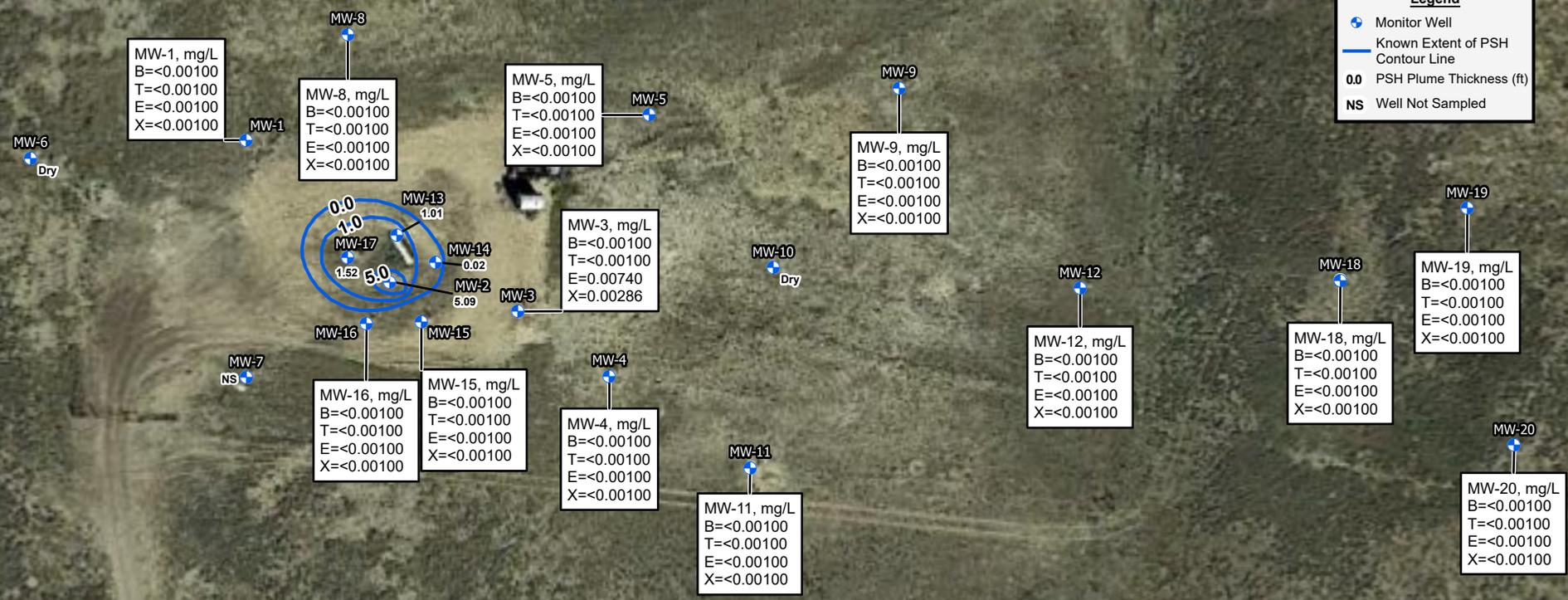
Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542

Figure 3b - PSH Thickness and Groundwater Concentration Map (06/07-08/2023)



**Legend**

- Monitor Well
- Known Extent of PSH Contour Line
- 0.0** PSH Plume Thickness (ft)
- NS** Well Not Sampled



Drafted: 10/23/2023  
 1 in = 80 ft  
 Drafted By: IJR

Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542  
 Figure 3c - PSH Thickness and Groundwater Concentration Map (09/05/2023)



**Legend**

- Monitor Well
- Known Extent of PSH Contour Line
- 0.0** PSH Plume Thickness (ft)
- NS** Well Not Sampled



Drafted: 3/4/2024  
 1 in = 80 ft  
 Drafted By: JAI

Lovington Deep 6"  
 SRS # 2002-10312, NMOCD REF. #nAPP2109530339  
 SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
 32.867039, -103.387542

Figure 3d - PSH Thickness and Groundwater Concentration Map (12/05-06/2023)



## APPENDIX B

### Tables

Table 1 - Groundwater Gauging Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-1 4"	3915.51	54	74	03/08/2016	64.98	-	-	3850.53
				05/24/2016	65.02	-	-	3850.49
				09/08/2016	65.06	-	-	3850.45
				12/05/2016	64.76	-	-	3850.75
				03/08/2017	64.80	-	-	3850.71
				06/13/2017	65.21	-	-	3850.30
				09/12/2017	65.22	-	-	3850.29
				12/13/2017	65.28	-	-	3850.23
				03/23/2018	65.33	-	-	3850.18
				06/12/2018	65.38	-	-	3850.13
				09/10/2018	65.34	-	-	3850.17
				12/11/2018	65.49	-	-	3850.02
				03/13/2019	65.54	-	-	3849.97
				06/10/2019	64.59	-	-	3850.92
				09/25/2019	65.83	-	-	3849.68
				12/06/2019	65.65	-	-	3849.86
				03/11/2020	65.73	-	-	3849.78
				05/06/2020	65.70	-	-	3849.81
				06/09/2020	65.77	-	-	3849.74
				09/04/2020	65.83	-	-	3849.68
				12/11/2020	65.84	-	-	3849.67
				03/16/2021	65.85	-	-	3849.66
				06/11/2021	65.94	-	-	3849.57
				09/01/2021	65.98	-	-	3849.53
				11/29/2021	66.04	-	-	3849.47
				03/02/2022	66.09	-	-	3849.42
				06/02/2022	66.14	-	-	3849.37
				09/13/2022	66.22	-	-	3849.29
				12/01/2022	66.24	-	-	3849.27
				03/01/2023	66.30	-	-	3849.21
				06/05/2023	66.36	-	-	3849.15
				09/05/2023	66.41	-	-	3849.10
12/05/2023	66.48	-	-	3849.03				
MW-2 4"	3915.04	54	74	03/08/2016	68.80	63.91	4.89	3850.32
				05/24/2016	68.57	64.00	4.57	3850.29
				09/08/2016	68.32	64.08	4.24	3850.26
				12/01/2016	68.67	64.10	4.57	3850.19
				03/08/2017	68.33	64.20	4.13	3850.16
				06/13/2017	68.42	64.20	4.22	3850.14
				09/12/2017	68.30	64.30	4.00	3850.08
				12/13/2017	68.00	64.40	3.60	3850.05
				03/23/2018	65.22	65.05	0.17	3849.96
				06/12/2018	67.10	64.50	2.60	3850.11
				09/10/2018	66.52	64.50	2.02	3850.21
				12/11/2018	68.28	64.60	3.68	3849.83
				03/13/2019	66.82	65.12	1.70	3849.64
				06/10/2019	DR	-	-	-
				12/06/2019	DR	-	-	-
				03/11/2020	65.79	65.40	0.39	3849.58
				05/06/2020	66.92	65.20	1.72	3849.56
				06/09/2020	DR	-	-	-
				09/04/2020	67.75	65.10	2.65	3849.50
				12/11/2020	65.73	65.65	0.08	3849.38
				03/16/2021	DR	-	-	-
				06/11/2021	68.90	65.09	3.81	3849.32
				09/01/2021	68.94	65.10	3.84	3849.31
				11/29/2021	67.20	65.55	1.65	3849.22
				03/02/2022	69.25	65.27	3.98	3849.11
				06/02/2022	68.90	65.25	3.65	3849.19
				09/13/2022	69.55	65.47	4.08	3848.90
				12/01/2022	69.04	65.39	3.65	3849.05
				03/01/2023	67.39	65.81	1.58	3848.97
				06/05/2023	66.20	66.10	0.10	3848.92
				09/05/2023	70.55	65.46	5.09	3848.74
				12/05/2023	69.55	66.58	2.97	3847.97
MW-3 4"	3915.24	54	74	03/08/2016	65.16	-	-	3850.08
				05/24/2016	65.21	-	-	3850.03
				09/08/2016	65.25	-	-	3849.99
				12/05/2016	65.27	-	-	3849.97
				03/08/2017	65.33	-	-	3849.91
				06/13/2017	65.39	-	-	3849.85
				09/12/2017	65.44	-	-	3849.80
				12/13/2017	65.70	-	-	3849.54
				03/23/2018	65.50	-	-	3849.74
				06/12/2018	65.59	-	-	3849.65
				09/10/2018	65.52	-	-	3849.72
				12/11/2018	65.66	-	-	3849.58
				03/13/2019	65.69	-	-	3849.55
				06/10/2019	65.75	-	-	3849.49
				09/25/2019	65.80	-	-	3849.44
				12/06/2019	65.85	-	-	3849.39
				03/11/2020	65.89	-	-	3849.35
				06/09/2020	65.97	-	-	3849.27
				09/04/2020	65.97	-	-	3849.27
				12/11/2020	66.04	-	-	3849.20
				03/16/2021	66.05	-	-	3849.19
				06/11/2021	65.93	-	-	3849.31
				09/01/2021	66.17	-	-	3849.07
				11/29/2021	66.21	-	-	3849.03
				03/02/2022	66.30	-	-	3848.94
				06/02/2022	66.33	-	-	3848.91
				09/13/2022	66.42	-	-	3848.82
				12/01/2022	66.43	-	-	3848.81
				03/01/2023	66.50	-	-	3848.74
				06/05/2023	66.55	-	-	3848.69
				09/05/2023	66.59	-	-	3848.65
				12/05/2023	66.71	-	-	3848.53

Table 1 - Groundwater Gauging Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-4 2"	3915.30	54	74	03/08/2016	65.41	-	-	3849.89
				05/24/2016	65.44	-	-	3849.86
				09/08/2016	65.47	-	-	3849.83
				12/05/2016	65.50	-	-	3849.80
				03/08/2017	65.55	-	-	3849.75
				06/13/2017	65.61	-	-	3849.69
				09/12/2017	65.64	-	-	3849.66
				12/13/2017	65.70	-	-	3849.60
				03/23/2018	65.73	-	-	3849.57
				06/12/2018	65.81	-	-	3849.49
				09/10/2018	65.74	-	-	3849.56
				12/11/2018	65.90	-	-	3849.40
				03/13/2019	65.96	-	-	3849.34
				06/10/2019	66.00	-	-	3849.30
				09/25/2019	66.04	-	-	3849.26
				12/06/2019	66.13	-	-	3849.17
				03/11/2020	66.17	-	-	3849.13
				05/06/2020	66.12	-	-	3849.18
				06/09/2020	66.18	-	-	3849.12
				09/04/2020	66.23	-	-	3849.07
				12/11/2020	66.27	-	-	3849.03
				03/16/2021	66.30	-	-	3849.00
				06/11/2021	66.78	-	-	3848.52
				09/01/2021	66.40	-	-	3848.90
				11/29/2021	66.45	-	-	3848.85
				03/02/2022	66.53	-	-	3848.77
				06/02/2022	66.55	-	-	3848.75
				09/13/2022	66.67	-	-	3848.63
				12/01/2022	66.66	-	-	3848.64
				03/01/2023	66.72	-	-	3848.58
				06/05/2023	66.80	-	-	3848.50
09/05/2023	66.83	-	-	3848.47				
12/05/2023	66.93	-	-	3848.37				
MW-5 4"	3915.26	54	74	03/08/2016	65.42	-	-	3849.84
				05/24/2016	65.47	-	-	3849.79
				09/08/2016	65.51	-	-	3849.75
				12/05/2016	65.52	-	-	3849.74
				03/08/2017	65.59	-	-	3849.67
				06/13/2017	65.65	-	-	3849.61
				09/12/2017	65.70	-	-	3849.56
				12/13/2017	65.75	-	-	3849.51
				03/23/2018	65.78	-	-	3849.48
				06/12/2018	65.90	-	-	3849.36
				09/10/2018	65.78	-	-	3849.48
				12/11/2018	65.93	-	-	3849.33
				03/13/2019	65.95	-	-	3849.31
				06/10/2019	66.02	-	-	3849.24
				09/25/2019	66.06	-	-	3849.20
				12/06/2019	66.15	-	-	3849.11
				03/11/2020	66.15	-	-	3849.11
				05/06/2020	66.90	-	-	3849.36
				06/09/2020	66.22	-	-	3849.04
				09/04/2020	66.25	-	-	3849.01
				12/11/2020	66.31	-	-	3848.95
				03/16/2021	66.33	-	-	3848.93
				06/11/2021	66.40	-	-	3848.86
				09/01/2021	66.44	-	-	3848.82
				11/29/2021	66.50	-	-	3848.76
				03/02/2022	66.55	-	-	3848.71
				06/02/2022	66.6	-	-	3848.66
				09/13/2022	66.66	-	-	3848.60
				12/01/2022	66.70	-	-	3848.56
				03/01/2023	66.77	-	-	3848.49
				06/05/2023	66.80	-	-	3848.46
09/05/2023	66.86	-	-	3848.40				
12/05/2023	66.96	-	-	3848.30				
MW-6 2"	3915.45	52	72	03/08/2016	64.71	-	-	3850.74
				05/24/2016	64.74	-	-	3850.71
				09/08/2016	64.80	-	-	3850.65
				12/05/2016	64.85	-	-	3850.60
				03/08/2017	64.90	-	-	3850.55
				06/13/2017	64.91	-	-	3850.54
				09/12/2017	64.97	-	-	3850.48
				12/13/2017	65.02	-	-	3850.43
				03/23/2018	65.04	-	-	3850.41
				06/12/2018	65.11	-	-	3850.34
				09/10/2018	65.04	-	-	3850.41
				12/11/2018	65.22	-	-	3850.23
				03/13/2019	65.23	-	-	3850.22
				06/10/2019	68.27	-	-	3847.18
				09/25/2019	DR	-	-	-
				12/06/2019	DR	-	-	-
				03/11/2020	DR	-	-	-
				05/06/2020	DR	-	-	-
				06/09/2020	DR	-	-	-
				09/04/2020	DR	-	-	-
				12/11/2020	DR	-	-	-
				03/16/2021	DR	-	-	-
				06/10/2021	DR	-	-	-
				09/01/2021	DR	-	-	-
				11/29/2021	DR	-	-	-
				03/02/2022	DR	-	-	-
				06/02/2022	DR	-	-	-
				09/13/2022	DR	-	-	-
				12/01/2022	DR	-	-	-
				03/01/2023	DR	-	-	-
				06/05/2023	DR	-	-	-
09/05/2023	DR	-	-	-				
12/05/2023	DR	-	-	-				

Table 1 - Groundwater Gauging Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-7 2"	3914.73	51	71	03/08/2016	64.39	-	-	3850.34
				05/24/2016	64.46	-	-	3850.27
				09/08/2016	64.49	-	-	3850.24
				12/05/2016	64.50	-	-	3850.23
				03/08/2017	64.29	-	-	3850.44
				06/13/2017	64.61	-	-	3850.12
				09/12/2017	64.67	-	-	3850.06
				12/13/2017	64.72	-	-	3850.01
				03/23/2018	65.75	-	-	3848.98
				06/12/2018	64.86	-	-	3849.87
				09/10/2018	64.78	-	-	3849.95
				12/11/2018	64.91	-	-	3849.82
				03/13/2019	64.91	-	-	3849.82
				06/10/2019	64.98	-	-	3849.75
				09/25/2019	65.04	-	-	3849.69
				12/06/2019	65.10	-	-	3849.63
				03/11/2020	OB	-	-	-
				05/06/2020	OB	-	-	-
				06/09/2020	OB	-	-	-
				09/04/2020	66.37	-	-	3848.36
				12/11/2020	65.31	-	-	3849.42
				03/16/2021	66.35	-	-	3848.38
				06/11/2021	66.50	-	-	3848.23
				09/01/2021	65.43	-	-	3849.30
				11/29/2021	65.45	-	-	3849.28
				03/02/2022	65.55	-	-	3849.18
				06/02/2022	65.56	-	-	3849.17
				09/13/2022	65.65	-	-	3849.08
				12/01/2022	65.66	-	-	3849.07
				03/01/2023	65.75	-	-	3848.98
				06/05/2023	65.76	-	-	3848.97
				09/05/2023	65.83	-	-	3848.90
				12/05/2023	65.92	-	-	3848.81
MW-8 2"	3915.19	53	73	03/08/2016	64.95	-	-	3850.24
				05/24/2016	65.00	-	-	3850.19
				09/08/2016	65.04	-	-	3850.15
				12/05/2016	65.07	-	-	3850.12
				03/08/2017	65.10	-	-	3850.09
				06/13/2017	65.17	-	-	3850.02
				09/12/2017	65.21	-	-	3849.98
				12/13/2017	65.26	-	-	3849.93
				03/23/2018	65.28	-	-	3849.91
				06/12/2018	65.36	-	-	3849.83
				09/10/2018	65.31	-	-	3849.88
				12/11/2018	65.45	-	-	3849.74
				03/13/2019	65.49	-	-	3849.70
				06/10/2019	65.52	-	-	3849.67
				09/25/2019	65.60	-	-	3849.59
				12/06/2019	65.83	-	-	3849.36
				03/11/2020	65.88	-	-	3849.51
				05/06/2020	65.88	-	-	3849.51
				06/09/2020	65.74	-	-	3849.45
				09/04/2020	65.74	-	-	3849.45
				12/11/2020	65.81	-	-	3849.38
				03/16/2021	65.83	-	-	3849.36
				06/11/2021	66.10	-	-	3849.09
				09/01/2021	65.94	-	-	3849.25
				11/29/2021	65.98	-	-	3849.21
				03/02/2022	66.10	-	-	3849.09
				06/02/2022	66.11	-	-	3849.08
				09/13/2022	66.18	-	-	3849.01
				12/01/2022	66.22	-	-	3848.97
				03/01/2023	66.27	-	-	3848.92
				06/05/2023	66.32	-	-	3848.87
				09/05/2023	66.38	-	-	3848.81
				12/05/2023	66.44	-	-	3848.75
MW-9 2"	3913.92	55	75	03/08/2016	64.33	-	-	3849.59
				05/24/2016	64.32	-	-	3849.60
				09/08/2016	64.35	-	-	3849.57
				12/05/2016	64.36	-	-	3849.56
				03/08/2017	63.38	-	-	3850.54
				06/13/2017	65.46	-	-	3848.46
				09/12/2017	64.53	-	-	3849.39
				12/13/2017	64.59	-	-	3849.33
				03/23/2018	64.75	-	-	3849.17
				06/12/2018	64.68	-	-	3849.24
				09/10/2018	64.71	-	-	3849.21
				12/11/2018	64.76	-	-	3849.16
				03/13/2019	64.80	-	-	3849.12
				06/10/2019	64.85	-	-	3849.07
				09/25/2019	64.90	-	-	3849.02
				12/06/2019	64.97	-	-	3848.95
				03/11/2020	64.99	-	-	3848.93
				05/06/2020	65.00	-	-	3848.92
				06/09/2020	65.05	-	-	3848.87
				09/04/2020	65.60	-	-	3848.32
				12/11/2020	65.67	-	-	3848.25
				03/16/2021	65.75	-	-	3848.17
				06/11/2021	65.25	-	-	3848.67
				09/01/2021	65.30	-	-	3848.62
				11/29/2021	65.30	-	-	3848.62
				03/02/2022	65.93	-	-	3847.99
				06/02/2022	65.99	-	-	3847.93
				09/13/2022	66.04	-	-	3847.88
				12/01/2022	66.08	-	-	3847.84
				03/01/2023	66.14	-	-	3847.78
				06/05/2023	66.18	-	-	3847.74
				09/05/2023	66.21	-	-	3847.71
				12/05/2023	65.80	-	-	3848.12

Table 1 - Groundwater Gauging Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-10 2"	3914.96	53	73	03/08/2016	65.32	-	-	3849.64
				05/24/2016	65.40	-	-	3849.56
				09/08/2016	65.41	-	-	3849.55
				12/05/2016	65.48	-	-	3849.48
				03/08/2017	65.50	-	-	3849.46
				06/13/2017	65.54	-	-	3849.42
				09/12/2017	65.46	-	-	3849.50
				12/13/2017	65.66	-	-	3849.30
				03/23/2018	65.64	-	-	3849.32
				06/12/2018	65.30	-	-	3849.66
				09/10/2018	65.72	-	-	3849.24
				12/11/2018	65.82	-	-	3849.14
				03/13/2019	65.87	-	-	3849.09
				06/10/2019	65.92	-	-	3849.04
				09/25/2019	65.97	-	-	3848.99
				12/06/2019	66.02	-	-	3848.94
				03/11/2020	66.05	-	-	3848.91
				05/06/2020	66.00	-	-	3848.96
				06/09/2020	66.07	-	-	3848.89
				09/04/2020	66.98	-	-	3847.98
				12/11/2020	DR	-	-	-
				03/16/2021	DR	-	-	-
				06/11/2021	DR	-	-	-
				09/01/2021	DR	-	-	-
				11/29/2021	DR	-	-	-
				03/02/2022	DR	-	-	-
				06/02/2022	DR	-	-	-
				09/13/2022	DR	-	-	-
12/01/2022	DR	-	-	-				
03/01/2023	DR	-	-	-				
06/05/2023	DR	-	-	-				
09/05/2023	DR	-	-	-				
12/05/2023	DR	-	-	-				
MW-11 2"	3914.40	52	72	03/08/2016	64.70	-	-	3849.70
				05/24/2016	65.77	-	-	3848.63
				09/08/2016	64.80	-	-	3849.60
				12/05/2016	64.81	-	-	3849.59
				03/08/2017	64.90	-	-	3849.50
				06/13/2017	64.93	-	-	3849.47
				09/12/2017	64.97	-	-	3849.43
				12/13/2017	65.04	-	-	3849.36
				03/23/2018	65.03	-	-	3849.37
				06/12/2018	65.19	-	-	3849.21
				09/10/2018	65.08	-	-	3849.32
				12/11/2018	65.21	-	-	3849.19
				03/13/2019	65.25	-	-	3849.15
				06/10/2019	65.34	-	-	3849.06
				09/25/2019	65.36	-	-	3849.04
				12/06/2019	65.43	-	-	3848.97
				03/11/2020	65.47	-	-	3848.93
				05/06/2020	65.45	-	-	3848.95
				06/09/2020	65.47	-	-	3848.93
				09/04/2020	65.52	-	-	3848.88
				12/11/2020	65.80	-	-	3848.60
				03/16/2021	65.63	-	-	3848.77
				06/11/2021	68.99	-	-	3845.41
				09/01/2021	65.74	-	-	3848.66
				11/29/2021	65.80	-	-	3848.60
				03/02/2022	65.90	-	-	3848.5
				06/02/2022	65.90	-	-	3848.50
				09/13/2022	65.97	-	-	3848.43
12/01/2022	66.01	-	-	3848.39				
03/01/2023	66.06	-	-	3848.34				
06/05/2023	66.12	-	-	3848.28				
09/05/2023	66.18	-	-	3848.22				
12/05/2023	66.25	-	-	3848.15				
MW-12 2"	3913.97	58	78	03/08/2016	64.93	-	-	3849.04
				05/24/2016	64.98	-	-	3848.99
				09/08/2016	65.02	-	-	3848.95
				12/05/2016	65.05	-	-	3848.92
				03/08/2017	65.07	-	-	3848.90
				06/13/2017	65.18	-	-	3848.79
				09/12/2017	64.95	-	-	3849.02
				12/13/2017	64.76	-	-	3849.21
				03/23/2018	64.45	-	-	3849.52
				06/12/2018	65.20	-	-	3848.77
				09/10/2018	65.31	-	-	3848.66
				12/11/2018	65.45	-	-	3848.52
				03/13/2019	65.46	-	-	3848.51
				06/10/2019	65.57	-	-	3848.40
				09/25/2019	65.59	-	-	3848.38
				12/06/2019	65.67	-	-	3848.30
				03/11/2020	65.68	-	-	3848.29
				05/06/2020	65.70	-	-	3848.27
				06/09/2020	65.71	-	-	3848.26
				09/04/2020	67.75	-	-	3846.22
				12/11/2020	65.83	-	-	3848.14
				03/16/2021	65.83	-	-	3848.14
				06/11/2021	65.94	-	-	3848.03
				09/01/2021	66.00	-	-	3847.97
				11/29/2021	66.00	-	-	3847.97
				03/02/2022	66.10	-	-	3847.87
				06/02/2022	66.13	-	-	3847.84
				09/13/2022	66.20	-	-	3847.77
12/01/2022	66.23	-	-	3847.74				
03/01/2023	66.28	-	-	3847.69				
06/05/2023	66.34	-	-	3847.63				
09/05/2023	66.41	-	-	3847.56				
12/05/2023	66.51	-	-	3847.46				

Table 1 - Groundwater Gauging Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-13 4"	3915.83	54	79	03/08/2016	67.60	65.10	2.50	3850.32
				05/24/2016	66.69	65.31	1.38	3850.29
				09/08/2016	66.53	65.42	1.11	3850.23
				12/01/2016	66.94	65.41	1.53	3850.17
				03/08/2017	66.80	65.42	1.38	3850.18
				06/13/2017	66.45	65.57	0.88	3850.11
				09/12/2017	66.45	65.58	0.87	3850.11
				12/13/2017	66.20	65.71	0.49	3850.04
				03/23/2018	65.81	65.80	0.01	3850.03
				06/12/2018	66.55	65.80	0.75	3849.91
				09/10/2018	65.88	65.78	0.10	3850.03
				12/11/2018	67.00	65.80	1.20	3849.83
				03/13/2019	66.27	66.12	0.15	3849.69
				06/10/2019	67.20	66.00	1.20	3849.63
				09/25/2019	66.55	66.04	0.51	3849.71
				12/06/2019	66.80	66.25	0.55	3849.49
				03/11/2020	66.30	66.24	0.06	3849.58
				05/06/2020	66.35	66.20	0.15	3849.61
				06/09/2020	66.86	66.10	0.76	3849.60
				09/04/2020	DR	-	-	-
				12/11/2020	66.55	66.54	0.01	3849.29
				03/16/2021	67.50	66.40	1.10	3849.25
				06/11/2021	67.10	66.40	0.70	3849.31
				09/01/2021	67.15	66.35	0.80	3849.35
				11/29/2021	66.83	66.80	0.03	3849.03
				03/02/2022	68.57	66.23	2.34	3849.21
				06/02/2022	67.85	66.54	1.31	3849.07
				09/13/2022	68.25	66.80	1.45	3848.79
				12/01/2022	67.45	66.84	0.61	3848.89
				03/01/2023	66.98	66.75	0.23	3849.04
				06/05/2023	67.25	66.80	0.45	3848.96
				09/05/2023	67.76	66.75	1.01	3848.91
				12/05/2023	67.75	67.10	0.65	3848.62
MW-14 4"	3915.72	53	78	03/08/2016	68.35	64.91	3.44	3850.24
				05/24/2016	65.62	65.49	0.13	3850.21
				09/08/2016	65.73	65.54	0.19	3850.15
				12/01/2016	66.31	65.50	0.81	3850.09
				03/08/2017	66.25	65.50	0.75	3850.10
				06/13/2017	66.72	65.50	1.22	3850.02
				09/12/2017	67.05	65.50	1.55	3849.96
				12/13/2017	66.90	65.45	1.45	3850.03
				03/23/2018	67.75	65.42	2.33	3849.92
				06/12/2018	68.09	65.49	2.60	3849.80
				09/10/2018	65.19	65.18	0.01	3850.54
				12/11/2018	66.08	65.95	0.13	3849.75
				03/13/2019	66.05	66.03	0.02	3849.69
				06/10/2019	66.12	66.08	0.04	3849.63
				09/25/2019	66.12	66.10	0.02	3849.62
				12/06/2019	66.20	66.17	0.03	3849.55
				03/11/2020	66.25	66.20	0.05	3849.51
				05/06/2020	66.25	66.20	0.05	3849.51
				06/09/2020	66.27	66.22	0.05	3849.49
				09/04/2020	66.30	66.29	0.01	3849.43
				12/11/2020	66.37	66.36	0.01	3849.36
				03/16/2021	66.40	66.38	0.02	3849.34
				06/11/2021	66.46	66.44	0.02	3849.28
				09/01/2021	66.48	66.47	0.01	3849.25
				11/29/2021	66.56	66.52	0.04	3849.19
				03/02/2022	66.60	66.58	0.02	3849.14
				06/02/2022	66.65	66.63	0.02	3849.09
				09/13/2022	66.71	66.70	0.01	3849.02
				12/01/2022	66.79	66.78	0.01	3848.94
				03/01/2023	66.83	66.82	0.01	3848.90
				06/05/2023	66.90	66.89	0.01	3848.83
				09/05/2023	66.91	66.89	0.02	3848.83
				12/05/2023	67.02	67.00	0.02	3848.72
MW-15 4"	3915.84	54	79	03/08/2016	65.81	65.20	0.61	3850.54
				05/24/2016	65.87	65.21	0.66	3850.52
				09/08/2016	65.42	65.36	0.06	3850.47
				12/01/2016	65.48	65.42	0.06	3850.41
				03/08/2017	65.45	65.40	0.05	3850.43
				06/13/2017	65.68	65.46	0.22	3850.34
				09/12/2017	65.57	65.52	0.05	3850.31
				12/13/2017	65.65	65.59	0.06	3850.24
				03/23/2018	65.68	65.59	0.09	3850.24
				06/12/2018	65.80	65.65	0.15	3850.17
				09/10/2018	65.61	-	-	3850.23
				12/11/2018	65.77	-	-	3850.07
				03/13/2019	65.79	-	-	3850.05
				06/10/2019	65.84	-	-	3850.00
				09/25/2019	65.90	-	-	3849.94
				12/06/2019	65.97	-	-	3849.87
				03/11/2020	66.00	-	-	3849.84
				05/06/2020	66.00	-	-	3849.84
				06/09/2020	66.08	-	-	3849.76
				09/04/2020	66.05	-	-	3849.79
				12/11/2020	66.12	-	-	3849.72
				03/16/2021	66.15	-	-	3849.69
				06/11/2021	65.89	-	-	3849.95
				09/01/2021	66.26	-	-	3849.58
				11/29/2021	66.30	-	-	3849.54
				03/02/2022	66.40	-	-	3849.44
				06/02/2022	66.40	-	-	3849.44
				09/13/2022	66.52	-	-	3849.32
				12/01/2022	66.52	-	-	3849.32
				03/01/2023	66.59	-	-	3849.25
				06/05/2023	66.64	-	-	3849.20
				09/05/2023	66.70	-	-	3849.14
				12/05/2023	66.77	-	-	3849.07

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 Lovington Deep 6"  
 Lea County, NM  
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Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-16 4"	3915.43	54	79	03/08/2016	65.78	65.00	0.78	3850.30
				05/24/2016	65.85	65.00	0.85	3850.29
				09/08/2016	65.23	65.20	0.03	3850.23
				12/01/2016	65.32	65.23	0.09	3850.19
				03/08/2017	65.27	65.21	0.06	3850.21
				06/13/2017	65.35	65.29	0.06	3850.13
				09/12/2017	65.40	65.33	0.07	3850.09
				12/13/2017	65.44	65.38	0.06	3850.04
				03/23/2018	65.48	65.40	0.08	3850.02
				06/12/2018	65.65	65.45	0.20	3849.95
				09/10/2018	65.45	-	-	3849.98
				12/11/2018	65.60	-	-	3849.83
				03/13/2019	65.60	-	-	3849.83
				06/10/2019	65.65	-	-	3849.78
				09/25/2019	65.75	-	-	3849.68
				12/06/2019	65.86	-	-	3849.57
				03/11/2020	65.81	-	-	3849.62
				05/06/2020	65.82	-	-	3849.61
				06/09/2020	65.87	-	-	3849.56
				09/04/2020	65.90	-	-	3849.53
				12/11/2020	65.96	-	-	3849.47
				03/16/2021	65.97	-	-	3849.46
				06/11/2021	66.83	-	-	3848.60
				09/01/2021	66.07	-	-	3849.36
				11/29/2021	66.12	-	-	3849.31
				03/02/2022	66.25	-	-	3849.18
				06/02/2022	66.25	-	-	3849.18
				09/13/2022	66.31	-	-	3849.12
				12/01/2022	66.34	-	-	3849.09
				03/01/2023	66.41	-	-	3849.02
				06/05/2023	66.45	-	-	3848.98
				09/05/2023	66.50	-	-	3848.93
12/05/2023	66.61	-	-	3848.82				
MW-17 4"	3915.59	58	78	03/08/2016	68.59	64.51	4.08	3850.41
				05/24/2016	67.19	64.85	2.34	3850.35
				09/08/2016	66.61	65.04	1.57	3850.29
				12/01/2016	67.28	65.96	1.32	3849.41
				03/08/2017	66.97	65.03	1.94	3850.24
				06/13/2017	66.65	65.14	1.51	3850.20
				09/12/2017	66.43	65.28	1.15	3850.12
				12/13/2017	66.07	65.40	0.67	3850.08
				03/23/2018	65.64	65.51	0.13	3850.06
				06/12/2018	66.50	65.44	1.06	3849.98
				09/10/2018	66.59	65.38	1.21	3850.01
				12/11/2018	67.24	65.40	1.84	3849.89
				03/13/2019	66.19	65.84	0.35	3849.69
				06/10/2019	67.21	65.50	1.71	3849.81
				09/25/2019	66.55	65.68	0.87	3849.77
				12/06/2019	65.87	65.70	0.17	3849.86
				03/11/2020	66.05	65.91	0.14	3849.66
				05/06/2020	66.25	65.85	0.4	3849.67
				06/09/2020	67.81	65.80	2.01	3849.46
				09/04/2020	66.70	65.85	0.85	3849.60
				12/11/2020	66.16	66.14	0.02	3849.45
				03/16/2021	68.20	65.79	2.41	3849.40
				06/11/2021	68.07	65.78	2.29	3849.43
				09/01/2021	67.94	65.82	2.12	3849.42
				11/29/2021	66.63	66.18	0.45	3849.34
				03/02/2022	69.45	65.65	3.8	3849.31
				06/02/2022	68.72	65.88	2.84	3849.24
				09/13/2022	69.23	65.90	3.33	3849.14
				12/01/2022	67.60	66.25	1.35	3849.12
				03/01/2023	66.95	66.43	0.52	3849.07
				06/05/2023	67.52	66.38	1.14	3849.02
				09/05/2023	67.87	66.35	1.52	3848.99
12/05/2023	67.77	66.52	1.25	3848.86				
MW-18 4"	3912.90	55	80	03/08/2016	64.19	-	-	3848.71
				05/24/2016	63.45	-	-	3849.45
				09/08/2016	64.50	-	-	3848.40
				12/05/2016	64.62	-	-	3848.28
				03/08/2017	64.50	-	-	3848.40
				06/13/2017	64.70	-	-	3848.20
				09/12/2017	63.83	-	-	3849.07
				12/13/2017	64.66	-	-	3848.24
				03/23/2018	64.69	-	-	3848.21
				06/12/2018	64.75	-	-	3848.15
				09/10/2018	65.85	-	-	3847.05
				12/11/2018	64.87	-	-	3848.03
				03/13/2019	64.90	-	-	3848.00
				06/10/2019	64.97	-	-	3847.93
				09/25/2019	65.01	-	-	3847.89
				12/06/2019	66.10	-	-	3846.80
				03/11/2020	65.18	-	-	3847.72
				05/06/2020	65.10	-	-	3847.80
				06/09/2020	66.10	-	-	3846.80
				09/04/2020	65.25	-	-	3847.65
				12/11/2020	66.24	-	-	3846.66
				03/16/2021	65.30	-	-	3847.60
				06/10/2021	65.48	-	-	3847.42
				09/01/2021	65.40	-	-	3847.50
				11/29/2021	65.50	-	-	3847.40
				03/02/2022	65.84	-	-	3847.06
				06/02/2022	65.66	-	-	3847.24
				09/13/2022	65.63	-	-	3847.27
				12/01/2022	65.66	-	-	3847.24
				03/01/2023	65.72	-	-	3847.18
				06/05/2023	65.79	-	-	3847.11
				09/05/2023	65.83	-	-	3847.07
12/05/2023	65.93	-	-	3846.97				

Table 1 - Groundwater Gauging Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Casing Elevation (fmsl)	Top of Screen (ft)	Bottom of Screen (ft)	Date Sampled (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (fmsl)
MW-19 4"	3913.35	60	80	09/10/2018	65.41	-	-	3847.94
				12/11/2018	65.55	-	-	3847.80
				03/13/2019	65.58	-	-	3847.77
				06/10/2019	65.65	-	-	3847.70
				09/25/2019	65.68	-	-	3847.67
				12/06/2019	65.75	-	-	3847.60
				03/11/2020	65.80	-	-	3847.55
				05/06/2020	65.80	-	-	3847.55
				06/09/2020	65.82	-	-	3847.53
				09/04/2020	65.90	-	-	3847.45
				12/11/2020	65.92	-	-	3847.43
				03/16/2021	64.95	-	-	3848.40
				06/10/2021	66.05	-	-	3847.30
				09/01/2021	66.12	-	-	3847.23
				11/29/2021	66.10	-	-	3847.25
				03/02/2022	66.30	-	-	3847.05
				06/02/2022	66.31	-	-	3847.04
				09/13/2022	66.32	-	-	3847.03
				12/01/2022	66.35	-	-	3847.00
				03/01/2023	66.40	-	-	3846.95
06/05/2023	66.47	-	-	3846.88				
09/05/2023	66.51	-	-	3846.84				
12/05/2023	66.61	-	-	3846.74				
MW-20 4"	3912.13	60	80	09/10/2018	64.31	-	-	3847.82
				12/11/2018	65.45	-	-	3846.68
				03/13/2019	64.48	-	-	3847.65
				06/10/2019	65.57	-	-	3846.56
				09/25/2019	65.60	-	-	3846.53
				12/06/2019	64.66	-	-	3847.47
				03/11/2020	64.69	-	-	3847.44
				05/06/2020	64.68	-	-	3847.45
				06/09/2020	64.71	-	-	3847.42
				09/04/2020	64.76	-	-	3847.37
				12/11/2020	64.82	-	-	3847.31
				03/16/2021	64.85	-	-	3847.28
				06/10/2021	64.94	-	-	3847.19
				09/01/2021	65.00	-	-	3847.13
				11/29/2021	65.00	-	-	3847.13
				03/02/2022	65.10	-	-	3847.03
				06/02/2022	65.13	-	-	3847.00
				09/13/2022	65.22	-	-	3846.91
				12/01/2022	65.25	-	-	3846.88
				03/01/2023	65.30	-	-	3846.83
06/05/2023	65.37	-	-	3846.76				
09/05/2023	65.42	-	-	3846.71				
12/05/2023	65.52	-	-	3846.61				

Specific Gravity: 0.75  
 Notes:  
 fmsl = Feet above mean sea level  
 DR = Well dry  
 DS = Well destroyed  
 NG = Well not gauged  
 NL = Well not located  
 NSA = No access  
 OB = Obstruction in well  
 PA = Well plugged and abandoned

Table 2 - Groundwater Analytical Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
<b>NMWQCC - Groundwater</b>						
		0.010	0.750	0.750	0.620	-
MW-1	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.000700 J	<0.00100	<0.000657	<0.000642	0.000700 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	0.00442	<0.000367	<0.000657	<0.00063	0.00442
	06/11/2019	<0.000371	<0.000333	<0.000597	<0.000572	<0.000333
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	0.00424	<0.000367	0.000660	<0.000630	0.00490
	03/12/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/10/2020	0.00236	<0.000367	<0.000657	<0.000630	0.00236
	12/14/2020	0.000820 J	<0.002000	0.00270	0.00303	0.006550
	03/19/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/02/2022	<0.000408	0.000657 J *1	<0.000657	<0.000642 *1	0.000657 J
	03/02/2023	<0.000408 *1	<0.000367	<0.000657	0.00161 J	0.00161 J
	06/07/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	MW-3	03/08/2016	<b>0.127</b>	<0.000238	0.0904	0.0707
05/24/2016		<b>0.151</b>	<0.000238	0.129	0.107	-
09/08/2016		<b>0.166</b>	<0.000621	0.132	0.123	-
12/05/2016		<b>0.261</b>	<0.00100	0.217	0.234	-
03/08/2017		<b>0.146</b>	<0.000367	0.143	0.146	0.435
06/13/2017		<b>0.159</b>	0.00296	0.238	0.156	0.556
09/14/2017		<b>0.101</b>	<0.000367	0.178	0.129	0.408
12/18/2017		<b>0.0232</b>	0.000750 J	0.0325	0.0228	0.0792
03/26/2018		<b>0.0119</b>	0.00131 J	0.0241	0.0171	0.0544
06/12/2018		<b>0.0108</b>	<0.000512	0.0266	0.0176	0.0550
09/11/2018		<b>0.0132</b>	<0.000367	0.0317	0.0184	0.0633
12/12/2018		<b>0.0341</b>	<0.000512	0.0725	0.123	0.230
03/15/2019		<b>0.0189</b>	0.00157	0.0822	0.120	0.222
06/10/2019		<b>0.0101</b>	<0.000342	0.0551	0.0419	0.107
09/26/2019		0.00860	<0.000367	0.0480	0.0380	0.0946
12/07/2019		0.00508	<0.000367	0.0360	0.0189	0.0600
03/12/2020		<0.000408	<0.000367	0.0560	0.0454	0.101
06/11/2020		0.00554 F	<0.000367 F	0.0774 LF	0.110	0.193
09/08/2020		<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
12/14/2020		0.00300	<0.002000	0.0364	0.0597	0.09914
03/19/2021		0.00291	0.000481 J		0.00208 J	0.0281
06/11/2021		0.00163 J	<0.00200	0.0838	0.107	0.193
09/07/2021		<0.00200	<0.00200	0.0561	0.0718	0.128
11/30/2021		0.000494 J	<0.00200	0.0339	0.0225	0.0569
03/03/2022		<0.000408	<0.000367	0.0265	0.00488	0.0314
06/03/2022		<0.000408	<0.000367	0.0494	0.0641	0.113
09/13/2022		<0.000408	<0.000367	<0.000657	0.0306	0.0306
12/05/2022		<0.000408	0.000367 J *1	0.0269	0.0222	0.0494
03/02/2023		<0.000408 *1	<0.000367	0.0164	0.00823	0.0246
06/07/2023		<0.00100	<0.00100	0.00373	<0.00100	0.00373
09/05/2023		<0.00100	<0.00100	0.00740	0.00286	0.0103
12/06/2023		<0.00100	<0.00100	0.00250	<0.00100	0.00250

Table 2 - Groundwater Analytical Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-4	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	<0.000408	<0.00100	<0.000657	<0.000642	<0.000408
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	0.00140	<0.000512	<0.000616	<0.000270	0.00140
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	<0.000408	<0.000367	0.000980	0.00107	0.00205
	06/10/2019	<0.000372	<0.000335	<0.0006	<0.000575	<0.000335
	09/26/2019	0.00619	<0.000367	<0.000657	<0.000630	0.00619
	12/07/2019	0.000710	<0.000367	<0.000657	<0.000630	0.000710
	03/11/2020	0.0123	<0.000367	<0.000657	<0.000630	0.0123
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	0.0132	<0.000367	0.0497	0.0722	0.135
	12/14/2020	0.00110 J	<0.002000	0.00457	0.00659	0.01226
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	0.00157 J	0.00179 J	0.00336 J
	11/30/2021	<0.0200	<0.0200	<0.0200	<0.0400	<0.0400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/02/2022	<0.000408	<0.000367 *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/02/2023	<0.000408 *1	<0.000367	<0.000657	0.00160 J	0.00160 J
	06/07/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.000800 J	<0.00100	<0.000657	<0.000642	<0.000800 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	0.00692	<0.000367	<0.000657	<0.00063	0.00692
	06/11/2019	<0.000387	<0.000348	<0.000623	<0.000597	<0.000348
	09/26/2019	0.0132	<0.000367	<0.000657	<0.000630	0.0132
	12/07/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/12/2020	0.00405	<0.000367	<0.000657	<0.000630	0.00405
	06/11/2020	0.00131 JF	<0.000367 F	<0.000657 LF	<0.000630	0.00131 J
	09/10/2020	0.00138 J	<0.000367	<0.000657	<0.000630	0.00138 J
	12/15/2020	0.000650 J	<0.002000	0.00134 J	0.00131 J	0.003300
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/05/2022	<0.000408	<0.000367 *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/02/2023	<0.000408 *1	<0.000367	<0.000657	0.00161 J	0.00161 J
	06/07/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00344	<0.00100	<0.000657	<0.000642	0.00344
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	0.000720 J	<0.000657	<0.000630	0.000720 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.00396	<0.000367	<0.000657	<0.00063	0.00396

Table 2 - Groundwater Analytical Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-7	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00481	<0.00100	<0.000657	<0.000642	0.00481
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	0.00150	<0.000512	0.00120	<0.000270	0.00270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.000630	<0.000367	<0.000657	<0.000630	0.000630
	06/10/2019	0.0407	<0.000314	<0.000562	<0.000538	0.0407
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/01/2023	<0.000408 *1	0.000688 J *1	<0.000657	<0.000642	0.000688 J
MW-8	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00272	<0.00100	<0.000657	<0.000642	0.00272
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	0.000610 J	<0.000657	<0.000630	0.000610 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/15/2019	0.00530	<0.000367	<0.000657	<0.000630	0.00530
	06/11/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	0.0586	<0.000367	0.00422	<0.000630	0.0628
	03/12/2020	0.00465	<0.000367	<0.000657	<0.000630	0.00465
	06/11/2020	0.000870 JF	<0.000367 F	<0.000657 LF	<0.000630	0.000870 J
	09/10/2020	0.00208	<0.000367	<0.000657	<0.000630	0.00208
	12/15/2020	0.000590 J	<0.002000	0.00116 J	0.00132 J	0.003070
	03/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/05/2022	<0.000408	0.000429 J *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/01/2023	<0.000408 *1	0.000911 J	<0.000657	<0.000642	0.000911 J
	06/08/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/13/2017	0.00113 J	<0.00100	<0.000657	<0.000642	0.00113 J
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	0.000680 J	<0.000657	<0.000630	0.000680 J
	06/12/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.000930	<0.000367	<0.000657	<0.000630	0.000930
	06/11/2019	<0.000373	<0.000335	<0.0006	<0.000575	<0.000335
	09/26/2019	0.0105	<0.000367	<0.000657	<0.000630	0.0105
	12/07/2019	0.000410	<0.000367	<0.000657	<0.000630	0.000410
	03/12/2020	0.00583	<0.000367	<0.000657	<0.000630	0.00583
	09/10/2020	0.00496	<0.000367	<0.000657	<0.000630	0.00496
	12/15/2020	0.000750 J	<0.002000	0.00166 J	0.00163 J	0.004040
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	0.00110 J	0.00110 J
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/05/2022	<0.000408	0.000424 J *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/01/2023	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/08/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	12/06/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100

Table 2 - Groundwater Analytical Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-10	03/08/2016	2.62	<0.0119	0.222	<0.0122	-
	05/24/2016	2.38	<0.00238	0.127	0.0325	-
	09/08/2016	3.16	<0.0329	0.181	<0.0136	-
	12/05/2016	3.35	<0.0200	0.178	0.0420	-
	03/08/2017	2.69	0.0620 J	0.303	0.0790 J	3.13
	06/13/2017	0.00417	<0.00100	<0.000657	<0.000642	0.00417
	09/14/2017	11.5 D	<0.000367	0.901 D	0.0192	12.4
	12/18/2017	12.1 D	0.00857	0.953 D	0.0257	13.1
	03/26/2018	5.04	0.0270 J	0.518	<0.0315	5.59
	06/12/2018	3.94	<0.00512	0.422	<0.00270	4.36
	09/11/2018	6.30 D	0.000380 J	0.693 D	0.00625	7.00
	12/11/2018	3.65	<0.0256	0.420	<0.0135	4.07
	03/14/2019	4.29	<0.000367	0.142	<0.00063	4.43
	06/10/2019	32	<0.0367	2.89	2.56	38
	09/26/2019	4.43	<0.000367	0.307	<0.000630	4.74
	12/07/2019	1.12	<0.000367	0.0564	<0.000630	1.18
	03/11/2020	3.03 D	<0.000367	0.161	<0.000630	3.19
06/11/2020	2.33 DF	0.00104 JF	0.0498 LF	0.00203	2.38	
MW-11	03/08/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	05/24/2016	<0.000223	<0.000238	<0.000238	<0.000243	-
	09/08/2016	<0.000504	<0.000621	<0.000763	<0.000256	-
	12/05/2016	<0.000408	<0.00100	<0.000657	<0.000642	-
	03/08/2017	0.000720 J	<0.000367	<0.000657	<0.000630	0.000720 J
	06/13/2017	0.00424	<0.00100	<0.000657	<0.000642	0.00424
	09/14/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/18/2017	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	03/26/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/12/2018	0.00270	<0.000512	<0.000616	<0.000270	0.00270
	09/11/2018	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.0101	<0.000367	0.00173	0.00146	0.0133
	06/10/2019	<0.000378	<0.00034	<0.000609	<0.000584	<0.00034
	09/26/2019	0.0429	<0.000367	0.00902	<0.000630	0.0519
	12/07/2019	0.000820	0.000440	<0.000657	<0.000630	0.00126
	03/12/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	0.00575	<0.000367	0.00384	0.00263	0.0122
	12/15/2020	0.00153 J	<0.002000	0.00251	0.00254	0.006580
	03/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/05/2022	<0.000408	<0.000367 *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/01/2023	<0.000408	0.000416 J	<0.000657	<0.000642	<0.000657
06/08/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-12	03/08/2016	1.88	<0.0119	<0.0119	<0.0122	-
	05/24/2016	0.634	<0.0119	<0.0119	<0.0122	-
	09/08/2016	0.162	<0.0329	<0.0404	<0.0136	-
	12/05/2016	0.0577	<0.00100	<0.000657	<0.000642	-
	03/08/2017	0.117	<0.0184	<0.0329	<0.0315	0.117
	06/13/2017	0.00768	<0.00100	<0.000657	<0.000642	0.00768
	09/14/2017	0.00496	<0.000367	0.00168 J	<0.000630	0.00664
	12/18/2017	0.0304	<0.000367	0.00627	0.00146 J	0.0381
	03/26/2018	0.000570 J	0.00103 J	<0.000657	<0.000630	0.00160 J
	06/12/2018	0.00130	<0.000512	<0.000616	0.000700 J	0.00200
	09/11/2018	0.00136 J	<0.000367	<0.000657	<0.000630	0.00136 J
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.000950	<0.000367	<0.000657	<0.00063	0.000950
	06/10/2019	<0.00037	<0.000333	<0.000596	<0.000571	<0.000333
	09/26/2019	0.00564	<0.000367	<0.000657	<0.000630	0.00564
	12/07/2019	0.000680	<0.000367	<0.000657	0.000640	0.00132
	03/12/2020	0.00719	0.000750 J	0.00121 J	<0.000630	0.00915
	06/11/2020	0.00101 JF	<0.000367 F	<0.000657 LF	<0.000630	0.00101 J
	09/10/2020	0.00874	0.000510 J	0.00161 J	0.00117 J	0.0120
	12/15/2020	0.00213	<0.002000	0.00236	0.00217	0.006660
	03/18/2021	0.000887 J	0.000745 J	0.00108 J	0.00273 J	0.00544
	06/11/2021	0.000750 J	0.000555 J	<0.00200	<0.00400	0.00131 J
	09/07/2021	0.000614 J	<0.00200	0.000673 J	<0.00400	0.00129 J
	11/30/2021	0.000479 J	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.00816	<0.00734	<0.0131	<0.0128	<0.0131
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/02/2022	<0.00408	<0.00367 *1	<0.00657 *1	<0.00642 *1	<0.00657
	03/01/2023	<0.000408 *1	<0.000367	<0.000657	0.00160 J	0.00160 J
06/08/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	

Table 2 - Groundwater Analytical Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-15	09/11/2018	0.00374	0.00324	0.0468	0.0637	0.117
	12/12/2018	0.00280	<0.000512	0.0474	0.0510	0.101
	03/15/2019	0.00886	<0.000367	0.0254	0.0257	0.0599
	06/10/2019	<b>0.0122</b>	<0.000336	0.0954	0.0691	0.177
	09/26/2019	<0.000408	<0.000367	0.0251	0.0161	0.0412
	12/07/2019	0.00162	<0.000367	0.0624	0.0369	0.101
	03/12/2020	<0.000408	<0.000367	0.0265	<0.000630	0.0265
	06/11/2020	0.00205 F	<0.000367 F	0.0235 LF	0.0140	0.0396
	09/11/2020	0.000940 J	<0.000367	0.00715	0.00268	0.0108
	12/15/2020	0.000810 J	<0.002000	0.00257	0.00121 J	0.004590
	03/19/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	<0.00200	<0.00200	0.00263	<0.00400	0.00263 J
	09/07/2021	<0.00200	<0.00200	0.00679	0.000719 J	0.00751
	11/29/2021	<0.00200	<0.00200	0.00373	<0.00400	0.00373 J
	03/03/2022	<0.000408	<0.000367	0.00449	<0.000642	0.00449
	06/03/2022	<0.000408	<0.000367	0.00123 J	0.000946 J	0.00218 J
	09/13/2022	<0.000408	<0.000367	<0.000657	0.00122 J	0.00122 J
	12/05/2022	<0.000408	<0.000367 *1	0.00224	<0.000642 *1	0.00224 J
	03/02/2023	<0.000408	<0.000367 *-	0.00352	0.00181 J	0.00533
	06/07/2023	<0.00100	<0.00100	0.00148	<0.00100	0.00148
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
12/06/2023	<0.00100	<0.00100	<0.00100	<0.00100	0.00100	
MW-16	09/11/2018	<b>0.0101</b>	0.00839	0.0242	0.0314	0.0741
	12/12/2018	0.00230	0.00120	0.00890	0.0150	0.0274
	03/15/2019	0.00408	0.00222	0.00551	0.0114	0.0232
	06/10/2019	<0.000377	<0.000339	<0.000607	<0.000582	<0.000339
	09/26/2019	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	12/07/2019	0.000470	<0.000367	0.00598	0.00577	0.0122
	03/12/2020	<0.000408	<0.000367	<0.000657	<0.000630	<0.000367
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/11/2020	0.00140 J	0.000380 J	0.00354	0.00299	0.00831
	12/15/2020	0.000590 J	<0.002000	0.00185 J	0.00176 J	0.004200
	03/19/2021	<0.00200	<0.00200	0.00682	0.00928	0.0161
	06/11/2021	<0.00200	<0.00200	0.00192 J	0.00229 J	0.00421
	09/07/2021	<0.00200	<0.00200	0.00151 J	<0.00400	0.00151 J
	11/29/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/05/2022	<0.000408	<0.000367 *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/02/2023	<0.000408 *1	<0.000367	<0.000657	0.00159 J	0.00159 J
	06/08/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
12/06/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-18	03/08/2016	<b>0.267</b>	<0.000238	0.000900 J	0.000500 J	-
	05/24/2016	<b>0.0108</b>	<0.000238	0.000800 J	0.000800 J	-
	09/08/2016	<b>0.0715</b>	<0.000621	0.00530	0.00610	-
	12/05/2016	<b>0.264</b>	<0.00100	<0.000657	<0.000642	-
	03/08/2017	<b>0.513</b>	<0.0184	<0.0329	<0.0315	0.513
	06/13/2017	<b>5.45</b>	<0.0250	<0.0164	<0.0161	5.45
	09/14/2017	<b>0.582 D</b>	<0.000367	0.00167 J	0.00118 J	0.585
	12/18/2017	<b>6.82 D</b>	<0.000367	0.00507	0.0241	6.85
	03/26/2018	<b>3.50</b>	0.00760 J	<0.0131	0.0132 J	3.52
	06/12/2018	<b>3.09</b>	<0.0256	<0.0308	<0.0135	3.09
	09/11/2018	<b>0.0801</b>	<0.000367	<0.000657	0.00463	0.0847
	12/11/2018	<b>0.0310</b>	<0.000512	<0.000616	<0.000270	0.0310
	03/14/2019	<0.000408	<0.000367	<0.000657	<0.00063	<0.000367
	06/10/2019	<0.00038	<0.000342	<0.000612	<0.000586	<0.000342
	09/25/2019	<b>0.395</b>	0.0145	0.00727	<0.000630	0.417
	12/07/2019	<b>0.122</b>	0.00273	0.00199	0.0109	0.138
	03/11/2020	<b>0.217</b>	0.0239	0.0105	0.00489	0.256
	06/11/2020	<b>0.241 F</b>	0.0138 F	0.00619 LF	0.0366	0.298
	09/08/2020	<b>0.135</b>	0.0242	0.0119	0.0517	0.223
	12/14/2020	<b>0.0479</b>	0.0196	0.00646	0.00537	0.07933
	03/18/2021	0.00968 J	0.0236 J	<0.0400	<0.0800	0.0333 J
	06/11/2021	<0.00200	0.0175	0.00494	<0.00400	0.0224
	09/07/2021	0.000698 J	0.00218	0.00494	<0.00400	0.00782
	11/30/2021	0.000702 J	0.00527	0.00141 J	0.0448	0.0522
	03/03/2022	<0.000408	0.00477	<0.000657	<0.000642	0.00477
	06/02/2022	0.00223	<0.000367	<0.000657	0.00104 J	0.00327 J
	09/14/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
12/05/2022	<0.00408	<0.00367 *1	<0.00657 *1	<0.00642 *1	<0.00657	
03/02/2023	<0.000408 *1	<0.000367	<0.000657	0.00159 J	0.00159 J	
06/07/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
12/05/2023	0.00107	<0.00100	<0.00100	<0.00100	0.00107	

Table 2 - Groundwater Analytical Data - Historical  
 Lovington Deep 6"  
 Lea County, NM  
 SRS#: 2002-10312

Sample ID	Date Sampled	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
MW-19	09/11/2018	2.41 D	<0.000367	<0.000657	<0.000630	2.41
	12/11/2018	6.07	<0.0102	<0.0123	<0.00540	6.07
	03/14/2019	2.11	<0.000367	<0.000657	<0.00063	2.11
	06/10/2019	0.302	<0.000367	<0.000657	<0.00063	0.302
	09/25/2019	3.99	<0.000367	0.00585	<0.000630	4.00
	12/07/2019	0.00180	0.000720	0.00206	0.00447	0.00905
	03/11/2020	3.96 D	0.00557	0.00777	0.00131 J	3.97
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	1.21	<0.00184	<0.00329	<0.00315	1.21
	12/14/2020	0.336 X	0.00208	0.00131 J	0.00116 J	0.3406
	03/18/2021	0.0235	<0.00200	<0.00200	<0.00400	0.0235
	06/11/2021	0.0958	<0.00200	<0.00200	0.00114 J	0.0969
	09/07/2021	0.110	0.00112 J	<0.00200	<0.00400	0.111
	11/30/2021	0.00575	0.00039 J	<0.00200	<0.00400	0.00614
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/02/2022	0.0268	<0.000367	0.00322	0.0223	0.0523
	09/14/2022	0.000773 J	<0.000367	<0.000657	<0.000642	0.000773 J
	12/02/2022	0.00110 J	0.000628 J *1	<0.000657 *1	<0.000642 *1	0.00173 J
	03/01/2023	<0.000408	<0.000367	0.00149 J	0.00273 J	0.00422
	06/07/2023	<0.00100	<0.00100	<0.00100	<0.00100	0.000710
09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	0.000600	
12/05/2023	<0.00100	<0.00100	<0.00100	0.00127	0.00127	
MW-20	09/11/2018	0.00373	<0.000367	<0.000657	<0.000630	0.00373
	12/11/2018	<0.000480	<0.000512	<0.000616	<0.000270	<0.000270
	03/14/2019	0.00741	<0.000367	<0.000657	<0.00063	0.00741
	06/10/2019	0.0373	<0.000367	<0.000657	<0.00063	0.0373
	09/25/2019	0.0606	<0.000367	<0.000657	<0.000630	0.0606
	12/07/2019	2.24	0.00218	0.00376	0.00340	2.25
	03/11/2020	0.0227	<0.000367	<0.000657	<0.000630	0.0227
	06/11/2020	<0.000408 F	<0.000367 F	<0.000657 LF	<0.000630	<0.000367
	09/08/2020	<0.000408 XF	<0.000367 XF	<0.000657 XF	<0.000630	<0.000367
	12/14/2020	0.00320	<0.002000	<0.002000	<0.002000	0.003200
	03/18/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200
	06/11/2021	0.000427 J	<0.00200	<0.00200	<0.00400	<0.00400
	09/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	11/30/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
	03/03/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	06/02/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	09/13/2022	<0.000408	<0.000367	<0.000657	<0.000642	<0.000657
	12/02/2022	<0.000408	<0.000367 *1	<0.000657 *1	<0.000642 *1	<0.000657
	03/01/2023	<0.000408	0.000372 J	<0.000657	<0.000642	<0.000657
	06/07/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
09/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
12/05/2023	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	

Notes:

Lab Flags noted next to values. See lab report for description.

Analyte concentration exceeds the standard for:

**NM/WQCC - Groundwater**



## **APPENDIX C**

### Laboratory Analytical Data Reports and Chain of Custody Documentation



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: David Adkins  
 Talon/LPE  
 408 W. Texas St.  
 Artesia, New Mexico 88210

Generated 3/15/2023 3:33:12 PM

## JOB DESCRIPTION

Lovington Deep  
 SDG NUMBER Lea County

## JOB NUMBER

890-4214-1

Eurofins Carlsbad  
 1089 N Canal St.  
 Carlsbad NM 88220



# Euofins Carlsbad

## 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



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

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Client: Talon/LPE  
Project/Site: Lovington Deep

Laboratory Job ID: 890-4214-1  
SDG: Lea County

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## Definitions/Glossary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

**Job ID: 890-4214-1**

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative  
890-4214-1**

**Receipt**

The samples were received on 3/1/2023 3:04 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

**GC VOA**

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 880-48323 recovered outside control limits for the following analytes: Benzene and Toluene.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 880-48623 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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### Client Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

**Client Sample ID: MW-7**  
Date Collected: 03/01/23 12:14  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-1**  
Matrix: Water

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/11/23 19:35	1
<b>Toluene</b>	<b>0.000688</b>	<b>J *1</b>	0.00200	0.000367	mg/L			03/11/23 19:35	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/11/23 19:35	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/11/23 19:35	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/11/23 19:35	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/11/23 19:35	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)	118		70 - 130					03/11/23 19:35	1
1,4-Difluorobenzene (Surr)	107		70 - 130					03/11/23 19:35	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.000688</b>	<b>J</b>	0.00400	0.000657	mg/L			03/13/23 18:25	1

**Client Sample ID: MW-8**  
Date Collected: 03/01/23 12:03  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-2**  
Matrix: Water

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/11/23 19:55	1
<b>Toluene</b>	<b>0.000911</b>	<b>J *1</b>	0.00200	0.000367	mg/L			03/11/23 19:55	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/11/23 19:55	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/11/23 19:55	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/11/23 19:55	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/11/23 19:55	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)	115		70 - 130					03/11/23 19:55	1
1,4-Difluorobenzene (Surr)	105		70 - 130					03/11/23 19:55	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.000911</b>	<b>J</b>	0.00400	0.000657	mg/L			03/13/23 18:25	1

**Client Sample ID: MW-20**  
Date Collected: 03/01/23 12:30  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-3**  
Matrix: Water

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 06:11	1
<b>Toluene</b>	<b>0.000372</b>	<b>J</b>	0.00200	0.000367	mg/L			03/15/23 06:11	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 06:11	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 06:11	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			03/15/23 06:11	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 06:11	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)	89		70 - 130					03/15/23 06:11	1
1,4-Difluorobenzene (Surr)	80		70 - 130					03/15/23 06:11	1

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### Client Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

**Client Sample ID: MW-20**  
Date Collected: 03/01/23 12:30  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-3**  
Matrix: Water

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/15/23 16:25	1

**Client Sample ID: MW-11**  
Date Collected: 03/01/23 12:32  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-4**  
Matrix: Water

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 06:32	1
<b>Toluene</b>	<b>0.000416</b>	<b>J</b>	0.00200	0.000367	mg/L			03/15/23 06:32	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 06:32	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 06:32	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			03/15/23 06:32	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 06:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130					03/15/23 06:32	1
1,4-Difluorobenzene (Surr)	80		70 - 130					03/15/23 06:32	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/15/23 16:25	1

**Client Sample ID: MW-12**  
Date Collected: 03/01/23 13:02  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-5**  
Matrix: Water

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 12:42	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 12:42	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 12:42	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00160</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 12:42	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 12:42	1
<b>Xylenes, Total</b>	<b>0.00160</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130					03/15/23 12:42	1
1,4-Difluorobenzene (Surr)	86		70 - 130					03/15/23 12:42	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<b>0.00160</b>	<b>J</b>	0.00400	0.000657	mg/L			03/15/23 16:25	1

**Client Sample ID: MW-9**  
Date Collected: 03/01/23 13:20  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-6**  
Matrix: Water

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 06:52	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 06:52	1

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### Client Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

**Client Sample ID: MW-9**

**Lab Sample ID: 890-4214-6**

Date Collected: 03/01/23 13:20

Matrix: Water

Date Received: 03/01/23 15:04

**Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 06:52	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 06:52	1
o-Xylene	<0.000642	U **	0.00200	0.000642	mg/L			03/15/23 06:52	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 06:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130					03/15/23 06:52	1
1,4-Difluorobenzene (Surr)	81		70 - 130					03/15/23 06:52	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/15/23 16:25	1

**Client Sample ID: MW-19**

**Lab Sample ID: 890-4214-7**

Date Collected: 03/01/23 13:24

Matrix: Water

Date Received: 03/01/23 15:04

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 07:12	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 07:12	1
Ethylbenzene	<b>0.00149</b>	<b>J</b>	0.00200	0.000657	mg/L			03/15/23 07:12	1
m-Xylene & p-Xylene	<b>0.00273</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 07:12	1
o-Xylene	<0.000642	U **	0.00200	0.000642	mg/L			03/15/23 07:12	1
Xylenes, Total	<b>0.00273</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 07:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130					03/15/23 07:12	1
1,4-Difluorobenzene (Surr)	89		70 - 130					03/15/23 07:12	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<b>0.00422</b>		0.00400	0.000657	mg/L			03/15/23 16:25	1

### Surrogate Summary

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4214-1  
 SDG: Lea County

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-25343-A-1 MS	Matrix Spike	104	107
880-25343-A-1 MSD	Matrix Spike Duplicate	106	107
880-25343-A-21 MS	Matrix Spike	141 S1+	139 S1+
880-25343-A-21 MSD	Matrix Spike Duplicate	141 S1+	135 S1+
880-25772-A-1 MS	Matrix Spike	120	113
880-25772-A-1 MSD	Matrix Spike Duplicate	115	112
890-4214-1	MW-7	118	107
890-4214-2	MW-8	115	105
890-4214-3	MW-20	89	80
890-4214-4	MW-11	83	80
890-4214-5	MW-12	112	86
890-4214-6	MW-9	82	81
890-4214-7	MW-19	116	89
LCS 880-48323/65	Lab Control Sample	116	111
LCS 880-48575/34	Lab Control Sample	97	104
LCS 880-48623/34	Lab Control Sample	141 S1+	97
LCSD 880-48323/66	Lab Control Sample Dup	109	114
LCSD 880-48575/35	Lab Control Sample Dup	107	112
LCSD 880-48623/35	Lab Control Sample Dup	129	98
MB 880-48205/5-A	Method Blank	110	102
MB 880-48323/70	Method Blank	105	98
MB 880-48335/5-A	Method Blank	61 S1-	89
MB 880-48336/5-A	Method Blank	90	84
MB 880-48575/39	Method Blank	65 S1-	89
MB 880-48623/39	Method Blank	85	82

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

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

Lab Sample ID: MB 880-48205/5-A  
Matrix: Water  
Analysis Batch: 48323

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 48205

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L		03/09/23 11:30	03/11/23 04:45	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L		03/09/23 11:30	03/11/23 04:45	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L		03/09/23 11:30	03/11/23 04:45	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L		03/09/23 11:30	03/11/23 04:45	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L		03/09/23 11:30	03/11/23 04:45	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L		03/09/23 11:30	03/11/23 04:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/09/23 11:30	03/11/23 04:45	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/09/23 11:30	03/11/23 04:45	1

Lab Sample ID: MB 880-48323/70  
Matrix: Water  
Analysis Batch: 48323

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/11/23 16:22	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/11/23 16:22	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/11/23 16:22	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/11/23 16:22	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/11/23 16:22	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/11/23 16:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		03/11/23 16:22	1
1,4-Difluorobenzene (Surr)	98		70 - 130		03/11/23 16:22	1

Lab Sample ID: LCS 880-48323/65  
Matrix: Water  
Analysis Batch: 48323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08252		mg/L		83	70 - 130
Toluene	0.100	0.07675		mg/L		77	70 - 130
Ethylbenzene	0.100	0.07977		mg/L		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1690		mg/L		85	70 - 130
o-Xylene	0.100	0.08464		mg/L		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-48323/66  
Matrix: Water  
Analysis Batch: 48323

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	0.100	0.1042	*1	mg/L		104	70 - 130	23	20

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### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

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

Lab Sample ID: LCSD 880-48323/66  
Matrix: Water  
Analysis Batch: 48323

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	
Toluene	0.100	0.09617	*1	mg/L		96	70 - 130	22	20	
Ethylbenzene	0.100	0.09661		mg/L		97	70 - 130	19	20	
m-Xylene & p-Xylene	0.200	0.2038		mg/L		102	70 - 130	19	20	
o-Xylene	0.100	0.1009		mg/L		101	70 - 130	18	20	
<b>Surrogate</b>										
		<b>LCSD</b>	<b>LCSD</b>							
		<b>%Recovery</b>	<b>Qualifier</b>							
4-Bromofluorobenzene (Surr)		109								70 - 130
1,4-Difluorobenzene (Surr)		114								70 - 130

Lab Sample ID: 880-25772-A-1 MS  
Matrix: Water  
Analysis Batch: 48323

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	<0.000408	U *1	0.100	0.1042		mg/L		104	70 - 130	
Toluene	0.00108	J *1	0.100	0.09741		mg/L		96	70 - 130	
Ethylbenzene	<0.000657	U	0.100	0.09852		mg/L		99	70 - 130	
m-Xylene & p-Xylene	0.000901	J	0.200	0.2078		mg/L		103	70 - 130	
o-Xylene	<0.000642	U	0.100	0.1025		mg/L		102	70 - 130	
<b>Surrogate</b>										
				<b>MS</b>	<b>MS</b>					
				<b>%Recovery</b>	<b>Qualifier</b>					
4-Bromofluorobenzene (Surr)				120						70 - 130
1,4-Difluorobenzene (Surr)				113						70 - 130

Lab Sample ID: 880-25772-A-1 MSD  
Matrix: Water  
Analysis Batch: 48323

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000408	U *1	0.100	0.09392		mg/L		94	70 - 130	10	25
Toluene	0.00108	J *1	0.100	0.08665		mg/L		86	70 - 130	12	25
Ethylbenzene	<0.000657	U	0.100	0.08903		mg/L		89	70 - 130	10	25
m-Xylene & p-Xylene	0.000901	J	0.200	0.1880		mg/L		94	70 - 130	10	25
o-Xylene	<0.000642	U	0.100	0.09395		mg/L		94	70 - 130	9	25
<b>Surrogate</b>											
				<b>MSD</b>	<b>MSD</b>						
				<b>%Recovery</b>	<b>Qualifier</b>						
4-Bromofluorobenzene (Surr)				115							70 - 130
1,4-Difluorobenzene (Surr)				112							70 - 130

Lab Sample ID: MB 880-48335/5-A  
Matrix: Water  
Analysis Batch: 48575

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 48335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L		03/10/23 14:49	03/14/23 15:26	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L		03/10/23 14:49	03/14/23 15:26	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L		03/10/23 14:49	03/14/23 15:26	1
m-Xylene & p-Xylene	0.001585	J	0.00400	0.000629	mg/L		03/10/23 14:49	03/14/23 15:26	1

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### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

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

Lab Sample ID: MB 880-48335/5-A  
Matrix: Water  
Analysis Batch: 48575

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 48335

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L		03/10/23 14:49	03/14/23 15:26	1
Xylenes, Total	0.001585	J	0.00400	0.000642	mg/L		03/10/23 14:49	03/14/23 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	61	S1-	70 - 130				03/10/23 14:49	03/14/23 15:26	1
1,4-Difluorobenzene (Surr)	89		70 - 130				03/10/23 14:49	03/14/23 15:26	1

Lab Sample ID: MB 880-48336/5-A  
Matrix: Water  
Analysis Batch: 48623

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 48336

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.000408	U	0.00200	0.000408	mg/L		03/10/23 14:51	03/14/23 18:57	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L		03/10/23 14:51	03/14/23 18:57	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L		03/10/23 14:51	03/14/23 18:57	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L		03/10/23 14:51	03/14/23 18:57	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L		03/10/23 14:51	03/14/23 18:57	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L		03/10/23 14:51	03/14/23 18:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				03/10/23 14:51	03/14/23 18:57	1
1,4-Difluorobenzene (Surr)	84		70 - 130				03/10/23 14:51	03/14/23 18:57	1

Lab Sample ID: MB 880-48575/39  
Matrix: Water  
Analysis Batch: 48575

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 05:03	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 05:03	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 05:03	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 05:03	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 05:03	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 05:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130					03/15/23 05:03	1
1,4-Difluorobenzene (Surr)	89		70 - 130					03/15/23 05:03	1

Lab Sample ID: LCS 880-48575/34  
Matrix: Water  
Analysis Batch: 48575

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	0.100	0.08598		mg/L		86	70 - 130
Toluene	0.100	0.07419		mg/L		74	70 - 130
Ethylbenzene	0.100	0.08449		mg/L		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1756		mg/L		88	70 - 130

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### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

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

Lab Sample ID: LCS 880-48575/34

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.08688		mg/L		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-48575/35

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1079	*1	mg/L		108	70 - 130	23	20
Toluene	0.100	0.08788		mg/L		88	70 - 130	17	20
Ethylbenzene	0.100	0.09453		mg/L		95	70 - 130	11	20
m-Xylene & p-Xylene	0.200	0.1962		mg/L		98	70 - 130	11	20
o-Xylene	0.100	0.09739		mg/L		97	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-25343-A-1 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000408	U *1	0.100	0.09977		mg/L		100	70 - 130
Toluene	<0.000367	U	0.100	0.08759		mg/L		88	70 - 130
Ethylbenzene	<0.000657	U	0.100	0.09541		mg/L		95	70 - 130
m-Xylene & p-Xylene	0.00179	J	0.200	0.1996		mg/L		99	70 - 130
o-Xylene	<0.000642	U	0.100	0.09877		mg/L		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 880-25343-A-1 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000408	U *1	0.100	0.08705		mg/L		87	70 - 130	14	25
Toluene	<0.000367	U	0.100	0.07918		mg/L		79	70 - 130	10	25
Ethylbenzene	<0.000657	U	0.100	0.08624		mg/L		86	70 - 130	10	25
m-Xylene & p-Xylene	0.00179	J	0.200	0.1786		mg/L		88	70 - 130	11	25
o-Xylene	<0.000642	U	0.100	0.08812		mg/L		88	70 - 130	11	25

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### QC Sample Results

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4214-1  
 SDG: Lea County

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

Lab Sample ID: 880-25343-A-1 MSD  
 Matrix: Water  
 Analysis Batch: 48575

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: MB 880-48623/39  
 Matrix: Water  
 Analysis Batch: 48623

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 05:29	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 05:29	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 05:29	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 05:29	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 05:29	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 05:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130		03/15/23 05:29	1
1,4-Difluorobenzene (Surr)	82		70 - 130		03/15/23 05:29	1

Lab Sample ID: LCS 880-48623/34  
 Matrix: Water  
 Analysis Batch: 48623

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09500		mg/L		95	70 - 130
Toluene	0.100	0.09421		mg/L		94	70 - 130
Ethylbenzene	0.100	0.1143		mg/L		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2590		mg/L		129	70 - 130
o-Xylene	0.100	0.1308	*+	mg/L		131	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-48623/35  
 Matrix: Water  
 Analysis Batch: 48623

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	0.100	0.1047		mg/L		105	70 - 130	10	20
Toluene	0.100	0.09768		mg/L		98	70 - 130	4	20
Ethylbenzene	0.100	0.1134		mg/L		113	70 - 130	1	20
m-Xylene & p-Xylene	0.200	0.2494		mg/L		125	70 - 130	4	20
o-Xylene	0.100	0.1250		mg/L		125	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130

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### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

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

Lab Sample ID: LCSD 880-48623/35  
Matrix: Water  
Analysis Batch: 48623

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-25343-A-21 MS  
Matrix: Water  
Analysis Batch: 48623

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
	MS %Recovery	MS Qualifier		MS %Recovery	MS Qualifier				
Benzene	0.00355	F1	0.100	0.1632	F1	mg/L		160	70 - 130
Toluene	<0.000367	U	0.100	0.1041		mg/L		104	70 - 130
Ethylbenzene	<0.000657	U	0.100	0.1234		mg/L		123	70 - 130
m-Xylene & p-Xylene	<0.000629	U F1	0.200	0.2782	F1	mg/L		139	70 - 130
o-Xylene	0.000901	J F1 *+	0.100	0.1396	F1	mg/L		139	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130						
1,4-Difluorobenzene (Surr)	139	S1+	70 - 130						

Lab Sample ID: 880-25343-A-21 MSD  
Matrix: Water  
Analysis Batch: 48623

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
	MSD %Recovery	MSD Qualifier		MSD %Recovery	MSD Qualifier					RPD	Limit
Benzene	0.00355	F1	0.100	0.1588	F1	mg/L		155	70 - 130	3	25
Toluene	<0.000367	U	0.100	0.1049		mg/L		105	70 - 130	1	25
Ethylbenzene	<0.000657	U	0.100	0.1249		mg/L		125	70 - 130	1	25
m-Xylene & p-Xylene	<0.000629	U F1	0.200	0.2845	F1	mg/L		142	70 - 130	2	25
o-Xylene	0.000901	J F1 *+	0.100	0.1441	F1	mg/L		143	70 - 130	3	25
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	135	S1+	70 - 130								

### QC Association Summary

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4214-1  
 SDG: Lea County

#### GC VOA

##### Prep Batch: 48205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48205/5-A	Method Blank	Total/NA	Water	5035	

##### Analysis Batch: 48323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4214-1	MW-7	Total/NA	Water	8021B	
890-4214-2	MW-8	Total/NA	Water	8021B	
MB 880-48205/5-A	Method Blank	Total/NA	Water	8021B	48205
MB 880-48323/70	Method Blank	Total/NA	Water	8021B	
LCS 880-48323/65	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-48323/66	Lab Control Sample Dup	Total/NA	Water	8021B	
880-25772-A-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-25772-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

##### Prep Batch: 48335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48335/5-A	Method Blank	Total/NA	Water	5035	

##### Prep Batch: 48336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48336/5-A	Method Blank	Total/NA	Water	5035	

##### Analysis Batch: 48557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4214-1	MW-7	Total/NA	Water	Total BTEX	
890-4214-2	MW-8	Total/NA	Water	Total BTEX	
890-4214-3	MW-20	Total/NA	Water	Total BTEX	
890-4214-4	MW-11	Total/NA	Water	Total BTEX	
890-4214-5	MW-12	Total/NA	Water	Total BTEX	
890-4214-6	MW-9	Total/NA	Water	Total BTEX	
890-4214-7	MW-19	Total/NA	Water	Total BTEX	

##### Analysis Batch: 48575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4214-5	MW-12	Total/NA	Water	8021B	
MB 880-48335/5-A	Method Blank	Total/NA	Water	8021B	48335
MB 880-48575/39	Method Blank	Total/NA	Water	8021B	
LCS 880-48575/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-48575/35	Lab Control Sample Dup	Total/NA	Water	8021B	
880-25343-A-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-25343-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

##### Analysis Batch: 48623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4214-3	MW-20	Total/NA	Water	8021B	
890-4214-4	MW-11	Total/NA	Water	8021B	
890-4214-6	MW-9	Total/NA	Water	8021B	
890-4214-7	MW-19	Total/NA	Water	8021B	
MB 880-48336/5-A	Method Blank	Total/NA	Water	8021B	48336
MB 880-48623/39	Method Blank	Total/NA	Water	8021B	
LCS 880-48623/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-48623/35	Lab Control Sample Dup	Total/NA	Water	8021B	

Eurofins Carlsbad

### QC Association Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

#### GC VOA (Continued)

#### Analysis Batch: 48623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25343-A-21 MS	Matrix Spike	Total/NA	Water	8021B	
880-25343-A-21 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

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### Lab Chronicle

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

**Client Sample ID: MW-7**  
Date Collected: 03/01/23 12:14  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-1**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48323	03/11/23 19:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/13/23 18:25	SM	EET MID

**Client Sample ID: MW-8**  
Date Collected: 03/01/23 12:03  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-2**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48323	03/11/23 19:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/13/23 18:25	SM	EET MID

**Client Sample ID: MW-20**  
Date Collected: 03/01/23 12:30  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-3**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48623	03/15/23 06:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/15/23 16:25	SM	EET MID

**Client Sample ID: MW-11**  
Date Collected: 03/01/23 12:32  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-4**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48623	03/15/23 06:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/15/23 16:25	SM	EET MID

**Client Sample ID: MW-12**  
Date Collected: 03/01/23 13:02  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-5**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 12:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/15/23 16:25	SM	EET MID

**Client Sample ID: MW-9**  
Date Collected: 03/01/23 13:20  
Date Received: 03/01/23 15:04

**Lab Sample ID: 890-4214-6**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48623	03/15/23 06:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/15/23 16:25	SM	EET MID

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### Lab Chronicle

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

**Client Sample ID: MW-19**  
**Date Collected: 03/01/23 13:24**  
**Date Received: 03/01/23 15:04**

**Lab Sample ID: 890-4214-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48623	03/15/23 07:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			48557	03/15/23 16:25	SM	EET MID

**Laboratory References:**

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

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### Accreditation/Certification Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

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### Method Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
5030B	Purge and Trap	SW846	EET MID

**Protocol References:**

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

**Laboratory References:**

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

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### Sample Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4214-1  
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-4214-1	MW-7	Water	03/01/23 12:14	03/01/23 15:04
890-4214-2	MW-8	Water	03/01/23 12:03	03/01/23 15:04
890-4214-3	MW-20	Water	03/01/23 12:30	03/01/23 15:04
890-4214-4	MW-11	Water	03/01/23 12:32	03/01/23 15:04
890-4214-5	MW-12	Water	03/01/23 13:02	03/01/23 15:04
890-4214-6	MW-9	Water	03/01/23 13:20	03/01/23 15:04
890-4214-7	MW-19	Water	03/01/23 13:24	03/01/23 15:04

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Environment Testing  
Xenco

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: \_\_\_\_\_

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Project Manager:	David Adkins	Bill to: (if different)	Plains All American Pipeline
Company Name:	Talon LPE	Company Name:	Attn: Camille Bryant
Address:	408 Texas St.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	SRS# 2002-10312
Phone:	575-441-4835	Email:	dadkins@talonlpe.com, mgomez@talonlpe.com

Work Order Comments	
Program: UST/PST	<input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting: Level II	<input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:	Lovington Deep		Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Location:	Lea, County		Due Date:			
Sampler's Name:	M. Gomez, N. Cox		TAT starts the day received by the lab, if received by 4:30pm			
PO #:	SRS# 2002-10312					
<b>SAMPLE RECEIPT</b>						
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Parameters
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:	-0.2			
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading:	5.8			
Total Containers:			Corrected Temperature:	5.6		



890-4214 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
MW-7	GW	3/1/23	12:14	N/A		3	X		DI Water: H <sub>2</sub> O	Email Analyticals to: CJBryan1@daalp.com Maochoe@daalp.com
MW-8			12:03							
MW-20			12:30							
MW-11			12:32							
MW-12			1:02							
MW-9			1:20							
MW-19			1:24							

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn  
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3-1-23 1504			

### Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-4214-1

SDG Number: Lea County

Login Number: 4214

List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

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### Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-4214-1

SDG Number: Lea County

Login Number: 4214

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 03/03/23 01:07 PM

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

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Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: David Adkins  
 Talon/LPE  
 408 W. Texas St.  
 Artesia, New Mexico 88210

Generated 3/16/2023 2:53:40 PM

## JOB DESCRIPTION

Lovington Deep  
 SDG NUMBER Lea County

## JOB NUMBER

890-4226-1

Eurofins Carlsbad  
 1089 N Canal St.  
 Carlsbad NM 88220



# Eurofins Carlsbad

## 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



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3/16/2023 2:53:40 PM

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

Client: Talon/LPE  
Project/Site: Lovington Deep

Laboratory Job ID: 890-4226-1  
SDG: Lea County

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## Definitions/Glossary

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4226-1  
 SDG: Lea County

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

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**Job ID: 890-4226-1**

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**Laboratory: Eurofins Carlsbad**

**Narrative**

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**Job Narrative  
890-4226-1**

**Receipt**

The samples were received on 3/2/2023 1:03 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

**GC VOA**

Method 8021B: The laboratory control sample (LCS) associated with analytical batch 880-48575 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-48575/70). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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### Client Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

**Client Sample ID: MW-1**

**Lab Sample ID: 890-4226-8**

Date Collected: 03/02/23 09:40

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 13:08	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 13:08	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 13:08	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00161</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 13:08	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 13:08	1
<b>Xylenes, Total</b>	<b>0.00161</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 13:08	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)	102		70 - 130					03/15/23 13:08	1
1,4-Difluorobenzene (Surr)	96		70 - 130					03/15/23 13:08	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00161</b>	<b>J</b>	0.00400	0.000657	mg/L			03/16/23 15:29	1

**Client Sample ID: MW-18**

**Lab Sample ID: 890-4226-9**

Date Collected: 03/02/23 10:20

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 13:34	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 13:34	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 13:34	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00159</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 13:34	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 13:34	1
<b>Xylenes, Total</b>	<b>0.00159</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 13:34	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)	103		70 - 130					03/15/23 13:34	1
1,4-Difluorobenzene (Surr)	89		70 - 130					03/15/23 13:34	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00159</b>	<b>J</b>	0.00400	0.000657	mg/L			03/16/23 15:29	1

**Client Sample ID: MW-16**

**Lab Sample ID: 890-4226-10**

Date Collected: 03/02/23 10:35

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 14:00	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 14:00	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 14:00	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00159</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 14:00	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 14:00	1
<b>Xylenes, Total</b>	<b>0.00159</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 14:00	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)	111		70 - 130					03/15/23 14:00	1
1,4-Difluorobenzene (Surr)	83		70 - 130					03/15/23 14:00	1

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### Client Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

**Client Sample ID: MW-16**

**Lab Sample ID: 890-4226-10**

Date Collected: 03/02/23 10:35

Matrix: Water

Date Received: 03/02/23 13:03

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00159	J	0.00400	0.000657	mg/L			03/16/23 15:29	1

**Client Sample ID: MW-3**

**Lab Sample ID: 890-4226-11**

Date Collected: 03/02/23 10:50

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 14:26	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 14:26	1
Ethylbenzene	0.0164		0.00200	0.000657	mg/L			03/15/23 14:26	1
m-Xylene & p-Xylene	0.00823		0.00400	0.000629	mg/L			03/15/23 14:26	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 14:26	1
Xylenes, Total	0.00823		0.00400	0.000642	mg/L			03/15/23 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130		03/15/23 14:26	1
1,4-Difluorobenzene (Surr)	85		70 - 130		03/15/23 14:26	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0246		0.00400	0.000657	mg/L			03/16/23 15:29	1

**Client Sample ID: MW-4**

**Lab Sample ID: 890-4226-12**

Date Collected: 03/02/23 11:20

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 14:52	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 14:52	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 14:52	1
m-Xylene & p-Xylene	0.00160	J	0.00400	0.000629	mg/L			03/15/23 14:52	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 14:52	1
Xylenes, Total	0.00160	J	0.00400	0.000642	mg/L			03/15/23 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130		03/15/23 14:52	1
1,4-Difluorobenzene (Surr)	77		70 - 130		03/15/23 14:52	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00160	J	0.00400	0.000657	mg/L			03/16/23 15:29	1

**Client Sample ID: MW-5**

**Lab Sample ID: 890-4226-13**

Date Collected: 03/02/23 11:40

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U *1	0.00200	0.000408	mg/L			03/15/23 15:19	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 15:19	1

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### Client Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

**Client Sample ID: MW-5**

**Lab Sample ID: 890-4226-13**

Date Collected: 03/02/23 11:40

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 15:19	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00161</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 15:19	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 15:19	1
<b>Xylenes, Total</b>	<b>0.00161</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 15:19	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)	108		70 - 130					03/15/23 15:19	1
1,4-Difluorobenzene (Surr)	7	S1-	70 - 130					03/15/23 15:19	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00161</b>	<b>J</b>	0.00400	0.000657	mg/L			03/16/23 15:29	1

**Client Sample ID: MW-15**

**Lab Sample ID: 890-4226-14**

Date Collected: 03/02/23 11:45

Matrix: Water

Date Received: 03/02/23 13:03

**Method: SW846 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 20:03	1
Toluene	<0.000367	U *-	0.00200	0.000367	mg/L			03/15/23 20:03	1
<b>Ethylbenzene</b>	<b>0.00352</b>		0.00200	0.000657	mg/L			03/15/23 20:03	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00181</b>	<b>J</b>	0.00400	0.000629	mg/L			03/15/23 20:03	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 20:03	1
<b>Xylenes, Total</b>	<b>0.00181</b>	<b>J</b>	0.00400	0.000642	mg/L			03/15/23 20:03	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)	102		70 - 130					03/15/23 20:03	1
1,4-Difluorobenzene (Surr)	80		70 - 130					03/15/23 20:03	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00533</b>		0.00400	0.000657	mg/L			03/16/23 15:42	1

### Surrogate Summary

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4226-1  
 SDG: Lea County

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-4226-8	MW-1	102	96
890-4226-9	MW-18	103	89
890-4226-10	MW-16	111	83
890-4226-11	MW-3	107	85
890-4226-12	MW-4	96	77
890-4226-13	MW-5	108	7 S1-
890-4226-14	MW-15	102	80
890-4226-14 MS	MW-15	106	101
890-4226-14 MSD	MW-15	107	113
LCS 880-48575/34	Lab Control Sample	97	104
LCS 880-48575/65	Lab Control Sample	112	105
LCSD 880-48575/35	Lab Control Sample Dup	107	112
LCSD 880-48575/66	Lab Control Sample Dup	121	86
MB 880-48335/5-A	Method Blank	61 S1-	89
MB 880-48575/39	Method Blank	65 S1-	89
MB 880-48575/70	Method Blank	65 S1-	86

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)  
 DFBZ = 1,4-Difluorobenzene (Surr)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

### QC Sample Results

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4226-1  
 SDG: Lea County

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

Lab Sample ID: MB 880-48335/5-A  
 Matrix: Water  
 Analysis Batch: 48575

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 48335

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.000408	U	0.00200	0.000408	mg/L		03/10/23 14:49	03/14/23 15:26	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L		03/10/23 14:49	03/14/23 15:26	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L		03/10/23 14:49	03/14/23 15:26	1
m-Xylene & p-Xylene	0.001585	J	0.00400	0.000629	mg/L		03/10/23 14:49	03/14/23 15:26	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L		03/10/23 14:49	03/14/23 15:26	1
Xylenes, Total	0.001585	J	0.00400	0.000642	mg/L		03/10/23 14:49	03/14/23 15:26	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)	61	S1-	70 - 130				03/10/23 14:49	03/14/23 15:26	1
1,4-Difluorobenzene (Surr)	89		70 - 130				03/10/23 14:49	03/14/23 15:26	1

Lab Sample ID: MB 880-48575/39  
 Matrix: Water  
 Analysis Batch: 48575

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 05:03	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 05:03	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 05:03	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 05:03	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 05:03	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 05:03	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)	65	S1-	70 - 130					03/15/23 05:03	1
1,4-Difluorobenzene (Surr)	89		70 - 130					03/15/23 05:03	1

Lab Sample ID: MB 880-48575/70  
 Matrix: Water  
 Analysis Batch: 48575

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/15/23 19:37	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/15/23 19:37	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/15/23 19:37	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/15/23 19:37	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/15/23 19:37	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/15/23 19:37	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)	65	S1-	70 - 130					03/15/23 19:37	1
1,4-Difluorobenzene (Surr)	86		70 - 130					03/15/23 19:37	1

### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

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

Lab Sample ID: LCS 880-48575/34

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	0.100	0.08598		mg/L		86	70 - 130	
Toluene	0.100	0.07419		mg/L		74	70 - 130	
Ethylbenzene	0.100	0.08449		mg/L		84	70 - 130	
m-Xylene & p-Xylene	0.200	0.1756		mg/L		88	70 - 130	
o-Xylene	0.100	0.08688		mg/L		87	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCS 880-48575/65

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	0.100	0.07557		mg/L		76	70 - 130	
Toluene	0.100	0.06835	*-	mg/L		68	70 - 130	
Ethylbenzene	0.100	0.07543		mg/L		75	70 - 130	
m-Xylene & p-Xylene	0.200	0.1592		mg/L		80	70 - 130	
o-Xylene	0.100	0.07871		mg/L		79	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-48575/35

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
Benzene	0.100	0.1079	*1	mg/L		108	70 - 130	23	20	
Toluene	0.100	0.08788		mg/L		88	70 - 130	17	20	
Ethylbenzene	0.100	0.09453		mg/L		95	70 - 130	11	20	
m-Xylene & p-Xylene	0.200	0.1962		mg/L		98	70 - 130	11	20	
o-Xylene	0.100	0.09739		mg/L		97	70 - 130	11	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-48575/66

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
Benzene	0.100	0.07670		mg/L		77	70 - 130	1	20	
Toluene	0.100	0.07333		mg/L		73	70 - 130	7	20	
Ethylbenzene	0.100	0.08013		mg/L		80	70 - 130	6	20	

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### QC Sample Results

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

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

Lab Sample ID: LCSD 880-48575/66

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.1682		mg/L		84	70 - 130	5	20
o-Xylene	0.100	0.08246		mg/L		82	70 - 130	5	20
<b>Surrogate</b>									
		<b>LCSD</b>	<b>LCSD</b>						
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)		121		70 - 130					
1,4-Difluorobenzene (Surr)		86		70 - 130					

Lab Sample ID: 890-4226-14 MS

Client Sample ID: MW-15

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000408	U	0.100	0.09496		mg/L		95	70 - 130		
Toluene	<0.000367	U *-	0.100	0.08686		mg/L		87	70 - 130		
Ethylbenzene	0.00352		0.100	0.09488		mg/L		91	70 - 130		
m-Xylene & p-Xylene	0.00181	J	0.200	0.1934		mg/L		96	70 - 130		
o-Xylene	<0.000642	U	0.100	0.09375		mg/L		94	70 - 130		
<b>Surrogate</b>											
				<b>MS</b>	<b>MS</b>						
				<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)				106		70 - 130					
1,4-Difluorobenzene (Surr)				101		70 - 130					

Lab Sample ID: 890-4226-14 MSD

Client Sample ID: MW-15

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 48575

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000408	U	0.100	0.1063		mg/L		106	70 - 130	11	25
Toluene	<0.000367	U *-	0.100	0.08873		mg/L		89	70 - 130	2	25
Ethylbenzene	0.00352		0.100	0.09845		mg/L		95	70 - 130	4	25
m-Xylene & p-Xylene	0.00181	J	0.200	0.2005		mg/L		99	70 - 130	4	25
o-Xylene	<0.000642	U	0.100	0.09727		mg/L		97	70 - 130	4	25
<b>Surrogate</b>											
				<b>MSD</b>	<b>MSD</b>						
				<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)				107		70 - 130					
1,4-Difluorobenzene (Surr)				113		70 - 130					

### QC Association Summary

Client: Talon/LPE  
 Project/Site: Lovington Deep

Job ID: 890-4226-1  
 SDG: Lea County

#### GC VOA

##### Prep Batch: 48335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48335/5-A	Method Blank	Total/NA	Water	5035	

##### Analysis Batch: 48575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4226-8	MW-1	Total/NA	Water	8021B	
890-4226-9	MW-18	Total/NA	Water	8021B	
890-4226-10	MW-16	Total/NA	Water	8021B	
890-4226-11	MW-3	Total/NA	Water	8021B	
890-4226-12	MW-4	Total/NA	Water	8021B	
890-4226-13	MW-5	Total/NA	Water	8021B	
890-4226-14	MW-15	Total/NA	Water	8021B	
MB 880-48335/5-A	Method Blank	Total/NA	Water	8021B	48335
MB 880-48575/39	Method Blank	Total/NA	Water	8021B	
MB 880-48575/70	Method Blank	Total/NA	Water	8021B	
LCS 880-48575/34	Lab Control Sample	Total/NA	Water	8021B	
LCS 880-48575/65	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-48575/35	Lab Control Sample Dup	Total/NA	Water	8021B	
LCSD 880-48575/66	Lab Control Sample Dup	Total/NA	Water	8021B	
890-4226-14 MS	MW-15	Total/NA	Water	8021B	
890-4226-14 MSD	MW-15	Total/NA	Water	8021B	

##### Analysis Batch: 48785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4226-8	MW-1	Total/NA	Water	Total BTEX	
890-4226-9	MW-18	Total/NA	Water	Total BTEX	
890-4226-10	MW-16	Total/NA	Water	Total BTEX	
890-4226-11	MW-3	Total/NA	Water	Total BTEX	
890-4226-12	MW-4	Total/NA	Water	Total BTEX	
890-4226-13	MW-5	Total/NA	Water	Total BTEX	
890-4226-14	MW-15	Total/NA	Water	Total BTEX	

### Lab Chronicle

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

**Client Sample ID: MW-1**  
Date Collected: 03/02/23 09:40  
Date Received: 03/02/23 13:03

**Lab Sample ID: 890-4226-8**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 13:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:29	SM	EET MID

**Client Sample ID: MW-18**  
Date Collected: 03/02/23 10:20  
Date Received: 03/02/23 13:03

**Lab Sample ID: 890-4226-9**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:29	SM	EET MID

**Client Sample ID: MW-16**  
Date Collected: 03/02/23 10:35  
Date Received: 03/02/23 13:03

**Lab Sample ID: 890-4226-10**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 14:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:29	SM	EET MID

**Client Sample ID: MW-3**  
Date Collected: 03/02/23 10:50  
Date Received: 03/02/23 13:03

**Lab Sample ID: 890-4226-11**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 14:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:29	SM	EET MID

**Client Sample ID: MW-4**  
Date Collected: 03/02/23 11:20  
Date Received: 03/02/23 13:03

**Lab Sample ID: 890-4226-12**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 14:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:29	SM	EET MID

**Client Sample ID: MW-5**  
Date Collected: 03/02/23 11:40  
Date Received: 03/02/23 13:03

**Lab Sample ID: 890-4226-13**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 15:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:29	SM	EET MID

Eurofins Carlsbad

### Lab Chronicle

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

**Client Sample ID: MW-15**  
**Date Collected: 03/02/23 11:45**  
**Date Received: 03/02/23 13:03**

**Lab Sample ID: 890-4226-14**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	48575	03/15/23 20:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48785	03/16/23 15:42	SM	EET MID

**Laboratory References:**

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

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### Accreditation/Certification Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

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### Method Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
5030B	Purge and Trap	SW846	EET MID

**Protocol References:**

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

**Laboratory References:**

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

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### Sample Summary

Client: Talon/LPE  
Project/Site: Lovington Deep

Job ID: 890-4226-1  
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-4226-8	MW-1	Water	03/02/23 09:40	03/02/23 13:03
890-4226-9	MW-18	Water	03/02/23 10:20	03/02/23 13:03
890-4226-10	MW-16	Water	03/02/23 10:35	03/02/23 13:03
890-4226-11	MW-3	Water	03/02/23 10:50	03/02/23 13:03
890-4226-12	MW-4	Water	03/02/23 11:20	03/02/23 13:03
890-4226-13	MW-5	Water	03/02/23 11:40	03/02/23 13:03
890-4226-14	MW-15	Water	03/02/23 11:45	03/02/23 13:03

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Environment Testing  
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
EL Paso, TX (915) 885-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

### Chain of Custody

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

Project Manager:	David Adkins	Bill to: (if different)	Plains All American Pipeline
Company Name:	Talon LPE	Company Name:	Ahn, Carnille Bryant
Address:	403 Texas St.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	SRS# 2002-10312
Phone:	575-441-4835	Email:	dadkins@talonline.com, mgomez@talonline.com

Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____	

Project Name:	Livington Deep	Turn Around	Pres Code	ANALYSIS REQUEST	Preservative Codes
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			None: NO DI Water: H <sub>2</sub> O
Project Location:	Lea, County	Due Date:			Cool: Cool MeOH: Me
Sampler's Name:	M. Gomez, N. Rose	TAT starts the day received by the lab, if received by 4:30pm			HCL: HC HNO <sub>3</sub> : HN
PO #:	SRS# 2002-10312				H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>
<b>SAMPLE RECEIPT</b>		Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		H <sub>3</sub> PO <sub>4</sub> : HP
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:			NaHSO <sub>4</sub> : NABIS
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input type="checkbox"/> M/A <input type="checkbox"/>	Correction Factor:			Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>
Sample Custody Seals:	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Temperature Reading:			Zn Acetate+NaOH: Zn
Total Containers:		Corrected Temperature:			NaOH+Ascorbic Acid: SAPC



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Sample Comments
MU-1	GW	3/7/23	9:40	N/A		3	BTEX 8021B	Email Analyticals to: CJBryant@paalp.com Maochoa@paalp.com
MU-18			10:20					
MU-16			10:35					
MU-3			10:50					
MU-4			11:20					
MU-5			11:40					
MU-15			11:45					

Total 200.7 / 6010    200.8 / 6020:    8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed    TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U    Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3-2-23 15:03			

### Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-4226-1

SDG Number: Lea County

**Login Number: 4226**

**List Number: 1**

**Creator: Stutzman, Amanda**

**List Source: Eurofins Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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### Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-4226-1

SDG Number: Lea County

Login Number: 4226

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 03/03/23 01:07 PM

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

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### Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-4226-1

SDG Number: Lea County

Login Number: 4226

List Number: 3

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 03/15/23 09:33 AM

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

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



# Analytical Report Rev. 1

**Prepared for:**

David Adkins  
Talon LPE  
2901 S. State Hwy 349  
Midland, TX 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Location: Lea County  
Lab Order Number: 3F08005



**Current Certification**

Report Date: 07/11/23

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-3	3F08005-01	Water	06/07/23 08:57	06-08-2023 10:48
MW-4	3F08005-02	Water	06/07/23 09:30	06-08-2023 10:48
MW-18	3F08005-03	Water	06/07/23 10:16	06-08-2023 10:48
MW-5	3F08005-04	Water	06/07/23 10:49	06-08-2023 10:48
MW-1	3F08005-05	Water	06/07/23 11:25	06-08-2023 10:48
MW-15	3F08005-06	Water	06/07/23 12:03	06-08-2023 10:48
MW-20	3F08005-07	Water	06/07/23 10:47	06-08-2023 10:48
MW-19	3F08005-08	Water	06/07/23 12:18	06-08-2023 10:48

This report was initially sent with the wrong Project name and number. This revised report reflects that correction.

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-3**  
**3F08005-01 (Water)**

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

**BTEX by 8021B**

<b>Total BTEX</b>	<b>0.00373</b>	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 00:02	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 00:02	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B
<b>Ethylbenzene</b>	<b>0.00373</b>	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B
Surrogate: 4-Bromofluorobenzene	104 %		80-120		P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B
Surrogate: 1,4-Difluorobenzene	97.7 %		80-120		P3F0912	06/09/23 13:33	06/10/23 00:02	EPA 8021B

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-4**  
**3F08005-02 (Water)**

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

**BTEX by 8021B**

Total BTEX	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 00:23	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Surrogate: 4-Bromofluorobenzene	104 %		80-120		P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B
Surrogate: 1,4-Difluorobenzene	97.5 %		80-120		P3F0912	06/09/23 13:33	06/10/23 00:23	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-18**  
**3F08005-03 (Water)**

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

**BTEX by 8021B**

Analyte	Limit Result	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 00:44	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 00:44	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %			P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B
<i>Surrogate: 1,4-Difluorobenzene</i>		95.5 %			P3F0912	06/09/23 13:33	06/10/23 00:44	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-5**  
**3F08005-04 (Water)**

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

**BTEX by 8021B**

Total BTEX	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 01:05	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 01:05	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B
<i>Surrogate: 4-Bromofluorobenzene</i>	98.8 %		80-120		P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B
<i>Surrogate: 1,4-Difluorobenzene</i>	97.5 %		80-120		P3F0912	06/09/23 13:33	06/10/23 01:05	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-1**  
**3F08005-05 (Water)**

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

**BTEX by 8021B**

Total BTEX	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 01:26	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Surrogate: 4-Bromofluorobenzene	104 %		80-120		P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B
Surrogate: 1,4-Difluorobenzene	99.3 %		80-120		P3F0912	06/09/23 13:33	06/10/23 01:26	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-15**  
**3F08005-06 (Water)**

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

**BTEX by 8021B**

Analyte	Limit Result	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total BTEX</b>	<b>0.00148</b>	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 01:47	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 01:47	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B
<b>Ethylbenzene</b>	<b>0.00148</b>	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B
Surrogate: 4-Bromofluorobenzene	101 %	80-120			P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B
Surrogate: 1,4-Difluorobenzene	97.9 %	80-120			P3F0912	06/09/23 13:33	06/10/23 01:47	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-20**  
**3F08005-07 (Water)**

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

**BTEX by 8021B**

Analyte	Limit Result	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 02:09	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Surrogate: 4-Bromofluorobenzene	103 %		80-120		P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B
Surrogate: 1,4-Difluorobenzene	95.5 %		80-120		P3F0912	06/09/23 13:33	06/10/23 02:09	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-19**  
**3F08005-08 (Water)**

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

**BTEX by 8021B**

<b>Total BTEX</b>	<b>0.000710</b>	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	06/09/23 13:33	06/10/23 02:30	EPA 8021B

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Surrogate: 4-Bromofluorobenzene	106 %		80-120		P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B
Surrogate: 1,4-Difluorobenzene	95.9 %		80-120		P3F0912	06/09/23 13:33	06/10/23 02:30	EPA 8021B

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F0912 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P3F0912-BLK1)**

Prepared & Analyzed: 06/09/23

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	0.122		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			

**LCS (P3F0912-BS1)**

Prepared & Analyzed: 06/09/23

Benzene	0.120	0.00100	mg/L	0.100		120	80-120			
Toluene	0.0948	0.00100	"	0.100		94.8	80-120			
Ethylbenzene	0.0981	0.00100	"	0.100		98.1	80-120			
Xylene (p/m)	0.197	0.00200	"	0.200		98.6	80-120			
Xylene (o)	0.0925	0.00100	"	0.100		92.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		99.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.0	80-120			

**LCS Dup (P3F0912-BSD1)**

Prepared & Analyzed: 06/09/23

Benzene	0.118	0.00100	mg/L	0.100		118	80-120	0.991	20	
Toluene	0.0979	0.00100	"	0.100		97.9	80-120	3.20	20	
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120	4.32	20	
Xylene (p/m)	0.205	0.00200	"	0.200		102	80-120	3.83	20	
Xylene (o)	0.0940	0.00100	"	0.100		94.0	80-120	1.67	20	
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		88.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.100		"	0.120		83.5	80-120			

**Calibration Blank (P3F0912-CCB1)**

Prepared & Analyzed: 06/09/23

Benzene	0.160		ug/l							
Toluene	0.250		"							
Ethylbenzene	0.350		"							
Xylene (p/m)	0.840		"							
Xylene (o)	0.510		"							
Surrogate: 4-Bromofluorobenzene	0.132		"	0.120		110	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		99.6	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F0912 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Blank (P3F0912-CCB2)**

Prepared & Analyzed: 06/09/23

Benzene	0.00		ug/l							
Toluene	0.210		"							
Ethylbenzene	0.400		"							
Xylene (p/m)	0.780		"							
Xylene (o)	0.450		"							
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	80-120			

**Calibration Check (P3F0912-CCV1)**

Prepared & Analyzed: 06/09/23

Benzene	0.120	0.00100	mg/L	0.100		120	80-120			
Toluene	0.0953	0.00100	"	0.100		95.3	80-120			
Ethylbenzene	0.0950	0.00100	"	0.100		95.0	80-120			
Xylene (p/m)	0.199	0.00200	"	0.200		99.7	80-120			
Xylene (o)	0.0963	0.00100	"	0.100		96.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.4	80-120			

**Calibration Check (P3F0912-CCV2)**

Prepared & Analyzed: 06/09/23

Benzene	0.119	0.00100	mg/L	0.100		119	80-120			
Toluene	0.0989	0.00100	"	0.100		98.9	80-120			
Ethylbenzene	0.0959	0.00100	"	0.100		95.9	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200		101	80-120			
Xylene (o)	0.0936	0.00100	"	0.100		93.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.0984		"	0.120		82.0	80-120			

**Calibration Check (P3F0912-CCV3)**

Prepared: 06/09/23 Analyzed: 06/10/23

Benzene	0.113	0.00100	mg/L	0.100		113	80-120			
Toluene	0.0938	0.00100	"	0.100		93.8	80-120			
Ethylbenzene	0.0938	0.00100	"	0.100		93.8	80-120			
Xylene (p/m)	0.196	0.00200	"	0.200		98.1	80-120			
Xylene (o)	0.0899	0.00100	"	0.100		89.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.6	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**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 P3F0912 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike (P3F0912-MS1)</b>	<b>Source: 3F08001-10</b>			Prepared: 06/09/23 Analyzed: 06/10/23						
Benzene	0.120	0.00100	mg/L	0.100	ND	120	80-120			
Toluene	0.0983	0.00100	"	0.100	ND	98.3	80-120			
Ethylbenzene	0.101	0.00100	"	0.100	ND	101	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200	ND	100	80-120			
Xylene (o)	0.0904	0.00100	"	0.100	ND	90.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.117		"	0.120		97.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.4	80-120			

<b>Matrix Spike Dup (P3F0912-MSD1)</b>	<b>Source: 3F08001-10</b>			Prepared: 06/09/23 Analyzed: 06/10/23						
Benzene	0.120	0.00100	mg/L	0.100	ND	120	80-120	0.267	20	
Toluene	0.0980	0.00100	"	0.100	ND	98.0	80-120	0.346	20	
Ethylbenzene	0.102	0.00100	"	0.100	ND	102	80-120	0.394	20	
Xylene (p/m)	0.201	0.00200	"	0.200	ND	101	80-120	0.199	20	
Xylene (o)	0.0907	0.00100	"	0.100	ND	90.7	80-120	0.309	20	
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		99.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.0	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**Notes and Definitions**

- ROI Received on Ice
- pH1 The Regulatory Holding time for pH is 15 minutes, Analysis should be done in the field.
- 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: 7/11/2023

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



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

L: \_\_\_\_\_ CH: \_\_\_\_\_ W: \_\_\_\_\_  
Phone: 432-686-7235

Project Manager: David Adkins

Project Name: Lovington Deep

Company Name: Talon LPE

Project #: Plains All American Pipeline

Company Address: 408 Texas St.

Project Loc: Lea County

City/State/zip: Artesia, NM 88210

PO #: SRS # 2002-10312

Telephone No: 575-441-4835

Fax No: \_\_\_\_\_  
Report Format:  Standard  TRRP  NPDES

Sampler Signature: Matthew Benz e-mail: adkins@talonlpe.com, mgomez@talonlpe.com

(lab use only)

ORDER #: 3F08005

Preservation & # of Containers

Matrix

Analyze For:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: TX 1005 TX 1006	Anions (Cl, SO <sub>4</sub> , Alkalinity)	BTEX 8021B/5030 or BTEX 8260	TCLP: <input type="checkbox"/>	TOTAL: <input type="checkbox"/>	RUSH TAT (Pre-Schedule) 24, 48, 72 h	Standard TAT	
2	MU-3			6/7/23	8:57		3	3								GW							X	
3	MU-4				4:30																			
4	MU-18				10:16																			
5	MU-5				10:49																			
6	MU-1				11:25																			
7	MU-15				12:03																			
8	MU-20				10:47																			
9	MU-19				12:18																			

Special Instructions: Email analytics to: CSBryant@paulp.com, M.achon@paulp.com

Laboratory Comments: 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?  UPS  DHL  FedEx   
Temperature Upon Receipt: 2.0 °C Thermometer: 13  
Adjuster: NS

Relinquished by: <u>Matthew Benz</u>	Date: <u>6/7/23</u>	Time: <u>1:20</u>	Received by: <u>Camilla</u>	Date: <u>6-7-23</u>	Time: <u>10:20</u>
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____

Relinquished by: _____	Date: _____	Time: _____	Received by: <u>Matthew Benz</u>	Date: <u>6/8/23</u>	Time: <u>10:44</u>
PBEL_COC_2021_1	Revision #: 2021_1	Effective Date: 9-21-21			



ORIGIN ID: H0BA (5/5) 392-7550  
 \* MAIL SERVICES ETC LLC  
 4008 N GRIMES  
 HOBBS, NM 88240  
 UNITED STATES US

SHIP DATE: 07JUN23  
 ACTWGT: 28.00 LB MAN  
 CAD: 0103352/CAFE3313  
 DIMS: 27x15x14 IN  
 BILL SENDER

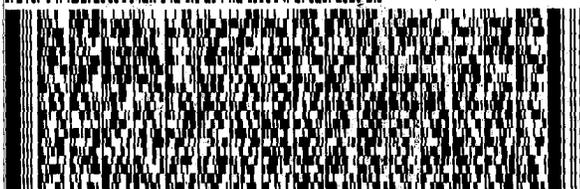
PERMAIN BASIN ENVIRONMENTAL LAB  
 PERMAIN BASIN ENVIRONMENTAL LAB  
 1400 RANKIN HWY

MIDLAND TX 79701

(432) 686-7235 REF:

INVL: PO: DEPT:

565CZ/25RB/65A2



FedEx  
Express



1191215062001U

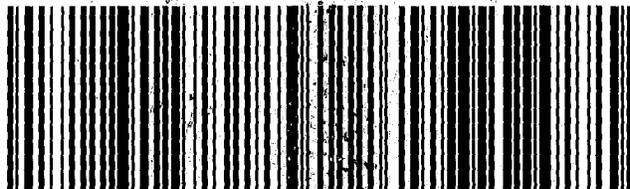
TRK# 6424 9945 2383  
 0201

THU - 08 JUN 12:00P  
 PRIORITY OVERNIGHT

41 MAFA

79701  
 TX-US LBB

Part # 156148-434 MTW EXP 10/23



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



## Analytical Report

**Prepared for:**

David Adkins  
Talon LPE  
2901 S. State Hwy 349  
Midland, TX 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Location: Lea County, NM  
Lab Order Number: 3F09004



**Current Certification**

Report Date: 07/05/23

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-16	3F09004-01	Water	06/08/23 08:45	06-09-2023 10:51
MW-12	3F09004-02	Water	06/08/23 08:55	06-09-2023 10:51
MW-8	3F09004-03	Water	06/08/23 09:00	06-09-2023 10:51
MW-11	3F09004-04	Water	06/08/23 09:39	06-09-2023 10:51
MW-9	3F09004-05	Water	06/08/23 09:50	06-09-2023 10:51

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-16**  
**3F09004-01 (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	P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	101 %		80-120		P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	96.8 %		80-120		P3F0912	06/09/23 13:33	06/10/23 02:51	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-12**  
**3F09004-02 (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	P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	101 %		80-120		P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	98.6 %		80-120		P3F1412	06/14/23 12:31	06/14/23 15:14	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-8**  
**3F09004-03 (Water)**

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

**Organics by GC**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	101 %		80-120		P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	99.2 %		80-120		P3F1412	06/14/23 12:31	06/14/23 15:35	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-11**  
**3F09004-04 (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	P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	101 %		80-120		P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	99.9 %		80-120		P3F1412	06/14/23 12:31	06/14/23 15:55	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-9**  
**3F09004-05 (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	P3F1412	06/14/23 12:31	06/14/23 16:16	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 16:16	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 16:16	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 16:16	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3F1412	06/14/23 12:31	06/14/23 16:16	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>101 %</i>	<i>80-120</i>		<i>P3F1412</i>	<i>06/14/23 12:31</i>	<i>06/14/23 16:16</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>		<i>99.6 %</i>	<i>80-120</i>		<i>P3F1412</i>	<i>06/14/23 12:31</i>	<i>06/14/23 16:16</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F0912 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P3F0912-BLK1)**

Prepared & Analyzed: 06/09/23

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	0.122		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			

**LCS (P3F0912-BS1)**

Prepared & Analyzed: 06/09/23

Benzene	0.120	0.00100	mg/L	0.100		120	80-120			
Toluene	0.0948	0.00100	"	0.100		94.8	80-120			
Ethylbenzene	0.0981	0.00100	"	0.100		98.1	80-120			
Xylene (p/m)	0.197	0.00200	"	0.200		98.6	80-120			
Xylene (o)	0.0925	0.00100	"	0.100		92.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		99.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.0	80-120			

**LCS Dup (P3F0912-BSD1)**

Prepared & Analyzed: 06/09/23

Benzene	0.118	0.00100	mg/L	0.100		118	80-120	0.991	20	
Toluene	0.0979	0.00100	"	0.100		97.9	80-120	3.20	20	
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120	4.32	20	
Xylene (p/m)	0.205	0.00200	"	0.200		102	80-120	3.83	20	
Xylene (o)	0.0940	0.00100	"	0.100		94.0	80-120	1.67	20	
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		88.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.100		"	0.120		83.5	80-120			

**Calibration Blank (P3F0912-CCB1)**

Prepared & Analyzed: 06/09/23

Benzene	0.160		ug/l							
Toluene	0.250		"							
Ethylbenzene	0.350		"							
Xylene (p/m)	0.840		"							
Xylene (o)	0.510		"							
Surrogate: 4-Bromofluorobenzene	0.132		"	0.120		110	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		99.6	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F0912 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Blank (P3F0912-CCB2)**

Prepared & Analyzed: 06/09/23

Benzene	0.00		ug/l							
Toluene	0.210		"							
Ethylbenzene	0.400		"							
Xylene (p/m)	0.780		"							
Xylene (o)	0.450		"							
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	80-120			

**Calibration Check (P3F0912-CCV1)**

Prepared & Analyzed: 06/09/23

Benzene	0.120	0.00100	mg/L	0.100		120	80-120			
Toluene	0.0953	0.00100	"	0.100		95.3	80-120			
Ethylbenzene	0.0950	0.00100	"	0.100		95.0	80-120			
Xylene (p/m)	0.199	0.00200	"	0.200		99.7	80-120			
Xylene (o)	0.0963	0.00100	"	0.100		96.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.4	80-120			

**Calibration Check (P3F0912-CCV2)**

Prepared & Analyzed: 06/09/23

Benzene	0.119	0.00100	mg/L	0.100		119	80-120			
Toluene	0.0989	0.00100	"	0.100		98.9	80-120			
Ethylbenzene	0.0959	0.00100	"	0.100		95.9	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200		101	80-120			
Xylene (o)	0.0936	0.00100	"	0.100		93.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.0984		"	0.120		82.0	80-120			

**Calibration Check (P3F0912-CCV3)**

Prepared: 06/09/23 Analyzed: 06/10/23

Benzene	0.113	0.00100	mg/L	0.100		113	80-120			
Toluene	0.0938	0.00100	"	0.100		93.8	80-120			
Ethylbenzene	0.0938	0.00100	"	0.100		93.8	80-120			
Xylene (p/m)	0.196	0.00200	"	0.200		98.1	80-120			
Xylene (o)	0.0899	0.00100	"	0.100		89.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.6	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F0912 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike (P3F0912-MS1)</b>	<b>Source: 3F08001-10</b>			Prepared: 06/09/23 Analyzed: 06/10/23						
Benzene	0.120	0.00100	mg/L	0.100	ND	120	80-120			
Toluene	0.0983	0.00100	"	0.100	ND	98.3	80-120			
Ethylbenzene	0.101	0.00100	"	0.100	ND	101	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200	ND	100	80-120			
Xylene (o)	0.0904	0.00100	"	0.100	ND	90.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.117		"	0.120		97.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.4	80-120			

<b>Matrix Spike Dup (P3F0912-MSD1)</b>	<b>Source: 3F08001-10</b>			Prepared: 06/09/23 Analyzed: 06/10/23						
Benzene	0.120	0.00100	mg/L	0.100	ND	120	80-120	0.267	20	
Toluene	0.0980	0.00100	"	0.100	ND	98.0	80-120	0.346	20	
Ethylbenzene	0.102	0.00100	"	0.100	ND	102	80-120	0.394	20	
Xylene (p/m)	0.201	0.00200	"	0.200	ND	101	80-120	0.199	20	
Xylene (o)	0.0907	0.00100	"	0.100	ND	90.7	80-120	0.309	20	
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		99.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.0	80-120			

**Batch P3F1412 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P3F1412-BLK1)</b>	Prepared & Analyzed: 06/14/23									
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	0.117		"	0.120		97.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		99.2	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F1412 - \*\*\* DEFAULT PREP \*\*\***

<b>LCS (P3F1412-BS1)</b>										
Prepared & Analyzed: 06/14/23										
Benzene	0.0884	0.00100	mg/L	0.100		88.4	80-120			
Toluene	0.0807	0.00100	"	0.100		80.7	80-120			
Ethylbenzene	0.0868	0.00100	"	0.100		86.8	80-120			
Xylene (p/m)	0.173	0.00200	"	0.200		86.3	80-120			
Xylene (o)	0.0803	0.00100	"	0.100		80.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.130		"	0.120		108	80-120			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.120		102	80-120			

<b>LCS Dup (P3F1412-BSD1)</b>										
Prepared & Analyzed: 06/14/23										
Benzene	0.0907	0.00100	mg/L	0.100		90.7	80-120	2.54	20	
Toluene	0.0822	0.00100	"	0.100		82.2	80-120	1.87	20	
Ethylbenzene	0.0879	0.00100	"	0.100		87.9	80-120	1.18	20	
Xylene (p/m)	0.173	0.00200	"	0.200		86.4	80-120	0.0811	20	
Xylene (o)	0.0804	0.00100	"	0.100		80.4	80-120	0.137	20	
Surrogate: 4-Bromofluorobenzene	0.126		"	0.120		105	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			

<b>Calibration Blank (P3F1412-CCB1)</b>										
Prepared & Analyzed: 06/14/23										
Benzene	0.100		ug/l							
Toluene	0.00		"							
Ethylbenzene	0.180		"							
Xylene (p/m)	0.400		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.7	80-120			

<b>Calibration Blank (P3F1412-CCB2)</b>										
Prepared & Analyzed: 06/14/23										
Benzene	0.250		ug/l							
Toluene	0.340		"							
Ethylbenzene	0.250		"							
Xylene (p/m)	1.50		"							
Xylene (o)	0.470		"							
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.7	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3F1412 - \*\*\* DEFAULT PREP \*\*\***

<b>Calibration Check (P3F1412-CCV1)</b>				Prepared & Analyzed: 06/14/23						
Benzene	0.101	0.00100	mg/L	0.100		101	80-120			
Toluene	0.0932	0.00100	"	0.100		93.2	80-120			
Ethylbenzene	0.0940	0.00100	"	0.100		94.0	80-120			
Xylene (p/m)	0.196	0.00200	"	0.200		97.9	80-120			
Xylene (o)	0.0918	0.00100	"	0.100		91.8	80-120			
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		104	80-120			
Surrogate: 1,4-Difluorobenzene	0.123		"	0.120		102	80-120			

<b>Calibration Check (P3F1412-CCV2)</b>				Prepared & Analyzed: 06/14/23						
Benzene	0.106	0.00100	mg/L	0.100		106	80-120			
Toluene	0.0983	0.00100	"	0.100		98.3	80-120			
Ethylbenzene	0.0971	0.00100	"	0.100		97.1	80-120			
Xylene (p/m)	0.203	0.00200	"	0.200		102	80-120			
Xylene (o)	0.0946	0.00100	"	0.100		94.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.129		"	0.120		108	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		100	80-120			

<b>Calibration Check (P3F1412-CCV3)</b>				Prepared & Analyzed: 06/14/23						
Benzene	0.0894	0.00100	mg/L	0.100		89.4	80-120			
Toluene	0.0812	0.00100	"	0.100		81.2	80-120			
Ethylbenzene	0.0816	0.00100	"	0.100		81.6	80-120			
Xylene (p/m)	0.172	0.00200	"	0.200		85.8	80-120			
Xylene (o)	0.0807	0.00100	"	0.100		80.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	80-120			
Surrogate: 1,4-Difluorobenzene	0.123		"	0.120		103	80-120			

<b>Matrix Spike (P3F1412-MS1)</b>				Source: 3F09004-02		Prepared & Analyzed: 06/14/23				
Benzene	0.101	0.00100	mg/L	0.100	ND	101	80-120			
Toluene	0.0900	0.00100	"	0.100	ND	90.0	80-120			
Ethylbenzene	0.0947	0.00100	"	0.100	0.000570	94.1	80-120			
Xylene (p/m)	0.188	0.00200	"	0.200	ND	94.0	80-120			
Xylene (o)	0.0855	0.00100	"	0.100	ND	85.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		107	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		98.9	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**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 P3F1412 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike Dup (P3F1412-MSD1)</b>	<b>Source: 3F09004-02</b>			<b>Prepared &amp; Analyzed: 06/14/23</b>						
Benzene	0.0952	0.00100	mg/L	0.100	ND	95.2	80-120	5.99	20	
Toluene	0.0870	0.00100	"	0.100	ND	87.0	80-120	3.44	20	
Ethylbenzene	0.0911	0.00100	"	0.100	0.000570	90.5	80-120	3.93	20	
Xylene (p/m)	0.180	0.00200	"	0.200	ND	90.2	80-120	4.07	20	
Xylene (o)	0.0836	0.00100	"	0.100	ND	83.6	80-120	2.21	20	
Surrogate: 4-Bromofluorobenzene	0.126		"	0.120		105	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.2	80-120			

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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: 7/5/2023

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.

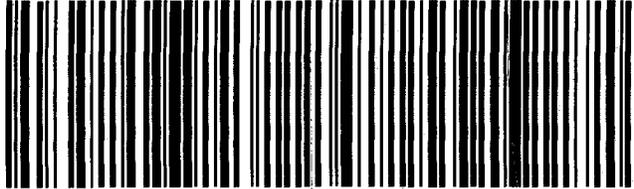
Permian Basin Environmental Lab, L.P.

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Part # 156148-434 MTW EXP 10/23



TX-US LBB  
79701

# 41 MAF

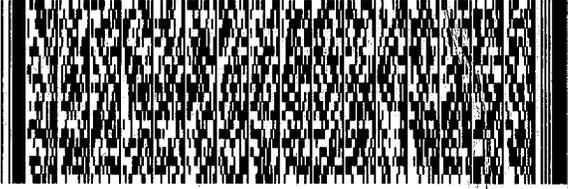
FRI - 09 JUN 12:00P  
PRIORITY OVERNIGHT

TRK# 0201  
6424 9945 2420

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J191219062001uv



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DEPT: PO: INV: REF: (432) 686-7235

MIDLAND TX 79701

565CZ/29A8/05N2

PERMIAN BASIN ENVIRONMENTAL LAB  
1400 RANKIN HWY  
MIDLAND TX 79701

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<p>SHIP DATE: 08JUN23 ACTMGT: 28.00 LB MAN CAD: 010336Z/CFFE3313 DIMS: 25X16X14 IN BILL SENDER</p>	<p>ORIGIN ID: HOBA (6/5) 392-7560 MAIL SERVICES ETC LLC 4008 N GRIMES HOBS, NM 88240 UNITED STATES US</p>
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3F09004

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



# Analytical Report

**Prepared for:**

David Adkins  
Talon LPE  
2901 S. State Hwy 349  
Midland, TX 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Location: Lea County, NM  
Lab Order Number: 3107002



**Current Certification**

Report Date: 09/14/23

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-11	3107002-01	Water	09/05/23 10:38	09-07-2023 15:13
MW-8	3107002-02	Water	09/05/23 11:28	09-07-2023 15:13
MW-3	3107002-03	Water	09/05/23 12:08	09-07-2023 15:13
MW-9	3107002-04	Water	09/05/23 12:26	09-07-2023 15:13
MW-1	3107002-05	Water	09/05/23 12:45	09-07-2023 15:13
MW-4	3107002-06	Water	09/05/23 13:09	09-07-2023 15:13
MW-12	3107002-07	Water	09/05/23 13:34	09-07-2023 15:13
MW-16	3107002-08	Water	09/05/23 09:49	09-07-2023 15:13
MW-15	3107002-09	Water	09/05/23 11:41	09-07-2023 15:13
MW-5	3107002-10	Water	09/05/23 12:24	09-07-2023 15:13
MW-18	3107002-11	Water	09/05/23 12:55	09-07-2023 15:13
MW-20	3107002-12	Water	09/05/23 09:14	09-07-2023 15:13
MW-19	3107002-13	Water	09/05/23 09:54	09-07-2023 15:13

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-11**  
**3107002-01 (Water)**

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

**BTEX by 8021B**

Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 00:23	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	88.3 %		80-120		P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	97.8 %		80-120		P310806	09/08/23 17:41	09/09/23 00:23	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-8**  
**3107002-02 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 01:33	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 01:33	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:33	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:33	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:33	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:33	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:33	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>90.0 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 01:33</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>97.9 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 01:33</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-3**  
**3107002-03 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total BTEX</b>	<b>0.0103</b>	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
<b>Xylenes (total)</b>	<b>0.00286</b>	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 01:56	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
<b>Ethylbenzene</b>	<b>0.00740</b>	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
<b>Xylene (p/m)</b>	<b>0.00286</b>	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	88.6 %		80-120		P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	97.9 %		80-120		P310806	09/08/23 17:41	09/09/23 01:56	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-9**  
**3107002-04 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 02:19	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	90.3 %		80-120		P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	98.8 %		80-120		P310806	09/08/23 17:41	09/09/23 02:19	EPA 8021B	

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

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 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-1**  
**3107002-05 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 02:42	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 02:42	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:42	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:42	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:42	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:42	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 02:42	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>89.4 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 02:42</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>98.3 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 02:42</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-4**  
**3107002-06 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 03:05	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 03:05	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:05	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:05	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:05	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:05	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:05	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>87.0 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 03:05</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>97.8 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 03:05</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-12**  
**3107002-07 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 03:28	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	89.6 %				P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	98.2 %				P310806	09/08/23 17:41	09/09/23 03:28	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-16**  
**3107002-08 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 03:51	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 03:51	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:51	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:51	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:51	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:51	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 03:51	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>87.3 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 03:51</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>97.8 %</i>	<i>80-120</i>			<i>P310806</i>	<i>09/08/23 17:41</i>	<i>09/09/23 03:51</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-15**  
**3107002-09 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 04:14	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	86.6 %				P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	97.6 %				P310806	09/08/23 17:41	09/09/23 04:14	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-5**  
**3107002-10 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 04:37	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	88.2 %				P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	98.0 %				P310806	09/08/23 17:41	09/09/23 04:37	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-18**  
**3107002-11 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/08/23 17:41	09/09/23 05:00	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	88.8 %				P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	95.9 %				P310806	09/08/23 17:41	09/09/23 05:00	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-20**  
**3107002-12 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/11/23 12:10	09/11/23 15:39	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	90.3 %		80-120		P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	96.4 %		80-120		P311109	09/11/23 12:10	09/11/23 15:39	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-19**  
**3107002-13 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total BTEX</b>	<b>0.000600</b>	0.00100	mg/L	1	[CALC]	09/11/23 12:10	09/11/23 16:02	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/11/23 12:10	09/11/23 16:02	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 16:02	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 16:02	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 16:02	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P311109	09/11/23 12:10	09/11/23 16:02	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P311109	09/11/23 12:10	09/11/23 16:02	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>89.4 %</i>	<i>80-120</i>			<i>P311109</i>	<i>09/11/23 12:10</i>	<i>09/11/23 16:02</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>93.5 %</i>	<i>80-120</i>			<i>P311109</i>	<i>09/11/23 12:10</i>	<i>09/11/23 16:02</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P310806 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P310806-BLK1)**

Prepared & Analyzed: 09/08/23

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	0.107		"	0.120		89.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.7	80-120			

**LCS (P310806-BS1)**

Prepared & Analyzed: 09/08/23

Benzene	0.0954	0.00100	mg/L	0.100		95.4	80-120			
Toluene	0.0910	0.00100	"	0.100		91.0	80-120			
Ethylbenzene	0.0902	0.00100	"	0.100		90.2	80-120			
Xylene (p/m)	0.179	0.00200	"	0.200		89.6	80-120			
Xylene (o)	0.0803	0.00100	"	0.100		80.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		89.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.5	80-120			

**LCS Dup (P310806-BSD1)**

Prepared & Analyzed: 09/08/23

Benzene	0.0962	0.00100	mg/L	0.100		96.2	80-120	0.845	20	
Toluene	0.0934	0.00100	"	0.100		93.4	80-120	2.56	20	
Ethylbenzene	0.0931	0.00100	"	0.100		93.1	80-120	3.22	20	
Xylene (p/m)	0.187	0.00200	"	0.200		93.7	80-120	4.46	20	
Xylene (o)	0.0812	0.00100	"	0.100		81.2	80-120	1.15	20	
Surrogate: 4-Bromofluorobenzene	0.113		"	0.120		94.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		98.9	80-120			

**Calibration Blank (P310806-CCB1)**

Prepared & Analyzed: 09/08/23

Benzene	0.110		ug/l							
Toluene	0.140		"							
Ethylbenzene	0.260		"							
Xylene (p/m)	0.250		"							
Xylene (o)	0.110		"							
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.3	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.1	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3I0806 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Blank (P3I0806-CCB2)**

Prepared: 09/08/23 Analyzed: 09/09/23

Benzene	0.0700		ug/l							
Toluene	0.100		"							
Ethylbenzene	0.0800		"							
Xylene (p/m)	0.110		"							
Xylene (o)	0.190		"							
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		90.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.5	80-120			

**Calibration Check (P3I0806-CCV1)**

Prepared & Analyzed: 09/08/23

Benzene	0.0860	0.00100	mg/L	0.100		86.0	80-120			
Toluene	0.0804	0.00100	"	0.100		80.4	80-120			
Ethylbenzene	0.0802	0.00100	"	0.100		80.2	80-120			
Xylene (p/m)	0.160	0.00200	"	0.200		80.0	80-120			
Xylene (o)	0.0803	0.00100	"	0.100		80.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.102		"	0.120		85.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	80-120			

**Calibration Check (P3I0806-CCV2)**

Prepared: 09/08/23 Analyzed: 09/09/23

Benzene	0.0951	0.00100	mg/L	0.100		95.1	80-120			
Toluene	0.0954	0.00100	"	0.100		95.4	80-120			
Ethylbenzene	0.0894	0.00100	"	0.100		89.4	80-120			
Xylene (p/m)	0.194	0.00200	"	0.200		97.0	80-120			
Xylene (o)	0.0871	0.00100	"	0.100		87.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		98.9	80-120			

**Calibration Check (P3I0806-CCV3)**

Prepared: 09/08/23 Analyzed: 09/09/23

Benzene	0.0931	0.00100	mg/L	0.100		93.1	80-120			
Toluene	0.0938	0.00100	"	0.100		93.8	80-120			
Ethylbenzene	0.0872	0.00100	"	0.100		87.2	80-120			
Xylene (p/m)	0.190	0.00200	"	0.200		95.2	80-120			
Xylene (o)	0.0846	0.00100	"	0.100		84.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.100		"	0.120		83.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.7	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P310806 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike (P310806-MS1)</b>	<b>Source: 3107001-01</b>			<b>Prepared &amp; Analyzed: 09/08/23</b>						
Benzene	0.117	0.00100	mg/L	0.100	ND	117	80-120			
Toluene	0.113	0.00100	"	0.100	ND	113	80-120			
Ethylbenzene	0.112	0.00100	"	0.100	ND	112	80-120			
Xylene (p/m)	0.220	0.00200	"	0.200	ND	110	80-120			
Xylene (o)	0.0971	0.00100	"	0.100	ND	97.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		86.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.6	80-120			

<b>Matrix Spike Dup (P310806-MSD1)</b>	<b>Source: 3107001-01</b>			<b>Prepared &amp; Analyzed: 09/08/23</b>						
Benzene	0.110	0.00100	mg/L	0.100	ND	110	80-120	6.23	20	
Toluene	0.105	0.00100	"	0.100	ND	105	80-120	7.66	20	
Ethylbenzene	0.103	0.00100	"	0.100	ND	103	80-120	7.98	20	
Xylene (p/m)	0.204	0.00200	"	0.200	ND	102	80-120	7.42	20	
Xylene (o)	0.0887	0.00100	"	0.100	ND	88.7	80-120	9.09	20	
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.3	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.8	80-120			

**Batch P311109 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P311109-BLK1)</b>	<b>Prepared &amp; Analyzed: 09/11/23</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	0.108		"	0.120		89.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.6	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3I1109 - \*\*\* DEFAULT PREP \*\*\***

**LCS (P3I1109-BS1)**

Prepared & Analyzed: 09/11/23

Benzene	0.0869	0.00100	mg/L	0.100		86.9	80-120			
Toluene	0.0893	0.00100	"	0.100		89.3	80-120			
Ethylbenzene	0.0895	0.00100	"	0.100		89.5	80-120			
Xylene (p/m)	0.177	0.00200	"	0.200		88.7	80-120			
Xylene (o)	0.0807	0.00100	"	0.100		80.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.113		"	0.120		94.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.5	80-120			

**LCS Dup (P3I1109-BSD1)**

Prepared & Analyzed: 09/11/23

Benzene	0.0849	0.00100	mg/L	0.100		84.9	80-120	2.36	20	
Toluene	0.0870	0.00100	"	0.100		87.0	80-120	2.55	20	
Ethylbenzene	0.0871	0.00100	"	0.100		87.1	80-120	2.74	20	
Xylene (p/m)	0.172	0.00200	"	0.200		85.9	80-120	3.21	20	
Xylene (o)	0.0844	0.00100	"	0.100		84.4	80-120	4.48	20	
Surrogate: 4-Bromofluorobenzene	0.115		"	0.120		95.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.0	80-120			

**Calibration Blank (P3I1109-CCB1)**

Prepared & Analyzed: 09/11/23

Benzene	0.130		ug/l							
Toluene	0.120		"							
Ethylbenzene	0.0900		"							
Xylene (p/m)	0.140		"							
Xylene (o)	0.0900		"							
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.8	80-120			

**Calibration Blank (P3I1109-CCB2)**

Prepared & Analyzed: 09/11/23

Benzene	0.300		ug/l							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		83.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		90.3	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3I1109 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Check (P3I1109-CCV1)**

Prepared & Analyzed: 09/11/23

Benzene	0.0834	0.00100	mg/L	0.100		83.4	80-120			
Toluene	0.0917	0.00100	"	0.100		91.7	80-120			
Ethylbenzene	0.0877	0.00100	"	0.100		87.7	80-120			
Xylene (p/m)	0.188	0.00200	"	0.200		93.9	80-120			
Xylene (o)	0.0897	0.00100	"	0.100		89.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.5	80-120			

**Calibration Check (P3I1109-CCV2)**

Prepared & Analyzed: 09/11/23

Benzene	0.0812	0.00100	mg/L	0.100		81.2	80-120			
Toluene	0.0886	0.00100	"	0.100		88.6	80-120			
Ethylbenzene	0.0896	0.00100	"	0.100		89.6	80-120			
Xylene (p/m)	0.184	0.00200	"	0.200		91.9	80-120			
Xylene (o)	0.0880	0.00100	"	0.100		88.0	80-120			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		90.4	80-120			

**Calibration Check (P3I1109-CCV3)**

Prepared: 09/11/23 Analyzed: 09/12/23

Benzene	0.0824	0.00100	mg/L	0.100		82.4	80-120			
Toluene	0.0883	0.00100	"	0.100		88.3	80-120			
Ethylbenzene	0.0895	0.00100	"	0.100		89.5	80-120			
Xylene (p/m)	0.189	0.00200	"	0.200		94.6	80-120			
Xylene (o)	0.0867	0.00100	"	0.100		86.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.0952		"	0.120		79.4	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.110		"	0.120		91.7	80-120			

**Matrix Spike (P3I1109-MS1)**

Source: 3107002-12

Prepared: 09/11/23 Analyzed: 09/12/23

Benzene	0.0928	0.00100	mg/L	0.100	ND	92.8	80-120			
Toluene	0.0888	0.00100	"	0.100	ND	88.8	80-120			
Ethylbenzene	0.0919	0.00100	"	0.100	ND	91.9	80-120			
Xylene (p/m)	0.181	0.00200	"	0.200	ND	90.7	80-120			
Xylene (o)	0.0806	0.00100	"	0.100	ND	80.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		95.1	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**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 P3I1109 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike Dup (P3I1109-MSD1)</b>	<b>Source: 3I07002-12</b>			<b>Prepared: 09/11/23 Analyzed: 09/12/23</b>						
Benzene	0.0891	0.00100	mg/L	0.100	ND	89.1	80-120	4.06	20	
Toluene	0.0847	0.00100	"	0.100	ND	84.7	80-120	4.66	20	
Ethylbenzene	0.0883	0.00100	"	0.100	ND	88.3	80-120	4.01	20	
Xylene (p/m)	0.174	0.00200	"	0.200	ND	86.9	80-120	4.32	20	
Xylene (o)	0.0760	0.00100	"	0.100	ND	76.0	80-120	5.93	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.0	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.2	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**Notes and Definitions**

- S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
- 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.
- 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: 9/14/2023

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

L: \_\_\_\_\_ CH: \_\_\_\_\_  
W: \_\_\_\_\_  
Phone: 432-686-7235

Project Manager: David Adkins

Company Name: Talon LPE

Company Address: 408 Texas St.

City/State/Zip: Artesia, NM 88210

Telephone No: 575-441-4835

Sampler Signature: *Matthew Lewis*

e-mail: dadkins@talonlpe.com, mgomez@talonlpe.com

Fax No: \_\_\_\_\_

Report Format:  Standard  TRRP  NPDES

Project Name: Lovington Deep (Lov Deep)

Project #: Plains All American Pipeline

Project Loc: Lea County, NM

PO #: SRS# 2002-10312

ORDER #: 3107002

(lab use only)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filled	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solids	NP=Non-Potable Specify Other	TPH: TX 1005 TX 1006	Anions (Cl, SO <sub>4</sub> , Alkalinity)	BTEX 8021B/5030 or BTEX 8280	Matrix	Preservation & # of Containers	Analyze For:	RUSH TAT (Pre-Schedule) 24, 48, 72 h	Standard TAT	
1	MJ-11			9/5/23	10:38		3																				
2	MJ-8			9/5/23	11:28		3																				
3	MJ-3			9/5/23	12:08		3																				
4	MJ-4			9/5/23	12:26		3																				
5	MJ-1			9/5/23	12:45		3																				
6	MJ-4			9/5/23	1:09		3																				
7	MJ-12			9/5/23	1:34		3																				
8	MJ-16			9/6/23	9:49		3																				
9	MJ-15			9/6/23	11:41		3																				
10	MJ-5			9/6/23	12:24		3																				

Special Instructions: Email Analyticals to: CBryant@paalp.com, Maachoa@paalp.com, and KHudgens@paalp.com

Relinquished by: <i>ESM</i>	Date	Time	Received by: <i>ESM</i>	Date	Time
Relinquished by: <i>ESM</i>	Date	Time	Received by: <i>ESM</i>	Date	Time
Relinquished by: <i>ESM</i>	Date	Time	Received by: <i>ESM</i>	Date	Time

Relinquished by: <i>ESM</i>	Date	Time	Received by: <i>ESM</i>	Date	Time
Relinquished by: <i>ESM</i>	Date	Time	Received by: <i>ESM</i>	Date	Time
Relinquished by: <i>ESM</i>	Date	Time	Received by: <i>ESM</i>	Date	Time

PBEL\_COC\_2021\_1 Revision #: 2021\_1 Effective Date: 9-21-21  
 Date: 9/7/23  
 Time: 5:13  
 Laboratory Comments: Sample Containers Intact? YOCs Free of Headspace? Y Labels on container(s) Y Custody seals on container(s) Y Sample Hand Delivered by Sampler/Client Rep. ? Y by Counter? UPS DHL FedEx Y Temperature Upon Receipt: 11.0 °C Thermometer Adjusted: 1.0 °C Factor: Lone Star  
 Page 1 of 2



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



# Analytical Report

**Prepared for:**

David Adkins  
Talon LPE  
2901 S. State Hwy 349  
Midland, TX 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Location: Lea County, NM  
Lab Order Number: 3L07008



**Current Certification**

Report Date: 12/21/23

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-20	3L07008-01	Water	12/05/23 11:10	12-07-2023 11:56
MW-19	3L07008-02	Water	12/05/23 10:45	12-07-2023 11:56
MW-18	3L07008-03	Water	12/05/23 12:13	12-07-2023 11:56
MW-4	3L07008-04	Water	12/05/23 13:34	12-07-2023 11:56
MW-11	3L07008-05	Water	12/05/23 12:33	12-07-2023 11:56
MW-12	3L07008-06	Water	12/05/23 11:58	12-07-2023 11:56
MW-9	3L07008-07	Water	12/06/23 10:46	12-07-2023 11:56
MW-5	3L07008-08	Water	12/05/23 13:53	12-07-2023 11:56
MW-8	3L07008-09	Water	12/05/23 13:19	12-07-2023 11:56
MW-16	3L07008-10	Water	12/06/23 08:46	12-07-2023 11:56
MW-15	3L07008-11	Water	12/06/23 09:46	12-07-2023 11:56
MW-3	3L07008-12	Water	12/06/23 10:19	12-07-2023 11:56
MW-1	3L07008-13	Water	12/05/23 12:52	12-07-2023 11:56

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-20**  
**3L07008-01 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/16/23 22:16	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/16/23 22:16	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 22:16	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 22:16	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 22:16	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 22:16	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 22:16	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>98.4 %</i>	<i>80-120</i>			<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/16/23 22:16</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>85.5 %</i>	<i>80-120</i>			<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/16/23 22:16</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**MW-19**  
**3L07008-02 (Water)**

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

**BTEX by 8021B**

<b>Total BTEX</b>	<b>0.00127</b>	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
<b>Xylenes (total)</b>	<b>0.00127</b>	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/16/23 23:25	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	99.5 %		80-120		P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	84.5 %		80-120		P3L1508	12/15/23 14:45	12/16/23 23:25	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-18**  
**3L07008-03 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total BTEX</b>	<b>0.00107</b>	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/16/23 23:48	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/16/23 23:48	EPA 8021B	

**Organics by GC**

<b>Benzene</b>	<b>0.00107</b>	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:48	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:48	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:48	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:48	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/16/23 23:48	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>98.5 %</i>	<i>80-120</i>			<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/16/23 23:48</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>84.9 %</i>	<i>80-120</i>			<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/16/23 23:48</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-4**  
**3L07008-04 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 00:12	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	94.6 %		80-120		P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	84.2 %		80-120		P3L1508	12/15/23 14:45	12/17/23 00:12	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-11**  
**3L07008-05 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 00:35	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	99.2 %		80-120		P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	85.8 %		80-120		P3L1508	12/15/23 14:45	12/17/23 00:35	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-12**  
**3L07008-06 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 00:58	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	98.8 %				P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	87.7 %				P3L1508	12/15/23 14:45	12/17/23 00:58	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-9**  
**3L07008-07 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 01:21	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	99.4 %				P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	86.0 %				P3L1508	12/15/23 14:45	12/17/23 01:21	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-5**  
**3L07008-08 (Water)**

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

**BTEX by 8021B**

Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 01:44	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 01:44	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:44	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:44	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:44	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:44	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 01:44	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	98.8 %				<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/17/23 01:44</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	86.9 %				<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/17/23 01:44</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-8**  
**3L07008-09 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 02:07	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	94.9 %				P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	84.6 %				P3L1508	12/15/23 14:45	12/17/23 02:07	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-16**  
**3L07008-10 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 02:31	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 02:31	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:31	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:31	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:31	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:31	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:31	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	95.2 %				<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/17/23 02:31</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	85.2 %				<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/17/23 02:31</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-15**  
**3L07008-11 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total BTEX</b>	<b>0.00100</b>	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 02:54	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/15/23 14:45	12/17/23 02:54	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:54	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:54	EPA 8021B	
<b>Ethylbenzene</b>	<b>0.00100</b>	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:54	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:54	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1508	12/15/23 14:45	12/17/23 02:54	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.1 %</i>		<i>80-120</i>		<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/17/23 02:54</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>86.3 %</i>		<i>80-120</i>		<i>P3L1508</i>	<i>12/15/23 14:45</i>	<i>12/17/23 02:54</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-3**  
**3L07008-12 (Water)**

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

**BTEX by 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total BTEX</b>	<b>0.00250</b>	0.00100	mg/L	1	[CALC]	12/18/23 10:43	12/19/23 02:59	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/18/23 10:43	12/19/23 02:59	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 02:59	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 02:59	EPA 8021B	
<b>Ethylbenzene</b>	<b>0.00250</b>	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 02:59	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 02:59	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 02:59	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>	88.3 %				<i>P3L1809</i>	<i>12/18/23 10:43</i>	<i>12/19/23 02:59</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>	92.2 %				<i>P3L1809</i>	<i>12/18/23 10:43</i>	<i>12/19/23 02:59</i>	<i>EPA 8021B</i>	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**MW-1**  
**3L07008-13 (Water)**

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

**BTEX by 8021B**

Total BTEX	ND	0.00100	mg/L	1	[CALC]	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	12/18/23 10:43	12/19/23 03:22	EPA 8021B	

**Organics by GC**

Benzene	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	88.4 %		80-120		P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	91.4 %		80-120		P3L1809	12/18/23 10:43	12/19/23 03:22	EPA 8021B	

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3L1508 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P3L1508-BLK1)**

Prepared: 12/15/23 Analyzed: 12/16/23

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	0.121		"	0.120		101	80-120			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.3	80-120			

**LCS (P3L1508-BS1)**

Prepared: 12/15/23 Analyzed: 12/16/23

Benzene	0.103	0.00100	mg/L	0.100		103	80-120			
Toluene	0.0945	0.00100	"	0.100		94.5	80-120			
Ethylbenzene	0.0969	0.00100	"	0.100		96.9	80-120			
Xylene (p/m)	0.190	0.00200	"	0.200		95.0	80-120			
Xylene (o)	0.0867	0.00100	"	0.100		86.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.115		"	0.120		96.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.106		"	0.120		88.2	80-120			

**LCS Dup (P3L1508-BSD1)**

Prepared: 12/15/23 Analyzed: 12/16/23

Benzene	0.0990	0.00100	mg/L	0.100		99.0	80-120	4.06	20	
Toluene	0.0905	0.00100	"	0.100		90.5	80-120	4.35	20	
Ethylbenzene	0.0928	0.00100	"	0.100		92.8	80-120	4.31	20	
Xylene (p/m)	0.182	0.00200	"	0.200		91.2	80-120	4.06	20	
Xylene (o)	0.0828	0.00100	"	0.100		82.8	80-120	4.56	20	
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.1	80-120			

**Calibration Blank (P3L1508-CCB1)**

Prepared: 12/15/23 Analyzed: 12/16/23

Benzene	0.120		ug/l							
Toluene	0.0700		"							
Ethylbenzene	0.150		"							
Xylene (p/m)	0.220		"							
Xylene (o)	0.160		"							
Surrogate: 4-Bromofluorobenzene	0.118		"	0.120		98.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.104		"	0.120		86.9	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3L1508 - \*\*\* DEFAULT PREP \*\*\***

<b>Calibration Blank (P3L1508-CCB2)</b>		Prepared: 12/15/23 Analyzed: 12/16/23								
Benzene	0.100		ug/l							
Toluene	0.0700		"							
Ethylbenzene	0.160		"							
Xylene (p/m)	0.200		"							
Xylene (o)	0.120		"							
Surrogate: 4-Bromofluorobenzene	0.117		"	0.120		97.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.103		"	0.120		86.2	80-120			

<b>Calibration Check (P3L1508-CCV1)</b>		Prepared: 12/15/23 Analyzed: 12/16/23								
Benzene	0.110	0.00100	mg/L	0.100		110	80-120			
Toluene	0.0983	0.00100	"	0.100		98.3	80-120			
Ethylbenzene	0.0948	0.00100	"	0.100		94.8	80-120			
Xylene (p/m)	0.194	0.00200	"	0.200		96.9	80-120			
Xylene (o)	0.0896	0.00100	"	0.100		89.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.120		93.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.106		"	0.120		88.4	80-120			

<b>Calibration Check (P3L1508-CCV2)</b>		Prepared: 12/15/23 Analyzed: 12/16/23								
Benzene	0.103	0.00100	mg/L	0.100		103	80-120			
Toluene	0.0929	0.00100	"	0.100		92.9	80-120			
Ethylbenzene	0.0897	0.00100	"	0.100		89.7	80-120			
Xylene (p/m)	0.184	0.00200	"	0.200		92.1	80-120			
Xylene (o)	0.0854	0.00100	"	0.100		85.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.114		"	0.120		95.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.1	80-120			

<b>Calibration Check (P3L1508-CCV3)</b>		Prepared: 12/15/23 Analyzed: 12/17/23								
Benzene	0.106	0.00100	mg/L	0.100		106	80-120			
Toluene	0.0923	0.00100	"	0.100		92.3	80-120			
Ethylbenzene	0.0880	0.00100	"	0.100		88.0	80-120			
Xylene (p/m)	0.182	0.00200	"	0.200		91.2	80-120			
Xylene (o)	0.0844	0.00100	"	0.100		84.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.113		"	0.120		94.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.4	80-120			

Permian Basin Environmental Lab, L.P.

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Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3L1508 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike (P3L1508-MS1)</b>		<b>Source: 3L06003-02</b>		Prepared: 12/15/23		Analyzed: 12/17/23				
Benzene	0.0600	0.00100	mg/L	0.100	ND	60.0	80-120			QM-05
Toluene	0.0808	0.00100	"	0.100	ND	80.8	80-120			
Ethylbenzene	0.0740	0.00100	"	0.100	ND	74.0	80-120			QM-05
Xylene (p/m)	0.141	0.00200	"	0.200	ND	70.4	80-120			QM-05
Xylene (o)	0.0653	0.00100	"	0.100	ND	65.3	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.742		"	0.120		618	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.0962		"	0.120		80.2	80-120			

<b>Matrix Spike Dup (P3L1508-MSD1)</b>		<b>Source: 3L06003-02</b>		Prepared: 12/15/23		Analyzed: 12/17/23				
Benzene	0.0618	0.00100	mg/L	0.100	ND	61.8	80-120	3.07	20	QM-05
Toluene	0.0871	0.00100	"	0.100	ND	87.1	80-120	7.53	20	
Ethylbenzene	0.0826	0.00100	"	0.100	ND	82.6	80-120	11.1	20	
Xylene (p/m)	0.156	0.00200	"	0.200	ND	78.2	80-120	10.6	20	QM-05
Xylene (o)	0.0718	0.00100	"	0.100	ND	71.8	80-120	9.39	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.715		"	0.120		596	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.0996		"	0.120		83.0	80-120			

**Batch P3L1809 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P3L1809-BLK1)</b>				Prepared: 12/18/23		Analyzed: 12/19/23				
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	0.104		"	0.120		86.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.3	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3L1809 - \*\*\* DEFAULT PREP \*\*\***

**LCS (P3L1809-BS1)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.102	0.00100	mg/L	0.100		102	80-120			
Toluene	0.0926	0.00100	"	0.100		92.6	80-120			
Ethylbenzene	0.0945	0.00100	"	0.100		94.5	80-120			
Xylene (p/m)	0.186	0.00200	"	0.200		92.9	80-120			
Xylene (o)	0.0832	0.00100	"	0.100		83.2	80-120			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		85.6	80-120			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.1	80-120			

**LCS Dup (P3L1809-BS1)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.0972	0.00100	mg/L	0.100		97.2	80-120	4.68	20	
Toluene	0.0877	0.00100	"	0.100		87.7	80-120	5.44	20	
Ethylbenzene	0.0895	0.00100	"	0.100		89.5	80-120	5.41	20	
Xylene (p/m)	0.178	0.00200	"	0.200		88.8	80-120	4.61	20	
Xylene (o)	0.0836	0.00100	"	0.100		83.6	80-120	0.456	20	
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.2	80-120			

**Calibration Blank (P3L1809-CCB1)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.110		ug/l							
Toluene	0.170		"							
Ethylbenzene	0.140		"							
Xylene (p/m)	0.240		"							
Xylene (o)	0.190		"							
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.3	80-120			
Surrogate: 1,4-Difluorobenzene	0.110		"	0.120		91.4	80-120			

**Calibration Blank (P3L1809-CCB2)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.100		ug/l							
Toluene	0.170		"							
Ethylbenzene	0.120		"							
Xylene (p/m)	0.190		"							
Xylene (o)	0.170		"							
Surrogate: 4-Bromofluorobenzene	0.105		"	0.120		87.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.7	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**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 P3L1809 - \*\*\* DEFAULT PREP \*\*\***

**Calibration Check (P3L1809-CCV1)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.108	0.00100	mg/L	0.100		108	80-120			
Toluene	0.0980	0.00100	"	0.100		98.0	80-120			
Ethylbenzene	0.0941	0.00100	"	0.100		94.1	80-120			
Xylene (p/m)	0.194	0.00200	"	0.200		97.0	80-120			
Xylene (o)	0.0880	0.00100	"	0.100		88.0	80-120			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		83.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.2	80-120			

**Calibration Check (P3L1809-CCV2)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.109	0.00100	mg/L	0.100		109	80-120			
Toluene	0.0988	0.00100	"	0.100		98.8	80-120			
Ethylbenzene	0.0938	0.00100	"	0.100		93.8	80-120			
Xylene (p/m)	0.195	0.00200	"	0.200		97.7	80-120			
Xylene (o)	0.0892	0.00100	"	0.100		89.2	80-120			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.4	80-120			

**Calibration Check (P3L1809-CCV3)**

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.104	0.00100	mg/L	0.100		104	80-120			
Toluene	0.0944	0.00100	"	0.100		94.4	80-120			
Ethylbenzene	0.0896	0.00100	"	0.100		89.6	80-120			
Xylene (p/m)	0.186	0.00200	"	0.200		92.9	80-120			
Xylene (o)	0.0850	0.00100	"	0.100		85.0	80-120			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		85.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.2	80-120			

**Matrix Spike (P3L1809-MS1)**

Source: 3L07008-12

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	0.0925	0.00100	mg/L	0.100	ND	92.5	80-120			
Toluene	0.0824	0.00100	"	0.100	ND	82.4	80-120			
Ethylbenzene	0.0858	0.00100	"	0.100	0.00250	83.3	80-120			
Xylene (p/m)	0.164	0.00200	"	0.200	ND	82.0	80-120			
Xylene (o)	0.0729	0.00100	"	0.100	ND	72.9	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.102		"	0.120		84.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.6	80-120			

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

Talon LPE  
 2901 S. State Hwy 349  
 Midland TX, 79706

Project: Lovington Deep  
 Project Number: Plains All American Pipeline  
 Project Manager: David Adkins

**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 P3L1809 - \*\*\* DEFAULT PREP \*\*\***

<b>Matrix Spike Dup (P3L1809-MSD1)</b>	<b>Source: 3L07008-12</b>			<b>Prepared: 12/18/23 Analyzed: 12/19/23</b>						
Benzene	0.102	0.00100	mg/L	0.100	ND	102	80-120	10.2	20	
Toluene	0.0958	0.00100	"	0.100	ND	95.8	80-120	15.0	20	
Ethylbenzene	0.102	0.00100	"	0.100	0.00250	99.6	80-120	17.8	20	
Xylene (p/m)	0.195	0.00200	"	0.200	ND	97.4	80-120	17.2	20	
Xylene (o)	0.0884	0.00100	"	0.100	ND	88.4	80-120	19.3	20	
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		90.0	80-120			

Permian Basin Environmental Lab, L.P.

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

**Notes and Definitions**

- S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
- 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.
- 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: 12/21/2023

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

Talon LPE  
2901 S. State Hwy 349  
Midland TX, 79706

Project: Lovington Deep  
Project Number: Plains All American Pipeline  
Project Manager: David Adkins

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Permian Basin Environmental Lab, L.P.

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





**CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST**

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

L: \_\_\_\_\_ CH: \_\_\_\_\_ W: \_\_\_\_\_

Phone: 432-686-7235

**Project Manager:** David Adkins  
**Company Name:** Talon LPE  
**Company Address:** 408 Texas St.  
**City/State/Zip:** Artesia, NM 88210  
**Telephone No:** 575-441-4835  
**Sampler Signature:** *Bartlett Madley*  
**e-mail:** dadkins@talonlpe.com, mgomez@talonlpe.com

**Project Name:** Lovington Deep (Lov Deep)  
**Project #:** Plains All American Pipeline  
**Project Loc:** Lea County, NM  
**PO #:** SRS# 2002-10312  
**Report Format:**  Standard  TRRP  NPDES

(lab use only)		Analyze For:												RUSH TAT (Pre-Schedule) 24, 48, 72 h	Standard TAT									
ORDER #:	3LO7008	TCLP:	TOTAL:	Preservation & # of Containers						Matrix														
LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filled	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW=Drinking Water SL=Sludg	GW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	TPH: TX 1005	TX 1006	Anions (Cl, SO <sub>4</sub> , Alkalinity)	BTEX 8021B/8030 or BTEX 8266		
11	MW-15			12-6-23	9:46	3	X		X							GW						X		X
12	MW-3			12-6-23	10:19	3	X		X							GW						X		X
13	MW-1			12-5-23	12:52	3	X		X							GW						X		X

**Special Instructions:** Email Analyticals to: CJBryant@paalp.com, Maochoa@paalp.com, and KHudgens@paalp.com

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Bartlett Madley</i>	12-6-23	12:03	<i>Eva Corliss</i>	12-6-23	12:15
Relinquished by:	Date	Time	Received by:	Date	Time
			<i>Christa Bledsoe</i>	12/7/23	11:56

**Laboratory Comments:**  
 Sample Containers Intact?  Y  N  
 VOCs Free of Headspace?  Y  N  
 Labels on container(s)  Y  N  
 Custody seals on container(s)  Y  N  
 Custody seals on cooler(s)  Y  N  
 Sample Hand Delivered by Sampler/Client Rep. ?  Y  N  
 by Courier?  UPS  DHL  FedEx  Lone Star  
 Temperature Upon Receipt:  Received: 4.2 °C Thermometer:  Adjusted: \_\_\_\_\_ °C Factor:  NCF  LB

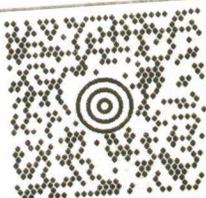
\*TALON LPE  
(575) 392-7550  
MAIL SERVICES ETC, LLC  
4008 N GRIMES ST  
HOBBS NM 88240

39 LBS

1 OF 1

DWT: 27,15,15  
AH

SHIP TO:  
PERMAIN BASIN ENVIORMENTAL LAB LP  
(575) 441-4835  
PERMAIN BASIN ENVIORMENTAL LAB LP  
1400 RANKIN HWY  
MIDLAND TX 79701-8137



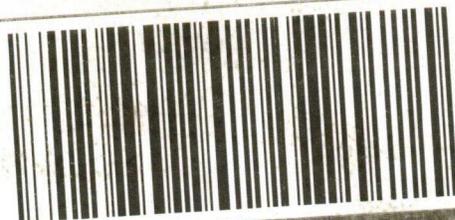
TX 797 9-01



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1

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1Z7923800142995454

**Weight**

39.00 LBS

**Service**

UPS Next Day Air®

**Shipped / Billed On**

12/06/2023

**Delivered On**

12/07/2023 11:56 A.M.

**Delivered To**

MIDLAND, TX, US

**Received By**

BASIN

Please print for your records as photo and details are only available for a limited time.

Sincerely,

UPS

Tracking results provided by UPS: 12/07/2023 1:10 P.M. EST

**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 349751

**CONDITIONS**

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 349751
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

**CONDITIONS**

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for Lovington Deep 6": content satisfactory 1. Continue to remove PSH by MDPE events as scheduled for the site. 2. Conduct groundwater monitoring events quarterly for BTEX and PAH analyses. 3. Submit the 2024 annual monitoring report to OCD by April 1, 2025.	8/19/2024