2023 Annual Groundwater Monitoring Report

REVIEWED
By Mike Buchanan at 2:45 pm, Jul 03, 2024

Plains All American Pipeline, LP
Livingston Line – Bob McCasland
Lea County, New Mexico
Unit Letter "K", Section 3, Township 21 South, Range 37 East
Latitude 32.504135 North, Longitude 103.151345 West
Plains SRS #: 2001-11226
NMOCD Reference #: 1RP-0395
NMOCD Incident ID #: nAPP2109736613

Review of the 2023 Annual Groundwater Monitoring Report: Content Satisfactory
1. Gauge and conduct quarterly sampling events for wells: MW-2, MW-3, MW-5 and MW-6 for BTEX.
2. On an annual basis, conduct sampling & gauging for MW-7, MW-8, MW-10, and MW-11 as prescribed.
3. Conduct AFR events to prevent the down-gradient migration of dissolved phase/free-phase plume
4. Submit the 2024 annual report to OCD by April 1, 2025.

Prepared By:

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ETECH Environmental & Safety Solutions, Inc.

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1.0 INTRODUCTION & SITE DESCRIPTION

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

The legal description of the Livingston Line to Bob McCasland Pipeline Release Site is Unit Letter "K" (NE/SW), Section 3, Township 21 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by Mr. Bob McCasland. The geographic coordinates of the Release Site are 32.504135º North latitude and 103.151345º West longitude. A "Site Location Map" is provided as Figure 1.

2.0 BACKGROUND INFORMATION

Based on information provided by the client, on July 13, 2001, an estimated release of four (4) barrels (bbls) of crude oil was reported to the NMOCD. The release covered an area of approximately 1,600 square feet (ft^2) along a pipeline right-of-way and an adjacent caliche road. Initial excavation activities were conducted by a third-party environmental contractor in an effort to stockpile saturated soils and expose the release source to facilitate repair of the pipeline. The pipeline excavation activities continued into December 2001. A total of approximately 11,445 cubic yards (yd^3) of hydrocarbon-impacted soil were excavated and stockpiled at the Site. Earthen berms were constructed around the stockpiles to prevent constituent runoff. Analytical results for soil samples collected from the excavation indicated benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations were above NMOCD remedial threshold limits. A *Soil Characterization Report and Remediation Plan Report,* dated June 2006, was submitted to the NMOCD. This report detailed remediation activities conducted at the Site, in-place soil concentrations, and recommendations for in-situ hydrocarbon-impacted soil closure.

Investigation activities were conducted from August 16 through 22, 2001, which included the advancement of 17 exploratory soil borings. During this time, it was determined groundwater had been impacted at approximately 30 feet below ground surface (bgs). Based on these field observations, three (3) groundwater monitor wells (MW-1, MW-2, and MW-3) were installed proximate to the release area to evaluate the extent and magnitude of the Release. Groundwater samples collected from the groundwater monitor wells exhibited concentrations of BTEX constituents above applicable New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards. Subsequently, three (3) additional monitor wells (MW-4, MW-5, and MW-6) were installed at the Site. A measurable thickness of phase-separated hydrocarbons (PSH) was detected in monitor well MW-4 following installation.

To delineate the lateral extent of groundwater impact at the Site, three (3) additional monitor wells (MW-7, MW-8 and MW-9) were installed in June 2004. Two (2) additional monitor wells (MW-10 and MW-11) were installed in November 2004. During installation of these monitor wells, soil samples were collected and submitted to AnalySys, Inc., in Austin, Texas, for analysis of total petroleum hydrocarbons (TPH) and BTEX constituents. BTEX constituents for all soil samples

from the monitor wells were below NMOCD remedial threshold limits. TPH concentrations from soil samples collected from monitor wells MW-7, MW-10, and MW-11 were at or below appropriate laboratory analytical method detection limits (MDLs).

In February 2023, Etech, at the request of Plains, assumed project management and oversight responsibilities for groundwater remediation activities at the Livingston Line to Bob McCasland Pipeline Release project Site.

Currently, there are a total of 11 monitor wells (MW-1 through MW-11) on-site. Monitor wells MW-2, MW-3, MW-5, and MW-6 are gauged and sampled on a quarterly schedule. Monitor wells MW-7, MW-8, MW-10, and MW-11 are gauged and sampled on an annual basis. Monitor well MW-1 is not sampled as it has been gauged as "dry". Monitor well MW-4 is currently not sampled due to the presence of PSH. Monitor well MW-9 has insufficient volume and recharge to sample.

3.0 FIELD ACTIVITIES

3.1 Product Recovery

A measurable thickness of PSH was detected in monitor well MW-4 following installation. Manual recovery of PSH and hydrocarbon-impacted groundwater from MW-4 commenced in 2018. Approximately 30.0 gallons of hydrocarbon-impacted groundwater and 3.16 gallons of PSH were recovered from MW-4 during the 2023 reporting period. A total of approximately 240 gallons (5.71 barrels) of PSH have been recovered since 2018. The average PSH thickness measured in monitor well MW-4 was 2.61 feet during the reporting period. Groundwater gauging and PSH recovery data for monitor well MW-4 is summarized in Table 3.

All recovered fluids were disposed of at an NMOCD-approved disposal facility.

3.2 Groundwater Recovery

Manual recovery of dissolved-phase hydrocarbon impacted groundwater from monitor well MW-5 commenced in May 2019. Approximately 23.4 gallons of impacted groundwater were recovered from monitor well MW-5 during the 2023 reporting period. Approximately 185 gallons (4.40 bbls) of impacted groundwater have been recovered since 2019. Groundwater gauging and recovery data for monitor well MW-5 is summarized in Table 4.

An Aggressive Fluid Recovery (AFR) event was conducted on monitor well MW-4 in August 2023. During the AFR event, a submersible pump was utilized to conduct a prolonged recovery event consisting of approximately 3-5 hours of pumping. A total of approximately 250 gallons (5.95 bbls) of hydrocarbon-impacted groundwater were recovered from the monitor well during the event. The total volume of PSH recovered during the event was unable to be accurately determined. The recovered fluid was transferred to a polystyrene aboveground storage tank (AST) at a Plains groundwater remediation site nearby, pending transport to an NMOCD-approved disposal facility.

All recovered fluids were ultimately disposed of at an NMOCD-approved disposal facility.

3.3 Groundwater Monitoring

The on-site monitor wells were gauged and sampled on March 27 (1Q2023), June 28 (2Q2023), September 20 (3Q2023), and December 20, 2023 (4Q2023). The groundwater monitoring events consisted of measuring static water levels in the on-site monitor wells (MW-1 through MW-11), checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Purged water was disposed of at an NMOCD-approved disposal facility.

Groundwater samples were collected utilizing low-flow sampling equipment, including a bladder pump and multi-parameter meter. Prior to sample collection, readings on the multi-parameter meter were recorded for a minimum of four (4) cycles of five (5) minutes each. Each groundwater sample collected was placed in laboratory-supplied containers appropriate to the analysis requested and placed on ice in a cooler.

Locations of the groundwater monitor wells and the inferred groundwater elevations, which were constructed from measurements collected during the 2023 quarterly sampling events, are depicted in Figures 2A through 2D. The maps indicate an average groundwater gradient of approximately 0.004 feet/foot to the east-southeast across the Site. Groundwater elevation and PSH thickness data are summarized in Table 1.

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

4.0 LABORATORY RESULTS

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

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

Monitor Well MW-1

Monitor well MW-1 gauged dry and was not able to be sampled during the reporting period.

Monitor Well MW-2

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL in 1Q2023, 2Q2023, and 3Q2023 to 0.000680 mg/L in 4Q2023. Toluene and ethylbenzene concentrations were less than the appropriate laboratory MDL in each of the submitted

groundwater samples. Total xylene concentrations ranged from less than the laboratory MDL in 1Q2023, 2Q2023, and 3Q2023 to 0.00274 mg/L in 4Q2023.

BTEX constituent concentrations were less than NMOCD regulatory standards in each of the submitted groundwater samples.

Monitor Well MW-3

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

Monitor Well MW-4

Monitor well MW-4 was not sampled during the reporting period due to the presence of PSH.

Monitor Well MW-5

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL in 2Q2023, 3Q2023, and 4Q2023 to 0.00107 mg/L in 1Q2023. Toluene concentrations ranged from less than the laboratory MDL in 2Q2023, 3Q2023, and 4Q2023 to 0.00119 mg/L in 1Q2023. Ethylbenzene concentrations ranged from less than the laboratory MDL in 2Q2023, 3Q2023, and 4Q2023 to 0.00202 mg/L in 1Q2023. Total xylene concentrations were less than the laboratory MDL in each of the submitted groundwater samples.

BTEX constituent concentrations were less than NMOCD regulatory standards in each of the submitted groundwater samples.

Monitor Well MW-6

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

Monitor Well MW-7

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

Monitor Well MW-8

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

Monitor Well MW-9

Monitor well MW-9 exhibited insufficient well volume/recharge and was not able to be sampled during the reporting period.

Monitor Well MW-10

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

Monitor Well MW-11

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

5.0 SUMMARY

This report presents the results of groundwater monitoring activities for the 2023 annual monitoring period. Currently, there are 11 groundwater monitor wells (MW-1 through MW-11) on-site. Monitor wells MW-2, MW-3, MW-5, and MW-6 were gauged and sampled during all four (4) quarters of the monitoring period. Monitor wells MW-7, MW-8, MW-10, and MW-11 are on an annual sampling schedule and were sampled during 1Q2023. The results of these sampling events are summarized above. Monitor well MW-1 gauged dry and was not able to be sampled during the reporting period. Monitor well MW-4 was not sampled due to the presence of PSH. Monitor well MW-9 exhibited insufficient well volume/recharge throughout the reporting period and was not able to be sampled.

Groundwater gauging data collected during the monitoring period indicates an average groundwater gradient of approximately 0.004 feet/foot to the east-southeast across the Site.

During the reporting period, approximately 30.0 gallons of hydrocarbon-impacted groundwater and 3.16 gallons of PSH were recovered by manual recovery from monitor well MW-4. A total of approximately 240 gallons (5.71 barrels) of PSH have been recovered since recovery commenced in 2018. The average PSH thickness measured in monitor well MW-4 was 2.61 feet.

Approximately 23.4 gallons of dissolved-phase hydrocarbon-impacted groundwater were recovered from monitor well MW-5 during the 2023 reporting period. Approximately 185 gallons (4.40 bbls) of impacted groundwater have been recovered since recovery commenced in 2019.

An Aggressive Fluid Recovery (AFR) event was conducted on monitor well MW-4 in August 2023. Approximately 250 gallons (5.95 bbls) of hydrocarbon-impacted groundwater were recovered from the monitor well during the event.

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

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

6.0 ANTICIPATED ACTIONS

Monitor wells MW-2, MW-3, MW-5, and MW-6 will continue to be gauged and sampled quarterly for BTEX. Monitor wells MW-7, MW-8, MW-10, and MW-11 will continue to be gauged and sampled on an annual basis. Monitor well MW-9 will be gauged on a quarterly basis and sampled if the monitor well exhibits sufficient volume/recharge.

In lieu of manual recovery, monthly AFR events will be conducted from monitor wells MW-4 and MW-5 in an effort to control the down-gradient migration of the dissolved-phase and free-phase plumes.

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

7.0 LIMITATIONS

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

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

8.0 DISTRIBUTION

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New Mexico Oil Conservation Division
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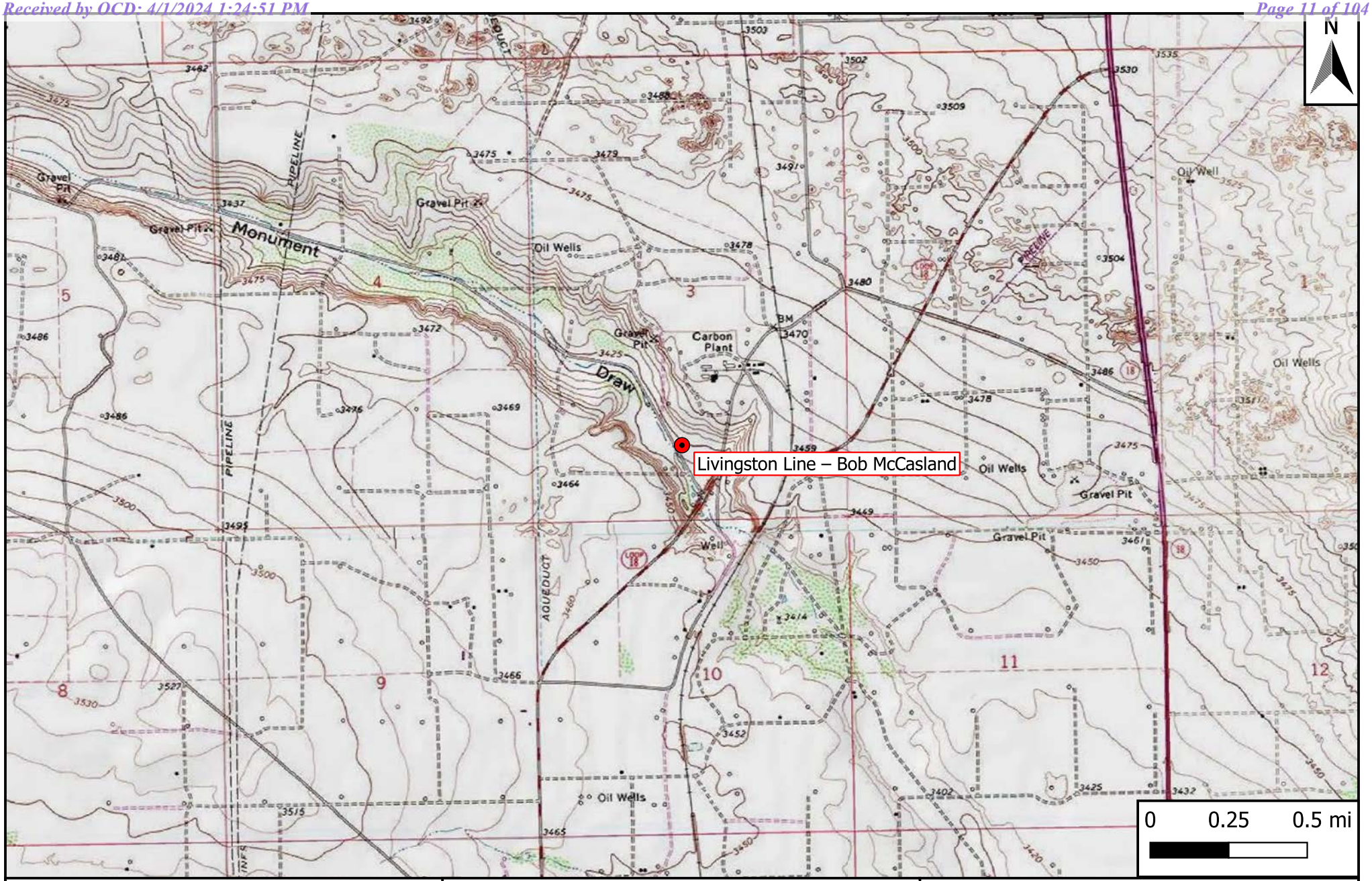
Aztec, NM 87410

Jeff Dann
Plains All American Pipeline, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

(Electronic Submission)

Figure 1
Site Location Map



Legend

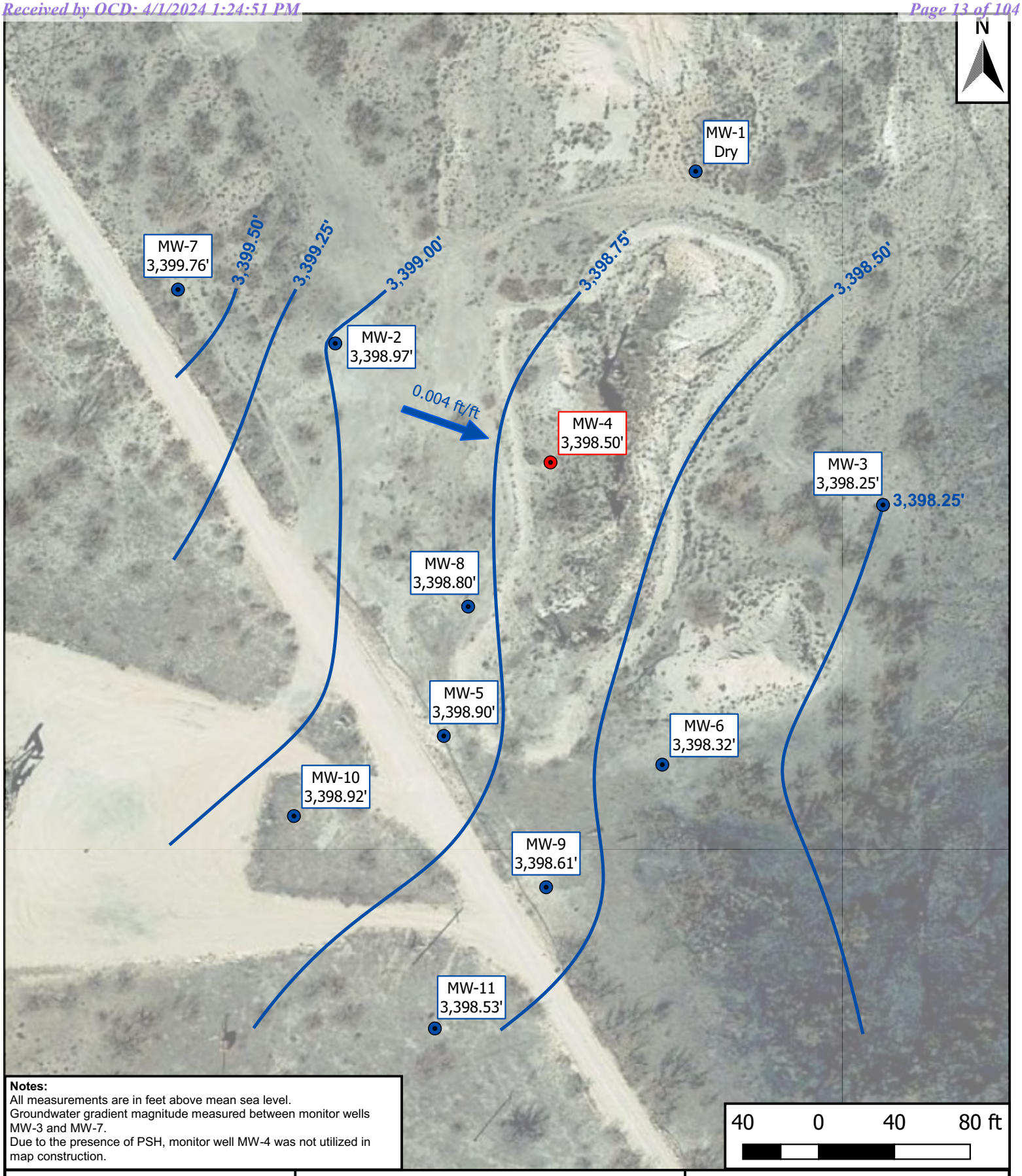
- Site Location

Figure 1
Site Location Map
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135,-103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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

Figures 2A - 2D
Inferred Groundwater Gradient Maps



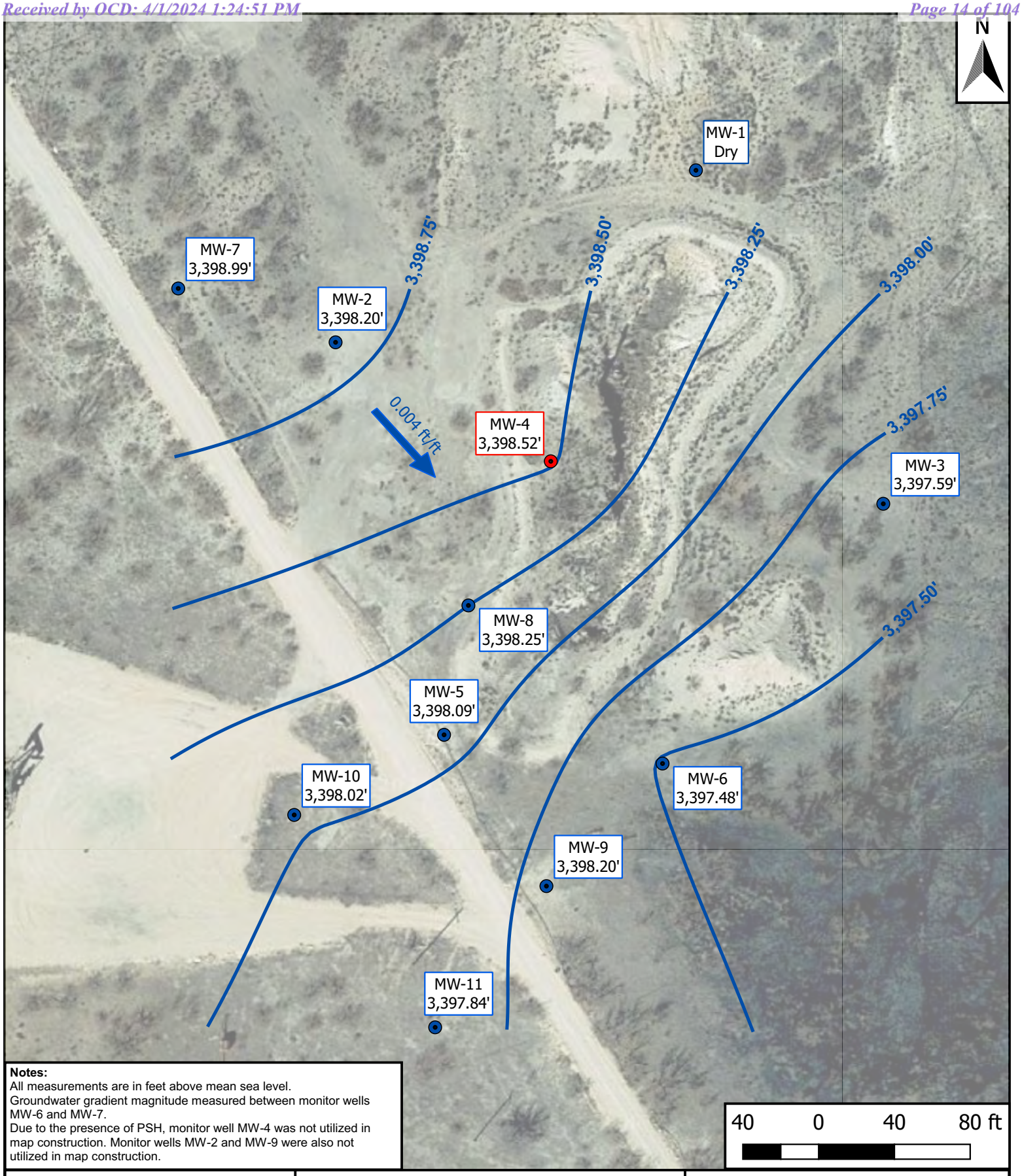
Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-3 and MW-7.
Due to the presence of PSH, monitor well MW-4 was not utilized in map construction.

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

Figure 2A
Inferred Groundwater Gradient Map – 1Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 5/22/23



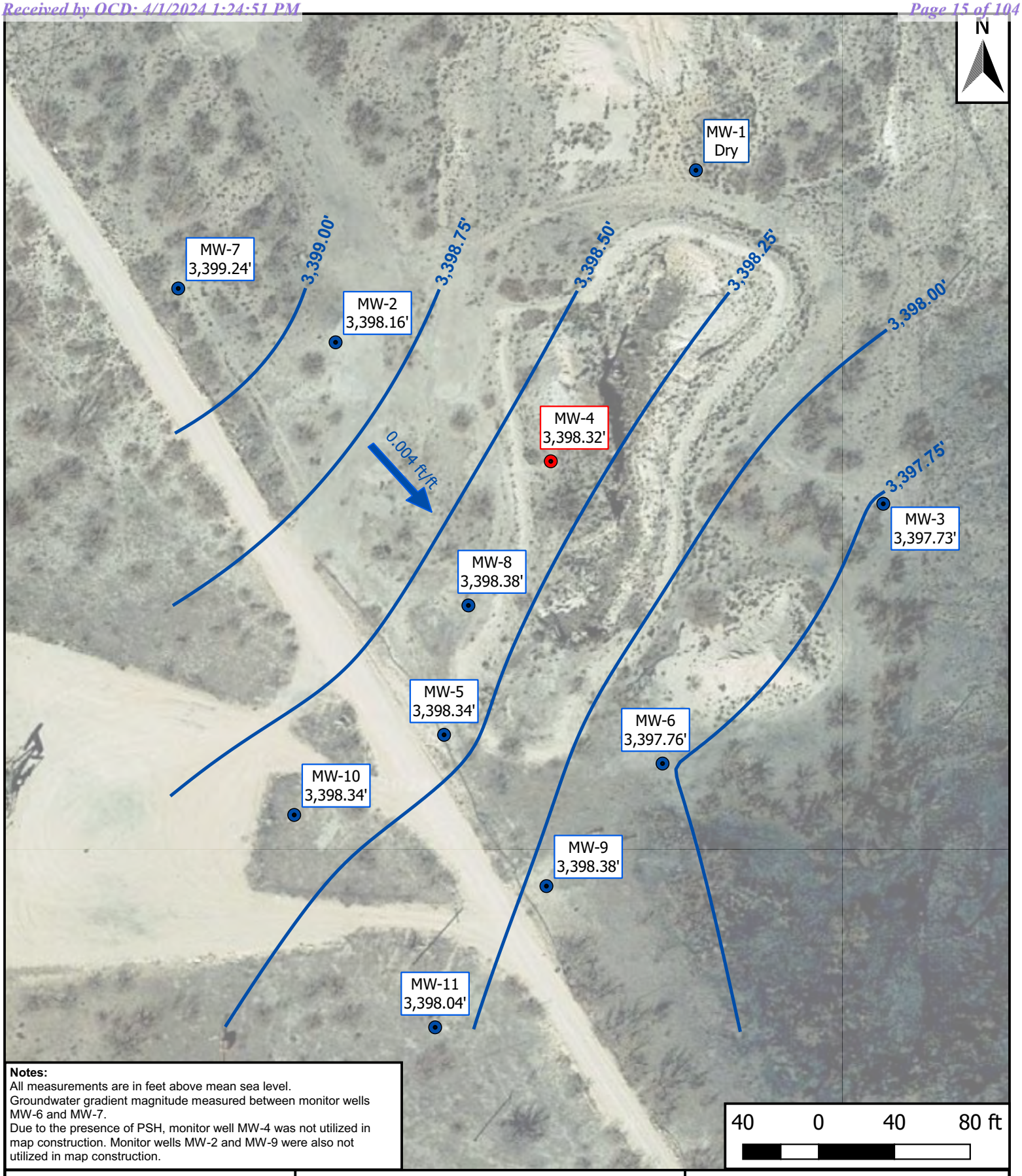
Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-6 and MW-7.
Due to the presence of PSH, monitor well MW-4 was not utilized in map construction. Monitor wells MW-2 and MW-9 were also not utilized in map construction.

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

Figure 2B
Inferred Groundwater Gradient Map – 2Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/13/24



Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-6 and MW-7.
Due to the presence of PSH, monitor well MW-4 was not utilized in map construction. Monitor wells MW-2 and MW-9 were also not utilized in map construction.

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

Figure 2C
Inferred Groundwater Gradient Map – 3Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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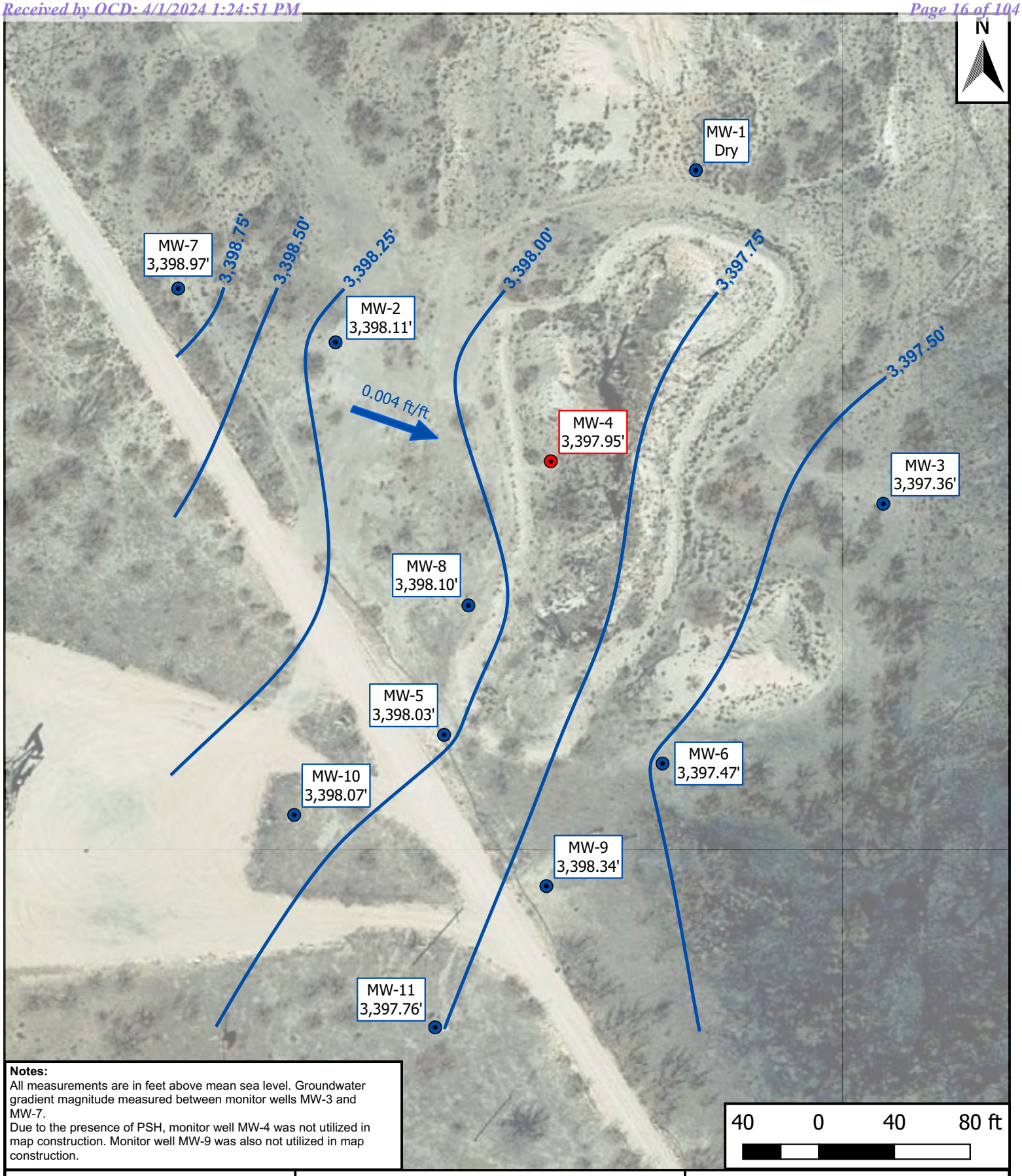

Notes:
All measurements are in feet above mean sea level. Groundwater gradient magnitude measured between monitor wells MW-3 and MW-7.
Due to the presence of PSH, monitor well MW-4 was not utilized in map construction. Monitor well MW-9 was also not utilized in map construction.

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

Figure 2D
Inferred Groundwater Gradient Map – 4Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

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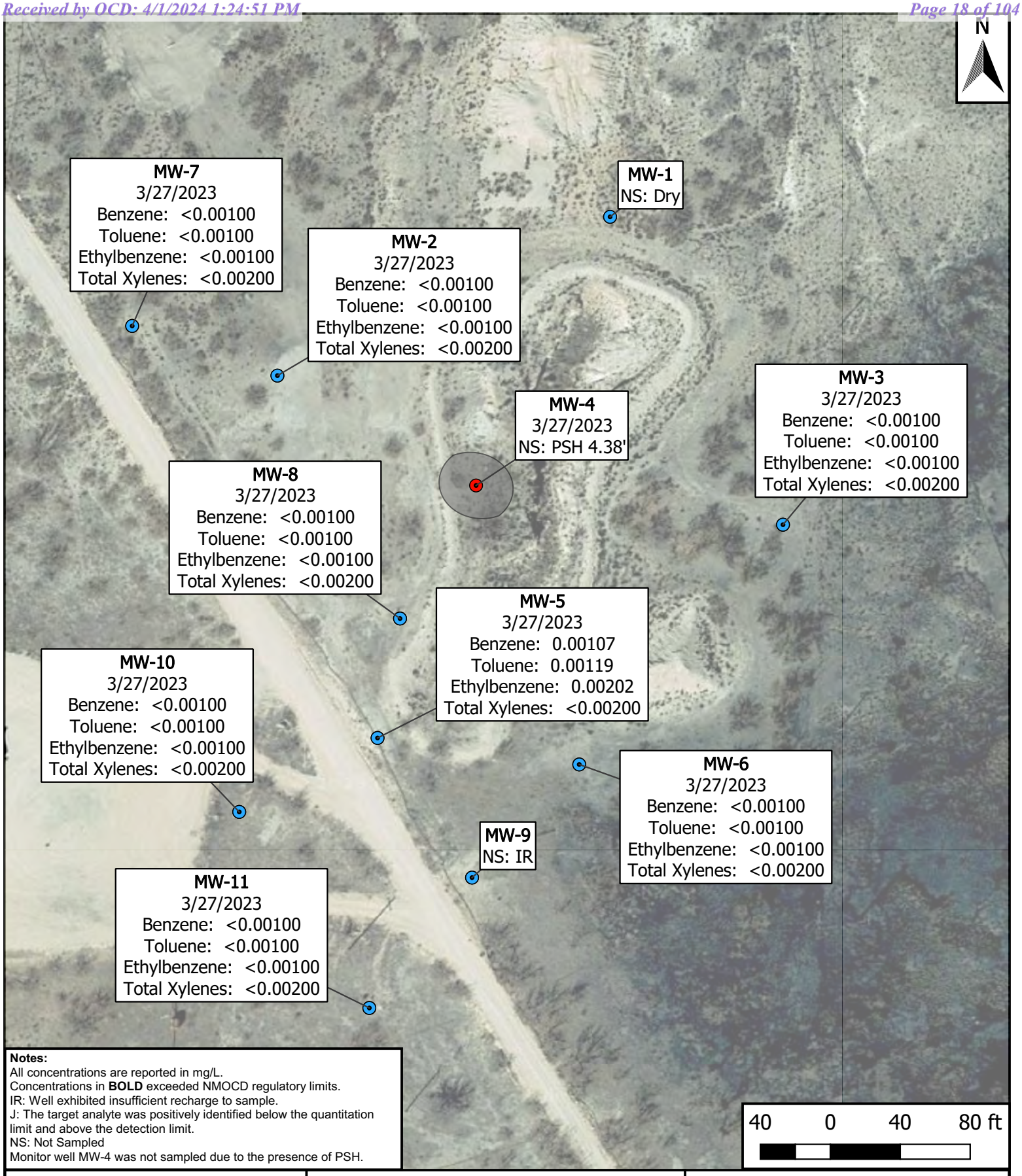
Figures 3A - 3D
Groundwater Concentration Maps



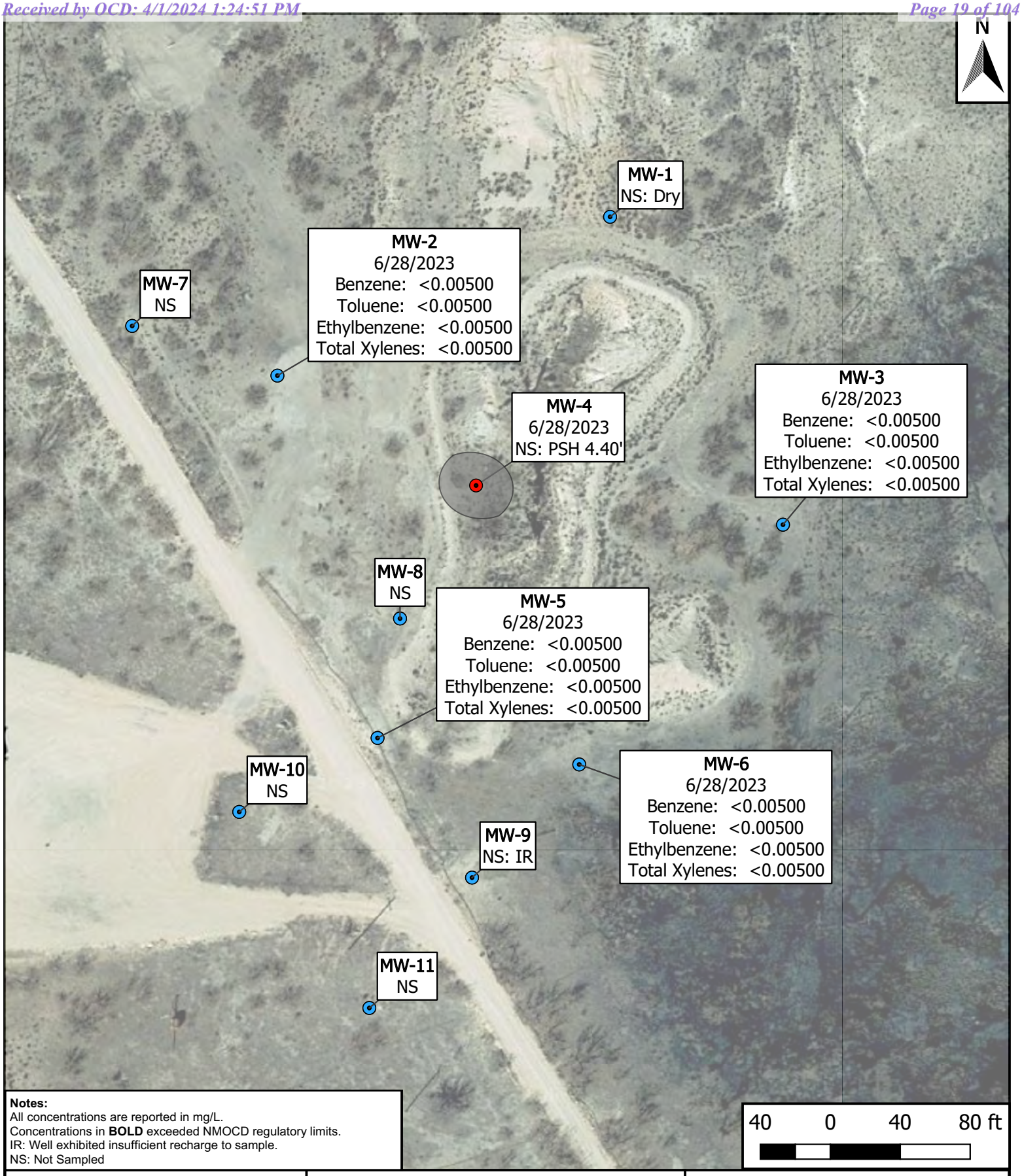
Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
IR: Well exhibited insufficient recharge to sample.
J: The target analyte was positively identified below the quantitation limit and above the detection limit.
NS: Not Sampled
Monitor well MW-4 was not sampled due to the presence of PSH.

Legend
- Monitor Well
- Recovery Well
- PSH Plume

Figure 3A
Groundwater Concentration Map – 1Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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



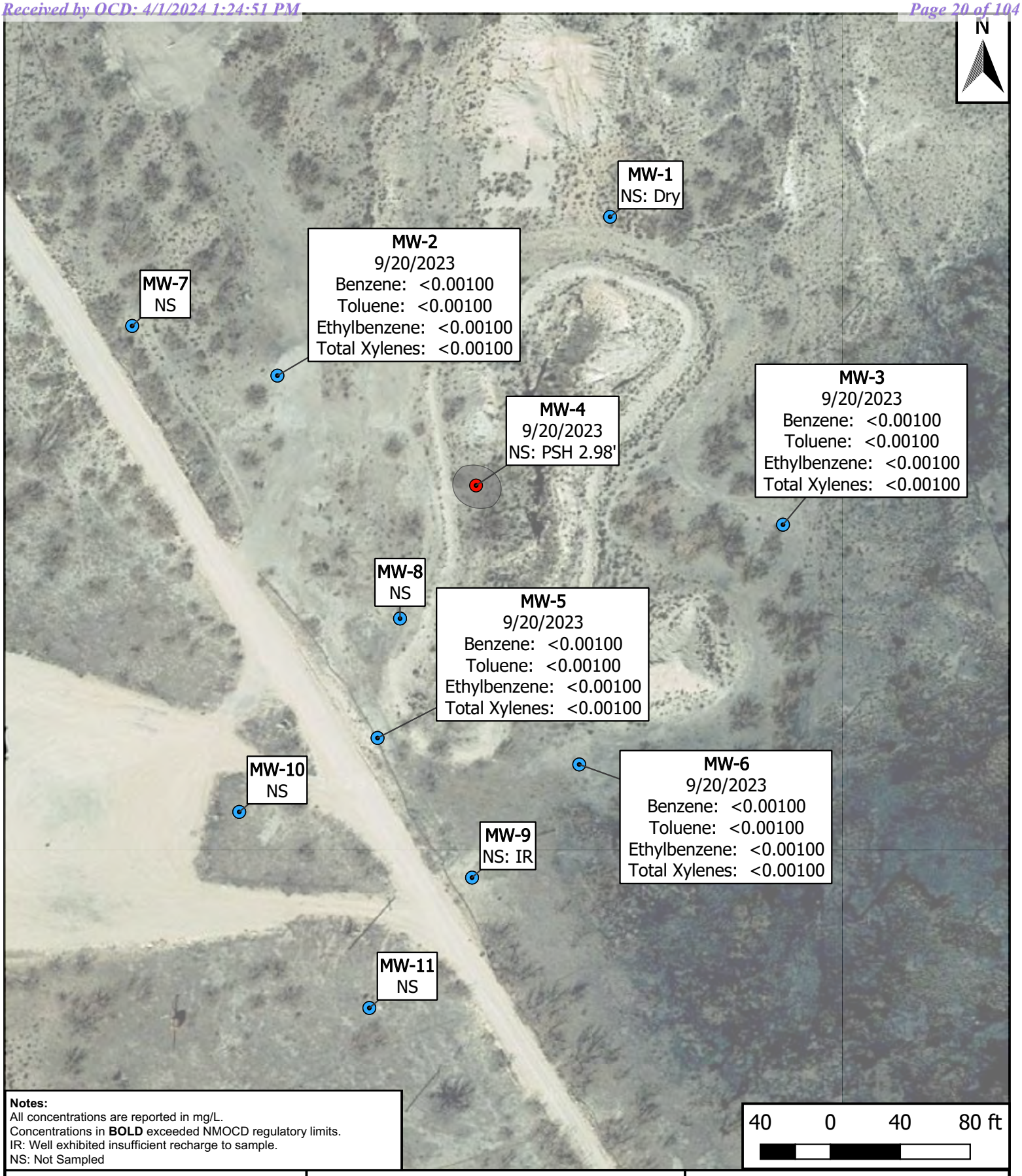
Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
IR: Well exhibited insufficient recharge to sample.
NS: Not Sampled

Legend
- Monitor Well
- Recovery Well
- PSH Plume

Figure 3B
Groundwater Concentration Map – 2Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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



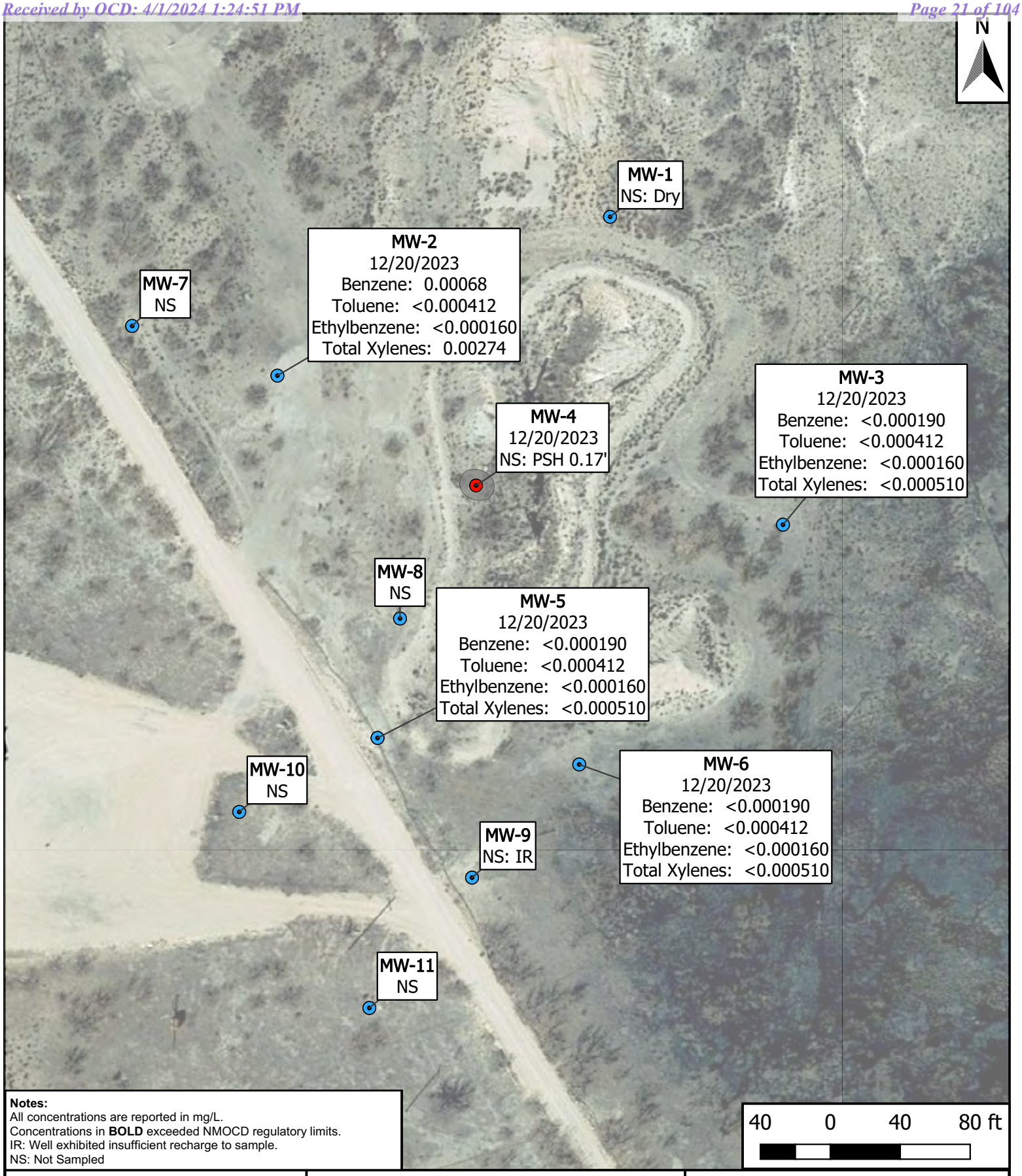
Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
IR: Well exhibited insufficient recharge to sample.
NS: Not Sampled

Legend
- Monitor Well
- Recovery Well
- PSH Plume

Figure 3C
Groundwater Concentration Map – 3Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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



Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
IR: Well exhibited insufficient recharge to sample.
NS: Not Sampled

Legend
- Monitor Well
- Recovery Well
- PSH Plume

Figure 3D
Groundwater Concentration Map – 4Q2023
Plains All American Pipeline, LP
Livingston Line – Bob McCasland
GPS: 32.504135, -103.151345
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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

Tables 1 - 5

Table 1
Groundwater Elevation & PSH[1] Thickness Summary

Livingston Line - Bob McCasland Pipeline Leak
Lea County, New Mexico
Plains SRS #: 2001-11226
Etech Project #: 17475
NMOCD[2] Incident #: nAPP2109736613

All elevation measurements are in feet above mean sea level

Monitoring Well (Well Diameter ")	Date Gauged	Top of Casing (TOC)[3] Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation**
MW-1 (2")	03/15/22	2,439.09	DRY			
	06/09/22					
	09/27/22					
	02/21/23					
	03/27/23					
	06/28/23					
	09/20/23					
	12/20/23					
MW-2 (2")	03/15/22	3,432.62	-	33.04	-	3,399.58
	06/09/22		-	33.71	-	3,398.91
	09/27/22		-	34.43	-	3,398.19
	02/21/23		-	33.61	-	3,399.01
	03/27/23		-	33.65	-	3,398.97
	06/28/23		-	34.42	-	3,398.20
	09/20/23		-	34.47	-	3,398.16
	12/20/23		-	34.51	-	3,398.11
MW-3 (2")	03/15/22	3,433.61	-	34.74	-	3,398.87
	06/09/22		-	35.25	-	3,398.36
	09/27/22		-	36.00	-	3,397.61
	02/21/23		-	35.47	-	3,398.14
	03/24/23		-	35.36	-	3,398.25
	06/28/23		-	36.02	-	3,397.59
	09/20/23		-	35.88	-	3,397.73
	12/20/23		-	36.25	-	3,397.36
MW-4 (2")	03/15/22	3,432.25	32.57	35.49	2.92	3,399.24
	04/27/22		32.6	35.98	3.38	3,399.14
	09/27/22		33.86	37.08	3.22	3,397.91
	02/21/23		33.11	37.36	4.25	3,398.50
	03/27/23		33.09	37.47	4.38	3,398.50
	06/28/23		33.07	37.47	4.40	3,398.52
	09/20/23		33.48	36.46	2.98	3,398.32
	12/20/23		34.27	34.44	0.17	3,397.95
MW-5 (2")	03/15/22	3,429.63	-	30.14	-	3,399.49
	06/09/22		-	30.80	-	3,398.83
	09/27/22		-	31.49	-	3,398.14
	02/21/23		-	30.78	-	3,398.85
	03/27/23		-	30.73	-	3,398.90
	06/28/23		-	31.54	-	3,398.09
	09/20/23		-	31.29	-	3,398.34
	12/20/23		-	31.60	-	3,398.03
MW-6 (2")	03/15/22	3,429.30	-	30.38	-	3,398.92
	06/09/22		-	30.99	-	3,398.31
	09/27/22		-	31.71	-	3,397.59
	02/21/23		-	30.94	-	3,398.36
	03/27/23		-	30.98	-	3,398.32
	06/28/23		-	31.82	-	3,397.48
	09/20/23		-	31.54	-	3,397.76
	12/20/23		-	31.83	-	3,397.47

Notes:
1. PSH = Phase Separated Hydrocarbons
2. NMOCD = New Mexico Oil Conservation Division
3. TOC = Top of Casing
* Elevations based on the North American Vertical Datum of 1988.
** Corrected groundwater elevations were extrapolated using a PSH specific gravity of 0.85, if PSH was gauged in the monitoring well.

Table 1
Groundwater Elevation & PSH[1] Thickness Summary

Livingston Line - Bob McCasland Pipeline Leak
Lea County, New Mexico
Plains SRS #: 2001-11226
Etech Project #: 17475
NMOCD[2] Incident #: nAPP2109736613

All elevation measurements are in feet above mean sea level

Monitoring Well (Well Diameter ")	Date Gauged	Top of Casing (TOC)[3] Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation**
MW-7 (2")	03/15/22	3,431.37	-	30.93	-	3,400.44
	09/27/22		-	32.38	-	3,398.99
	03/27/23		-	31.61	-	3,399.76
	06/28/23		-	32.38	-	3,398.99
	09/20/23		-	32.13	-	3,399.24
	12/20/23		-	32.40	-	3,398.97
MW-8 (4")	03/15/22	3,431.07	-	31.50	-	3,399.57
	09/27/22		-	32.85	-	3,398.22
	03/27/23		-	32.27	-	3,398.80
	06/28/23		-	32.82	-	3,398.25
	09/20/23		-	32.69	-	3,398.38
	12/20/23		-	32.97	-	3,398.10
MW-9 (2")	03/15/22	3,429.79	-	30.55	-	3,399.24
	09/27/22		-	31.48	-	3,398.31
	03/27/23		-	31.18	-	3,398.61
	06/28/23		-	31.59	-	3,398.20
	09/20/23		-	31.41	-	3,398.38
	12/20/23		-	31.45	-	3,398.34
MW-10 (2")	03/15/22	3,429.49	-	29.98	-	3,399.51
	09/27/22		-	31.34	-	3,398.15
	03/27/23		-	30.57	-	3,398.92
	06/28/23		-	31.47	-	3,398.02
	09/20/23		-	31.15	-	3,398.34
	12/20/23		-	31.42	-	3,398.07
MW-11 (2")	03/15/22	3,428.32	-	29.13	-	3,399.19
	09/27/22		-	30.46	-	3,397.86
	03/27/23		-	29.79	-	3,398.53
	06/28/23		-	30.48	-	3,397.84
	09/20/23		-	30.28	-	3,398.04
	12/20/23		-	30.56	-	3,397.76

Notes:
1. PSH = Phase Separated Hydrocarbons
2. NMOCD = New Mexico Oil Conservation Division
3. TOC = Top of Casing
* Elevations based on the North American Vertical Datum of 1988.
** Corrected groundwater elevations were extrapolated using a PSH specific gravity of 0.85, if PSH was gauged in the monitoring well.

Table 2
Groundwater BTEX[1] Concentration Analytical Summary

Livingston Line - Bob McCasland Pipeline Leak
Lea County, New Mexico
Plains SRS #: 2001-11226
Etech Project #: 17475
NMOCD[2] Incident ID#: nAPP2109736613

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

Monitoring Well	Date Sampled	EPA SW846-8021B						
		Benzene	Toluene	Ethylbenzene	M,P-Xylenes	O-Xylenes	Total Xylenes	Total BTEX
NMOCD RRAL CRITERIA[3]		0.01	0.75	0.75	TOTAL XYLENES 0.62			NE[4]
MW-1	03/15/2022	Dry - Not Sampled						
	06/09/2022							
	09/27/2022							
	02/17/2023							
	03/27/2023							
	06/28/2023							
	09/20/2023							
	12/20/2023							
MW-2	03/15/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/27/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/17/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500
	09/20/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/20/2023	0.000680	<0.000412	<0.000160	-	-	0.00274	0.00342
	DUP-1	0.000845	<0.000412	<0.000160	-	-	<0.000510	0.000845
MW-3	03/15/2022	<0.000408	0.000401 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/27/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/17/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500
	09/20/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/20/2023	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510
MW-4	03/15/2022	Not Sampled Due to the presence of Phase Separated Hydrocarbons (PSH)						
	06/09/2022							
	09/27/2022							
	02/17/2023							
	03/27/2023							
	06/28/2023							
	09/20/2023							
	12/20/2023							
MW-5	03/15/2022	<0.000408	0.000459 J	0.000700 J	<0.000629	<0.000642	<0.000642	0.00116 J
	DUP-1	<0.000408	0.000433 J	0.000673 J	<0.000629	<0.000642	<0.000642	0.00111 J
	06/09/2022	0.000596J	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/27/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	DUP-1	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/17/2023	<0.000408	<0.000367	0.000780J	0.000804J	<0.000642	0.000804J	0.00158J
	03/27/2023	0.00107	0.00119	0.00202	<0.00200	<0.00100	<0.00200	0.00428
	06/28/2023	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500
	09/20/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/20/2023	<0.000190	<0.000412	<0.000160	-	-	<0.00051	<0.000510
MW-6	03/15/2022	<0.000408	0.000403 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/27/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/17/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500
	09/20/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/20/2023	<0.000190	<0.000412	<0.000160	-	-	<0.00051	<0.000510

Notes:
1. BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes
2. NMOCD = New Mexico Oil Conservation Division
3. RRAL Criteria = Recommended Remediation Action Level Criteria
4. NE = Not Established
J: The target analyte was positively identified below the quantitation limit and above the detection limit
Bold text indicates a concentration exceeding the NMOCD RRAL Criteria

Table 2
Groundwater BTEX[1] Concentration Analytical Summary

Livingston Line - Bob McCasland Pipeline Leak
Lea County, New Mexico
Plains SRS #: 2001-11226
Etech Project #: 17475
NMOCD[2] Incident ID#: nAPP2109736613

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

Monitoring Well	Date Sampled	EPA SW846-8021B						
		Benzene	Toluene	Ethylbenzene	M,P-Xylenes	O-Xylenes	Total Xylenes	Total BTEX
NMOCD RRAL CRITERIA[3]		0.01	0.75	0.75	TOTAL XYLENES 0.62			NE[4]
MW-7	03/15/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	Well Not Sampled (Annual Schedule)						
	09/27/2022							
	02/17/2023							
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Well Not Sampled (Annual Schedule)						
	09/20/2023							
	12/20/2023							
MW-8	03/15/2022	<0.000408	0.000435 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	Well Not Sampled (Annual Schedule)						
	09/27/2022							
	02/17/2023							
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Well Not Sampled (Annual Schedule)						
	09/20/2023							
	12/20/2023							
MW-9	03/15/2022	Insufficient Volume for Sample Collection						
	06/09/2022							
	09/27/2022							
	02/17/2023							
	03/27/2023							
	06/28/2023							
	09/20/2023							
	12/20/2023							
MW-10	03/15/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	Well Not Sampled (Annual Schedule)						
	09/27/2022							
	02/17/2023							
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Well Not Sampled (Annual Schedule)						
	09/20/2023							
	12/20/2023							
MW-11	03/15/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/09/2022	Well Not Sampled (Annual Schedule)						
	09/27/2022							
	02/17/2023							
	03/27/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Well Not Sampled (Annual Schedule)						
	09/20/2023							
	12/20/2023							

Notes:
1. BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes
2. NMOCD = New Mexico Oil Conservation Division
3. RRAL Criteria = Recommended Remediation Action Level Criteria
4. NE = Not Established
J: The target analyte was positively identified below the quantitation limit and above the detection limit
Bold text indicates a concentration exceeding the NMOCD RRAL Criteria

Table 3
MW-4 PSH[1]/BTEX[2] Impacted Groundwater Recovery Summary

Livingston Line to Bob McCasland Pipeline Release
Lea County, New Mexico
Plains SRS #: 2001-11226
Etech Project #: 17475
NMOCD[3] Incident ID#: nAPP2109736613

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Depth to PSH[1] Below Top of Casing	Depth to Water Below Top of Casing	PSH Thickness	Total Fluid Recovery (gallons)	PSH Recovered (gallons)
MW-4	01/25/2022	32.85	34.88	2.03	4.00	0.33
	02/23/2022	32.55	35.78	3.23	4.00	0.53
	03/29/2022	32.48	35.99	3.51	4.00	0.57
	04/27/2022	32.60	35.98	3.38	5.00	0.55
	08/31/2022	33.72	37.28	3.56	5.00	0.58
	10/19/2022	33.69	36.98	3.29	5.00	0.54
	11/22/2022	33.41	36.74	3.33	5.00	0.54
	03/10/2023	39.25	40.25	1.00	4.00	0.16
	03/27/2023	33.09	37.47	4.38	6.50	0.71
	05/12/2023	39.21	40.26	1.05	4.00	0.17
	05/25/2023	33.21	37.86	4.65	5.00	0.76
	06/28/2023	33.07	37.47	4.40	0.00	0.00
	07/25/2023	-	-	-	5.00	0.72
	08/22/2023	-	-	-	250	0.60
	09/20/2023	-	-	-	5.00	0.03
	12/20/2023	34.27	34.44	0.17	0.00	0.00
2023 Average PSH Thickness:			**2.61**	**2023 Total Recovery**	**280**	**3.16**

Notes:
1. PSH: Phase Separated Hydrocarbons
2. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes
3. NMOCD: New Mexico Oil Conservation Division
- = Data not recorded

Table 4
MW-5 BTEX[1] Impacted Groundwater Recovery Summary

Livingston Line to Bob McCasland Pipeline Release
Lea County, New Mexico
Plains SRS #: 2001-11226
Etech Project #: 17476
NMOCD[2] Incident ID#: nAPP2109736613

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Groundwater Recovered (gallons)
MW-5	01/25/2022	4.00
	02/23/2022	3.50
	03/29/2022	5.00
	04/27/2022	0.00
	08/31/2022	5.00
	10/19/2022	5.00
	11/22/2022	5.00
	02/21/2023	5.00
	03/10/2023	1.50
	03/27/2023	3.40
	05/12/2023	1.50
	06/28/2023	2.00
	07/25/2023	5.00
	09/20/2023	2.50
	12/20/2023	2.47
2023 Total GW[3] Recovered		**23.4**

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes
2. NMOCD: New Mexico Oil Conservation Division
3. GW: Groundwater
- = Data not recorded

Table 5

Concentrations of PAH[1] in Groundwater Summary

Livingston Line – Bob McCasland

Lea County, New Mexico

Plains SRS #: 2001-11226

Etech Project #: 17475

NMOCD[2] Incident ID#: nAPP2109736613

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

Well ID	Date Sampled	EPA SW846-8270C, 3510																
		N/Aphthalene	Benzo(a)pyrene	AceN/Aphthene	AceN/Aphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	PheN/Anthrene	Pyrene
NMWQCC Standard[4]		0.03	0.0007	NE[5]														
MW-1	9/13/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	7/14/2004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	3/21/2005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	2/16/2006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/10/2007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
MW-2	7/14/2004	0.0133	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000061	<0.00005	0.000497	<0.00005
	3/21/2005	0.00883	<0.00005	0.000054	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000052	<0.00005	0.000325	<0.00005
	2/16/2006	0.0128	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.000066	<0.00005	N/A	<0.00005	0.000103	<0.00005	0.000352	<0.00005
	5/10/2007	0.00779	<0.0002	<0.0002	<0.0002	0.00175	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	0.000442	<0.0002	0.000229	<0.0004	<0.0002	<0.0002
	2/28/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/7/2012	0.00946	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	9/5/2013	0.000902	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508
	12/14/2020	<0.0000976	<0.0000573	<0.000100	<0.0000845	<0.0000869	<0.000135	<0.0000714	<0.000114	<0.000117	<0.000157	<0.0000763	N/A	<0.000158	<0.000101	<0.0000916	<0.0000854	<0.000131
	3/15/2022	<0.0000965	<0.0000567	<0.0000993	<0.0000836	<0.0000894	<0.000133	<0.0000695	<0.000112	<0.000115	<0.000155	<0.0000755	<0.0000993	<0.000156	<0.000100	<0.0000906	<0.0000844	<0.000129
MW-3	9/13/2001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	7/14/2004	N/A																
	9/14/2004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	3/21/2005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	2/16/2006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/10/2007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
	2/28/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	<0.000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562
	10/5/2014	Not sampled due to sampling frequency reduction																
	10/15/2015																	
	12/14/2020	<0.000104	<0.0000613	<0.000107	<0.0000904	<0.0000930	<0.000144	<0.0000763	<0.000122	<0.000125	<0.000168	<0.0000816	N/A	<0.000169	<0.000108	<0.0000980	<0.0000913	<0.000140
	3/15/2022	<0.0000974	<0.0000572	<0.000100	<0.0000844	<0.0000902	<0.000134	<0.0000701	<0.000113	<0.000116	<0.000156	<0.0000761	<0.000100	<0.000157	<0.000101	<0.0000915	<0.0000974	<0.000130

Notes:
1. PAH: Polycyclic Aromatic Hydrocarbons
2. NMOCD: New Mexico Oil Conservation Division
3. NMWQCC: New Mexico Water Quality Control Commission
4. NE: Not Established

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

Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards

Table 5

Concentrations of PAH[1] in Groundwater Summary

Livingston Line – Bob McCasland

Lea County, New Mexico

Plains SRS #: 2001-11226

Etech Project #: 17475

NMOCD[2] Incident ID#: nAPP2109736613

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

Well ID	Date Sampled	EPA SW846-8270C, 3510																
		N/Aphthalene	Benzo(a)pyrene	AceN/Aphthene	AceN/Aphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	PheN/Anthrene	Pyrene
NMWQCC Standard[4]		0.03	0.0007	NE[5]														
MW-4		Not sampled due to the presence of Phase-Separated Hydrocarbons (PSH)																
	2/16/2006	**0.113**	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00252	<0.00005	N/A	<0.00005	0.000855	<0.00005	0.00916	<0.00005
	5/10/2007	**0.0659**	<0.0002	<0.0002	<0.0002	0.00596	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	0.00112	<0.0002	0.000737	<0.0004	<0.0002	<0.0002
	2/28/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	12/30/2011	**0.0366**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/7/2012	**0.101**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00154	<0.0002	<0.0002	<0.0002	0.00494	<0.0002
	9/5/2013	**0.0643**	<0.0000667	<0.0000667	0.000288	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	0.00092	<0.0000667	0.000419	<0.0000667	0.00328	<0.0000667
	10/5/2014	0.00869	<0.00000660	<0.00000407	<0.00000495	<0.00000236	<0.00000527	<0.00000998	<0.00000796	<0.00000583	<0.00000427	<0.00000580	0.000308	<0.00000633	0.00014	<0.00000750	0.000821	<0.00000691
	10/15/2015	0.0104	<0.000391	<0.000958	<0.000967	<0.000729	<0.000367	<0.000459	<0.000350	<0.000573	<0.000382	<0.000406	N/A	<0.000500	<0.000988	<0.000367	0.000797	0.000459
	11/14/2019	0.0107	<0.000108	<0.000108	0.000262	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	<0.000108	0.000831	<0.000108	0.000367	<0.000108	0.00148	<0.000108
	12/14/2020	Not sampled due the presence of PSH																
MW-5	9/13/2001	**0.049**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	7/14/2004	N/A																
	9/14/2004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	3/21/2005	N/A																
	2/16/2006	0.000415	<0.00005	0.000059	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000147	<0.00005	0.000309	<0.00005
	5/10/2007	0.00218	<0.0002	<0.0002	<0.0002	0.00075	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	0.00112	<0.0002	0.000496	<0.0004	<0.0002	<0.0002
	2/28/2008	**0.051**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	12/30/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/7/2012	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	9/5/2013	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562	0.000311	<0.0000562	<0.0000562	<0.0000562	<0.0000562	<0.0000562
	11/14/2019	0.00670	<0.000111	0.000233	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	0.00135	<0.000111	<0.000111	<0.000111	0.000242	<0.000111
	12/14/2020	<0.000101	<0.0000595	<0.000104	<0.0000878	<0.0000904	<0.000140	<0.0000742	<0.000118	<0.000121	<0.000163	<0.0000793	N/A	<0.000164	<0.000105	<0.0000953	<0.0000887	<0.000136
	3/15/2022	<0.000194	<0.0000605	<0.000106	<0.0000892	<0.0000954	<0.000142	<0.0000605	<0.000120	<0.000123	<0.000165	<0.0000805	0.000524	<0.000166	<0.000107	<0.0000968	<0.0000901	<0.000138

Notes:
1. PAH: Polycyclic Aromatic Hydrocarbons
2. NMOCD: New Mexico Oil Conservation Division
3. NMWQCC: New Mexico Water Quality Control Commission
4. NE: Not Established

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

Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards

Table 5

Concentrations of PAH[1] in Groundwater Summary

Livingston Line – Bob McCasland

Lea County, New Mexico

Plains SRS #: 2001-11226

Etech Project #: 17475

NMOCD[2] Incident ID#: nAPP2109736613

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

Well ID	Date Sampled	EPA SW846-8270C, 3510																
		N/Aphthalene	Benzo(a)pyrene	AceN/Aphthene	AceN/Aphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	PheN/Anthrene	Pyrene
NMWQCC Standard[4]		0.03	0.0007	NE[5]														
MW-6	7/14/2004	0.00122	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	0.000085	<0.00005
	3/21/2005	0.000089	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	2/16/2006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/10/2007	0.00095	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
	2/28/2008	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667	0.000305	<0.0000667	<0.0000667	<0.0000667	<0.0000667	<0.0000667
	12/14/2020	<0.0000977	<0.0000573	<0.000100	<0.0000846	<0.0000870	<0.000135	<0.0000714	<0.000114	<0.000117	<0.000157	<0.0000764	N/A	<0.000158	<0.000101	<0.0000917	<0.0000854	<0.000131
	3/15/2022	<0.0000962	<0.0000565	<0.0000989	<0.0000833	<0.0000890	<0.000133	<0.0000692	<0.000112	<0.000115	<0.000154	<0.0000752	<0.0000989	<0.000155	<0.0000999	<0.0000903	<0.0000841	<0.000129
MW-7	7/14/2004	0.000261	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	0.000293	<0.00005
	3/21/2005	0.000448	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	0.000222	<0.00005
	2/16/2006	0.000057	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/10/2007	0.000606	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
	2/28/2008	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	12/30/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508
MW-8	7/14/2004	0.000261	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	0.000293	<0.00005
	3/21/2005	0.000448	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	0.000222	<0.00005
	2/16/2006	0.000057	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/10/2007	0.000606	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
	2/28/2008	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	12/30/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508

Notes:
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Livingston Line – Bob McCasland

Lea County, New Mexico

Plains SRS #: 2001-11226

Etech Project #: 17475

NMOCD[2] Incident ID#: nAPP2109736613

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

Well ID	Date Sampled	EPA SW846-8270C, 3510																
		N/Aphthalene	Benzo(a)pyrene	AceN/Aphthene	AceN/Aphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	PheN/Anthrene	Pyrene
NMWQCC Standard[4]		0.03	0.0007	NE[5]														
MW-9	7/14/2004	0.00798	<0.00005	0.000089	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000306	<0.00005	0.00008	<0.00005
	3/21/2005	0.00126	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000076	<0.00005	0.000068	<0.00005
	2/16/2006	0.0107	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000139	<0.00005	0.000125	<0.00005
	5/10/2007	0.00243	<0.0002	<0.0002	<0.0002	0.000222	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	0.00132	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
	2/28/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	0.00247	<0.0000588	<0.0000588	<0.0000588	<0.0000588	<0.0000588	<0.0000588	<0.0000588	<0.0000588	<0.0000588	<0.0000588	0.000354	<0.0000588	0.000262	<0.0000588	0.000287	<0.0000588
	12/14/2020	<0.0000969	<0.0000569	<0.0000996	<0.0000839	<0.0000863	<0.000134	<0.0000708	<0.000113	<0.000116	<0.000156	<0.0000757	N/A	<0.000157	<0.000100	<0.0000910	<0.0000848	<0.000130
MW-10	3/21/2005	0.00738	<0.00005	0.000083	0.000051	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.000292	<0.00005	0.000654	<0.00005
	2/16/2006	N/A																
	5/22/2006	0.000174	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	0.00009	<0.00005	0.000202	<0.00005
	5/10/2007	0.000688	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	0.00108	<0.0002	0.000388	<0.0004	<0.0002	<0.0002
	2/28/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	0.000548	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	0.000714	<0.0000508	0.0000839	<0.0000508	0.0000605	<0.0000508
MW-11	3/21/2005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	2/16/2006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	N/A	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/10/2007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002
	2/28/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005
	9/5/2013	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524	<0.0000524

Notes:
1. PAH: Polycyclic Aromatic Hydrocarbons
2. NMOCD: New Mexico Oil Conservation Division
3. NMWQCC: New Mexico Water Quality Control Commission
4. NE: Not Established

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

Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards

Appendix A
Laboratory Analytical Reports

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

PBELAB

Analytical Report

Prepared for:

Joel Lowry

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

13000 West County Road 100

Odessa, TX 79765

Project: Plains-Livingston Line

Project Number: 17475

Location: Lea County, NM

Lab Order Number: 3D03009

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 04/14/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-10	3D03009-01	Water	03/27/23 15:20	04-03-2023 14:40
MW-11	3D03009-02	Water	03/27/23 15:00	04-03-2023 14:40
MW-5	3D03009-03	Water	03/27/23 12:12	04-03-2023 14:40
MW-8	3D03009-04	Water	03/27/23 11:34	04-03-2023 14:40
MW-2	3D03009-05	Water	03/27/23 10:01	04-03-2023 14:40
MW-6	3D03009-06	Water	03/27/23 08:58	04-03-2023 14:40
MW-7	3D03009-07	Water	03/27/23 11:02	04-03-2023 14:40
MW-3	3D03009-08	Water	03/27/23 09:24	04-03-2023 14:40

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW-10

3D03009-01 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:02	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:02	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:02	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:02	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:02	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*112 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 06:02*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*92.4 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 06:02*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW-11

3D03009-02 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:23	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:23	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:23	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:23	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:23	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 06:23*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*91.7 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 06:23*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW-5

3D03009-03 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	**0.00107**	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:44	EPA 8021B	
Toluene	**0.00119**	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:44	EPA 8021B	
Ethylbenzene	**0.00202**	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:44	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:44	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 06:44	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*110 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 06:44*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*92.3 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 06:44*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

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3D03009-04 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:06	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:06	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:06	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:06	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:06	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 07:06*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*90.9 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 07:06*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW-2

3D03009-05 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:27	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:27	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:27	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:27	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0302	04/03/23 15:51	04/04/23 07:27	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 07:27*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*92.4 %*	*80-120*		*P3D0302*	*04/03/23 15:51*	*04/04/23 07:27*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

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3D03009-06 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 22:52	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 22:52	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 22:52	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 22:52	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 22:52	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*100 %*	*80-120*		*P3D0603*	*04/06/23 10:11*	*04/06/23 22:52*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*100 %*	*80-120*		*P3D0603*	*04/06/23 10:11*	*04/06/23 22:52*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

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3D03009-07 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:13	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:13	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:13	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:13	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0603*	*04/06/23 10:11*	*04/06/23 23:13*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.3 %*	*80-120*		*P3D0603*	*04/06/23 10:11*	*04/06/23 23:13*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

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3D03009-08 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:35	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:35	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:35	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:35	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0603	04/06/23 10:11	04/06/23 23:35	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		*P3D0603*	*04/06/23 10:11*	*04/06/23 23:35*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.6 %*	*80-120*		*P3D0603*	*04/06/23 10:11*	*04/06/23 23:35*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D0302 - * DEFAULT PREP *** **										
Blank (P3D0302-BLK1)				Prepared & Analyzed: 04/03/23						
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	*0.132*		*"*	*0.120*		*110*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.110*		*"*	*0.120*		*91.7*	*80-120*			
LCS (P3D0302-BS1)				Prepared & Analyzed: 04/03/23						
Benzene	0.117	0.00100	mg/L	0.100		117	80-120			
Toluene	0.115	0.00100	"	0.100		115	80-120			
Ethylbenzene	0.119	0.00100	"	0.100		119	80-120			
Xylene (p/m)	0.240	0.00200	"	0.200		120	80-120			
Xylene (o)	0.114	0.00100	"	0.100		114	80-120			
Surrogate: 4-Bromofluorobenzene	*0.137*		*"*	*0.120*		*114*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.8*	*80-120*			
LCS Dup (P3D0302-BSD1)				Prepared & Analyzed: 04/03/23						
Benzene	0.114	0.00100	mg/L	0.100		114	80-120	2.37	20	
Toluene	0.115	0.00100	"	0.100		115	80-120	0.00873	20	
Ethylbenzene	0.118	0.00100	"	0.100		118	80-120	1.17	20	
Xylene (p/m)	0.239	0.00200	"	0.200		120	80-120	0.246	20	
Xylene (o)	0.113	0.00100	"	0.100		113	80-120	0.563	20	
Surrogate: 4-Bromofluorobenzene	*0.132*		*"*	*0.120*		*110*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.111*		*"*	*0.120*		*92.7*	*80-120*			
Calibration Blank (P3D0302-CCB1)				Prepared & Analyzed: 04/03/23						
Benzene	0.130		ug/l							
Toluene	0.290		"							
Ethylbenzene	0.470		"							
Xylene (p/m)	1.45		"							
Xylene (o)	0.650		"							
Surrogate: 4-Bromofluorobenzene	*0.133*		*"*	*0.120*		*111*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.112*		*"*	*0.120*		*93.4*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D0302 - * DEFAULT PREP *** **										
Calibration Blank (P3D0302-CCB2)				Prepared: 04/03/23 Analyzed: 04/04/23						
Benzene	0.0900		ug/l							
Toluene	0.220		"							
Ethylbenzene	0.430		"							
Xylene (p/m)	1.07		"							
Xylene (o)	0.440		"							
Surrogate: 4-Bromofluorobenzene	*0.134*		*"*	*0.120*		*112*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.111*		*"*	*0.120*		*92.5*	*80-120*			
Calibration Check (P3D0302-CCV1)				Prepared & Analyzed: 04/03/23						
Benzene	0.0818	0.00100	mg/L	0.100		81.8	80-120			
Toluene	0.104	0.00100	"	0.100		104	80-120			
Ethylbenzene	0.116	0.00100	"	0.100		116	80-120			
Xylene (p/m)	0.237	0.00200	"	0.200		119	80-120			
Xylene (o)	0.115	0.00100	"	0.100		115	80-120			
Surrogate: 4-Bromofluorobenzene	*0.140*		*"*	*0.120*		*117*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.1*	*80-120*			
Calibration Check (P3D0302-CCV2)				Prepared: 04/03/23 Analyzed: 04/04/23						
Benzene	0.0861	0.00100	mg/L	0.100		86.1	80-120			
Toluene	0.109	0.00100	"	0.100		109	80-120			
Ethylbenzene	0.119	0.00100	"	0.100		119	80-120			
Xylene (p/m)	0.240	0.00200	"	0.200		120	80-120			
Xylene (o)	0.118	0.00100	"	0.100		118	80-120			
Surrogate: 4-Bromofluorobenzene	*0.129*		*"*	*0.120*		*108*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.108*		*"*	*0.120*		*90.0*	*80-120*			
Calibration Check (P3D0302-CCV3)				Prepared: 04/03/23 Analyzed: 04/04/23						
Benzene	0.109	0.00100	mg/L	0.100		109	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.106	0.00100	"	0.100		106	80-120			
Xylene (p/m)	0.219	0.00200	"	0.200		109	80-120			
Xylene (o)	0.102	0.00100	"	0.100		102	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*91.0*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.0961*		*"*	*0.120*		*80.1*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
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Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D0302 - * DEFAULT PREP *** **										
Matrix Spike (P3D0302-MS1)	**Source: 3C27011-01**			Prepared: 04/03/23 Analyzed: 04/04/23						
Benzene	0.112	0.00100	mg/L	0.100	ND	112	80-120			
Toluene	0.109	0.00100	"	0.100	ND	109	80-120			
Ethylbenzene	0.116	0.00100	"	0.100	ND	116	80-120			
Xylene (p/m)	0.233	0.00200	"	0.200	ND	117	80-120			
Xylene (o)	0.107	0.00100	"	0.100	ND	107	80-120			
Surrogate: 4-Bromofluorobenzene	*0.137*		*"*	*0.120*		*114*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.109*		*"*	*0.120*		*90.7*	*80-120*			
Matrix Spike Dup (P3D0302-MSD1)	**Source: 3C27011-01**			Prepared: 04/03/23 Analyzed: 04/04/23						
Benzene	0.119	0.00100	mg/L	0.100	ND	119	80-120	6.19	20	
Toluene	0.117	0.00100	"	0.100	ND	117	80-120	7.63	20	
Ethylbenzene	0.117	0.00100	"	0.100	ND	117	80-120	0.797	20	
Xylene (p/m)	0.242	0.00200	"	0.200	ND	121	80-120	3.70	20	QM-05
Xylene (o)	0.114	0.00100	"	0.100	ND	114	80-120	6.33	20	
Surrogate: 4-Bromofluorobenzene	*0.139*		*"*	*0.120*		*116*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.111*		*"*	*0.120*		*92.6*	*80-120*			
Batch P3D0603 - * DEFAULT PREP *** **										
Blank (P3D0603-BLK1)				Prepared & Analyzed: 04/06/23						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.111*		*"*	*0.120*		*92.5*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.123*		*"*	*0.120*		*103*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
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Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D0603 - * DEFAULT PREP *** **										
LCS (P3D0603-BS1)				Prepared & Analyzed: 04/06/23						
Benzene	0.118	0.00100	mg/L	0.100		118	80-120			
Toluene	0.112	0.00100	"	0.100		112	80-120			
Ethylbenzene	0.113	0.00100	"	0.100		113	80-120			
Xylene (p/m)	0.225	0.00200	"	0.200		112	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.120*		*93.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.122*		*"*	*0.120*		*102*	*80-120*			
LCS Dup (P3D0603-BSD1)				Prepared & Analyzed: 04/06/23						
Benzene	0.120	0.00100	mg/L	0.100		120	80-120	1.28	20	
Toluene	0.119	0.00100	"	0.100		119	80-120	5.95	20	
Ethylbenzene	0.119	0.00100	"	0.100		119	80-120	5.28	20	
Xylene (p/m)	0.239	0.00200	"	0.200		119	80-120	6.05	20	
Xylene (o)	0.111	0.00100	"	0.100		111	80-120	6.13	20	
Surrogate: 4-Bromofluorobenzene	*0.115*		*"*	*0.120*		*95.7*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.122*		*"*	*0.120*		*102*	*80-120*			
Calibration Blank (P3D0603-CCB1)				Prepared & Analyzed: 04/06/23						
Benzene	0.180		ug/l							
Toluene	0.320		"							
Ethylbenzene	0.570		"							
Xylene (p/m)	1.00		"							
Xylene (o)	0.580		"							
Surrogate: 4-Bromofluorobenzene	*0.119*		*"*	*0.120*		*99.4*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.120*		*101*	*80-120*			
Calibration Blank (P3D0603-CCB2)				Prepared & Analyzed: 04/06/23						
Benzene	0.170		ug/l							
Toluene	0.180		"							
Ethylbenzene	0.270		"							
Xylene (p/m)	0.630		"							
Xylene (o)	0.330		"							
Surrogate: 4-Bromofluorobenzene	*0.119*		*"*	*0.120*		*98.8*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.9*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
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Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D0603 - * DEFAULT PREP *** **										
Calibration Check (P3D0603-CCV1)				Prepared & Analyzed: 04/06/23						
Benzene	0.115	0.00100	mg/L	0.100		115	80-120			
Toluene	0.112	0.00100	"	0.100		112	80-120			
Ethylbenzene	0.106	0.00100	"	0.100		106	80-120			
Xylene (p/m)	0.224	0.00200	"	0.200		112	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	*0.117*		"	*0.120*		*97.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.124*		"	*0.120*		*103*	*80-120*			
Calibration Check (P3D0603-CCV2)				Prepared & Analyzed: 04/06/23						
Benzene	0.0938	0.00100	mg/L	0.100		93.8	80-120			
Toluene	0.0903	0.00100	"	0.100		90.3	80-120			
Ethylbenzene	0.0861	0.00100	"	0.100		86.1	80-120			
Xylene (p/m)	0.183	0.00200	"	0.200		91.4	80-120			
Xylene (o)	0.0846	0.00100	"	0.100		84.6	80-120			
Surrogate: 4-Bromofluorobenzene	*0.118*		"	*0.120*		*98.6*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.1*	*80-120*			
Calibration Check (P3D0603-CCV3)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.106	0.00100	mg/L	0.100		106	80-120			
Toluene	0.105	0.00100	"	0.100		105	80-120			
Ethylbenzene	0.101	0.00100	"	0.100		101	80-120			
Xylene (p/m)	0.214	0.00200	"	0.200		107	80-120			
Xylene (o)	0.0994	0.00100	"	0.100		99.4	80-120			
Surrogate: 4-Bromofluorobenzene	*0.127*		"	*0.120*		*106*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.119*		"	*0.120*		*98.9*	*80-120*			
Matrix Spike (P3D0603-MS1)		**Source: 3C28006-01**		Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.116	0.00100	mg/L	0.100	ND	116	80-120			
Toluene	0.115	0.00100	"	0.100	ND	115	80-120			
Ethylbenzene	0.120	0.00100	"	0.100	ND	120	80-120			
Xylene (p/m)	0.235	0.00200	"	0.200	ND	117	80-120			
Xylene (o)	0.104	0.00100	"	0.100	ND	104	80-120			
Surrogate: 4-Bromofluorobenzene	*0.124*		"	*0.120*		*103*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.120*		"	*0.120*		*100*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D0603 - * DEFAULT PREP *** **										
Matrix Spike Dup (P3D0603-MSD1)	**Source: 3C28006-01**			Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.106	0.00100	mg/L	0.100	ND	106	80-120	9.04	20	
Toluene	0.106	0.00100	"	0.100	ND	106	80-120	8.25	20	
Ethylbenzene	0.111	0.00100	"	0.100	ND	111	80-120	7.57	20	
Xylene (p/m)	0.220	0.00200	"	0.200	ND	110	80-120	6.51	20	
Xylene (o)	0.0981	0.00100	"	0.100	ND	98.1	80-120	5.82	20	
Surrogate: 4-Bromofluorobenzene	*0.128*		*"*	*0.120*		*107*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.120*		*101*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Line
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Notes and Definitions

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

Report Approved By: Brent Barron Date: 4/14/2023

Brent Barron, Laboratory Director/Technical Director

E Tech Environmental & Safety Solutions, Inc. [1]	Project:	Plains-Livingston Line
13000 West County Road 100	Project Number:	17475
Odessa TX, 79765	Project Manager:	Joel Lowry

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Phone: 432-686-7235

Project Manager: Joel Lowry
Company Name: Plains All American Pipeline, L.P.
Company Address: 1106 Griffith Drive
City/State/Zip: Midland, TX 79706
Telephone No: Fax No:
Sampler Signature: Miguel Ramirez e-mail: pm@etechenv.com

Project Name: Livingston Line
Project #: 17475
Project Loc: Lea County, NM
PO #: 2001-11226
Report Format: X Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 3D03009

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3 250ml Poly	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None 1L Poly	NaOH/ZnAc	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH by TX 1005 8015B 8015M	Chloride	BTEX by 8021B	Rush 24 48 72 (Please call)	Standard
1	MW 10	-	-	03/27/23	3:20		3	X		X						GW			X		X
2	MW 11	-	-	03/27/23	3:00		3	X		X						GW			X		X
3	MW 5	-	-	03/27/23	12:12		3	X		X						GW			X		X
4	MW 8	-	-	03/27/23	11:34		3	X		X						GW			X		X
5	MW 2	-	-	03/27/23	10:01		3	X		X						GW			X		X
6	MW 6	-	-	03/27/23	8:58		3	X		X						GW			X		X
7	MW 7	-	-	03/27/23	11:02		3	X		X						GW			X		X
8	MW 3	-	-	03/27/23	9:24		3	X		X						GW			X		X
		-	-				3	X		X						GW			X		X
		-	-				3	X		X						GW			X		X

Special Instructions:
Bill to Plains, Care of Camille Bryant

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/3/23	4:40			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
			[signature]	4/3/23	14:40

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	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 4.3 °C
Adjusted: °C Factor

NC5 L3

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

PBELAB

Analytical Report

Prepared for:

Zach Conder

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

13000 West County Road 100

Odessa, TX 79765

Project: LIVINGSTON LINE

Project Number: 17475

Location: RURAL LEA COUNTY, NM

Lab Order Number: 3F29012

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 07/17/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW2	3F29012-01	Water	06/28/23 14:25	06-29-2023 13:09
MW3	3F29012-02	Water	06/28/23 14:30	06-29-2023 13:09
MW5	3F29012-03	Water	06/28/23 14:30	06-29-2023 13:09
MW6	3F29012-04	Water	06/28/23 14:35	06-29-2023 13:09

Due to failure of our BTEX Autosampler, 8260 BTEXanalysis was subcontracted to ALS Houston. Their report is attached after the Chain of Custody. Their TCEQ TNI certification number can be found here:
https://www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/labs/als_svcs_houston.pdf

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

MW2

3F29012-01 (Water)

Permian Basin Environmental Lab, L.P.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:31	07/07/23 17:31	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:31	07/07/23 17:31	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1717	07/07/23 17:31	07/07/23 17:31	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:31	07/07/23 17:31	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:31	07/07/23 17:31	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:31	07/07/23 17:31	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

MW3

3F29012-02 (Water)

Permian Basin Environmental Lab, L.P.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:53	07/07/23 17:53	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:53	07/07/23 17:53	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1717	07/07/23 17:53	07/07/23 17:53	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:53	07/07/23 17:53	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:53	07/07/23 17:53	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1717	07/07/23 17:53	07/07/23 17:53	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

MW5

3F29012-03 (Water)

Permian Basin Environmental Lab, L.P.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:16	07/07/23 18:16	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:16	07/07/23 18:16	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1717	07/07/23 18:16	07/07/23 18:16	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:16	07/07/23 18:16	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:16	07/07/23 18:16	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:16	07/07/23 18:16	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

MW6

3F29012-04 (Water)

Permian Basin Environmental Lab, L.P.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:38	07/07/23 18:38	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:38	07/07/23 18:38	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G1717	07/07/23 18:38	07/07/23 18:38	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:38	07/07/23 18:38	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:38	07/07/23 18:38	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G1717	07/07/23 18:38	07/07/23 18:38	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Zach Conder

Notes and Definitions

SUB-13	Subcontract of analyte/analysis to ALS Houston.
ROI	Received on Ice
pH1	The Regulatory Holding time for pH is 15 minutes, Analysis should be done in the field.
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: Brent Barron Date: 7/17/2023

Brent Barron, Laboratory Director/Technical Director

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

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

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Phone: 432-686-7235

Project Manager: Zach Conder
Company Name: ETech Environmental
Company Address: 2617 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: 575.396.2378
Fax No: 575.396.1429
Sampler Signature:
e-mail: PM@etechenv.com

Project Name: Livingston Line
Project #: 17475
Project Loc: Rural Lea Co., NM
PO #: 2001.11226
Report Format: X Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 3F29012

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3 250 ml Poly	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None 1L Poly	NaOH/ZnAc	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH by TX 1005 8015B 8015M	Chloride	BTEX by 8021B	Rush 24 48 72 (Please call)	Standard
1	MW2	-	-	6/28/23	2:25	G	3	X		X							GW				X		X
2	MW3	-	-	6/28/23	2:30	G	3	X		X							GW				X		X
3	MW5	-	-	6/28/23	2:30	G	3	X		X							GW				X		X
4	MW6	-	-	6/28/23	2:35	G	3	X		X							GW				X		X

Special Instructions:

	Date	Time		Date	Time
Relinquished by:					
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
				6/29/23	13:09

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	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 6.0 °C
Adjusted: °C Factor

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Phone: 432-686-7235
PBELAB_SUB_COC_V2

Project Manager: Brent Barron — **Project Name:** SUBCONTRACT

Company Name: PBEL — **Project #:**

Company Address: 1400 Rankin HWY — **Project Loc:**

City/State/Zip: Midland Texas 79701 — **PO #:**

Telephone No: 432-661-4184 — Fax No: — **Report Format:** X Standard ☐ TRRP ☐ NPDES

Sampler Signature: N/A — e-mail: brentbarron@pbelab.com

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: ICE	HNO_3 250 poly 1	HCl 3 40mL VOA	H_2SO_4 1 AMBER 500/250POLY	NaOH /Ascorbic Acid 250ML P	$Na_2S_2O_3$	NONE	NONE 3 AMBER VOAA VIALS	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: BTEX 8021B TOTAL CALC												24 HOUR	STANDARD
	3F29012-01			6/28/2023	14:25		3	X		X						W	X												X
	3F29012-02			6/28/2023	14:30		3	X		X						W	X												X
	3F29012-03			6/28/2023	14:30		3	X		X						W	X												X
	3F29012-04			6/28/2023	14:35		3	X		X						W	X												X

SPECIAL INSTRUCTIONS: **REPORT TO MDL RUN REGARDLESS OF HOLD TIME**

Relinquished by:	Date	Time	Received by:	Date	Time
Brent Barron					
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

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	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		
Temperature Upon Receipt:		
Received: °C		
Adjusted: °C Factor		

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

July 10, 2023

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

Work Order: **HS23070256**

Laboratory Results for: **3F29012**

Dear Brent Barron,

ALS Environmental received 4 sample(s) on Jul 07, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL
Anna Kinchen
Project Manager

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
Work Order: HS23070256

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23070256-01	3F29012-01	Water		28-Jun-2023 14:25	07-Jul-2023 09:40	☐
HS23070256-02	3F29012-02	Water		28-Jun-2023 14:30	07-Jul-2023 09:40	☐
HS23070256-03	3F29012-03	Water		28-Jun-2023 14:30	07-Jul-2023 09:40	☐
HS23070256-04	3F29012-04	Water		28-Jun-2023 14:35	07-Jul-2023 09:40	☐

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP **CASE NARRATIVE**
Project: 3F29012
Work Order: HS23070256

Work Order Comments

Batch ID: R440835

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

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
Sample ID: 3F29012-01
Collection Date: 28-Jun-2023 14:25

ANALYTICAL REPORT
WorkOrder:HS23070256
Lab ID:HS23070256-01
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**					Analyst: PC
Benzene	ND		0.0050	mg/L	1	07-Jul-2023 17:31
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 17:31
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 17:31
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 17:31
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 17:31
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 17:31
Surr: 1,2-Dichloroethane-d4	*105*		*70-126*	*%REC*	*1*	*07-Jul-2023 17:31*
Surr: 4-Bromofluorobenzene	*94.3*		*82-124*	*%REC*	*1*	*07-Jul-2023 17:31*
Surr: Dibromofluoromethane	*100*		*77-123*	*%REC*	*1*	*07-Jul-2023 17:31*
Surr: Toluene-d8	*106*		*82-127*	*%REC*	*1*	*07-Jul-2023 17:31*

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

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
Sample ID: 3F29012-02
Collection Date: 28-Jun-2023 14:30

ANALYTICAL REPORT
WorkOrder:HS23070256
Lab ID:HS23070256-02
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**					Analyst: PC
Benzene	ND		0.0050	mg/L	1	07-Jul-2023 17:53
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 17:53
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 17:53
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 17:53
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 17:53
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 17:53
Surr: 1,2-Dichloroethane-d4	*103*		*70-126*	*%REC*	*1*	*07-Jul-2023 17:53*
Surr: 4-Bromofluorobenzene	*93.7*		*82-124*	*%REC*	*1*	*07-Jul-2023 17:53*
Surr: Dibromofluoromethane	*99.0*		*77-123*	*%REC*	*1*	*07-Jul-2023 17:53*
Surr: Toluene-d8	*109*		*82-127*	*%REC*	*1*	*07-Jul-2023 17:53*

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

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
Sample ID: 3F29012-03
Collection Date: 28-Jun-2023 14:30

ANALYTICAL REPORT
WorkOrder:HS23070256
Lab ID:HS23070256-03
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**					Analyst: PC
Benzene	ND		0.0050	mg/L	1	07-Jul-2023 18:16
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 18:16
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 18:16
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 18:16
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 18:16
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 18:16
Surr: 1,2-Dichloroethane-d4	*104*		*70-126*	*%REC*	*1*	*07-Jul-2023 18:16*
Surr: 4-Bromofluorobenzene	*93.5*		*82-124*	*%REC*	*1*	*07-Jul-2023 18:16*
Surr: Dibromofluoromethane	*98.7*		*77-123*	*%REC*	*1*	*07-Jul-2023 18:16*
Surr: Toluene-d8	*108*		*82-127*	*%REC*	*1*	*07-Jul-2023 18:16*

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

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
Sample ID: 3F29012-04
Collection Date: 28-Jun-2023 14:35

ANALYTICAL REPORT
WorkOrder:HS23070256
Lab ID:HS23070256-04
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**					Analyst: PC
Benzene	ND		0.0050	mg/L	1	07-Jul-2023 18:38
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 18:38
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 18:38
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 18:38
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 18:38
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 18:38
Surr: 1,2-Dichloroethane-d4	*105*		*70-126*	*%REC*	*1*	*07-Jul-2023 18:38*
Surr: 4-Bromofluorobenzene	*93.7*		*82-124*	*%REC*	*1*	*07-Jul-2023 18:38*
Surr: Dibromofluoromethane	*101*		*77-123*	*%REC*	*1*	*07-Jul-2023 18:38*
Surr: Toluene-d8	*109*		*82-127*	*%REC*	*1*	*07-Jul-2023 18:38*

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

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
WorkOrder: HS23070256

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R440835 (0)	**Test Name :** VOLATILES - SW8260C				**Matrix:** Water	
HS23070256-01	3F29012-01	28 Jun 2023 14:25			07 Jul 2023 17:31	1
HS23070256-02	3F29012-02	28 Jun 2023 14:30			07 Jul 2023 17:53	1
HS23070256-03	3F29012-03	28 Jun 2023 14:30			07 Jul 2023 18:16	1
HS23070256-04	3F29012-04	28 Jun 2023 14:35			07 Jul 2023 18:38	1

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
WorkOrder: HS23070256

QC BATCH REPORT

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

MBLK Sample ID: **VBLKW-230707** Units: **ug/L** Analysis Date: **07-Jul-2023 13:02**
Client ID: Run ID: **VOA9_440835** SeqNo: **7409148** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	ND	5.0							
Ethylbenzene	ND	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Toluene	ND	5.0							
Xylenes, Total	ND	5.0							
Surr: 1,2-Dichloroethane-d4	*51.91*	*0*	*50*	*0*	*104*	*70 - 130*			
Surr: 4-Bromofluorobenzene	*48.02*	*0*	*50*	*0*	*96.0*	*82 - 115*			
Surr: Dibromofluoromethane	*49.72*	*0*	*50*	*0*	*99.4*	*73 - 126*			
Surr: Toluene-d8	*53.07*	*0*	*50*	*0*	*106*	*81 - 120*			

LCS Sample ID: **VLCSW-230707** Units: **ug/L** Analysis Date: **07-Jul-2023 12:17**
Client ID: Run ID: **VOA9_440835** SeqNo: **7409147** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	21.26	5.0	20	0	106	74 - 120			
Ethylbenzene	21.3	5.0	20	0	107	77 - 117			
m,p-Xylene	44.94	10	40	0	112	77 - 122			
o-Xylene	22.42	5.0	20	0	112	75 - 119			
Toluene	21.76	5.0	20	0	109	77 - 118			
Xylenes, Total	67.35	5.0	60	0	112	75 - 122			
Surr: 1,2-Dichloroethane-d4	*56.24*	*0*	*50*	*0*	*112*	*70 - 130*			
Surr: 4-Bromofluorobenzene	*52.1*	*0*	*50*	*0*	*104*	*82 - 115*			
Surr: Dibromofluoromethane	*54.38*	*0*	*50*	*0*	*109*	*73 - 126*			
Surr: Toluene-d8	*51.35*	*0*	*50*	*0*	*103*	*81 - 120*			

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
WorkOrder: HS23070256

QC BATCH REPORT

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

MS Sample ID: **HS23070249-01MS** Units: **ug/L** Analysis Date: **07-Jul-2023 16:01**
Client ID: Run ID: **VOA9_440835** SeqNo: **7409156** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.9	5.0	20	0	104	70 - 127				
Ethylbenzene	22.29	5.0	20	0	111	70 - 124				
m,p-Xylene	45.92	10	40	0	115	70 - 130				
o-Xylene	22.35	5.0	20	0	112	70 - 124				
Toluene	22.33	5.0	20	0	112	70 - 123				
Xylenes, Total	68.27	5.0	60	0	114	70 - 130				
Surr: 1,2-Dichloroethane-d4	*50.11*	*0*	*50*	*0*	*100*	*70 - 126*				
Surr: 4-Bromofluorobenzene	*49.54*	*0*	*50*	*0*	*99.1*	*82 - 124*				
Surr: Dibromofluoromethane	*49.61*	*0*	*50*	*0*	*99.2*	*77 - 123*				
Surr: Toluene-d8	*56.11*	*0*	*50*	*0*	*112*	*82 - 127*				

MSD Sample ID: **HS23070249-01MSD** Units: **ug/L** Analysis Date: **07-Jul-2023 16:24**
Client ID: Run ID: **VOA9_440835** SeqNo: **7409157** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.42	5.0	20	0	102	70 - 127	20.9	2.31	20	
Ethylbenzene	21.97	5.0	20	0	110	70 - 124	22.29	1.44	20	
m,p-Xylene	45.71	10	40	0	114	70 - 130	45.92	0.444	20	
o-Xylene	22.11	5.0	20	0	111	70 - 124	22.35	1.09	20	
Toluene	21.44	5.0	20	0	107	70 - 123	22.33	4.03	20	
Xylenes, Total	67.82	5.0	60	0	113	70 - 130	68.27	0.653	20	
Surr: 1,2-Dichloroethane-d4	*50.18*	*0*	*50*	*0*	*100*	*70 - 126*	*50.11*	*0.147*	*20*	
Surr: 4-Bromofluorobenzene	*50.6*	*0*	*50*	*0*	*101*	*82 - 124*	*49.54*	*2.12*	*20*	
Surr: Dibromofluoromethane	*49.78*	*0*	*50*	*0*	*99.6*	*77 - 123*	*49.61*	*0.328*	*20*	
Surr: Toluene-d8	*54.65*	*0*	*50*	*0*	*109*	*82 - 127*	*56.11*	*2.64*	*20*	

The following samples were analyzed in this batch: HS23070256-01 HS23070256-02 HS23070256-03 HS23070256-04

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29012
WorkOrder: **HS23070256**

QUALIFIERS, ACRONYMS, UNITS

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

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

Unit Reported	Description
mg/L	Milligrams per Liter

ALS Houston, US Date: 10-Jul-23

CERTIFICATIONS,ACCREDITATIONS & LICENSES

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

ALS Houston, US Date: 10-Jul-23

Sample Receipt Checklist

Work Order ID: HS23070256 **Date/Time Received:** 07-Jul-2023 09:40

Client Name: Permian Basin Lab **Received by:** Paresh M. Giga

Completed By:	/S/ Ragen Giga	07-Jul-2023 10:57	**Reviewed by:**	/S/ Anna Kinchen	10-Jul-2023 09:59
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **water** Carrier name: **FedEx Priority Overnight**

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

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

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

HS23070256

Permian Basin Environmental Lab, LP
3F29012

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

Project Loc:
PO #:
Report Format: X Standard ☐ TRRP ☐ NPDES

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: ICE	HNO_3 250 poly 1	HCl 3 40mL VOA	H_2SO_4 1 AMBER 500/250POLY	NaOH /Ascorbic Acid 250ML P	$Na_2S_2O_3$	NONE	NONE 3 AMBER VOAA VIALS	Matrix: DW Drinking Water SL-Sludge GW = Groundwater S-Soil/Solid NP: Non Potable Specify Other	Analyze For: BTEX 80218 TOTAL CALC	24 HOUR	STANDARD
	3F29012-01			6/28/2023	14:25		3	X		X						W	X		X
	3F29012-02			6/28/2023	14:30		3	X		X						W	X		X
	3F29012-03			6/28/2023	14:30		3	X		X						W	X		X
	3F29012-04			6/28/2023	14:35		3	X		X						W	X		X

SPECIAL INSTRUCTIONS: REPORT TO MDL RUN REGARDLESS OF HOLD TIME

Relinquished by:	Date	Time	Received by:	Date	Time
Brent Barron	7/16/23	17:00		7/17/23	09:40
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

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	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: °C
Adjusted: °C Factor

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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

PBELAB

Analytical Report

Prepared for:

Joel Lowry

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

13000 West County Road 100

Odessa, TX 79765

Project: LIVINGSTON LINE

Project Number: 17475

Location: Rural Lea County, NM

Lab Order Number: 3I21017

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 09/26/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW2	3I21017-01	Water	09/20/23 08:00	09-21-2023 13:48
MW3	3I21017-02	Water	09/20/23 09:00	09-21-2023 13:48
MW5	3I21017-03	Water	09/20/23 10:00	09-21-2023 13:48
MW6	3I21017-04	Water	09/20/23 11:00	09-21-2023 13:48

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW2

3I21017-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.2 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 07:13*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.2 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 07:13*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW3

3I21017-02 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 07:37	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.6 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 07:37*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 07:37*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW5

3I21017-03 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 08:46	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.9 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 08:46*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.4 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 08:46*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

MW6

3I21017-04 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Total BTEX	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 09:09	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.9 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 09:09*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 09:09*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3I2207 - * DEFAULT PREP *** **										
Blank (P3I2207-BLK1)				Prepared: 09/22/23 Analyzed: 09/23/23						
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	*0.113*		*"*	*0.120*		*94.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.7*	*80-120*			
LCS (P3I2207-BS1)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0959	0.00100	mg/L	0.100		95.9	80-120			
Toluene	0.0907	0.00100	"	0.100		90.7	80-120			
Ethylbenzene	0.0931	0.00100	"	0.100		93.1	80-120			
Xylene (p/m)	0.184	0.00200	"	0.200		92.0	80-120			
Xylene (o)	0.0807	0.00100	"	0.100		80.7	80-120			
Surrogate: 4-Bromofluorobenzene	*0.107*		*"*	*0.120*		*88.8*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.2*	*80-120*			
LCS Dup (P3I2207-BSD1)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0904	0.00100	mg/L	0.100		90.4	80-120	5.84	20	
Toluene	0.0866	0.00100	"	0.100		86.6	80-120	4.56	20	
Ethylbenzene	0.0890	0.00100	"	0.100		89.0	80-120	4.44	20	
Xylene (p/m)	0.177	0.00200	"	0.200		88.7	80-120	3.61	20	
Xylene (o)	0.0800	0.00100	"	0.100		80.0	80-120	0.809	20	
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*90.3*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.7*	*80-120*			
Calibration Blank (P3I2207-CCB1)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.180		ug/l							
Toluene	0.150		"							
Ethylbenzene	0.0800		"							
Xylene (p/m)	0.160		"							
Xylene (o)	0.100		"							
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*89.8*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.8*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3I2207 - * DEFAULT PREP *** **										
Calibration Blank (P3I2207-CCB2)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.170		ug/l							
Toluene	0.160		"							
Ethylbenzene	0.140		"							
Xylene (p/m)	0.100		"							
Xylene (o)	0.220		"							
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.120*		*94.6*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.2*	*80-120*			
Calibration Check (P3I2207-CCV1)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0903	0.00100	mg/L	0.100		90.3	80-120			
Toluene	0.0953	0.00100	"	0.100		95.3	80-120			
Ethylbenzene	0.0993	0.00100	"	0.100		99.3	80-120			
Xylene (p/m)	0.206	0.00200	"	0.200		103	80-120			
Xylene (o)	0.0937	0.00100	"	0.100		93.7	80-120			
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.120*		*92.0*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.2*	*80-120*			
Calibration Check (P3I2207-CCV2)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0874	0.00100	mg/L	0.100		87.4	80-120			
Toluene	0.0914	0.00100	"	0.100		91.4	80-120			
Ethylbenzene	0.0947	0.00100	"	0.100		94.7	80-120			
Xylene (p/m)	0.198	0.00200	"	0.200		99.0	80-120			
Xylene (o)	0.0906	0.00100	"	0.100		90.6	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.7*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*97.0*	*80-120*			
Calibration Check (P3I2207-CCV3)				Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0856	0.00100	mg/L	0.100		85.6	80-120			
Toluene	0.0900	0.00100	"	0.100		90.0	80-120			
Ethylbenzene	0.0928	0.00100	"	0.100		92.8	80-120			
Xylene (p/m)	0.192	0.00200	"	0.200		96.0	80-120			
Xylene (o)	0.0882	0.00100	"	0.100		88.2	80-120			
Surrogate: 4-Bromofluorobenzene	*0.106*		*"*	*0.120*		*88.5*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.113*		*"*	*0.120*		*94.4*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3I2207 - * DEFAULT PREP *** **										
Matrix Spike (P3I2207-MS1)	**Source: 3I21016-02**			Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0957	0.00100	mg/L	0.100	ND	95.7	80-120			
Toluene	0.0895	0.00100	"	0.100	ND	89.5	80-120			
Ethylbenzene	0.0909	0.00100	"	0.100	ND	90.9	80-120			
Xylene (p/m)	0.179	0.00200	"	0.200	ND	89.4	80-120			
Xylene (o)	0.0778	0.00100	"	0.100	ND	77.8	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*94.7*	*80-120*			
Matrix Spike Dup (P3I2207-MSD1)	**Source: 3I21016-02**			Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0939	0.00100	mg/L	0.100	ND	93.9	80-120	1.84	20	
Toluene	0.0877	0.00100	"	0.100	ND	87.7	80-120	2.03	20	
Ethylbenzene	0.0897	0.00100	"	0.100	ND	89.7	80-120	1.35	20	
Xylene (p/m)	0.177	0.00200	"	0.200	ND	88.5	80-120	0.956	20	
Xylene (o)	0.0769	0.00100	"	0.100	ND	76.9	80-120	1.15	20	QM-05
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.7*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.113*		"	*0.120*		*94.5*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON LINE
13000 West County Road 100	Project Number: 17475
Odessa TX, 79765	Project Manager: Joel Lowry

Notes and Definitions

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: Brent Barron Date: 9/26/2023

Brent Barron, Laboratory Director/Technical Director

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

L: _____ CH: _____ W: _____

Permian Basin Environmental Lab, LP
1400 Rankin HWY
Midland, Texas 79701
Phone: 432-686-7235

Project Manager: Joel Lowry
Company Name: ETech Environmental & Safety Solutions
Company Address: 2617 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: 575-264-9884
Fax No:
Sampler Signature:
e-mail: PM@etechenv.com

Project Name: Livingstone Line
Project #: 17475
Project Loc: Rural Lea Co., NM
PO #: 2001-11226
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 3I21017

Analyze For:
TCLP:
TOTAL:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW=Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	TPH: TX 1005 TX 1006	Anions (Cl, SO4, Alkalinity)	BTEX 8021B/5030 or BTEX 8260	RUSH TAT (Pre-Schedule) 24, 48, 72 h	Standard TAT
1	MW2			9/20/23	8:00		3	X		X						GW			X		X
2	MW3			9/20/23	9:00		3	X		X						GW			X		X
3	MW5			9/20/23	10:00		3	X		X						GW			X		X
4	MW6			9/20/23	11:00		3	X		X						GW			X		X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time
			Dan Mc	9/21/23	13:48

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	Y	N
by Sampler/Client Rep. ?		
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 5.9 °C Thermometer: CF013
Adjusted: °C Factor:

Pace Analytical®

ANALYTICAL REPORT

January 11, 2024

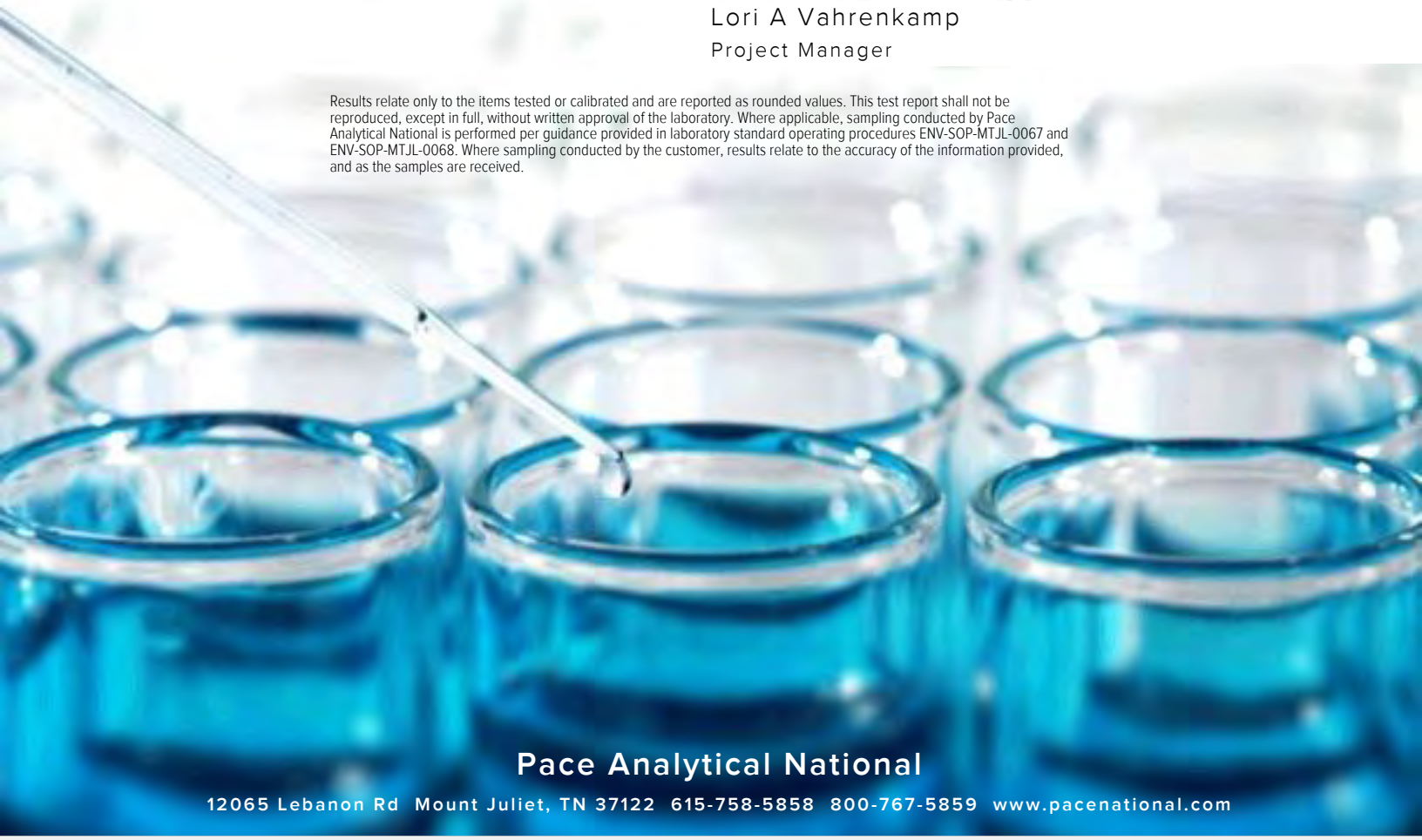
Plains All American Pipeline - ETECH

Sample Delivery Group:	L1691043
Samples Received:	12/22/2023
Project Number:	SRS #2001-11226
Description:	Livingston Line - Bob McCasland
Site:	SRS #2001-11226
Report To:	Kimble Thrash PO Box 62228 Midland, TX 79711

Entire Report Reviewed By:

Lori A Vahrenkamp
Project Manager

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



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

TABLE OF CONTENTS

MW-2 L1691043-01 GW

Collected by: Kimble Thrash | Collected date/time: 12/20/23 12:15 | Received date/time: 12/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG2199269	1	01/02/24 13:07	01/02/24 13:07	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG2200833	1	01/05/24 01:46	01/05/24 01:46	NCD	Mt. Juliet, TN

MW-3 L1691043-02 GW

Collected by: Kimble Thrash | Collected date/time: 12/20/23 13:15 | Received date/time: 12/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG2199269	1	01/02/24 13:30	01/02/24 13:30	ACG	Mt. Juliet, TN

MW-5 L1691043-03 GW

Collected by: Kimble Thrash | Collected date/time: 12/20/23 15:30 | Received date/time: 12/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG2199269	1	01/02/24 13:52	01/02/24 13:52	ACG	Mt. Juliet, TN

MW-6 L1691043-04 GW

Collected by: Kimble Thrash | Collected date/time: 12/20/23 14:10 | Received date/time: 12/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG2199269	1	01/02/24 14:15	01/02/24 14:15	ACG	Mt. Juliet, TN

MW-7 L1691043-05 GW

Collected by: Kimble Thrash | Collected date/time: 12/20/23 15:31 | Received date/time: 12/22/23 08:00

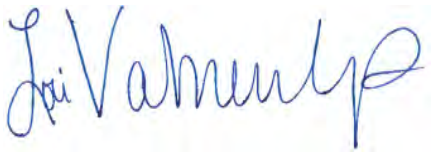
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG2199269	1	01/02/24 14:38	01/02/24 14:38	ACG	Mt. Juliet, TN

TRIP BLANK L1691043-06 GW

Collected by: Kimble Thrash | Collected date/time: 12/20/23 00:00 | Received date/time: 12/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG2199269	1	01/02/24 12:21	01/02/24 12:21	ACG	Mt. Juliet, TN

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



Lori A Vahrenkamp
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1691043-02	MW-3	8021B
L1691043-03	MW-5	8021B

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000680		0.000190	0.000500	1	01/02/2024 13:07	WG2199269
Toluene	U	Q	0.000412	0.00100	1	01/05/2024 01:46	WG2200833
Ethylbenzene	U		0.000160	0.000500	1	01/02/2024 13:07	WG2199269
Total Xylene	0.00274		0.000510	0.00150	1	01/02/2024 13:07	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*98.1*			*79.0-125*		*01/02/2024 13:07*	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*97.4*			*79.0-125*		*01/05/2024 01:46*	WG2200833

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	1	01/02/2024 13:30	WG2199269
Toluene	U		0.000412	0.00100	1	01/02/2024 13:30	WG2199269
Ethylbenzene	U		0.000160	0.000500	1	01/02/2024 13:30	WG2199269
Total Xylene	U		0.000510	0.00150	1	01/02/2024 13:30	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*95.3*			*79.0-125*		*01/02/2024 13:30*	WG2199269

MW-3
Collected date/time: 12/20/23 15:30
L1691043

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	01/02/2024 13:52	WG2199269
Toluene	U		0.000412	0.00100	1	01/02/2024 13:52	WG2199269
Ethylbenzene	U		0.000160	0.000500	1	01/02/2024 13:52	WG2199269
Total Xylene	U		0.000510	0.00150	1	01/02/2024 13:52	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*96.5*			*79.0-125*		*01/02/2024 13:52*	WG2199269

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	1	01/02/2024 14:15	WG2199269
Toluene	U		0.000412	0.00100	1	01/02/2024 14:15	WG2199269
Ethylbenzene	U		0.000160	0.000500	1	01/02/2024 14:15	WG2199269
Total Xylene	U		0.000510	0.00150	1	01/02/2024 14:15	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*96.7*			*79.0-125*		*01/02/2024 14:15*	WG2199269

MW - 7
Collected date/time: 12/20/23 15:31
L1691043

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000845		0.000190	0.000500	1	01/02/2024 14:38	WG2199269
Toluene	U		0.000412	0.00100	1	01/02/2024 14:38	WG2199269
Ethylbenzene	U		0.000160	0.000500	1	01/02/2024 14:38	WG2199269
Total Xylene	U		0.000510	0.00150	1	01/02/2024 14:38	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*94.4*			*79.0-125*		*01/02/2024 14:38*	WG2199269

TRIP BLANK
Collected date/time: 12/20/23 00:00
L1691043

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	1	01/02/2024 12:21	WG2199269
Toluene	U		0.000412	0.00100	1	01/02/2024 12:21	WG2199269
Ethylbenzene	U		0.000160	0.000500	1	01/02/2024 12:21	WG2199269
Total Xylene	U		0.000510	0.00150	1	01/02/2024 12:21	WG2199269
(S) a,a,a-Trifluorotoluene(PID)	*96.3*			*79.0-125*		*01/02/2024 12:21*	WG2199269

Method Blank (MB)

(MB) R4019625-3 01/02/24 11:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	*96.2*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R4019625-1 01/02/24 09:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0479	95.8	77.0-122	
Toluene	0.0500	0.0460	92.0	80.0-121	
Ethylbenzene	0.0500	0.0494	98.8	80.0-123	
Total Xylene	0.150	0.143	95.3	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*94.8*	*79.0-125*	

QUALITY CONTROL SUMMARY

L1691043-01

Method Blank (MB)

(MB) R4020384-3 01/05/24 01:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Toluene	U		0.000412	0.00100
(S) a,a,a-Trifluorotoluene(PID)	*97.8*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R4020384-1 01/04/24 22:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Toluene	0.0500	0.0430	86.0	80.0-121	
(S) a,a,a-Trifluorotoluene(PID)			*95.3*	*79.0-125*	

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Company Name/Address:
Plains All American Pipeline - ETECH
PO Box 62228
Midland, TX 79711

Billing Information:
Accounts Payable
333 Clay St
Suite 1600
Houston, TX 77002

Pres Chk

Report to: Kimble Thrash

Email To: kimble@etechenv.com

Project Description: Livingston Line - Bob McCasland

City/State Collected: LEA COUNTY, NM

Please Circle: PT MT CT ET

Phone: 4328949996

Client Project # SRS #2001-11226

Lab Project # PLAINSETECH-NM GW

Collected by (print): KIMBLE THRASH

Site/Facility ID # SRS #2001-11226

P.O. #

Collected by (signature): Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace PEOPLE ADVANCING SCIENCE

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

SDG # L1691043
F105

Acctnum: PLAINSETECH
Template: T242881
Prelogin: P1041693
PM: 3587 - Lori A Vahrenkamp
PB:
Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl	BTEX 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
[redacted]										
MW-2	G	GW	N/A	12-20-23	1215	3	X			-01
MW-3	G	GW	N/A	12-20-23	1315	3	X			-02
[redacted]										
MW-5	G	GW	N/A	12-20-23	1530	3	X			-03
MW-6	G	GW	N/A	12-20-23	1410	3	X			-04
DUP-1	G	GW	N/A	12-20-23	1531	3	X			-05
TRIP BLANK		GW				1	X	X		-06
[redacted]										

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

Remarks: Order Includes: 13xGW BTEX; 1xTrip Blank

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	12/21/23	1631			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.2°C Bottles Received: 0.2+0=0.2 15	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Caleb TRP	Date: 12/22/23 Time: 08:00	Hold: Condition: NCF / OK

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

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

CONDITIONS

Action 328422

CONDITIONS

Operator:	OGRID:
PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	34053
	Action Number: 328422
	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: Content Satisfactory 1. Gauge and conduct quarterly sampling events for wells: MW-2, MW-3, MW-5 and MW-6 for BTEX. 2. On an annual basis, conduct sampling & gauging for MW-7, MW-8, MW-10, and MW-11 as prescribed. 3. Conduct AFR events to prevent the down-gradient migration of dissolved phase/free-phase plume 4. Submit the 2024 annual report to OCD by April 1, 2025.	7/3/2024