2023 Annual Groundwater Monitoring Report

REVIEWED
By Mike Buchanan at 2:26 pm, Jul 03, 2024

Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims
Lea County, New Mexico
Unit Letter "I", Section 3, Township 21 South, Range 37 East
Latitude 32.503649 North, Longitude 103.148924 West
Plains SRS #: 2001-11005
NMOCD Reference #: 1RP-0398
NMOCD Incident ID #: nAPP2109740065

Review of the 2023 Annual Groundwater Monitoring Report for Livingston Ridge to Hugh--P. Sims: content satisfactory
1. Continue to gauge and sample monitoring wells: MW-2, MW-5, MW-11 and MW-12 on a quarterly schedule as planned.
2. Conduct groundwater sampling for MW-7, MW-8, and MW-10 on an annual basis.
3. Conduct AFR events as prescribed to prevent down-gradient contamination.
4. Submit the 2024 annual report to the OCD by April 1, 2025.

Prepared By:

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ETECH Environmental & Safety Solutions, Inc.

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TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

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 Ridge to Hugh – P. Sims 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 Livingston Ridge to Hugh – P. Sims Site is Unit Letter "I" (NE/SE), Section 3, Township 21 South, Range 37 East, in Lea County, New Mexico. The property affected by the Release is owned by Mr. Hugh P. Sims. The geographic coordinates of the Release Site are 32.503649º North latitude and 103.148924º West longitude. A "Site Location Map" is provided as Figure 1.

2.0 BACKGROUND INFORMATION

Based on information provided by the client, on June 22, 2001, the Release of an estimated six (6) barrels (bbls) of crude oil was reported to the NMOCD. Initial excavation activities were conducted by Environmental Plus, Inc. (EPI), in an effort to stockpile saturated soils and expose the release origin to facilitate repair of the pipeline. The pipeline excavation activities continued into July 2001. A total of approximately 148 cubic yards (yd^3) of hydrocarbon-impacted soil were excavated at the Site and transported to EPI's land-farm south of Eunice, New Mexico. A temporary groundwater monitor well (TMW-1) was installed in the bottom of the excavation. Phase-separated hydrocarbons (PSH) were observed within the shallow groundwater bearing unit at the time of installation. Based on the review of provided documentation, the NMOCD and landowner were immediately notified of the Release. EPI installed three (3) groundwater monitor wells at the Site to evaluate the magnitude and extent of the Release and determine the groundwater gradient.

In August 2002, Environmental Technology Group, Inc. (ETGI), assumed management of remedial activities and installed 12 additional groundwater monitor wells (MW-2 through MW-14) at the Site. The wells were installed to complete the delineation activities initiated by EPI. At the time of ETGI's investigation, the groundwater monitor wells had adequately delineated the hydrocarbon dissolved-phase plume and PSH plume at the Site. In 2004, Plains requested EPI manage the remediation and sampling activities.

On February 1, 2007, Terracon assumed project management responsibilities and oversight of groundwater activities associated with the Release.

In July 2007, Terracon oversaw the installation of a polyvinyl chloride (PVC) liner on the floor of the excavation and backfilling the excavation with remediated soils from the previous land treatment area at the Site in accordance with the NMOCD-approved work plan. Details of these activities can be found in Plains' *Soil Closure Compliance Report*, dated August 17, 2007.

On October 1, 2018, monitor wells TMW-1 and MW-3 were plugged and abandoned. A replacement monitor well for MW1 (TMW-1R) was installed to evaluate the status of the

groundwater at the Site. The monitor well was advanced to a total depth of approximately 45 feet (ft.) below ground surface (bgs). Monitor well TMW-1R is located approximately 65 ft. to the west (cross-gradient) of monitor well MW-1.

On November 2, 2018, West Company, a licensed, Professional Land Surveyor, surveyed monitor well TMW-1R.

In February 2023, Etech, at the request of Plains, assumed project management and oversight responsibilities for groundwater remediation activities at the Livingston Ridge to Hugh – P. Sims Release Site.

Currently, there are a total of 15 monitor wells on-site: MW-1, MW-2, MW-4 through MW-15, and TMW-1R. Monitor wells MW-2, MW-5, MW-11, and MW-12 are gauged and sampled on a quarterly schedule. Monitor wells MW-6, MW-9, MW-13, MW-14, and MW-15 are sampled on a semi-annual basis. Monitor wells MW-7, MW-8, and MW-10 are on an annual sampling schedule. Monitor wells MW-1, MW-4, and TMW-1R are currently not sampled due to the presence of PSH.

3.0 FIELD ACTIVITIES

3.1 Groundwater Remediation Activities

A measurable thickness of PSH was detected in monitor well MW-1 on June 15, 2022. Manual recovery of PSH and dissolved-phase hydrocarbon-impacted groundwater from MW-1 commenced in February of 2023. Approximately 15.0 gallons of dissolved-phase hydrocarbon-impacted groundwater and 2.99 gallons of PSH were recovered from MW-1 during the 2023 reporting period. Groundwater gauging and PSH recovery data for monitor well MW-1 are summarized in Table 3.

Manual recovery of PSH and dissolved-phase hydrocarbon-impacted groundwater from monitor well MW-4 commenced in May 2019. A measurable thickness of PSH was detected in the well in October 2021. Approximately 30 gallons of dissolved-phase hydrocarbon-impacted groundwater and 0.91 gallons of PSH were recovered from MW-4 during the 2023 reporting period. A total of approximately 301 gallons (7.12 bbls) of dissolved-phase hydrocarbon-impacted groundwater have been recovered from the well since 2018, and approximately 2.00 gallons of PSH have been recovered since 2021. Groundwater gauging and PSH recovery data for monitor well MW-4 is summarized in Table 4.

Monthly manual recovery of dissolved-phase hydrocarbon-impacted groundwater was also conducted on monitor wells MW-5 and MW-12 in an effort to control the down- and cross-gradient migration of the dissolved-phase plume. Estimated volumes of 23.8 and 39.4 gallons of dissolved-phase hydrocarbon-impacted groundwater were recovered from monitor wells MW-5 and MW-12, respectively, during the reporting period. Summaries of groundwater recovery data are provided in Tables 5 and 6.

A measurable thickness of PSH was detected in monitor well TMW-1 following installation. On October 1, 2018, TMW-1 was plugged and abandoned, and replacement monitor well (TMW-1R) was drilled and completed. Manual recovery of PSH and dissolved-phase hydrocarbon-impacted groundwater from TMW-1R commenced in May of 2019. Approximately 25.0 gallons of dissolved-phase hydrocarbon-impacted groundwater and 4.41 gallons of PSH were recovered from TMW-1R during the 2023 reporting period. A total of approximately 9,815 gallons (234 barrels) of dissolved-phase hydrocarbon-impacted groundwater and 21.4 gallons of PSH have been recovered from the well since 2019. Groundwater gauging and PSH recovery data for monitor well TMW-1R are summarized in Table 7.

Approximately 13,758 gallons (327 bbls) of dissolved-phase hydrocarbon-impacted groundwater have been recovered by Aggressive Fluid Recovery (AFR) since 2019. No AFR events were conducted at the site during the monitoring period.

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

3.2 Groundwater Monitoring

The on-site monitor wells were gauged and sampled on March 28 and 29 (1Q2023); June 28 (2Q2023); September 21 (3Q2023); and December 21, 2023 (4Q2023). The groundwater monitoring events consisted of measuring static water levels in the on-site monitor wells (MW-1, MW-2, MW-4 through MW-15, and TMW-1R), checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Purged water was placed into a polystyrene aboveground storage tank (AST) and disposed of at an NMOCD-approved disposal facility.

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

Locations of the groundwater monitor wells and the inferred groundwater elevations, which were constructed from measurements collected during the 2023 quarterly sampling events, are depicted in Figures 2A through 2D. The maps indicate a general groundwater gradient of approximately 0.002 to 0.003 feet/foot to the southeast as measured between monitor wells MW-8 and MW-15. 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 benzene, toluene, ethylbenzene, and total

xylenes (BTEX) and/or PAH 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).

QUARTERLY MONITORING

Monitor Well MW-1

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

Monitor Well MW-2

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory method detection limit (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 1Q2023, 2Q2023, and 3Q2023 to 0.000834 mg/L in 4Q2023. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate 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-11

Laboratory analytical results indicated benzene, 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 0.00107 mg/L in 4Q2023.

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

Monitor Well MW-12

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL in 1Q2023, 2Q2023, and 3Q2023 to 0.000235 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 0.00245 mg/L in 4Q2023.

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

Monitor well TMW-1R

Monitor well TMW-1R was not sampled during the reporting period due to the presence of PSH.

SEMI-ANNUAL MONITORING

Monitor Well MW-6, MW-9, MW-14, and MW-15

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 semi-annual groundwater samples.

MW-13

Laboratory analytical results indicated benzene, ethylbenzene, and toluene concentrations were less than the appropriate laboratory MDL in each of the submitted semi-annual groundwater samples. Total xylene concentrations ranged from less than the appropriate laboratory MDL in 1Q2023 to 0.000720 mg/L in 3Q2023.

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

ANNUAL MONITORING

Monitor Wells MW-7, MW-8, and MW-10

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 annual groundwater samples.

5.0 SUMMARY

This report presents the results of groundwater monitoring activities for the 2023 annual monitoring period. Currently, there are 15 groundwater monitor wells (MW-1, MW-2, MW-4 through MW-15, and TMW-1R) on-site. Monitor wells MW-2, MW-5, MW-11, and MW-12 are

gauged and sampled on a quarterly schedule. Monitor wells MW-6, MW-9, MW-13, MW-14, and MW-15 are sampled on a semi-annual basis. Monitor wells MW-7, MW-8, and MW-10 are on an annual sampling schedule. Monitor wells MW-1, MW-4, and TMW-1R are currently not sampled due to the presence of PSH.

Groundwater gauging data collected during the monitoring period indicates a general gradient of approximately 0.002 to 0.003 feet/foot to the southeast as measured between monitor wells MW-8 and MW-15.

Approximately 15.0 gallons of dissolved-phase hydrocarbon-impacted groundwater and 2.99 gallons of PSH were recovered from MW-1 during the 2023 reporting period.

Approximately 30 gallons of dissolved-phase hydrocarbon-impacted groundwater and 0.91 gallons of PSH were recovered from MW-4 during the 2023 reporting period. A total of approximately 301 gallons (7.12 bbls) of dissolved-phase hydrocarbon-impacted groundwater have been recovered from the well since 2018, and approximately 2.00 gallons of PSH have been recovered since 2021.

Approximately 23.8 and 39.4 gallons of dissolved-phase hydrocarbon-impacted groundwater were recovered from monitor wells MW-5 and MW-12, respectively, during the reporting period.

Approximately 25.0 gallons of dissolved-phase hydrocarbon-impacted groundwater and 4.41 gallons of PSH were recovered from monitor well TMW-1R during the reporting period. A total of approximately 23,548 gallons (561 barrels) of dissolved-phase hydrocarbon-impacted groundwater have been recovered from the well via a combination of manual recovery and AFR since 2019. Approximately 21.4 gallons of PSH have been recovered from the well since 2019.

No AFR events were conducted at the site during the monitoring period.

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

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

6.0 ANTICIPATED ACTIONS

Monitor wells MW-2, MW-5, MW-11, and MW-12 will continue to be gauged and sampled on a quarterly schedule. Monitor wells MW-6, MW-9, MW-13, MW-14, and MW-15 will be sampled on a semi-annual basis. Monitor wells MW-7, MW-8, and MW-10 will be sampled annually.

In lieu of monthly manual recovery of PSH and dissolved-phase hydrocarbon-impacted groundwater, monthly AFR events will be conducted from monitor wells MW-1, MW-4, MW-5, MW-12, and TMW-1R 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 referenced 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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Aztec, NM 87410

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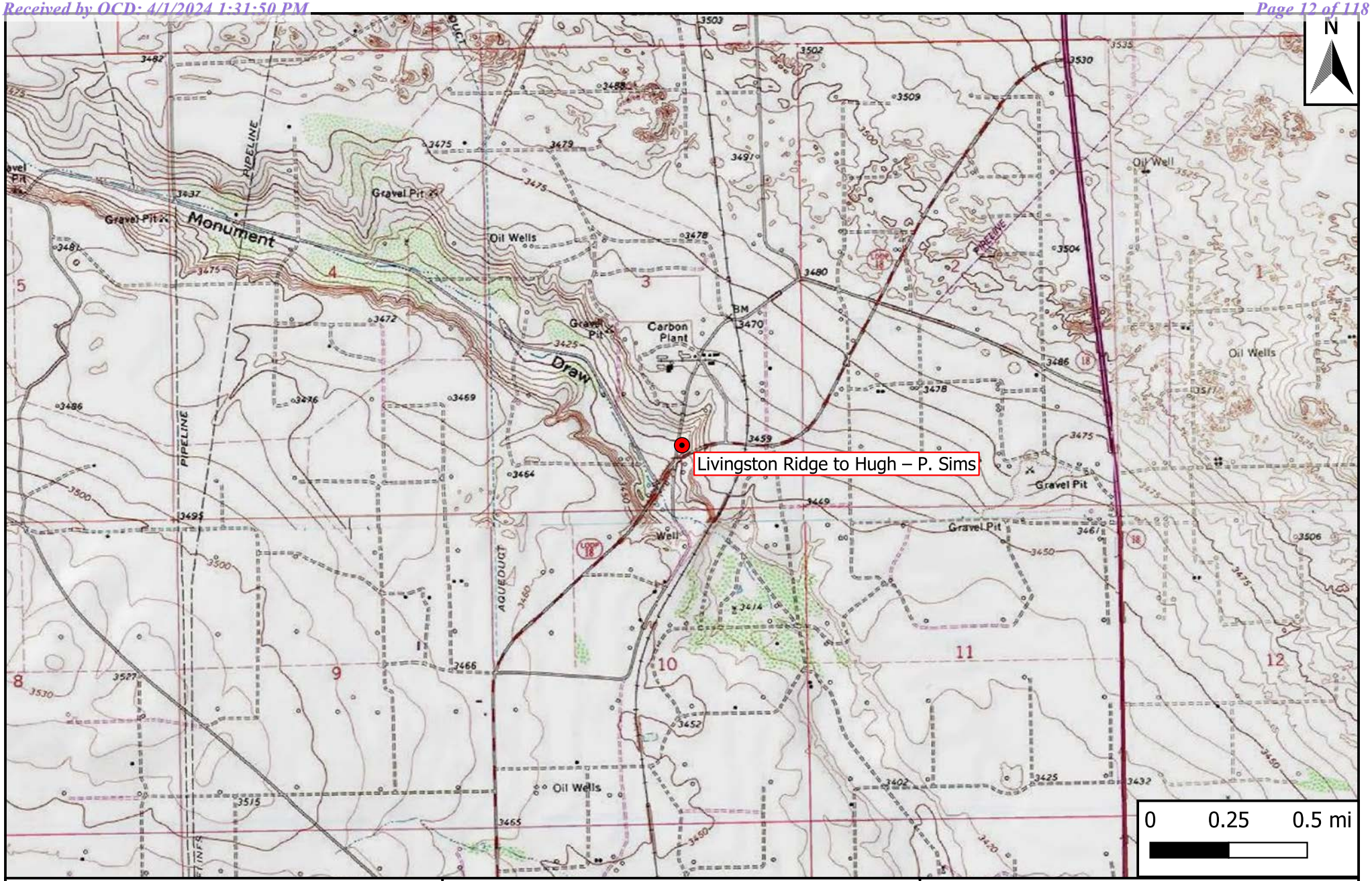
(Electronic Submission)

Figure 1
Site Location Map



Legend

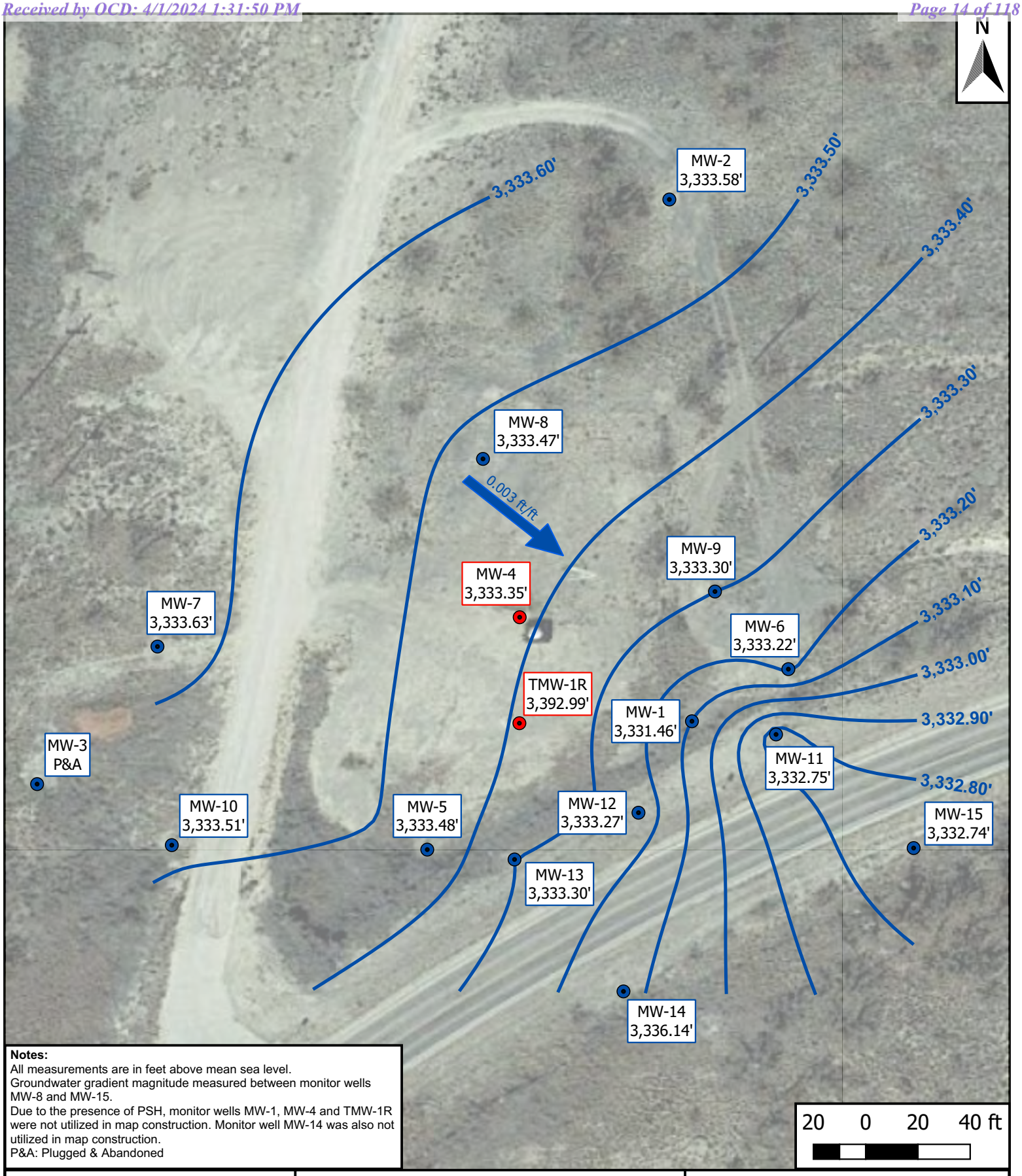
- Site Location

Figure 1
Site Location Map
Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims
GPS: 32.503649,-103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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

Figures 2A - 2D
Inferred Groundwater Gradient Maps



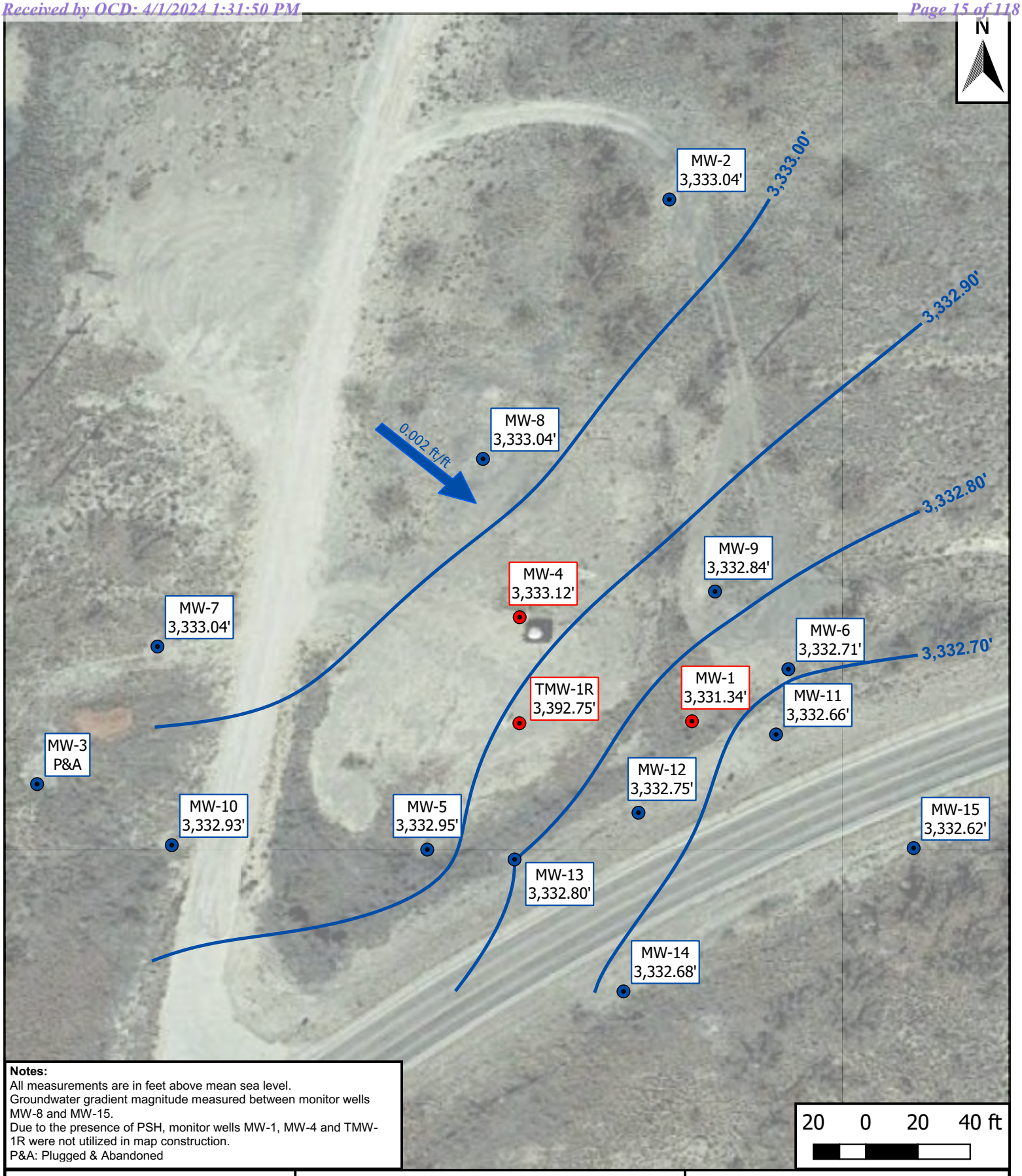
Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-8 and MW-15.
Due to the presence of PSH, monitor wells MW-1, MW-4 and TMW-1R were not utilized in map construction. Monitor well MW-14 was also not utilized in map construction.
P&A: Plugged & Abandoned

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 Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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



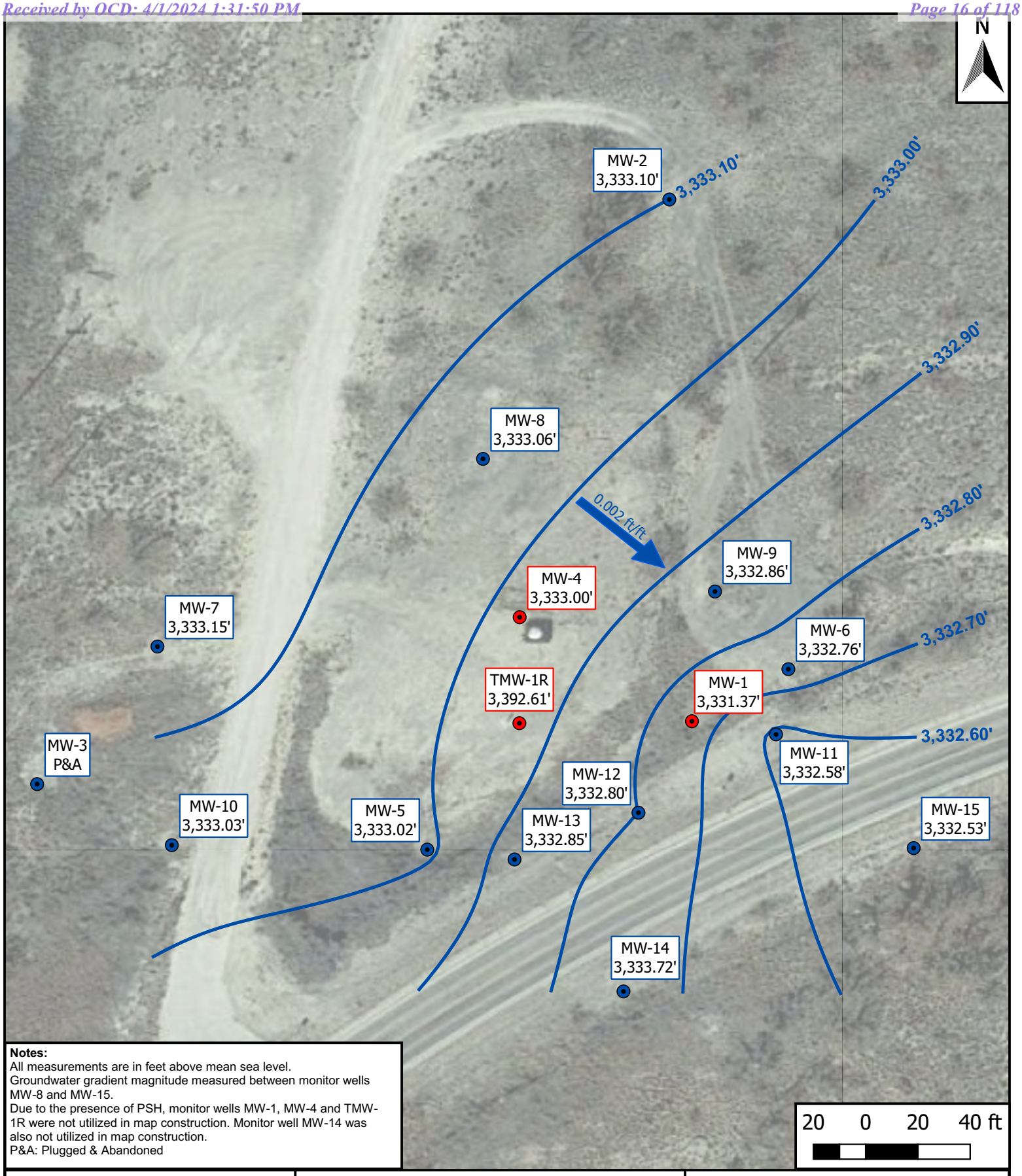
Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-8 and MW-15.
Due to the presence of PSH, monitor wells MW-1, MW-4 and TMW-1R were not utilized in map construction.
P&A: Plugged & Abandoned

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 Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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



Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-8 and MW-15.
Due to the presence of PSH, monitor wells MW-1, MW-4 and TMW-1R were not utilized in map construction. Monitor well MW-14 was also not utilized in map construction.
P&A: Plugged & Abandoned

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 Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

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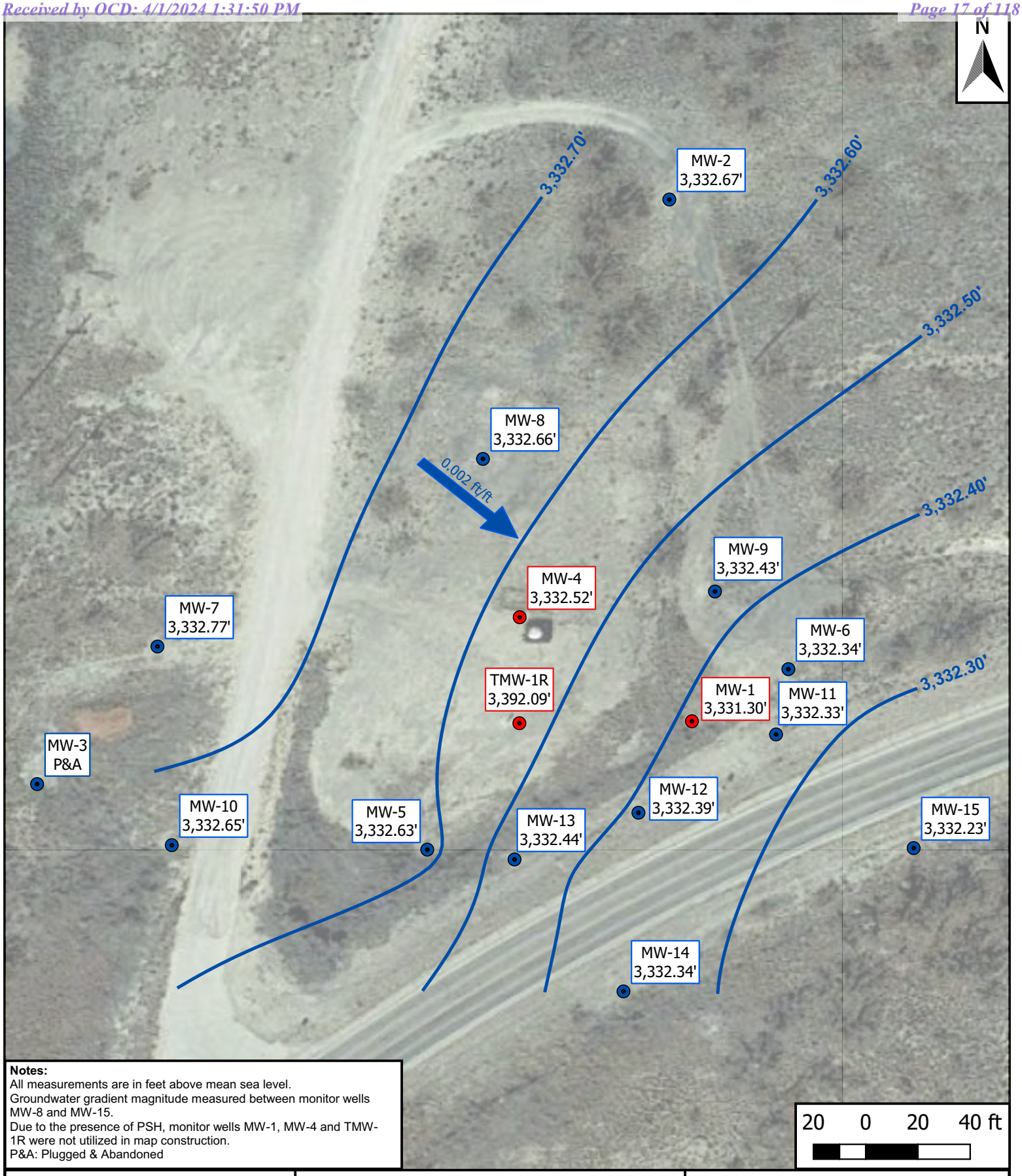


Notes:
All measurements are in feet above mean sea level.
Groundwater gradient magnitude measured between monitor wells MW-8 and MW-15.
Due to the presence of PSH, monitor wells MW-1, MW-4 and TMW-1R were not utilized in map construction.
P&A: Plugged & Abandoned

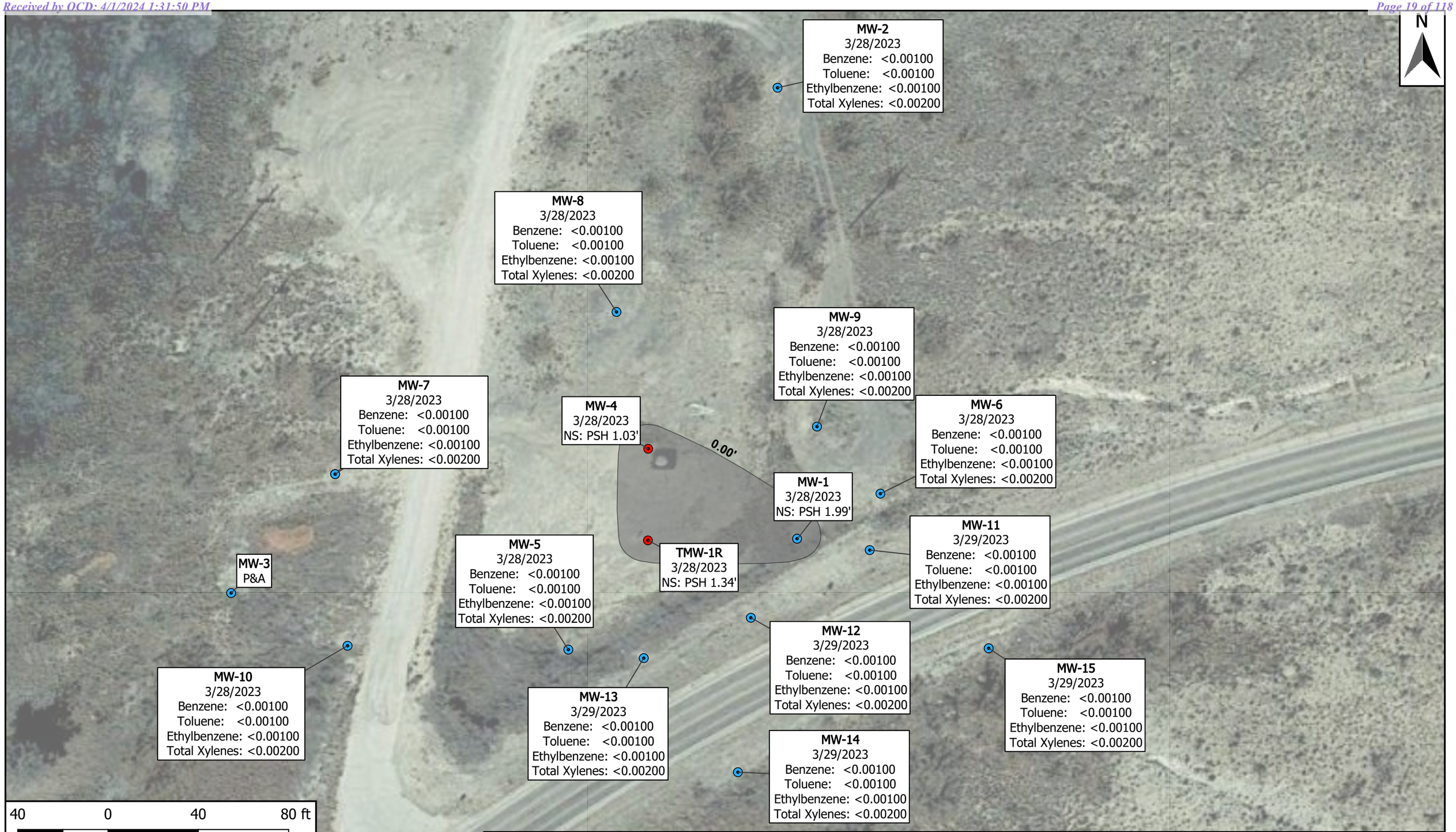
Legend
- Monitor Well
- Recovery Well
- Groundwater Elevation Contour (ft)
- Groundwater Gradient/Magnitude

Figure 2D
Inferred Groundwater Gradient Map – 4Q2023
Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/07/24

Figures 3A - 3D
Groundwater Concentration Maps



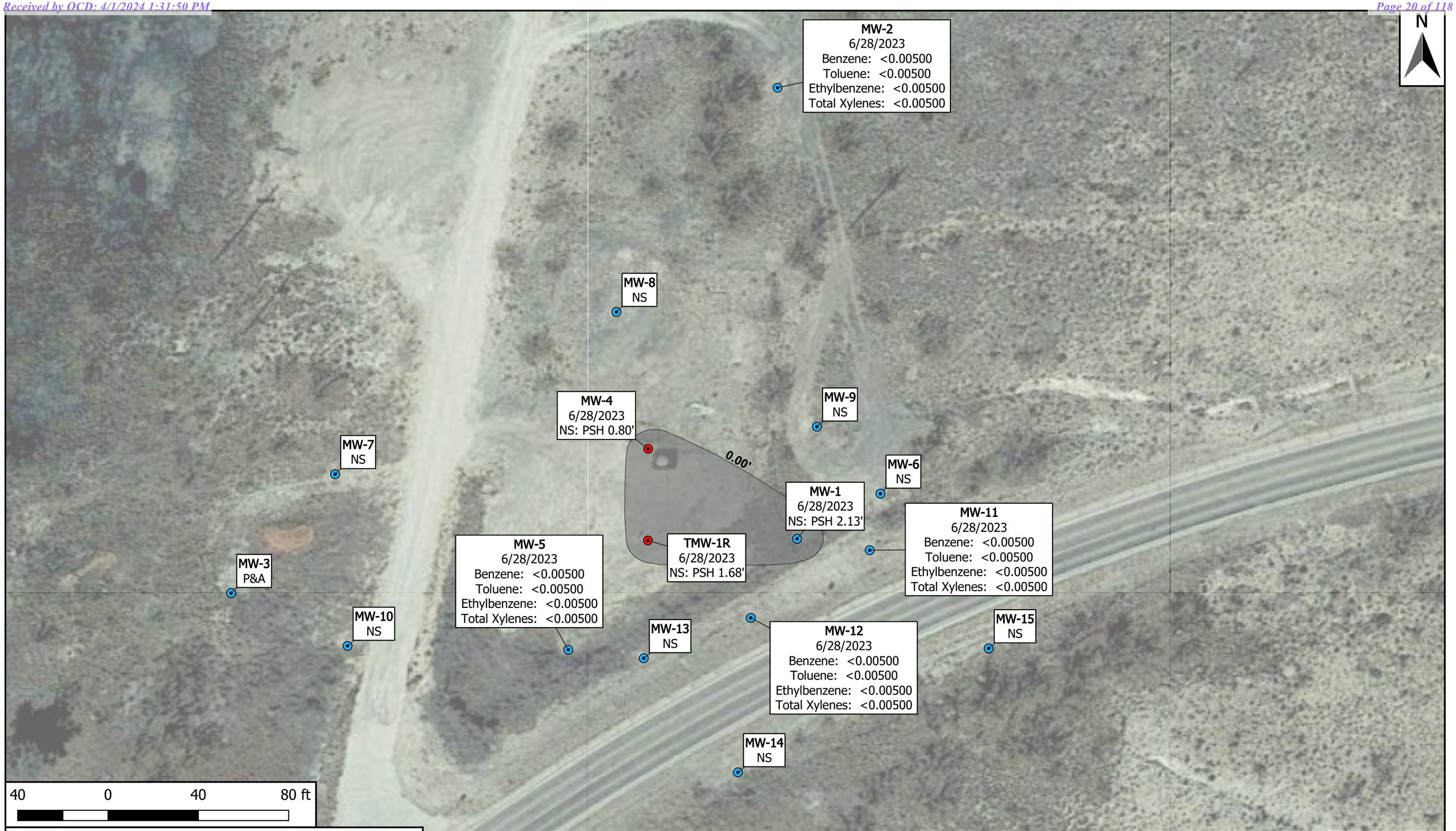
Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
NS: Not Sampled
P&A: Plugged & Abandoned
Monitor wells MW-1, MW-4, and TMW-1R were not sampled due to the presence of PSH.

Legend
- Monitor Well
- Recovery Well
- PSH Extent

Figure 3A
Groundwater Concentration Map – 1Q2023
Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 3/28/2024



Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
NS: Not Sampled
P&A: Plugged & Abandoned
Monitor wells MW-1, MW-4, and TMW-1R were not sampled due to the presence of PSH.

Legend
- Monitor Well
- Recovery Well
- PSH Extent

Figure 3B
Groundwater Concentration Map – 2Q2023
Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims GPS:
32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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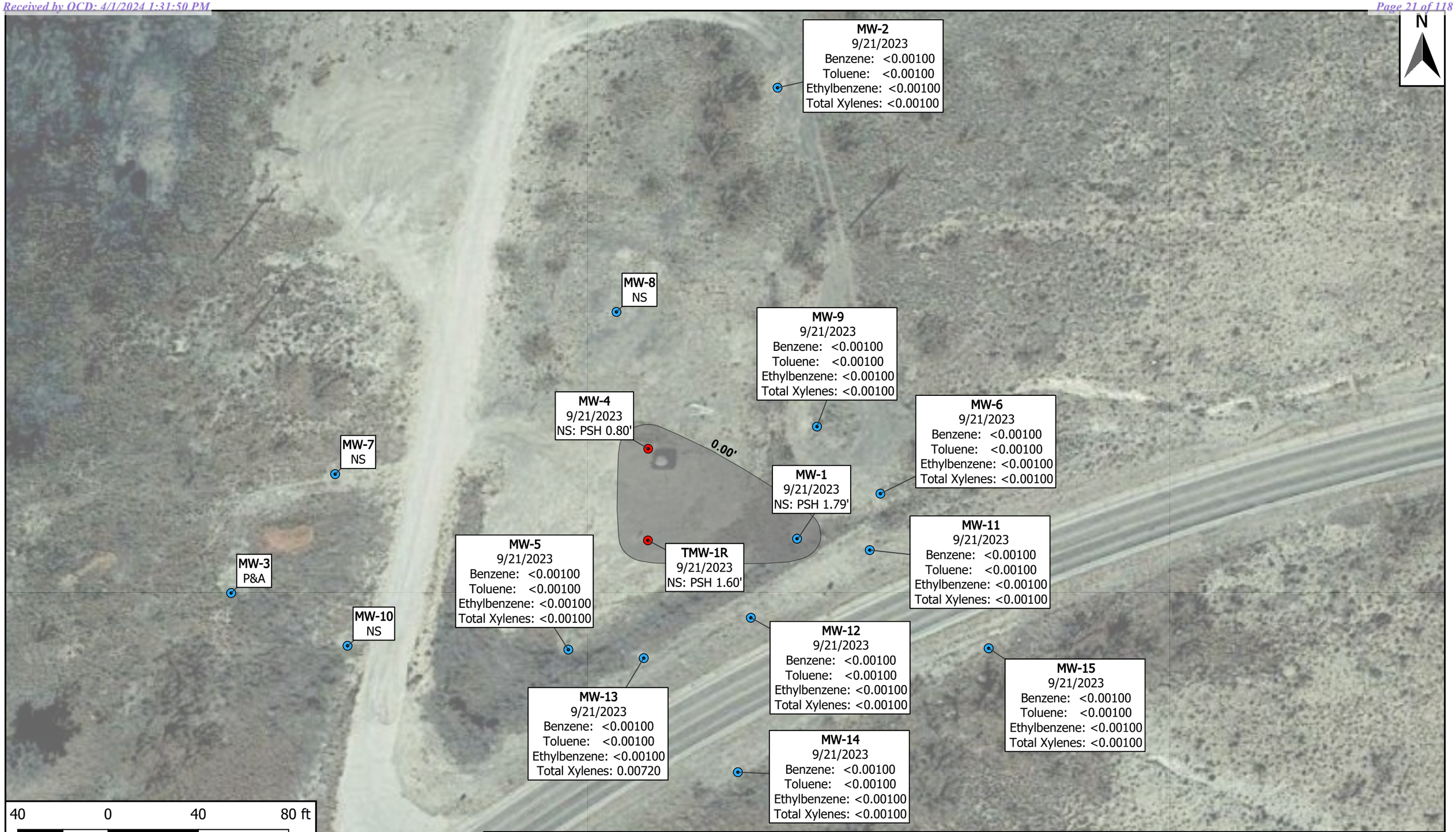


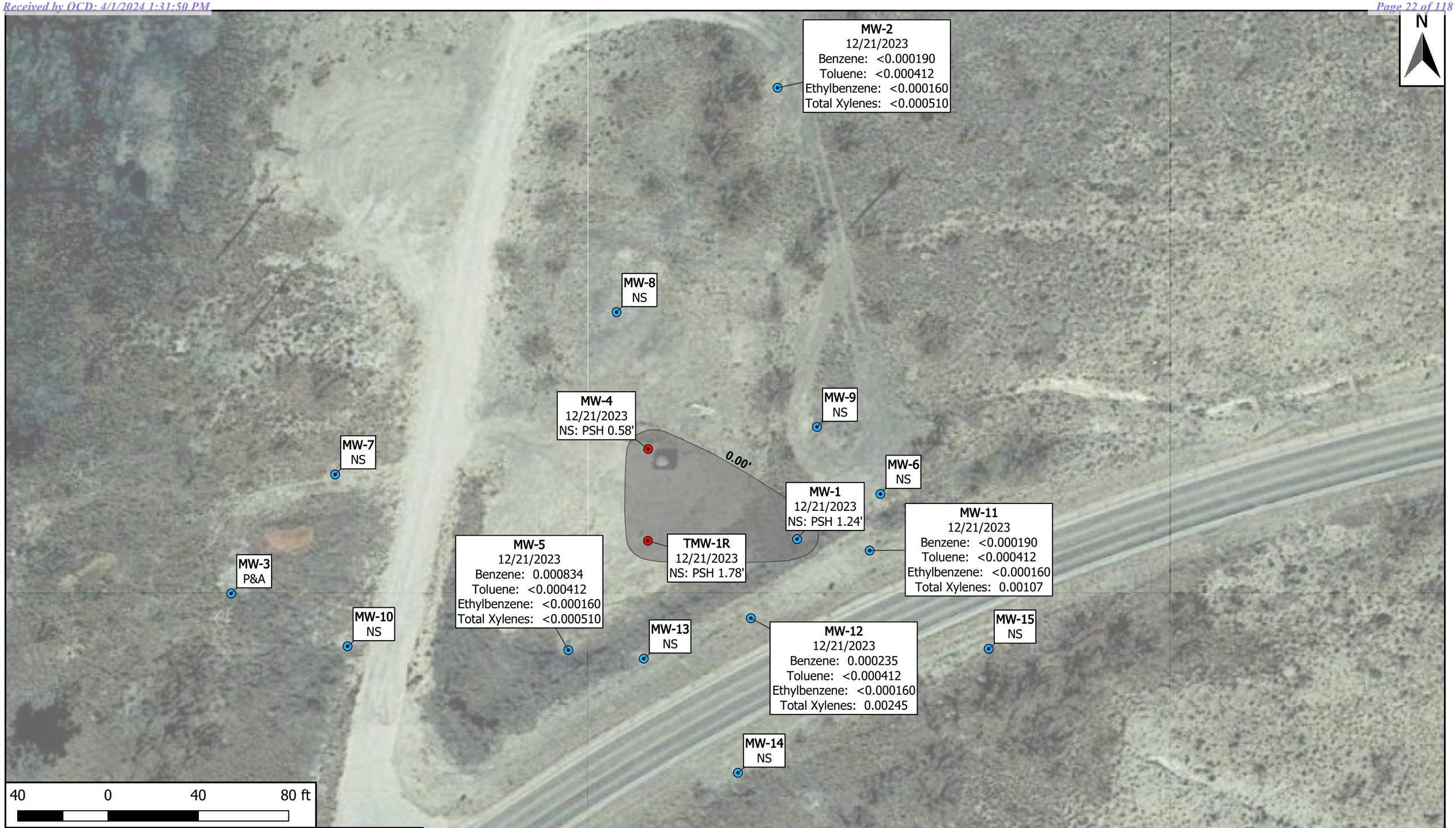
Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
NS: Not Sampled
P&A: Plugged & Abandoned
Monitor wells MW-1, MW-4, and TMW-1R were not sampled due to the presence of PSH.

Legend
- Monitor Well
- Recovery Well
- PSH Extent

Figure 3C
Groundwater Concentration Map – 3Q2023
Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 3/28/2024



Notes:
All concentrations are reported in mg/L.
Concentrations in **BOLD** exceeded NMOCD regulatory limits.
NS: Not Sampled
P&A: Plugged & Abandoned
Monitor wells MW-1, MW-4, and TMW-1R were not sampled due to the presence of PSH.

Legend
- Monitor Well
- Recovery Well
- PSH Extent

Figure 3D
Groundwater Concentration Map – 4Q2023
Plains All American Pipeline, LP
Livingston Ridge to Hugh – P. Sims
GPS: 32.503649, -103.148924
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

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Tables 1 - 8

Table 1
Groundwater Elevation & PSH[1] Thickness Summary

Livingston Ridge - HP Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

All 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")	03/16/2022	3,374.23	-	40.39	-	3,333.84
	06/15/2022		40.76	40.95	0.19	3,333.28
	09/28/2022		41.41	41.61	0.20	3,332.62
	02/17/2023		40.83	41.68	0.85	3,332.55
	03/28/2023		40.78	42.77	1.99	3,331.46
	06/28/2023		40.76	42.89	2.13	3,331.34
	09/21/2023		41.08	42.86	1.79	3,331.37
	12/21/2023		41.69	42.93	1.24	3,331.30
MW-2 (2")	03/16/2022	3,378.27	-	44.13	-	3,334.14
	06/15/2022		-	44.50	-	3,333.77
	09/28/2022		-	45.17	-	3,333.10
	02/17/2023		-	44.65	-	3,333.62
	03/28/2023		-	44.69	-	3,333.58
	06/28/2023		-	45.23	-	3,333.04
	09/21/2023		-	45.17	-	3,333.10
	12/21/2023		-	45.60	-	3,332.67
MW-3 (2")	10/01/2018	3,367.36	Plugged & Abandoned			
MW-4 (2")	03/16/2022	3,372.73	38.60	39.23	0.63	3,334.04
	06/15/2022		38.65	38.95	0.30	3,334.04
	09/28/2022		39.68	40.50	0.82	3,332.93
	02/17/2023		39.23	40.21	0.98	3,333.35
	03/28/2023		39.23	40.26	1.03	3,333.35
	06/28/2023		39.49	40.29	0.80	3,333.12
	09/21/2023		39.61	40.42	0.80	3,333.00
	12/21/2023		40.12	40.70	0.58	3,332.52
MW-5 (2")	03/16/2022	3,370.92	-	36.84	-	3,334.08
	06/15/2022		-	37.28	-	3,333.64
	09/28/2022		-	37.92	-	3,333.00
	02/17/2023		-	37.94	-	3,332.98
	03/28/2023		-	37.44	-	3,333.48
	06/28/2023		-	37.97	-	3,332.95
	09/21/2023		-	37.90	-	3,333.02
	12/21/2023		-	38.29	-	3,332.63
MW-6 (2")	03/16/2022	3,377.02	-	43.23	-	3,333.79
	06/15/2022		-	43.53	-	3,333.49
	09/28/2022		-	44.21	-	3,332.81
	03/28/2023		-	43.80	-	3,333.22
	06/28/2023		-	44.31	-	3,332.71
	09/21/2023		-	44.26	-	3,332.76
	12/21/2023		-	44.68	-	3,332.34

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 Ridge - HP Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

All 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")	03/16/2022	3,369.47	-	35.25	-	3,334.22
	06/15/2022		-	35.70	-	3,333.77
	09/28/2022		-	36.36	-	3,333.11
	03/28/2023		-	35.84	-	3,333.63
	06/28/2023		-	36.43	-	3,333.04
	09/21/2023		-	36.32	-	3,333.15
	12/21/2023		-	36.70	-	3,332.77
MW-8 (2")	03/16/2022	3,373.77	-	39.64	-	3,334.13
	06/15/2022		-	40.04	-	3,333.73
	09/28/2022		-	40.70	-	3,333.07
	03/28/2023		-	40.30	-	3,333.47
	06/28/2023		-	40.73	-	3,333.04
	09/21/2023		-	40.71	-	3,333.06
	12/21/2023		-	41.11	-	3,332.66
MW-9 (2")	03/16/2022	3,375.92	-	42.02	-	3,333.90
	06/15/2022		-	42.41	-	3,333.51
	09/28/2022		-	43.05	-	3,332.87
	03/28/2023		-	42.62	-	3,333.30
	06/28/2023		-	43.08	-	3,332.84
	09/21/2023		-	43.06	-	3,332.86
	12/21/2023		-	43.49	-	3,332.43
MW-10 (2")	03/16/2022	3,370.17	-	36.08	-	3,334.09
	06/15/2022		-	36.52	-	3,333.65
	09/28/2022		-	37.17	-	3,333.00
	03/28/2023		-	36.66	-	3,333.51
	06/28/2023		-	37.24	-	3,332.93
	09/21/2023		-	37.14	-	3,333.03
	12/21/2023		-	37.52	-	3,332.65
MW-11 (2")	03/16/2022	3,373.96	-	40.17	-	3,333.79
	06/15/2022		-	40.54	-	3,333.42
	09/28/2022		-	41.12	-	3,332.84
	02/17/2023		-	40.71	-	3,333.25
	03/28/2023		-	41.21	-	3,332.75
	06/28/2023		-	41.30	-	3,332.66
	09/21/2023		-	41.38	-	3,332.58
	12/21/2023		-	41.63	-	3,332.33
MW-12 (2")	03/16/2022	3,372.41	-	38.56	-	3,333.85
	06/15/2022		-	38.96	-	3,333.45
	09/28/2022		-	39.60	-	3,332.81
	02/17/2023		-	39.20	-	3,333.21
	03/28/2023		-	39.14	-	3,333.27
	06/28/2023		-	39.66	-	3,332.75
	09/21/2023		-	39.61	-	3,332.80
	12/21/2023		-	40.02	-	3,332.39

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 Ridge - HP Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

All 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-13 (2")	03/16/2022	3,368.91	-	35.03	-	3,333.88
	06/15/2022		-	35.43	-	3,333.48
	09/28/2022		-	36.07	-	3,332.84
	03/28/2023		-	35.61	-	3,333.30
	06/28/2023		-	36.11	-	3,332.80
	09/21/2023		-	36.06	-	3,332.85
	12/21/2023		-	36.47	-	3,332.44
MW-14 (2")	03/16/2022	3,371.54	-	37.75	-	3,333.79
	06/15/2022		-	38.15	-	3,333.39
	09/28/2022		-	38.81	-	3,332.73
	03/28/2023		-	35.40	-	3,336.14
	06/28/2023		-	38.86	-	3,332.68
	09/21/2023		-	37.82	-	3,333.72
	12/21/2023		-	39.20	-	3,332.34
MW-15 (2")	03/16/2022	3,377.64	-	43.97	-	3,333.67
	06/15/2022		-	44.35	-	3,333.29
	09/28/2022		-	45.00	-	3,332.64
	03/28/2023		-	44.90	-	3,332.74
	06/28/2023		-	45.02	-	3,332.62
	09/21/2023		-	45.11	-	3,332.53
	12/21/2023		-	45.41	-	3,332.23
TMW-1 (2")	10/01/2018	Plugged & Abandoned				
TMW-1R	03/16/2022	3,431.82	38.12	38.40	0.28	3,393.66
	06/15/2022		38.55	38.85	0.30	3,393.23
	09/28/2022		39.07	40.50	1.43	3,392.54
	02/17/2023		38.66	39.41	0.75	3,393.05
	03/28/2023		38.63	39.97	1.34	3,392.99
	06/28/2023		38.82	40.50	1.68	3,392.75
	09/21/2023		38.97	40.57	1.60	3,392.61
	12/21/2023		39.46	41.24	1.78	3,392.09

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 Ridge to Hugh P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

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	03/17/2022	<0.000408	<0.000367	0.00330	<0.000629	<0.000642	<0.000642	0.00330 J
	06/15/2022	Not Sampled Due to Phase Separated Hydrocarbons						
	09/28/2022							
	02/21/2023							
	03/28/2023							
	06/28/2023							
	09/21/2023							
	12/21/2023							
MW-2	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	<0.000408	0.000703 J	<0.000657	<0.000629	<0.000642	<0.000642	0.000703 J
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	DUP-2	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	03/28/2023	<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
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	<0.000190	<0.000412	<0.000160	-	-	<0.000510	<0.000510
MW-3	10/01/2018	Plugged & Abandoned						
MW-4	03/17/2022	Not Sampled Due to Phase Separated Hydrocarbons						
	06/15/2022							
	09/28/2022							
	02/21/2023							
	03/28/2023							
	06/28/2023							
	09/21/2023							
	12/21/2023							
MW-5	03/17/2022	<0.000408	0.000434 J	0.000882 J	<0.000629	<0.000642	<0.000642	0.00132 J
	06/15/2022	<0.00408	<0.00367	<0.00657	<0.00629	<0.00642	<0.00642	<0.00657
	09/28/2022	<0.000533	<0.000475	0.000426	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	<0.000408	<0.000367	<0.000657	<0.000629	0.000687 J	0.000687 J	0.000687J
	03/28/2023	<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
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	0.000834	<0.000412	<0.000160	-	-	<0.000510	0.000834
MW-6	03/17/2022	<0.000408	0.000382 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Semi-Annual Schedule)						
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	Not Sampled (Semi-Annual Schedule)						
	03/28/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Semi-Annual Schedule)						
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	Not Sampled (Semi-Annual Schedule)						
MW-7	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Annual Schedule)						
	09/28/2022							
	02/21/2023							
	03/28/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Annual Schedule)						
	09/21/2023							
	12/21/2023							

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 2
Groundwater BTEX[1] Concentration Analytical Summary

Livingston Ridge to Hugh P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

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-8	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	DUP-1	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Annual Schedule)						
	09/28/2022							
	02/21/2023							
	03/28/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Annual Schedule)						
	09/21/2023							
	12/21/2023							
MW-9	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Semi-Annual Schedule)						
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	Not Sampled (Semi-Annual Schedule)						
	03/28/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Semi-Annual Schedule)						
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	Not Sampled (Semi-Annual Schedule)						
MW-10	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Annual Schedule)						
	09/28/2022							
	02/21/2023							
	03/28/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Annual Schedule)						
	09/21/2023							
	12/21/2023							
MW-11	03/17/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	<0.000408	0.000430 J	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	03/29/2023	<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
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	<0.000190	<0.000412	<0.000160	-	-	0.00107	0.00107
MW-12	03/17/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	DUP-2	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	<0.00408	0.00416 J	<0.00657	<0.00629	<0.00642	<0.00642	<0.00657
	DUP-1	<0.00408	<0.00367	<0.00657	<0.00629	<0.00642	<0.00642	<0.00657
	09/28/2022	<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
	02/21/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	03/29/2023	<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
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	0.000570
	12/21/2023	0.000235	<0.000412	<0.000160	-	-	0.00245	0.00269
MW-13	03/17/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Semi-Annual Schedule)						
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	Not Sampled (Semi-Annual Schedule)						
	03/29/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Semi-Annual Schedule)						
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	0.000720	0.00142
	12/21/2023	Not Sampled (Semi-Annual Schedule)						

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 Ridge to Hugh P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

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-14	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Semi-Annual Schedule)						
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	Not Sampled (Semi-Annual Schedule)						
	03/29/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Semi-Annual Schedule)						
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	Not Sampled (Semi-Annual Schedule)						
MW-15	03/16/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657
	06/15/2022	Not Sampled (Semi-Annual Schedule)						
	09/28/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124
	02/21/2023	Not Sampled (Semi-Annual Schedule)						
	03/29/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200
	06/28/2023	Not Sampled (Semi-Annual Schedule)						
	09/21/2023	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100
	12/21/2023	Not Sampled (Semi-Annual Schedule)						
TMW-1	10/01/2018	Plugged & Abandoned						
TMW-1R	03/16/2022	Not Sampled Due to Phase Separated Hydrocarbons						
	06/15/2022							
	09/28/2022							
	02/21/2023							
	03/28/2023							
	06/28/2023							
	09/21/2023							
	12/21/2023							

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-1 BTEX[1] & PSH[2] Thickness & Recovery Summary

Livingston Ridge to Hugh - P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[3] Incident ID #: nAPP2109740065

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC)[4] Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Total Fluid Recovery (Gallons)	PSH Recovered (Gallons)
MW-1	02/17/2023	3,374.23	40.83	41.68	0.85	5.00	0.56
	03/28/2023		40.78	42.77	1.99	-	-
	05/25/2023		40.76	42.80	2.04	5.00	1.33
	06/28/2023		40.76	42.89	2.13		
	08/23/2023		-	-	-	5.00	1.10
	12/21/2023		41.69	42.93	1.24	-	-
2023 Average PSH Thickness & Recovery Totals					**1.65**	**15.0**	**2.99**

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
2. PSH = Phase Separated Hydrocarbons
3. NMOCD = New Mexico Oil Conservation Division
4. TOC = Top Of Casing

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

Table 4
MW-4 BTEX[1] & PSH[2] Thickness & Recovery Summary

Livingston Ridge to Hugh - P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC)[3] Elevation*	DEPTH TO PRODUCT (Feet)	Depth to Water (Feet)	PSH THICKNESS (Feet)	Groundwater Recovered (gallons)	PSH Recovered
MW-4	01/25/2022	3,372.73	38.68	39.28	0.60	5.00	0.10
	02/23/2022		37.65	38.55	0.90	5.00	0.15
	03/29/2022		38.64	39.42	0.78	5.00	0.13
	04/27/2022		38.72	39.39	0.67	5.00	0.11
	08/31/2022		39.61	40.78	1.17	5.00	0.19
	10/19/2022		39.65	40.43	0.78	5.00	0.13
	02/17/2023		39.23	40.21	0.98	5.00	0.16
	03/10/2023		39.25	40.25	1.00	5.00	0.16
	03/28/2023		39.23	40.26	1.03	-	-
	05/12/2023		39.21	40.26	1.05	5.00	0.17
	05/16/2023		39.20	40.27	1.07	5.00	0.17
	05/25/2023		39.46	40.26	0.80	5.00	0.13
	06/28/2023		39.49	40.29	0.80	-	-
	08/23/2023		-	-	-	5.00	0.11
	12/21/2023		40.12	40.70	0.58	-	-
2023 Average PSH Thickness & Recovery Totals					**0.91**	**30.0**	**0.91**

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
2. PSH = Phase Separated Hydrocarbons
3. NMOCD = New Mexico Oil Conservation Division
4. TOC = Top Of Casing

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

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

Livingston Ridge to Hugh - P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC)[3] Elevation*	Groundwater Recovered (gallons)
MW-5	01/25/2022	3,370.92	3.00
	02/23/2022		2.50
	03/29/2022		2.00
	04/27/2022		0.00
	08/31/2022		1.00
	10/19/2022		2.00
	11/22/2022		5.00
	02/17/2023		6.00
	03/10/2023		1.50
	03/28/2023		1.00
	05/12/2023		1.50
	05/16/2023		2.00
	05/25/2023		2.00
	06/28/2023		3.72
	09/21/2023		5.00
	12/21/2023		1.13
2023 Total GW[4] Recovered			**23.8**

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
2. NMOCD = New Mexico Oil Conservation Division
3. TOC = Top Of Casing
4. GW: Groundwater

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

Table 6
MW-12 Gauging & BTEX[1] Impacted Groundwater Recovery Summary

Livingston Ridge to Hugh - P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID #: nAPP2109740065

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC)[3] Elevation*	Groundwater Recovered (gallons)
MW-12	01/25/2022	3,372.41	5.00
	02/23/2022		5.00
	03/29/2022		5.00
	08/31/2022		5.00
	10/19/2022		5.00
	11/22/2022		5.00
	02/17/2023		5.00
	03/10/2023		5.00
	03/28/2023		5.00
	05/16/2023		5.00
	05/25/2023		5.00
	06/28/2023		4.65
	09/21/2023		5.00
	12/21/2023		4.72
2023 Total GW[4] Recovered			**39.4**

Notes:

1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
2. NMOCD = New Mexico Oil Conservation Division
3. TOC = Top Of Casing
4. GW: Groundwater

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

Table 7
TMW-1R BTEX[1] & PSH[2] Thickness & Recovery Summary

Livingston Ridge to Hugh - P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[3] Incident ID #: nAPP2109740065

All elevations are measured in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC)[4] Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Total Fluid Recovery (Gallons)	PSH Recovered (Gallons)
TMW-1R	01/25/2022	3,431.82	38.17	38.41	0.24	5.00	0.16
	02/11/2022		38.19	38.54	0.35	1,260	0.23
	02/23/2022		38.18	38.33	0.15	5.00	0.10
	03/29/2022		38.64	39.42	0.78	5.00	0.51
	04/27/2022		38.13	38.59	0.46	5.00	0.30
	08/31/2022		39.00	40.35	1.35	5.00	0.88
	10/19/2022		39.14	39.49	0.35	5.00	0.23
	11/22/2022		38.94	39.67	0.73	5.00	0.48
	02/17/2023		38.66	39.41	0.75	5.00	0.49
	03/10/2023		39.20	40.46	1.26	5.00	0.82
	03/28/2023		38.63	39.47	0.84	-	-
	05/16/2023		38.65	39.99	1.34	5.00	0.88
	05/25/2023		38.80	40.48	1.68	5.00	1.10
	06/28/2023		38.82	40.5	1.68	-	-
	08/23/2023		-	-	-	5.00	1.13
	12/21/2023		39.46	41.24	1.78	-	-
2023 Average PSH Thickness & Recovery Totals					**1.33**	**25.0**	**4.41**

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
2. PSH = Phase Separated Hydrocarbons
3. NMOCD = New Mexico Oil Conservation Division
4. TOC = Top Of Casing

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

Table 8
Concentrations of PAH[1] in Groundwater Summary

Livingston Ridge to Hugh – P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID#: nAPP2109740065

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

Monitoring Well	Date Sampled	EPA SW846-8270C, 3510																
		Naphthalene	Benzo(a)pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	Pyrene
NMWQCC Groundwater Criteria[3]		0.03	0.0007	NE[4]														
MW-1	2/16/2006	0.0000136	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.00229	<0.00005	0.00399	<0.00005
	5/11/2007	0.017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	<0.001	<0.001	NA	<0.001	0.001	<0.001	0.012	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	11/7/2012	**0.0438**	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	<0.002	<0.002	<0.002	0.0180	<0.002
	9/19/2013	0.00592	<0.0000500	0.000128	<0.0000500	0.000162	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	0.000736	<0.0000500	0.000649	<0.0000500
	10/4/2014	<0.0000149	<0.0000066	<0.00000495	<0.00000236	<0.00000407	<0.00000527	<0.00000998	<0.00000796	<0.00000583	<0.00000427	<0.00000580	0.000332	<0.00000633	<0.00000633	<0.00000750	0.000148	<0.00000691
	12/22/2020	0.000315 J	<0.0000585	<0.000103	<0.0000864	<0.0000888	<0.000138	<0.0000729	<0.000116	<0.000119	<0.000160	<0.0000780	N/A	<0.000161	<0.000103	<0.0000937	<0.0000872	<0.000134
MW-2	6/18/2003	<0.00005	<0.00005	0.000118	0.000061	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	0.000056	0.000078	<0.00005	<0.00005	0.000121
	3/22/2005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	11/7/2012	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	<0.002	<0.002	<0.002	<0.002	<0.002
	9/19/2013	0.00056	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	NA	<0.0000513	0.000115	<0.0000513	0.000174	<0.0000513
	10/4/2014	Not Sampled Due to Sample Reduction																
MW-3	6/18/2003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	Dry - Not Sampled																
MW-4		Not Sampled due to the presence of phase separated hydrocarbons																
	6/18/2003	0.000167	<0.00005	0.000156	<0.00005	0.000144	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000498	<0.00005	0.000891	<0.00005
	11/2/2004	0.0025	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.0002	<0.00005	0.000227	<0.00005
	2/16/2006	0.00492	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.000068	<0.00005	NA	<0.00005	0.000251	<0.00005	0.000312	<0.00005
	5/11/2007	**0.034**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	0.001	<0.001	0.006	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	NA	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513
	10/4/2014	<0.0000149	<0.0000066	<0.00000495	<0.00000236	<0.00000407	<0.00000527	<0.00000998	<0.00000796	<0.00000583	<0.00000427	<0.00000580	0.000114	<0.00000633	<0.00000633	<0.00000750	0.0000614	<0.00000691
	12/23/2020	0.00501	<0.0000577	<0.000101	<0.0000851	<0.0000876	<0.000136	<0.0000719	<0.000114	<0.000117	<0.000158	<0.0000768	N/A	<0.000159	0.000247	<0.0000923	<0.0000860	<0.000132

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 8
Concentrations of PAH[1] in Groundwater Summary

Livingston Ridge to Hugh – P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID#: nAPP2109740065

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

Monitoring Well	Date Sampled	EPA SW846-8270C, 3510																
		Naphthalene	Benzo(a)pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	Pyrene
NMWQCC Groundwater Criteria[3]		0.03	0.0007	NE[4]														
MW-5	6/18/2003	**0.0403**	0.000249	0.000732	0.00507	0.000856	0.000459	0.000129	<0.00005	0.00007	0.000328	<0.00005	NA	0.000087	0.00268	<0.00005	<0.00005	0.000284
	8/24/2004	0.00768	<0.00005	0.000092	<0.00005	0.00007	<0.00005	<0.00005	<0.00005	0.00006	0.000114	<0.00005	NA	<0.00005	0.000419	<0.00005	0.000898	<0.00005
	2/16/2006	0.00136	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.000115	<0.00005	NA	<0.00005	0.000306	<0.00005	0.000427	<0.00005
	5/11/2007	0.019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	0.606	<0.001	<0.001	<0.001
	2/29/2008	**0.031**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<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	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	11/7/2012	**0.0448**	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	<0.002	<0.002	<0.002	0.0161	<0.002
	9/19/2013	**0.0405**	<0.000256	0.00028	<0.000256	0.000397	0.000377	<0.000256	<0.000256	<0.000256	<0.000256	<0.000256	NA	<0.000256	0.00213	<0.000256	0.00374	<0.000256
	10/4/2014	0.00741	<0.00000667	<0.000005	<0.00000238	<0.00000411	<0.00000533	<0.0000101	<0.0000804	<0.00000588	<0.00000431	<0.00000586	0.00071	<0.00000639	0.000301	<0.00000757	0.00019	<0.00000698
	10/19/2015	<0.000968	<0.000395	<0.000968	<0.000736	<0.000977	<0.000371	<0.000463	<0.000353	<0.000579	<0.000386	<0.00041	NA	<0.000505	<0.000997	<0.000371	<0.000804	<0.000463
	11/15/2019	0.00193	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	<0.000109	0.00126	<0.000109	0.000421	<0.000109	0.000227	<0.000109
	12/22/2020	0.000292 J	<0.0000575	<0.000101	<0.0000849	<0.0000873	<0.000136	<0.0000717	<0.000114	<0.000117	<0.000157	<0.0000766	N/A	<0.000158	0.000286	<0.0000921	<0.0000857	<0.000131
	3/17/2022	0.000472	<0.0000569	<0.0000996	<0.0000839	<0.0000897	<0.000134	<0.0000697	<0.000113	<0.000116	<0.000155	<0.0000757	0.00188	<0.000156	<0.000101	<0.000910	<0.0000847	<0.000130
MW-6	6/18/2003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	11/2/2004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	0.000126	<0.00005	0.000063	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	NA	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508
	12/22/2020	<0.0000997	<0.0000585	<0.000103	<0.0000864	<0.0000888	<0.000138	<0.0000729	<0.000116	<0.000119	<0.000160	<0.0000780	N/A	<0.000161	<0.000103	<0.0000937	<0.0000872	<0.000134
MW-7	6/18/2003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
MW-8	6/18/2003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005

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 8
Concentrations of PAH[1] in Groundwater Summary

Livingston Ridge to Hugh – P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID#: nAPP2109740065

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

Monitoring Well	Date Sampled	EPA SW846-8270C, 3510																
		Naphthalene	Benzo(a)pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	Pyrene
NMWQCC Groundwater Criteria[3]		0.03	0.0007	NE[4]														
MW-9	6/18/2003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	3/22/2005	0.000544	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000084	<0.00005	0.000058	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000513	<0.0000513	0.000052	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513	NA	<0.0000513	<0.0000513	<0.0000513	<0.0000513	<0.0000513
	12/22/2020	<0.0000974	<0.0000571	<0.000100	<0.0000843	<0.0000867	<0.000135	<0.0000712	<0.000113	<0.000116	<0.000156	<0.0000761	N/A	<0.000157	<0.000101	<0.0000914	<0.0000852	<0.000130
MW-10	6/18/2003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2019	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	NA	<0.0000508	<0.0000508	<0.0000508	0.0000852	<0.0000508
MW-11	11/6/2002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	8/18/2004	0.0014	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000075	<0.00005	0.000154	<0.00005
	3/22/2005	0.00167	<0.00005	0.000068	<0.00005	0.000055	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.00008	<0.00005	0.000296	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
	12/23/2020	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
MW-12	11/6/2002	0.000198	<0.00005	0.00007	0.000096	0.000151	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000662	<0.00005	0.000722	0.000071
	8/18/2004	0.000262	<0.00005	0.000079	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000078	<0.00005	0.000246	<0.00005
	3/22/2005	0.000107	<0.00005	0.0011	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000166	<0.00005	0.000285	<0.00005
	2/16/2006	<0.00005	<0.00005	0.000055	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000053	<0.00005	0.000174	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
	11/15/2019	0.00210	<0.0000585	<0.000103	<0.0000864	<0.0000888	<0.000138	<0.0000729	<0.000116	<0.000119	<0.000160	<0.0000780	N/A	<0.000161	<0.000103	<0.0000937	<0.0000872	<0.000134
	12/23/2020	0.00210	<0.0000585	<0.000103	<0.0000864	<0.0000888	<0.000138	<0.0000729	<0.000116	<0.000119	<0.000160	<0.0000780	N/A	<0.000161	<0.000103	<0.0000937	<0.0000872	<0.000134
	3/17/2022	<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

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 8
Concentrations of PAH[1] in Groundwater Summary

Livingston Ridge to Hugh – P. Sims
Lea County, New Mexico
Plains SRS #: 2001-11005
Etech Project #: 17476
NMOCD[2] Incident ID#: nAPP2109740065

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

Monitoring Well	Date Sampled	EPA SW846-8270C, 3510																
		Naphthalene	Benzo(a)pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	Pyrene
NMWQCC Groundwater Criteria[3]		0.03	0.0007	NE[4]														
MW-13	11/6/2002	0.000232	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	8/18/2004	0.00234	<0.00005	0.000139	<0.00005	0.000086	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000141	<0.00005	0.000702	<0.00005
	3/22/2005	0.000746	<0.00005	0.000105	<0.00005	0.000072	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000366	<0.00005	0.000426	<0.00005
	2/16/2006	0.000064	<0.00005	0.000079	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	0.000079	<0.00005	0.000132	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508	NA	<0.0000508	<0.0000508	<0.0000508	<0.0000508	<0.0000508
	12/22/2020	<0.0000997	<0.0000585	<0.000103	<0.0000863	<0.0000888	<0.000138	<0.0000729	<0.000116	<0.000119	<0.000160	<0.0000779	N/A	<0.000161	<0.000103	<0.0000936	<0.0000872	<0.000134
MW-14	11/6/2002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	8/18/2004	0.00119	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	0.000079	<0.00005
	3/22/2005	0.000071	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<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	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
	12/29/2020	<0.000116	<0.0000683	<0.000120	<0.000101	<0.000104	<0.000161	<0.0000851	<0.000136	<0.000139	<0.000187	<0.0000910	N/A	<0.000188	<0.000121	<0.000109	<0.000102	<0.000156
MW-15	11/6/2002	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	8/24/2004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	2/16/2006	0.0033	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	NA	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	5/11/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.001	<0.001	NA	<0.001	<0.001	<0.001	<0.001	<0.001
	2/29/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005
	9/19/2013	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	NA	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
	12/29/2020	<0.000100	<0.0000588	<0.000103	<0.0000867	<0.0000892	<0.000138	<0.0000732	<0.000117	<0.000120	<0.000161	<0.0000783	N/A	<0.000162	<0.000104	<0.0000940	<0.0000876	<0.000134
TMW-1	2/16/2006	**0.0886**	<0.00005	0.00146	<0.00005	0.00147	<0.00005	<0.00005	<0.00005	<0.00005	0.00221	<0.00005	NA	<0.00005	0.00818	<0.00005	0.0149	0.000788
	5/11/2007	**0.062**	<0.003	<0.002	<0.004	<0.002	<0.002	<0.002	<0.006	NA	<0.002	<0.001	NA	<0.002	0.008	<0.003	<0.002	<0.002
	2/29/2008	**0.069**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	NA	<0.025	<0.025	NA	<0.025	<0.025	<0.025	<0.025	<0.025
	9/19/2013	Not Sampled Due to PSH																
	10/4/2014																	
	10/1/2018	Plugged & Abbandoned																

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 Ridge

Project Number: 17476

Location: Lea County, NM

Lab Order Number: 3D03011

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 04/17/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-15	3D03011-01	Water	03/29/23 11:30	04-03-2023 14:40
MW-14	3D03011-02	Water	03/29/23 11:30	04-03-2023 14:40
MW-11	3D03011-03	Water	03/29/23 11:13	04-03-2023 14:40
MW-5	3D03011-04	Water	03/28/23 14:11	04-03-2023 14:40
MW-13	3D03011-05	Water	03/29/23 10:47	04-03-2023 14:40
MW-12	3D03011-06	Water	03/29/23 11:00	04-03-2023 14:40
MW-8	3D03011-07	Water	03/28/23 13:35	04-03-2023 14:40
MW-10	3D03011-08	Water	03/28/23 12:40	04-03-2023 14:40
MW-2	3D03011-09	Water	03/28/23 12:08	04-03-2023 14:40
MW-7	3D03011-10	Water	03/28/23 12:24	04-03-2023 14:40
MW-9	3D03011-11	Water	03/28/23 11:45	04-03-2023 14:40
MW-6	3D03011-12	Water	03/28/23 11:15	04-03-2023 14:40

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-15

3D03011-01 (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	P3D0606	04/06/23 11:35	04/07/23 04:09	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:09	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:09	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:09	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:09	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 04:09*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.7 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 04:09*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-14

3D03011-02 (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	P3D0606	04/06/23 11:35	04/07/23 04:31	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:31	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:31	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:31	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:31	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 04:31*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.3 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 04:31*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-11

3D03011-03 (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	P3D0606	04/06/23 11:35	04/07/23 04:52	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:52	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:52	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:52	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 04:52	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 04:52*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 04:52*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-5

3D03011-04 (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	P3D0606	04/06/23 11:35	04/07/23 05:13	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:13	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:13	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:13	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 05:13*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 05:13*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-13

3D03011-05 (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	P3D0606	04/06/23 11:35	04/07/23 05:34	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:34	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:34	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:34	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:34	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 05:34*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.6 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 05:34*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-12

3D03011-06 (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	P3D0606	04/06/23 11:35	04/07/23 05:55	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:55	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:55	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:55	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 05:55	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*100 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 05:55*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 05:55*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-8

3D03011-07 (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	P3D0606	04/06/23 11:35	04/07/23 06:16	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 06:16	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 06:16	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 06:16	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 06:16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 06:16*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.7 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 06:16*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-10

3D03011-08 (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	P3D0606	04/06/23 11:35	04/07/23 07:20	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 07:20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.3 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 07:20*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-2

3D03011-09 (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	P3D0606	04/06/23 11:35	04/07/23 07:42	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:42	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:42	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:42	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 07:42	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 07:42*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.5 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 07:42*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-7

3D03011-10 (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	P3D0606	04/06/23 11:35	04/07/23 08:03	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:03	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:03	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:03	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:03	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 08:03*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.3 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 08:03*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-9

3D03011-11 (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	P3D0606	04/06/23 11:35	04/07/23 08:24	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:24	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:24	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:24	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:24	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 08:24*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.0 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 08:24*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW-6

3D03011-12 (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	P3D0606	04/06/23 11:35	04/07/23 08:45	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:45	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:45	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:45	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3D0606	04/06/23 11:35	04/07/23 08:45	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 08:45*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.0 %*	*80-120*		*P3D0606*	*04/06/23 11:35*	*04/07/23 08:45*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
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 P3D0606 - * DEFAULT PREP *** **										
Blank (P3D0606-BLK1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.123*		*"*	*0.120*		*102*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.2*	*80-120*			
LCS (P3D0606-BS1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.0980	0.00100	mg/L	0.100		98.0	80-120			
Toluene	0.0975	0.00100	"	0.100		97.5	80-120			
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120			
Xylene (p/m)	0.202	0.00200	"	0.200		101	80-120			
Xylene (o)	0.0910	0.00100	"	0.100		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	*0.127*		*"*	*0.120*		*106*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.118*		*"*	*0.120*		*98.5*	*80-120*			
LCS Dup (P3D0606-BSD1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.0974	0.00100	mg/L	0.100		97.4	80-120	0.645	20	
Toluene	0.0972	0.00100	"	0.100		97.2	80-120	0.308	20	
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120	0.500	20	
Xylene (p/m)	0.202	0.00200	"	0.200		101	80-120	0.0248	20	
Xylene (o)	0.0912	0.00100	"	0.100		91.2	80-120	0.165	20	
Surrogate: 4-Bromofluorobenzene	*0.123*		*"*	*0.120*		*102*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.118*		*"*	*0.120*		*98.1*	*80-120*			
Calibration Blank (P3D0606-CCB1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.120		ug/l							
Toluene	0.240		"							
Ethylbenzene	0.500		"							
Xylene (p/m)	1.00		"							
Xylene (o)	0.520		"							
Surrogate: 4-Bromofluorobenzene	*0.119*		*"*	*0.120*		*98.9*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.3*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
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 P3D0606 - * DEFAULT PREP *** **										
Calibration Blank (P3D0606-CCB2)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.150		ug/l							
Toluene	0.200		"							
Ethylbenzene	0.330		"							
Xylene (p/m)	0.670		"							
Xylene (o)	0.410		"							
Surrogate: 4-Bromofluorobenzene	*0.122*		*"*	*0.120*		*102*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.112*		*"*	*0.120*		*93.3*	*80-120*			
Calibration Check (P3D0606-CCV1)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.106	0.00100	mg/L				80-120			
Toluene	0.105	0.00100	"				80-120			
Ethylbenzene	0.101	0.00100	"				80-120			
Xylene (p/m)	0.214	0.00200	"				80-120			
Xylene (o)	0.0994	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	*0.127*		*"*	*0.120*		*106*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.120*		*98.9*	*80-120*			
Calibration Check (P3D0606-CCV2)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.112	0.00100	mg/L				80-120			
Toluene	0.112	0.00100	"				80-120			
Ethylbenzene	0.108	0.00100	"				80-120			
Xylene (p/m)	0.226	0.00200	"				80-120			
Xylene (o)	0.104	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	*0.128*		*"*	*0.120*		*107*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.120*		*99.4*	*80-120*			
Calibration Check (P3D0606-CCV3)				Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.0994	0.00100	mg/L				80-120			
Toluene	0.0977	0.00100	"				80-120			
Ethylbenzene	0.0941	0.00100	"				80-120			
Xylene (p/m)	0.199	0.00200	"				80-120			
Xylene (o)	0.0914	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	*0.124*		*"*	*0.120*		*103*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.8*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
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 P3D0606 - * DEFAULT PREP *** **										
Matrix Spike (P3D0606-MS1)	**Source: 3D03010-03**			Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.0960	0.00100	mg/L	0.100	ND	96.0	80-120			
Toluene	0.0928	0.00100	"	0.100	ND	92.8	80-120			
Ethylbenzene	0.0921	0.00100	"	0.100	ND	92.1	80-120			
Xylene (p/m)	0.179	0.00200	"	0.200	ND	89.5	80-120			
Xylene (o)	0.0808	0.00100	"	0.100	ND	80.8	80-120			
Surrogate: 4-Bromofluorobenzene	*0.124*		"	*0.120*		*103*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.7*	*80-120*			
Matrix Spike Dup (P3D0606-MSD1)	**Source: 3D03010-03**			Prepared: 04/06/23 Analyzed: 04/07/23						
Benzene	0.0942	0.00100	mg/L	0.100	ND	94.2	80-120	1.88	20	
Toluene	0.0911	0.00100	"	0.100	ND	91.1	80-120	1.85	20	
Ethylbenzene	0.0929	0.00100	"	0.100	ND	92.9	80-120	0.800	20	
Xylene (p/m)	0.181	0.00200	"	0.200	ND	90.6	80-120	1.23	20	
Xylene (o)	0.0826	0.00100	"	0.100	ND	82.6	80-120	2.19	20	
Surrogate: 4-Bromofluorobenzene	*0.123*		"	*0.120*		*103*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.121*		"	*0.120*		*101*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Plains-Livingston Ridge
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

Notes and Definitions

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

Report Approved By: Brent Barron Date: 4/17/2023

Brent Barron, Laboratory Director/Technical Director

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 Ridge
Project #: 17476
Project Loc: Lea County, NM
PO #: 2001-11005
Report Format: X Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 3D03011

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3 250ml Poly	HCl	H2SO4	NaOH	Na2S2O3	None 1L Poly	NaOH/Zn/Ac	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 15	-	-	03/29/23	11:30		3	X		X						GW			X		X
2	MW 14	-	-	03/29/23	11:30		3	X		X						GW			X		X
3	MW 11	-	-	03/29/23	11:13		3	X		X						GW			X		X
4	MW 5	-	-	03/28/23	2:11		3	X		X						GW			X		X
5	MW 13	-	-	03/29/23	10:47		3	X		X						GW			X		X
6	MW 12	-	-	03/29/23	11:00		3	X		X						GW			X		X
7	MW 8	-	-	03/28/23	1:35		3	X		X						GW			X		X
8	MW 10	-	-	03/28/23	12:40		3	X		X						GW			X		X
9	MW 2	-	-	03/28/23	12:08		3	X		X						GW			X		X
10	MW 7	-	-	03/28/23	12:24		3	X		X						GW			X		X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Joel Lowry	4/3/23	14:40			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
			Trina Bledsoe	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 1.3
ACF

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 Ridge
Project #: 17476
Project Loc: Lea County, NM
PO #: 2001-11005
Report Format: X Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 3D03011

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
11	MW 9	-	-	03/28/23	11:45		3	X		X						GW			X		X
12	MW 6	-	-	03/28/23	11:15		3	X		X						GW			X		X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/3/23	14:40			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	4/3/23	14:30

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

NCF
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 RIDGE

Project Number: 17476

Location: Rural Lee Co. NM

Lab Order Number: 3F29011

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 07/24/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Zach Conder

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW2	3F29011-01	Water	06/28/23 14:15	06-29-2023 13:09
MW5	3F29011-02	Water	06/28/23 14:00	06-29-2023 13:09
MW11	3F29011-03	Water	06/28/23 14:05	06-29-2023 13:09
MW12	3F29011-04	Water	06/28/23 14:10	06-29-2023 13:09

BTEX analysis were 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 RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Zach Conder

MW2

3F29011-01 (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	P3G2406	07/07/23 19:01	07/07/23 19:01	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:01	07/07/23 19:01	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G2406	07/07/23 19:01	07/07/23 19:01	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:01	07/07/23 19:01	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:01	07/07/23 19:01	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:01	07/07/23 19:01	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Zach Conder

MW5

3F29011-02 (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	P3G2406	07/07/23 19:33	07/07/23 19:33	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:33	07/07/23 19:33	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G2406	07/07/23 19:33	07/07/23 19:33	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:33	07/07/23 19:33	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:33	07/07/23 19:33	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:33	07/07/23 19:33	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Zach Conder

MW11

3F29011-03 (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	P3G2406	07/07/23 19:45	07/07/23 19:45	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:45	07/07/23 19:45	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G2406	07/07/23 19:45	07/07/23 19:45	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:45	07/07/23 19:45	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:45	07/07/23 19:45	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G2406	07/07/23 19:45	07/07/23 19:45	EPA 8260B	SUB-13

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Zach Conder

MW12

3F29011-04 (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	P3G2406	07/07/23 20:08	07/07/23 20:08	EPA 8260B	SUB-13
Ethylbenzene	ND	0.00500	mg/L	1	P3G2406	07/07/23 20:08	07/07/23 20:08	EPA 8260B	SUB-13
m,p-Xylene	ND	0.0100	mg/L	1	P3G2406	07/07/23 20:08	07/07/23 20:08	EPA 8260B	SUB-13
o-Xylene	ND	0.00500	mg/L	1	P3G2406	07/07/23 20:08	07/07/23 20:08	EPA 8260B	SUB-13
Toluene	ND	0.00500	mg/L	1	P3G2406	07/07/23 20:08	07/07/23 20:08	EPA 8260B	SUB-13
Xylenes, total (v/v)	ND	0.00500	mg/L	1	P3G2406	07/07/23 20:08	07/07/23 20:08	EPA 8260B	SUB-13

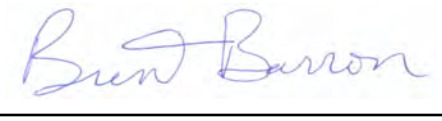
E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Zach Conder

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 RIDGE
13000 West County Road 100	Project Number: 17476
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:  Date: 7/24/2023

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 Ridge
Project #: 17476
Project Loc: Rural Lea Co., NM
PO #: 2001-11005

Report Format: X Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 3F29011

1/1

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	2:15	G	3	X		X						GW					X		X
2	MW5	-	-	6/28/23	2:00	G	3	X		X						GW					X		X
3	MW11	-	-	6/28/23	2:05	G	3	X		X						GW					X		X
4	MW12	-	-	6/28/23	2:10	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
	3F29011-01			6/28/2023	14:15		3	X		X						W	X												X
	3F29011-02			6/28/2023	14:00		3	X		X						W	X												X
	3F29011-03			6/28/2023	14:05		3	X		X						W	X												X
	3F29011-04			6/28/2023	14:10		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: **HS23070257**

Laboratory Results for: **3F29011**

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: 3F29011
Work Order: HS23070257

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23070257-01	3F29011-01	Water		28-Jun-2023 14:15	07-Jul-2023 09:40	☐
HS23070257-02	3F29011-02	Water		28-Jun-2023 14:00	07-Jul-2023 09:40	☐
HS23070257-03	3F29011-03	Water		28-Jun-2023 14:05	07-Jul-2023 09:40	☐
HS23070257-04	3F29011-04	Water		28-Jun-2023 14:10	07-Jul-2023 09:40	☐

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP **CASE NARRATIVE**
Project: 3F29011
Work Order: HS23070257

GCMS Volatiles by Method SW8260

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: 3F29011
Sample ID: 3F29011-01
Collection Date: 28-Jun-2023 14:15

ANALYTICAL REPORT
WorkOrder:HS23070257
Lab ID:HS23070257-01
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 19:01
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 19:01
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 19:01
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 19:01
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 19:01
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 19:01
Surr: 1,2-Dichloroethane-d4	*104*		*70-126*	*%REC*	*1*	*07-Jul-2023 19:01*
Surr: 4-Bromofluorobenzene	*93.4*		*82-124*	*%REC*	*1*	*07-Jul-2023 19:01*
Surr: Dibromofluoromethane	*98.4*		*77-123*	*%REC*	*1*	*07-Jul-2023 19:01*
Surr: Toluene-d8	*107*		*82-127*	*%REC*	*1*	*07-Jul-2023 19:01*

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: 3F29011
Sample ID: 3F29011-02
Collection Date: 28-Jun-2023 14:00

ANALYTICAL REPORT
WorkOrder:HS23070257
Lab ID:HS23070257-02
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 19:23
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 19:23
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 19:23
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 19:23
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 19:23
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 19:23
Surr: 1,2-Dichloroethane-d4	*104*		*70-126*	*%REC*	*1*	*07-Jul-2023 19:23*
Surr: 4-Bromofluorobenzene	*95.1*		*82-124*	*%REC*	*1*	*07-Jul-2023 19:23*
Surr: Dibromofluoromethane	*101*		*77-123*	*%REC*	*1*	*07-Jul-2023 19:23*
Surr: Toluene-d8	*109*		*82-127*	*%REC*	*1*	*07-Jul-2023 19:23*

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: 3F29011
Sample ID: 3F29011-03
Collection Date: 28-Jun-2023 14:05

ANALYTICAL REPORT
WorkOrder:HS23070257
Lab ID:HS23070257-03
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 19:45
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 19:45
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 19:45
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 19:45
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 19:45
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 19:45
Surr: 1,2-Dichloroethane-d4	*104*		*70-126*	*%REC*	*1*	*07-Jul-2023 19:45*
Surr: 4-Bromofluorobenzene	*98.6*		*82-124*	*%REC*	*1*	*07-Jul-2023 19:45*
Surr: Dibromofluoromethane	*98.9*		*77-123*	*%REC*	*1*	*07-Jul-2023 19:45*
Surr: Toluene-d8	*109*		*82-127*	*%REC*	*1*	*07-Jul-2023 19:45*

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: 3F29011
Sample ID: 3F29011-04
Collection Date: 28-Jun-2023 14:10

ANALYTICAL REPORT
WorkOrder:HS23070257
Lab ID:HS23070257-04
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 20:08
Ethylbenzene	ND		0.0050	mg/L	1	07-Jul-2023 20:08
m,p-Xylene	ND		0.010	mg/L	1	07-Jul-2023 20:08
o-Xylene	ND		0.0050	mg/L	1	07-Jul-2023 20:08
Toluene	ND		0.0050	mg/L	1	07-Jul-2023 20:08
Xylenes, Total	ND		0.0050	mg/L	1	07-Jul-2023 20:08
Surr: 1,2-Dichloroethane-d4	*103*		*70-126*	*%REC*	*1*	*07-Jul-2023 20:08*
Surr: 4-Bromofluorobenzene	*97.5*		*82-124*	*%REC*	*1*	*07-Jul-2023 20:08*
Surr: Dibromofluoromethane	*98.4*		*77-123*	*%REC*	*1*	*07-Jul-2023 20:08*
Surr: Toluene-d8	*107*		*82-127*	*%REC*	*1*	*07-Jul-2023 20:08*

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: 3F29011
WorkOrder: HS23070257

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	
HS23070257-01	3F29011-01	28 Jun 2023 14:15			07 Jul 2023 19:01	1
HS23070257-02	3F29011-02	28 Jun 2023 14:00			07 Jul 2023 19:23	1
HS23070257-03	3F29011-03	28 Jun 2023 14:05			07 Jul 2023 19:45	1
HS23070257-04	3F29011-04	28 Jun 2023 14:10			07 Jul 2023 20:08	1

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29011
WorkOrder: HS23070257

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: 3F29011
WorkOrder: HS23070257

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: HS23070257-01 HS23070257-02 HS23070257-03 HS23070257-04

ALS Houston, US Date: 10-Jul-23

Client: Permian Basin Environmental Lab, LP
Project: 3F29011
WorkOrder: **HS23070257**

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: HS23070257 **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 10:01
	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

HS23070257

Permian Basin Environmental Lab. LP
3F29011

Permian Basin Environmental Lab
1400 Rankin HWY
Midland, Texas 79701

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	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
	3F29011-01			6/28/2023	14:15		3	X		X						W	X		X
	3F29011-02			6/28/2023	14:00		3	X		X						W	X		X
	3F29011-03			6/28/2023	14:05		3	X		X						W	X		X
	3F29011-04			6/28/2023	14:10		3	X		X						W	X		X
	ice																		
	Ro 5.8°																		
	#31 CF -0.1°																		

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

Relinquished by:	Date	Time	Received by:	Date	Time
Brent Barron	7/5/23	17:00	[signature] 7/7/23 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 RIDGE

Project Number: 17476

Location: Rural Lea County, NM

Lab Order Number: 3I21016

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 09/26/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW2	3I21016-01	Water	09/21/23 08:00	09-21-2023 13:48
MW5	3I21016-02	Water	09/21/23 08:30	09-21-2023 13:48
MW11	3I21016-03	Water	09/21/23 09:00	09-21-2023 13:48
MW12	3I21016-04	Water	09/21/23 09:30	09-21-2023 13:48
MW6	3I21016-05	Water	09/21/23 10:00	09-21-2023 13:48
MW9	3I21016-06	Water	09/21/23 10:30	09-21-2023 13:48
MW13	3I21016-07	Water	09/21/23 11:00	09-21-2023 13:48
MW14	3I21016-08	Water	09/21/23 11:30	09-21-2023 13:48
MW15	3I21016-09	Water	09/21/23 12:00	09-21-2023 13:48

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW2

3I21016-01 (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 13:17	09/23/23 01:03	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:17	09/23/23 01:03	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2206	09/22/23 13:17	09/23/23 01:03	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2206	09/22/23 13:17	09/23/23 01:03	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2206	09/22/23 13:17	09/23/23 01:03	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2206	09/22/23 13:17	09/23/23 01:03	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2206	09/22/23 13:17	09/23/23 01:03	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*80-120*		*P3I2206*	*09/22/23 13:17*	*09/23/23 01:03*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.8 %*	*80-120*		*P3I2206*	*09/22/23 13:17*	*09/23/23 01:03*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW5

3I21016-02 (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 04:08	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 04:08	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:08	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:08	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:08	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:08	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:08	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.6 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 04:08*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.6 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 04:08*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW11

3I21016-03 (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 04:31	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 04:31	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:31	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:31	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:31	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:31	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:31	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.2 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 04:31*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 04:31*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW12

3I21016-04 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Total BTEX	**0.000570**	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 04:55	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*90.3 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 04:55*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*93.4 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 04:55*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW6

3I21016-05 (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 05:18	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 05:18	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:18	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:18	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:18	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:18	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.5 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 05:18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 05:18*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW9

3I21016-06 (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 05:41	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 05:41	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:41	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:41	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:41	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:41	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 05:41	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 05:41*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 05:41*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW13

3I21016-07 (Water)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Total BTEX	**0.00142**	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Xylenes (total)	**0.000720**	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:04	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*90.0 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 06:04*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.8 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 06:04*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW14

3I21016-08 (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 06:27	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 06:27	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:27	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:27	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:27	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:27	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:27	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.3 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 06:27*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.4 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 06:27*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
Odessa TX, 79765	Project Manager: Joel Lowry

MW15

3I21016-09 (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 06:50	EPA 8021B	
Xylenes (total)	ND	0.00100	mg/L	1	[CALC]	09/22/23 13:22	09/23/23 06:50	EPA 8021B	
Organics by GC									
Benzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:50	EPA 8021B	
Toluene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:50	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:50	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:50	EPA 8021B	
Xylene (o)	ND	0.00100	mg/L	1	P3I2207	09/22/23 13:22	09/23/23 06:50	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.8 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 06:50*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.4 %*	*80-120*		*P3I2207*	*09/22/23 13:22*	*09/23/23 06:50*	*EPA 8021B*	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
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 P3I2206 - * DEFAULT PREP *** **										
Blank (P3I2206-BLK1)				Prepared & Analyzed: 09/22/23						
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	*0.112*		*"*	*0.120*		*93.1*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.7*	*80-120*			
LCS (P3I2206-BS1)				Prepared & Analyzed: 09/22/23						
Benzene	0.0937	0.00100	mg/L	0.100		93.7	80-120			
Toluene	0.0912	0.00100	"	0.100		91.2	80-120			
Ethylbenzene	0.0957	0.00100	"	0.100		95.7	80-120			
Xylene (p/m)	0.186	0.00200	"	0.200		93.1	80-120			
Xylene (o)	0.0821	0.00100	"	0.100		82.1	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.6*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.1*	*80-120*			
LCS Dup (P3I2206-BSD1)				Prepared & Analyzed: 09/22/23						
Benzene	0.0914	0.00100	mg/L	0.100		91.4	80-120	2.47	20	
Toluene	0.0881	0.00100	"	0.100		88.1	80-120	3.54	20	
Ethylbenzene	0.0921	0.00100	"	0.100		92.1	80-120	3.83	20	
Xylene (p/m)	0.180	0.00200	"	0.200		90.2	80-120	3.18	20	
Xylene (o)	0.0807	0.00100	"	0.100		80.7	80-120	1.77	20	
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.120*		*93.1*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.7*	*80-120*			
Calibration Blank (P3I2206-CCB1)				Prepared & Analyzed: 09/22/23						
Benzene	0.170		ug/l							
Toluene	0.180		"							
Ethylbenzene	0.170		"							
Xylene (p/m)	0.260		"							
Xylene (o)	0.100		"							
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.120*		*94.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.7*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
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 P3I2206 - * DEFAULT PREP *** **										
Calibration Blank (P3I2206-CCB2)				Prepared & Analyzed: 09/22/23						
Benzene	0.130		ug/l							
Toluene	0.220		"							
Ethylbenzene	0.140		"							
Xylene (p/m)	0.140		"							
Xylene (o)	0.0700		"							
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.120*		*91.6*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.0*	*80-120*			
Calibration Check (P3I2206-CCV1)				Prepared & Analyzed: 09/22/23						
Benzene	0.0869	0.00100	mg/L	0.100		86.9	80-120			
Toluene	0.0935	0.00100	"	0.100		93.5	80-120			
Ethylbenzene	0.0982	0.00100	"	0.100		98.2	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200		100	80-120			
Xylene (o)	0.0924	0.00100	"	0.100		92.4	80-120			
Surrogate: 4-Bromofluorobenzene	*0.111*		*"*	*0.120*		*92.9*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.9*	*80-120*			
Calibration Check (P3I2206-CCV2)				Prepared & Analyzed: 09/22/23						
Benzene	0.0853	0.00100	mg/L	0.100		85.3	80-120			
Toluene	0.0892	0.00100	"	0.100		89.2	80-120			
Ethylbenzene	0.0911	0.00100	"	0.100		91.1	80-120			
Xylene (p/m)	0.188	0.00200	"	0.200		93.8	80-120			
Xylene (o)	0.0861	0.00100	"	0.100		86.1	80-120			
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*89.9*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.8*	*80-120*			
Calibration Check (P3I2206-CCV3)				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*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
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 P3I2206 - * DEFAULT PREP *** **										
Matrix Spike (P3I2206-MS1)	**Source: 3I21003-06**			Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0886	0.00100	mg/L	0.100	ND	88.6	80-120			
Toluene	0.0822	0.00100	"	0.100	ND	82.2	80-120			
Ethylbenzene	0.0837	0.00100	"	0.100	ND	83.7	80-120			
Xylene (p/m)	0.166	0.00200	"	0.200	ND	82.9	80-120			
Xylene (o)	0.0721	0.00100	"	0.100	ND	72.1	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.109*		*"*	*0.120*		*90.7*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.3*	*80-120*			
Matrix Spike Dup (P3I2206-MSD1)	**Source: 3I21003-06**			Prepared: 09/22/23 Analyzed: 09/23/23						
Benzene	0.0906	0.00100	mg/L	0.100	ND	90.6	80-120	2.25	20	
Toluene	0.0874	0.00100	"	0.100	ND	87.4	80-120	6.12	20	
Ethylbenzene	0.0895	0.00100	"	0.100	ND	89.5	80-120	6.63	20	
Xylene (p/m)	0.177	0.00200	"	0.200	ND	88.5	80-120	6.54	20	
Xylene (o)	0.0775	0.00100	"	0.100	ND	77.5	80-120	7.21	20	QM-05
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*90.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.9*	*80-120*			
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*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
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 *** **										
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*			
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*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
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 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*			
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*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: LIVINGSTON RIDGE
13000 West County Road 100	Project Number: 17476
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 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 RIDGE
13000 West County Road 100	Project Number: 17476
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:

Project Name: Livingston Ridge
Project #: 17476
Project Loc: Rural Lea Co., NM
PO #: 2001-11005
Report Format: ☐ Standard ☐ TRRP ☐ NPDES
e-mail: PM@etechenv.com

(lab use only)
ORDER #: 3I21016

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	Analyze For: 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			9/21/23	8:00		3	X		X						GW					X		X
2	MW5			9/21/23	8:30		3	X		X						GW					X		X
3	MW11			9/21/23	9:00		3	X		X						GW					X		X
4	MW12			9/21/23	9:30		3	X		X						GW					X		X
5	MW6			9/21/23	10:00		3	X		X						GW					X		X
6	MW9			9/21/23	10:30		3	X		X						GW					X		X
7	MW13			9/21/23	11:00		3	X		X						GW					X		X
8	MW14			9/21/23	11:30		3	X		X						GW					X		X
9	MW15			9/21/23	12:00		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
			Lacy McC	9/21/23	15:48

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. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

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

ANALYTICAL REPORT

January 04, 2024

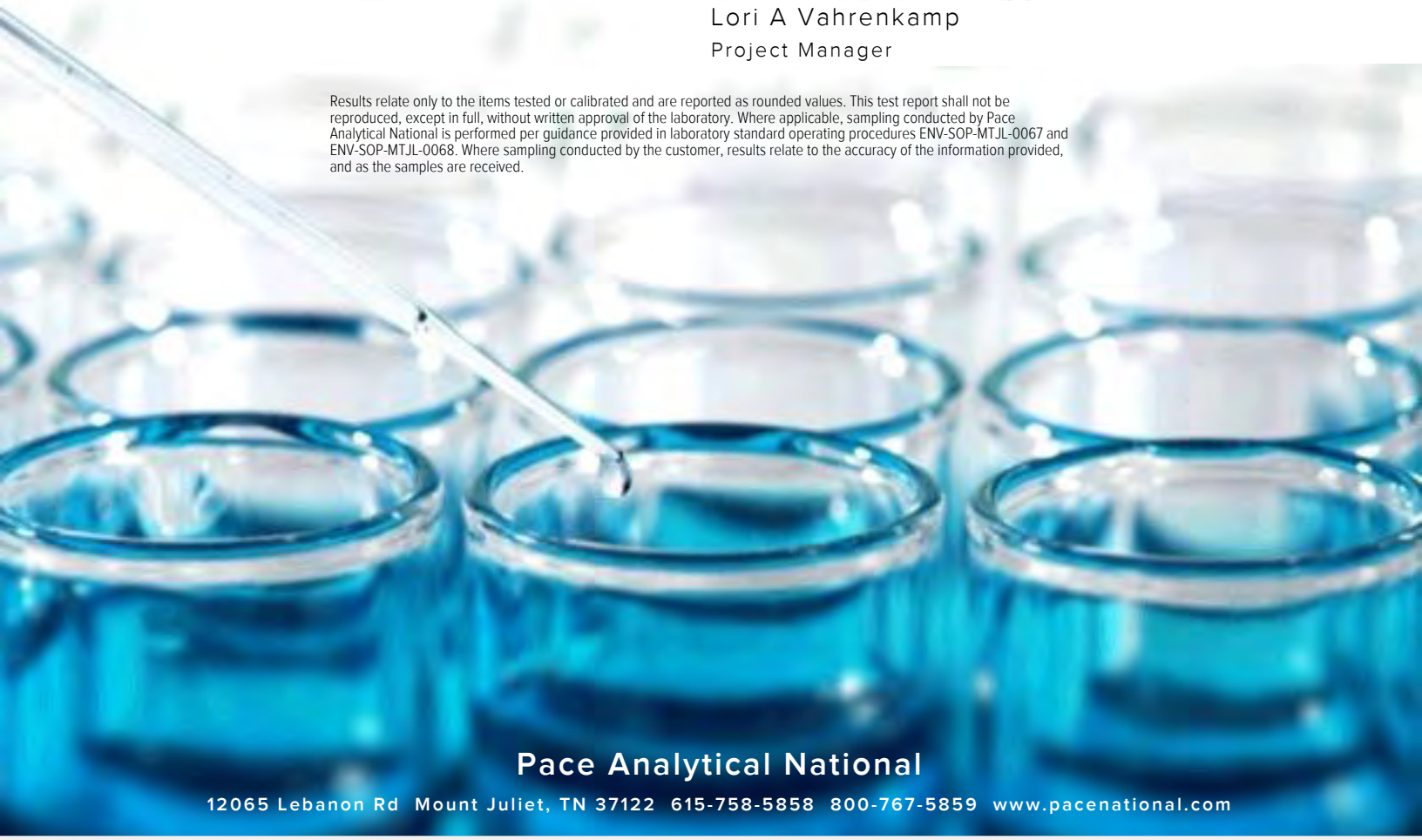
Plains All American Pipeline - ETECH

Sample Delivery Group:	L1691041
Samples Received:	12/22/2023
Project Number:	SRS #2001-11005
Description:	Livingston Ridge - Hugh P. Sims
Site:	SRS #2001-11005
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

SAMPLE SUMMARY

MW-11 L1691041-01 GW

Collected by: Kimble Thrash | Collected date/time: 12/21/23 14:00 | 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	WG2198956	1	12/31/23 18:53	12/31/23 18:53	ACG	Mt. Juliet, TN

MW-12 L1691041-02 GW

Collected by: Kimble Thrash | Collected date/time: 12/21/23 14:55 | 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	WG2198956	1	12/31/23 19:16	12/31/23 19:16	ACG	Mt. Juliet, TN

MW-2 L1691041-03 GW

Collected by: Kimble Thrash | Collected date/time: 12/21/23 11:55 | 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	WG2198956	1	12/31/23 19:39	12/31/23 19:39	ACG	Mt. Juliet, TN

MW-5 L1691041-04 GW

Collected by: Kimble Thrash | Collected date/time: 12/21/23 13:00 | 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	WG2198956	1	12/31/23 20:01	12/31/23 20:01	ACG	Mt. Juliet, TN

DUP-1 L1691041-05 GW

Collected by: Kimble Thrash | Collected date/time: 12/21/23 14:56 | 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	WG2198956	1	12/31/23 20:24	12/31/23 20:24	ACG	Mt. Juliet, TN

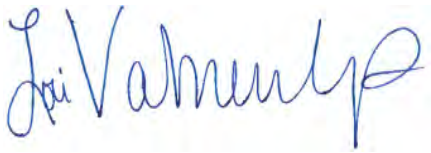
TRIP BLANK L1691041-06 GW

Collected by: Kimble Thrash | Collected date/time: 12/21/23 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	WG2198956	1	12/31/23 13:13	12/31/23 13:13	ACG	Mt. Juliet, TN

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

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



Lori A Vahrenkamp
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1691041-01	MW-11	8021B
L1691041-04	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	U		0.000190	0.000500	1	12/31/2023 18:53	WG2198956
Toluene	U		0.000412	0.00100	1	12/31/2023 18:53	WG2198956
Ethylbenzene	U		0.000160	0.000500	1	12/31/2023 18:53	WG2198956
Total Xylene	0.00107	J	0.000510	0.00150	1	12/31/2023 18:53	WG2198956
(S) a,a,a-Trifluorotoluene(PID)	*95.1*			*79.0-125*		*12/31/2023 18:53*	WG2198956

MW-12
Collected date/time: 12/21/23 14:55
L1691041

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000235	J	0.000190	0.000500	1	12/31/2023 19:16	WG2198956
Toluene	U		0.000412	0.00100	1	12/31/2023 19:16	WG2198956
Ethylbenzene	U		0.000160	0.000500	1	12/31/2023 19:16	WG2198956
Total Xylene	0.00245		0.000510	0.00150	1	12/31/2023 19:16	WG2198956
(S) a,a,a-Trifluorotoluene(PID)	*94.0*			*79.0-125*		*12/31/2023 19:16*	WG2198956

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	1	12/31/2023 19:39	WG2198956
Toluene	U		0.000412	0.00100	1	12/31/2023 19:39	WG2198956
Ethylbenzene	U		0.000160	0.000500	1	12/31/2023 19:39	WG2198956
Total Xylene	U		0.000510	0.00150	1	12/31/2023 19:39	WG2198956
(S) a,a,a-Trifluorotoluene(PID)	*96.1*			*79.0-125*		*12/31/2023 19:39*	WG2198956

MW-3
Collected date/time: 12/21/23 13:00
L1691041

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000834		0.000190	0.000500	1	12/31/2023 20:01	WG2198956
Toluene	U		0.000412	0.00100	1	12/31/2023 20:01	WG2198956
Ethylbenzene	U		0.000160	0.000500	1	12/31/2023 20:01	WG2198956
Total Xylene	U		0.000510	0.00150	1	12/31/2023 20:01	WG2198956
(S) a,a,a-Trifluorotoluene(PID)	*93.8*			*79.0-125*		*12/31/2023 20:01*	WG2198956

DUP-1
Collected date/time: 12/21/23 14:56
L1691041

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000248	J	0.000190	0.000500	1	12/31/2023 20:24	WG2198956
Toluene	U		0.000412	0.00100	1	12/31/2023 20:24	WG2198956
Ethylbenzene	U		0.000160	0.000500	1	12/31/2023 20:24	WG2198956
Total Xylene	0.00241		0.000510	0.00150	1	12/31/2023 20:24	WG2198956
(S) a,a,a-Trifluorotoluene(PID)	*93.8*			*79.0-125*		*12/31/2023 20:24*	WG2198956

TRIP BLANK
Collected date/time: 12/21/23 00:00
L1691041

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	1	12/31/2023 13:13	WG2198956
Toluene	U		0.000412	0.00100	1	12/31/2023 13:13	WG2198956
Ethylbenzene	U		0.000160	0.000500	1	12/31/2023 13:13	WG2198956
Total Xylene	U		0.000510	0.00150	1	12/31/2023 13:13	WG2198956
(S) a,a,a-Trifluorotoluene(PID)	*95.6*			*79.0-125*		*12/31/2023 13:13*	WG2198956

Method Blank (MB)

(MB) R4019601-2 12/31/23 12:50

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)	*95.9*			*79.0-125*

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

(LCS) R4019601-1 12/31/23 11:42 • (LCSD) R4019601-3 12/31/23 21:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0488	0.0439	97.6	87.8	77.0-122			10.6	20
Toluene	0.0500	0.0459	0.0410	91.8	82.0	80.0-121			11.3	20
Ethylbenzene	0.0500	0.0513	0.0455	103	91.0	80.0-123			12.0	20
Total Xylene	0.150	0.148	0.131	98.7	87.3	47.0-154			12.2	20
(S) a,a,a-Trifluorotoluene(PID)				*94.5*	*94.6*	*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
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [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 Ridge - Hugh P. Sims**

City/State Collected: **LEA COUNTY, NM**

Please Circle: PT MT CT ET

Phone: **4328949996**

Client Project # **SRS #2001-11005**

Lab Project # **PLAINSETECH-NM GW**

Collected by (print): **KIMBLE THRASH**

Site/Facility ID # **SLS#2001-11005**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl	BTEX 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-11	G	GW	N/A	12-21-23	1400	3	X			-01
MW-12	G	GW	N/A	12-21-23	1455	3	X			-02
[redacted] MW-2	G	GW	N/A	12-21-23	1155	3	X			-03
[redacted] MW-5	G	GW	N/A	12-21-23	1300	3	X			-04
[redacted]		[redacted]				[redacted]				
DUP-1	G	GW	N/A	12-21-23	1456	3	X			-05
[redacted]		[redacted]				[redacted]				
TRIP BLANK		GW				1		X		-06

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 # L1691041

F104

Acctnum: **PLAINSETECH**
Template: **T242882**
Prelogin: **P1041695**
PM: **3587 - Lori A Vahrenkamp**
PB:

Shipped Via: **Courier**

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

Remarks:Order Includes: 17xGW 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

	Date:	Time:		
Relinquished by : (Signature)	12/21/23	1631	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: DPAE 0.2+0=0.2 Bottles Received: 15
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Caleb T/PP	Date: 12/22/23 Time: 08:00

If preservation required by Login: Date/Time

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 328474

CONDITIONS

Operator:	OGRID:
PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	34053
	Action Number: 328474
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for Livingston Ridge to Hugh--P. Sims: content satisfactory 1. Continue to gauge and sample monitoring wells: MW-2, MW-5, MW-11 and MW-12 on a quarterly schedule as planned. 2. Conduct groundwater sampling for MW-7, MW-8, and MW-10 on an annual basis. 3. Conduct AFR events as prescribed to prevent down-gradient contamination. 4. Submit the 2024 annual report to the OCD by April 1, 2025.	7/3/2024