REVIEWED
By Nelson Velez at 9:23 am, Jul 22, 2022

Review of 2021 Annual Groundwater Monitoring Report:
Content satisfactory

Contractor recommendations approved by NMOCD and are as follows;

1. Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8021B for all monitor wells located on-site
2. Removal of MW-3R from weekly BTEX abatement
3. Replace the ORC filter socks after 12 months of use in MW-1R, MW-2R, and MW-4R
4. Continue the operation of the oxygen emitter system installed at monitor well MW-12
5. Submit the Annual Groundwater Monitoring Report to the NMOCD no later than March 31, 2023.

2021 Annual Groundwater Monitoring Report

Lovington Gathering WTI
Lea County, New Mexico
SRS #2006-142
NMOCD Remediation
Permit Number AP-96
Incident ID # nAPP2108928398

Plains All American Pipeline, LP

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1. Introduction

GHD Services, Inc. (GHD), on behalf of Plains All American Pipeline, L.P. (Plains), submits this Annual Groundwater Monitoring Report (Report) in compliance with New Mexico Oil Conservation Division (NMOCD) requirements. This Site falls under NMOCD Abatement Plan number AP-96. This Report provides the quarterly results of groundwater sampling events (GWSEs) and remediation activities completed at Lovington Gathering SRS #2006-142 (Site) during 2021.

The legal description of the Site is SE ¼, NE ¼, Section 6, Township 17 South, Range 37 East in Lea County, New Mexico. The GPS coordinates for the Site are 32.8649° N latitude and 103.2853° W longitude. The surface owner of the pasture where the release occurred is Mr. Robert Rice. The Site is characterized by a fenced, excavated, and backfilled release area, including a Plains pipeline right-of-way, adjacent to an idle Plains pump station. A Site Location Map is provided as Figure 1. The Plains pipeline right-of-way, the Plains pump station and other site details are depicted on Figure 2, Site Details Map.

1.1 Site Location and History

On April 21, 2006, during purging of the 6-inch steel Lovington Gathering WTI Pipeline owned by Plains, a release of sweet crude oil occurred as the result of internal corrosion. At the time the release was discovered, it was estimated that approximately 12 barrels (bbls) of crude oil were released with an aerial extent of surface impact estimated at approximately 1,500 square feet. A copy of the Release Notification and Corrective Action, NMOCD Form C-141 is attached as Appendix A. Cleanup action began the same day with approximately 8 bbls of crude oil being recovered. Basin Environmental Service Technologies, LLC (Basin) was notified by Plains to respond to the pipeline release, to repair the pipeline, and to excavate impacted soil. The pipeline was repaired utilizing a clamp, and visually stained soil was excavated and placed on plastic sheeting. Excavation activities during the response and subsequent remediation of the Site covered an area approximately 30 feet long by 27 feet wide and was approximately 5 to 6 feet below ground surface. On April 21, 2006, remediation and project management responsibilities were assumed by Basin. GHD assumed Site groundwater remediation and project management responsibilities on October 1, 2016.

Monitor wells MW-1, MW-2, and MW-3 were installed in July 2006. Monitor wells MW-4, MW-5, MW-6, and MW-7 were installed in November 2006. Monitor well MW-8 was installed in February 2007. Monitor well MW-9 was installed in August 2007. Monitor well MW-10 was installed in October 2009.

On September 17, 2018, monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5 were plugged and abandoned at the Site. On September 19, 2018, GHD completed the installation of five 2-inch replacement monitor wells (MW-1R, MW-2R, MW-3R, MW-4R, and MW-5R) to maintain delineation and replace the five plugged and abandoned wells. The new monitor wells were installed in proximity to the original well locations (Figure 2). Additionally, two new monitoring wells, MW-11 and MW-12, were installed to further delineate down-gradient conditions at the southern portion of the Site. On May 27, 2020, GHD installed an oxygen emitter system into monitor well MW-12 to address benzene concentrations in the downgradient portion of the site.

On May 27, 2020, an oxygen emitter system was installed into MW-12 to enhance aerobic biodegradation of dissolved-phase hydrocarbons in groundwater. The oxygen emitter is removed prior to gauging and sampling activities, as appropriate, and replaced after these activities were completed.

2. Regulatory Framework

The NMOCD guidelines require groundwater to be analyzed for potential contaminants as defined by the New Mexico Water Quality Control Commission (NMWQCC) Standards 20.6.2.3103 Section A, which provide Human Health Standards for Groundwater. The constituents of concern (COCs) in affected groundwater at the Site are currently benzene, toluene, ethylbenzene, and total xylenes (BTEX). NMWQCC standards as shown in Table 2.1 are used to guide assessment and remediation of the Site:

Table 2.1 NMWQCC Human Health Standards

Analyte	NMWQCC Human Health Standard
Benzene	0.01 mg/L
Toluene	0.75 mg/L
Ethylbenzene	0.75 mg/L
Total Xylenes	0.62 mg/L
Benzo(a)pyrene	0.0002 mg/L
Combined Naphthalene and Monomethylnaphthalenes	0.03 mg/L

3. 2021 Groundwater Sampling Events

GHD conducted quarterly GWSEs for 12 on-site monitor wells, 4 off-site Goff Dairy locations, and 1 off-site private well. Sample locations can be viewed in the Site Details Map provided as Figure 2. All on-site and off-site sample locations were sampled in accordance with the following groundwater sampling schedule as approved by the NMOCD:

Table 3.1 NMOCD-Approved Groundwater Sampling Schedule

Sample Location ID	Groundwater Sampling Schedule
MW-8	Semi-Annual
Goff Dairy Well; Goff Dairy Center Pivot Well; Goff Dairy Center Pivot-Beg.; Goff Dairy Center Pivot-End; JW Well; MW-1R; MW-2R; MW-3R; MW-4R; MW-5R; MW-6; MW-7; MW-9; MW-10; MW-11; MW-12	Quarterly

3.1 Groundwater Sampling Methodology

Prior to gauging activity, each well cap was removed to allow groundwater levels to stabilize. Static fluid levels were gauged with an oil-water interface probe to the nearest hundredth of a foot. Each well was purged of three casing volumes of water, and groundwater samples were

collected. The purged groundwater was stored in an above-ground storage tank (AST) located at the Site. The Goff Dairy locations and private well could not be purged via hand-bailing, therefore spickets were purged for a minimum of 30 seconds prior to sample collection for the off-site sampling locations.

Laboratory-supplied containers were filled with groundwater directly from the PVC bailer used for purging, then placed on ice and chilled to a temperature of approximately 4° C. All groundwater samples were analyzed for BTEX by Method 8021B. A duplicate sample was generally collected for every 12 wells and analyzed for BTEX by Method 8021B. All groundwater samples were analyzed by Pace Analytical Laboratory in Mt. Juliet, Tennessee. Certified Laboratory Reports and Chain-of-Custody are provided in Appendix C. Groundwater samples were not analyzed for polycyclic aromatic hydrocarbons (PAH) in 2021 because all wells have previously met the NMWQCC criteria for 2 consecutive years. Historical PAH Analytical Results are provided in Table 3.

3.2 Laboratory Analytical Results Summary

BTEX analytical results for GWSEs conducted during 2020 and 2021 are included on Table 2, BTEX Analytical Results for Groundwater Sampling Events 2020-2021. BTEX concentrations for the quarterly GWSEs conducted in 2021 are shown on Figure 7, Figure 8, Figure 9, and Figure 10.

3.2.1 First Quarter Summary

On February 2-3, 2021, GHD collected groundwater samples from nine (9) monitor wells. Approximately 86.5 gallons of groundwater were purged and stored into the on-site AST. Analytical results were not consistent with historical data in monitor wells Mw-1R, MW-2R, MW-4R, MW-11 and MW-12. Plains made the decision to repeat the first quarter sampling event.

On March 18-19, 2021, GHD returned to the site to repeat the first quarter sampling event. Nine (9) monitor wells were sampled during this event. Approximately 76 gallons of groundwater were purged and stored into the on-site AST. Analytical results indicated benzene concentrations above 0.01 mg/L in MW-1R, MW-2R, MW-4R, and MW-12. Benzene concentrations above 0.01 mg/L ranged from 0.0877 mg/L in MW-2R to 1.07 mg/L in MW-4R. None of the other Site wells exhibited benzene concentrations that exceeded the benzene standard. None of the Site wells exhibited toluene, ethylbenzene, or total xylenes concentrations above the NMWQCC criteria. Results for the analyses of the initial and field duplicate groundwater samples collected at MW-4R were within acceptable ranges.

No groundwater samples were collected at the Goff Diary Well or Goff Dairy Center Pivot due the irrigation system being shut off. The JW Well was also not sampled due to not having access to the sampling location. MW-6, MW-8, and MW-10 were not sampled due to being dry.

3.2.2 Second Quarter Summary

On May 4-5, 2021, GHD collected groundwater samples from nine (9) monitor wells. Approximately 46 gallons of groundwater were purged and stored into the on-site AST. Analytical results indicated benzene concentrations above 0.01 mg/L in MW-1R, MW-2R, MW-4R, and MW-12. Benzene concentrations above 0.01 mg/L ranged from 0.0956 mg/L in MW-1R to 1.36 mg/L in

MW-4R. None of the other Site wells exhibited benzene concentrations that exceeded the benzene standard. None of the Site wells exhibited toluene, ethylbenzene, or total xylenes concentrations above the NMWQCC criteria. Results for the analyses of the initial and field duplicate groundwater samples collected at MW-4R were within acceptable ranges.

One June 11, 2021, GHD collected groundwater samples for the Goff Dairy Well and the Goff Dairy Center Pivot from three (3) locations. None of the Goff wells exhibited BTEX concentrations above the NMWQCC criteria.

The JW Well was not sampled due to not having access to the sampling location. MW-6, MW-8, and MW-10 were not sampled due to being dry.

3.2.3 Third Quarter Summary

On August 3-4, 2021, GHD collected groundwater samples from nine (9) monitor wells. Approximately 50 gallons of groundwater were purged and stored into the on-site AST. Analytical results indicated benzene concentrations above 0.01 mg/L in MW-1R, MW-2R, MW-4R, and MW-12. Benzene concentrations above 0.01 mg/L ranged from 0.0388 mg/L in MW-2R to 1.61 mg/L in MW-4R. None of the other Site wells exhibited benzene concentrations that exceeded the benzene standard. None of the Site wells exhibited toluene, ethylbenzene, or total xylenes concentrations above the NMWQCC criteria. Results for the analyses of the initial and field duplicate groundwater samples collected at MW-4R were within acceptable ranges.

No groundwater samples were collected at the Goff Diary Well or Goff Dairy Center Pivot due the irrigation system being shut off. The JW Well was also not sampled due to not having access to the sampling location. MW-6, MW-8, and MW-10 were not sampled due to being dry.

3.2.4 Fourth Quarter Summary

On November 1-2, 2021, GHD collected groundwater samples from nine (9) monitor wells, Goff Dairy Well, three (3) Goff Dairy Center Pivot sample locations, and the JW Well. Approximately 69 gallons of groundwater were purged and stored into the on-site AST. Analytical results indicated benzene concentrations above 0.01 mg/L in MW-1R, MW-4R, and MW-12. Benzene concentrations above 0.01 mg/L ranged from 0.0570 mg/L in MW-1R to 1.54 mg/L in MW-4R. None of the other Site wells exhibited benzene concentrations that exceeded the benzene standard. None of the Site wells exhibited toluene, ethylbenzene, or total xylenes concentrations above the NMWQCC criteria. Results for the analyses of the initial and field duplicate groundwater samples collected at MW-4R were within acceptable ranges.

MW-6, MW-8, and MW-10 were not sampled due to being dry.

4. Potentiometric Surface and Gradient Summary

During the quarterly GWSEs, GHD conducted gauging events prior to groundwater sample collection. All fluid level measurements were from tops of casings which were professionally surveyed. Groundwater flow is generally toward the southeast, which is consistent with historical data. The average gradient of the potentiometric surface during 2021 is 0.0085 feet per foot (ft./ft.). The elevation of the potentiometric surface indicates an average decline of 0.51 ft. during

2021. Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021 are provided in Table 1. Quarterly Groundwater Gradient Maps are provided as Figure 3, Figure 4, Figure 5, and Figure 6.

5. Remediation Activities

Oxygen Release Compound (ORC) filter socks were installed in MW-1R; MW-2R; and MW-4R in March 2021, to enhance aerobic biodegradation of dissolved-phase hydrocarbons in groundwater. GHD conducts weekly BTEX abatement, via hand bailing, in monitor wells MW-1R, MW-2R, and MW-4R on a weekly basis. Approximately 388 gallons of total fluid were removed from the monitor wells during 2021. Monitor well MW-12R has had an oxygen emitter installed in it since May of 2020. The oxygen bottle is checked on a weekly basis.

6. Summary of Findings

Based on GWSE and remedial activities performed at the Site in 2021, the following summary of findings is presented:

- MW-6, MW-8, and MW-10 are dry wells.
- Groundwater flow direction is toward the southeast and is consistent with previous monitoring events. The average gradient of the potentiometric surface during 2021 is 0.0085 ft./ft.
- No measurable light non-aqueous phase liquids are present in the groundwater within the Site.
- Benzene concentrations are consistently above the NMWQCC criteria for MW-1R, MW-2R, MW-4R, and MW-12. Charts of Dissolved Benzene Concentrations Versus Time are provided in Appendix C.
    - Historically, MW-3R has had benzene concentrations exceeding the NMWQCC criteria but it has been below the benzene standards since May 2020.
    - MW-2R exhibited benzene concentration below the NMWQCC standard.
    - The dissolved phase hydrocarbon plume appears to be stable and is not expanding based on the 2021 GWSEs.
- Fluctuations in the elevation of the potentiometric surface can be attributed to the seasonal operation of the Goff Dairy irrigation system located adjacent to the southwest of the Site. GHD cannot collect groundwater samples at Goff Dairy sample locations when the irrigation system is off.
- Access to JW Well is not available for every GWSE.

7. Recommendations

Based upon the data and findings presented in this Report, the following are recommended for 2022:

- Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8021B for all monitor wells located on-site.
- Remove MW-3R from weekly BTEX abatement. BTEX concentrations have been below the NMWQCC Human Health Standards since the GWSE conducted in May 2020.
- Replace the ORC filter socks after 12 months of use in MW-1R, MW-2R, and MW-4R due to expiration of the controlled-release, molecular oxygen.
- Continue the operation of the oxygen emitter system installed at monitor well MW-12.

All of which is Respectfully Submitted,

GHD

Becky Haskell
Senior Project Manager

Tom Larson
Midland Operations Manager

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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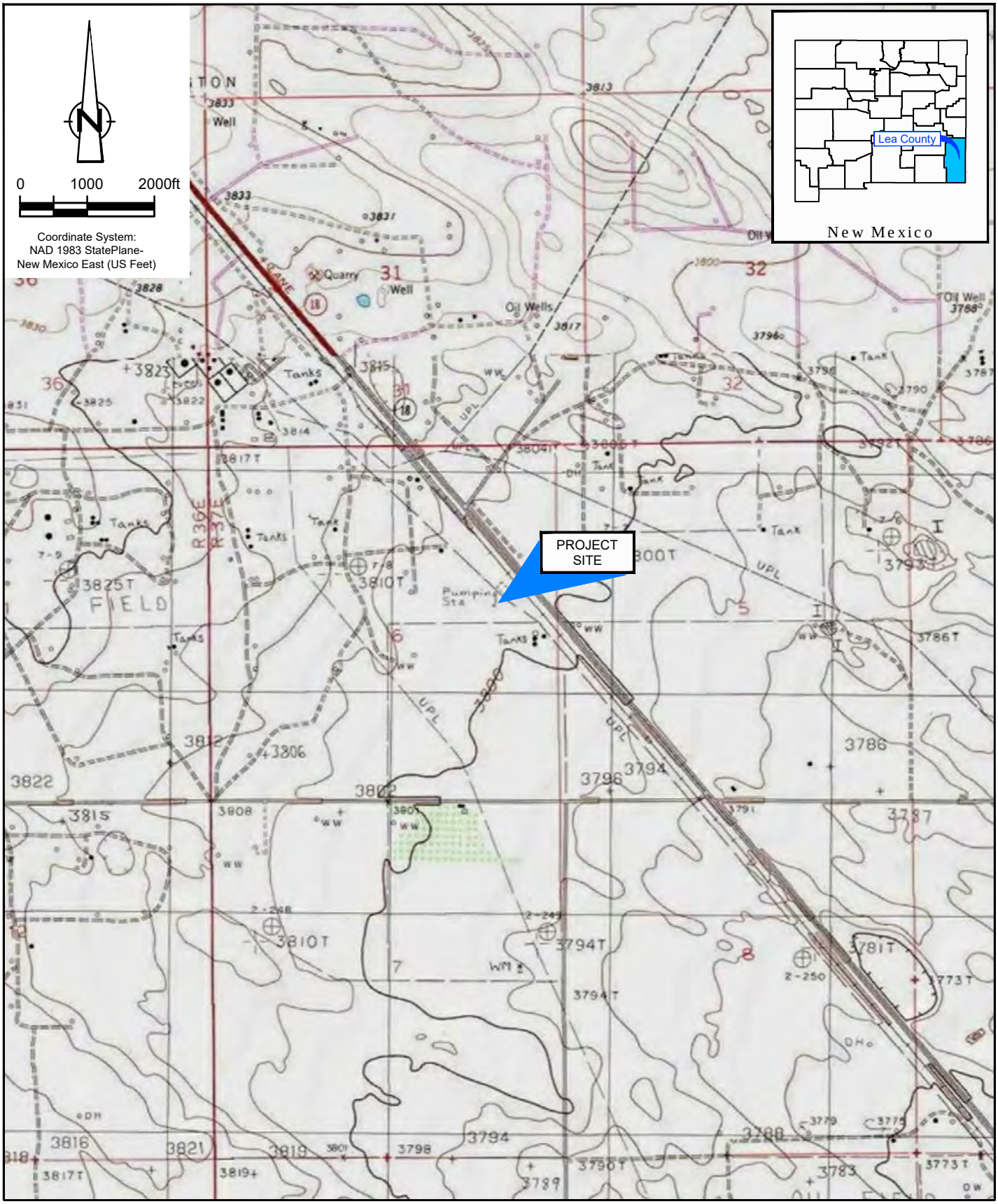
Figures



Source: USGS 7.5 Minute Quad "Lovington SE and Lovington, New Mexico"

Lat/Long: 32.8649° North, 103.2853° West

PLAINS PIPELINE L.P.
LEA COUNTY, NEW MEXICO
LOVINGTON GATHERING WTI

11209905

May 24, 2021

SITE LOCATION MAP

FIGURE 1

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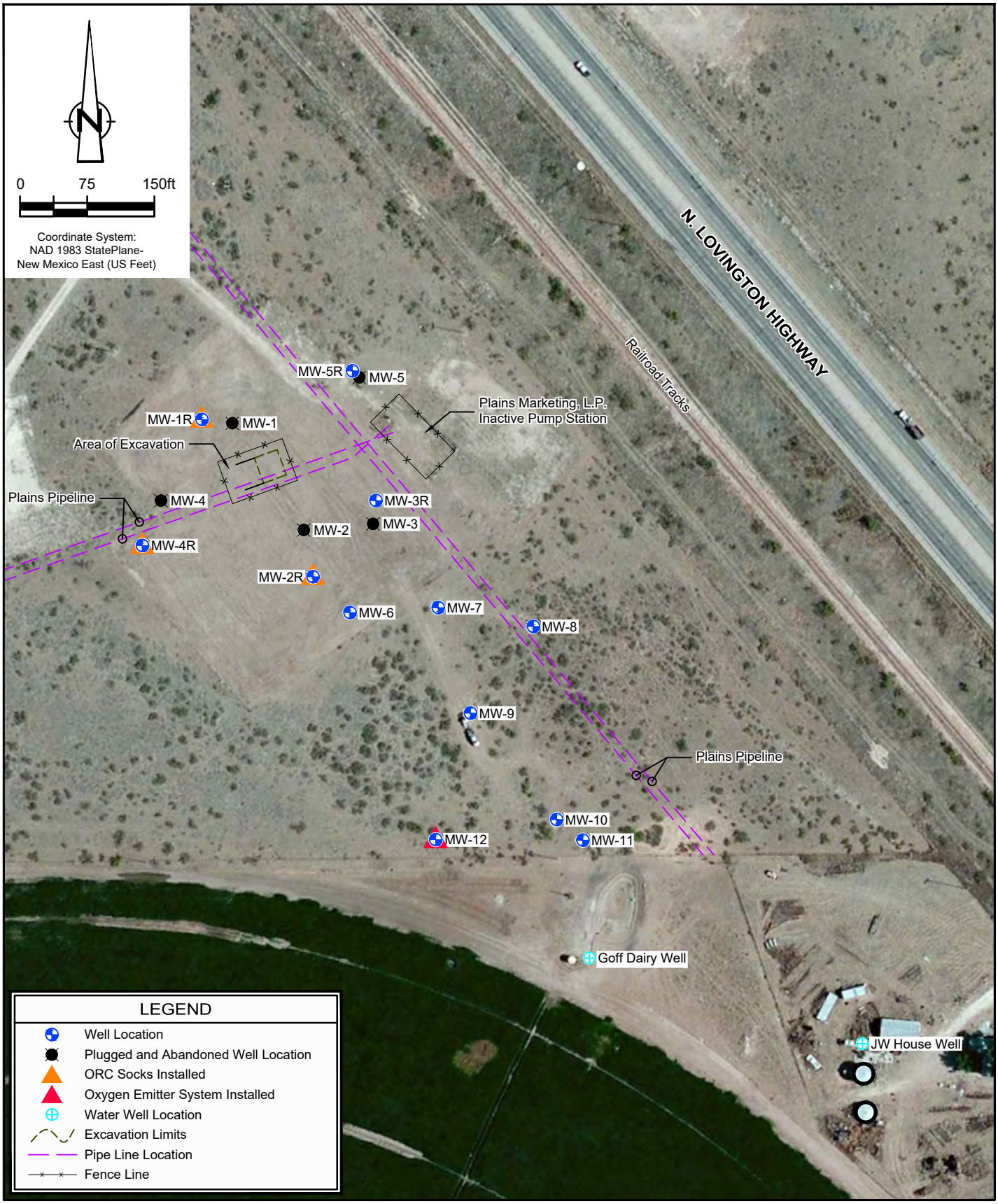

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PLAINS PIPELINE L.P.
LEA COUNTY, NEW MEXICO
LOVINGTON GATHERING WTI

11209905

Jan 21, 2022

SITE DETAILS MAP

FIGURE 2

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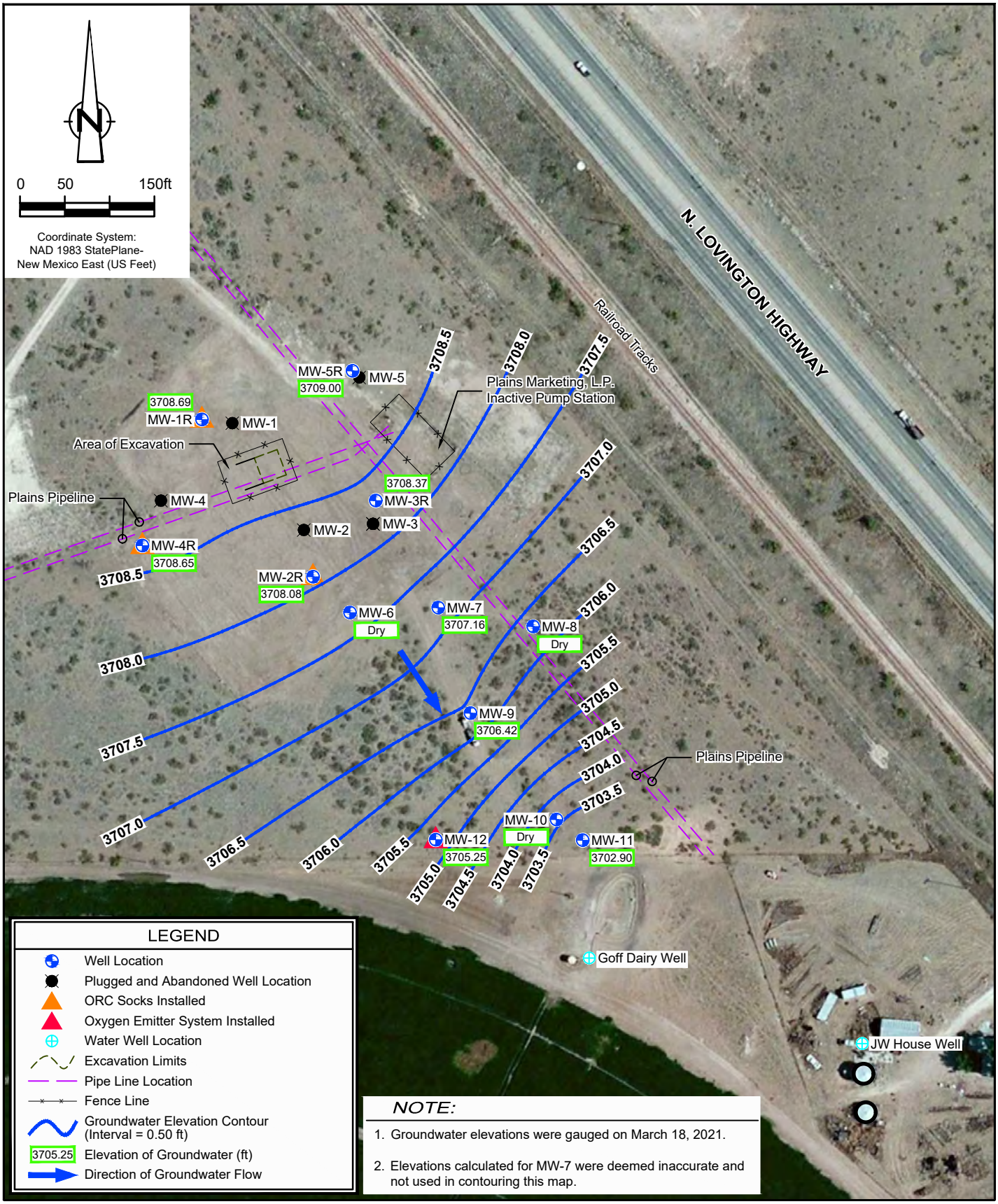

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PLAINS PIPELINE L.P.
LEA COUNTY, NEW MEXICO
LOVINGTON GATHERING WTI

11209905

Jan 21, 2022

GROUNDWATER GRADIENT MAP - MARCH 2021

FIGURE 3

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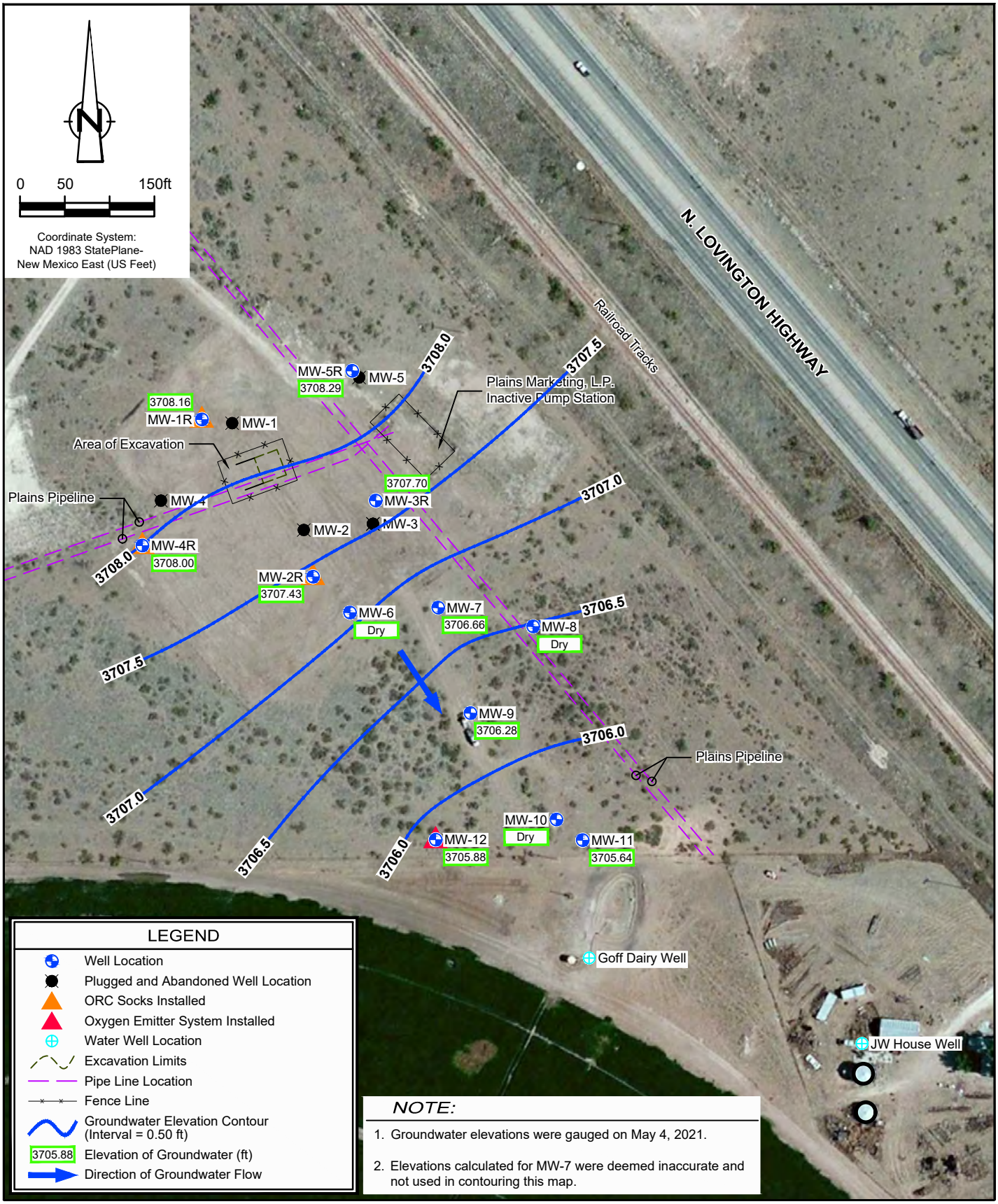

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LEA COUNTY, NEW MEXICO
LOVINGTON GATHERING WTI

11209905

Jan 21, 2022

GROUNDWATER GRADIENT MAP - MAY 2021

FIGURE 4

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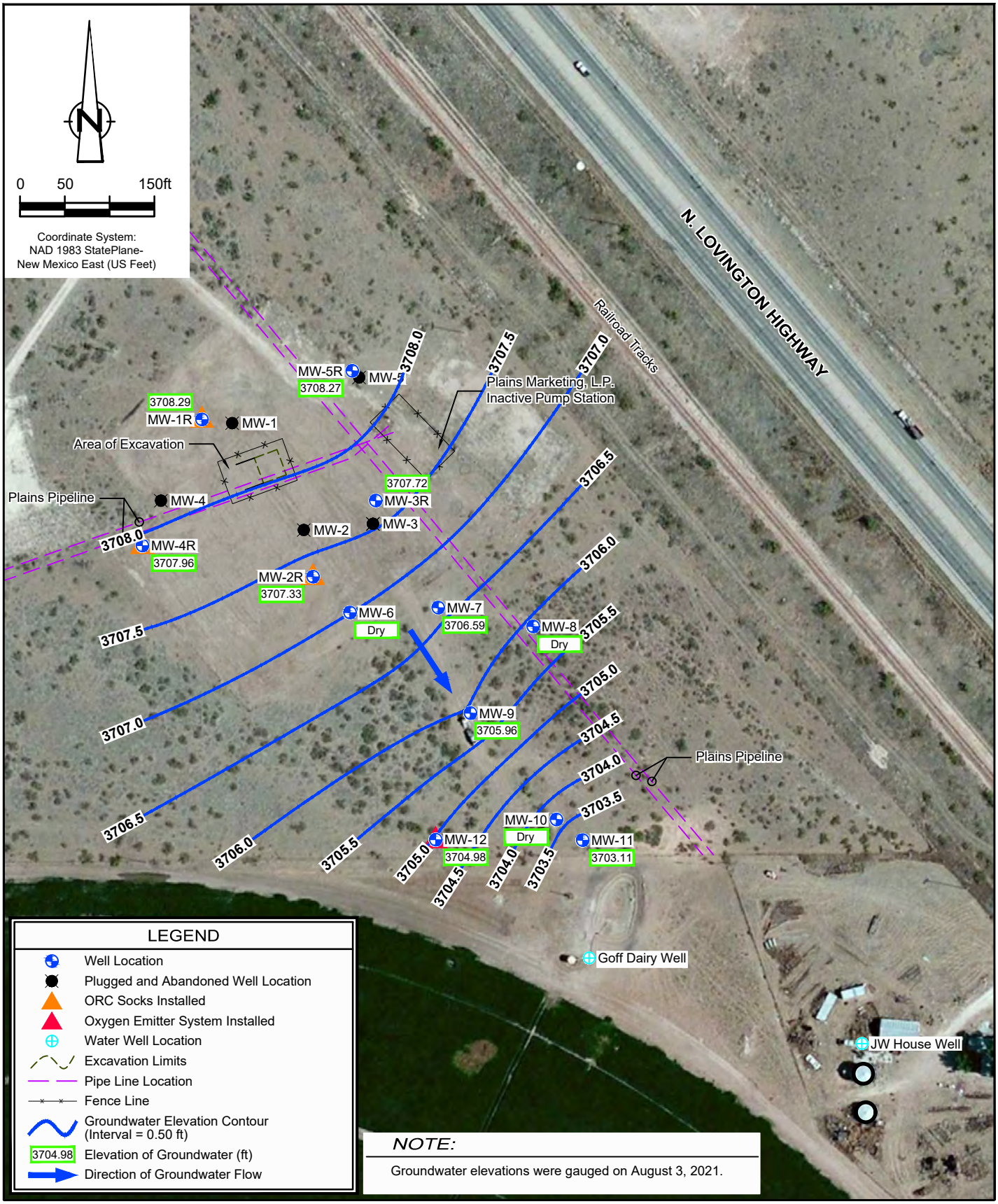

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LOVINGTON GATHERING WTI

11209905

Jan 21, 2022

GROUNDWATER GRADIENT MAP - AUGUST 2021

FIGURE 5

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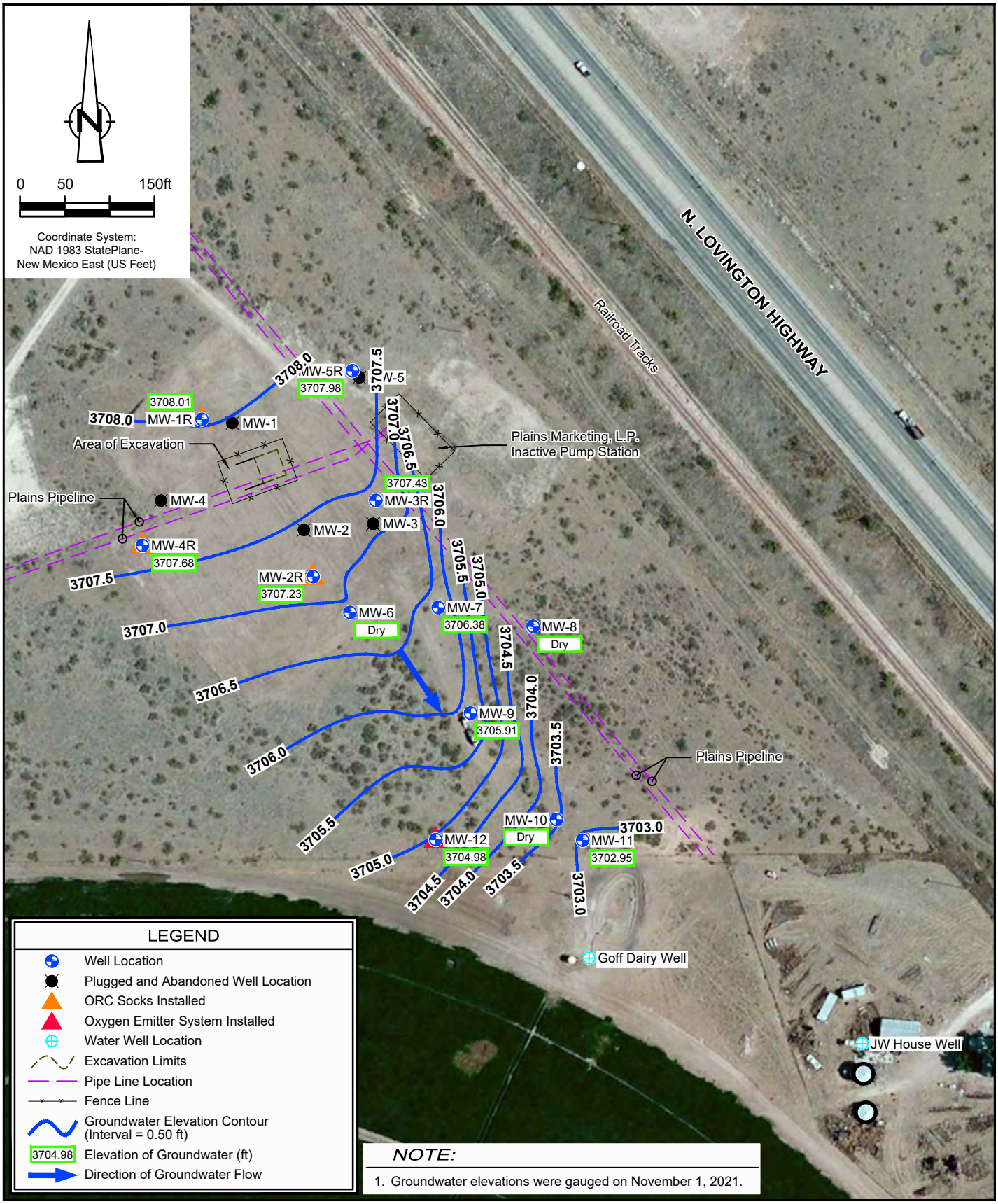

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Jan 21, 2022

GROUNDWATER GRADIENT MAP - NOVEMBER 2021

FIGURE 6

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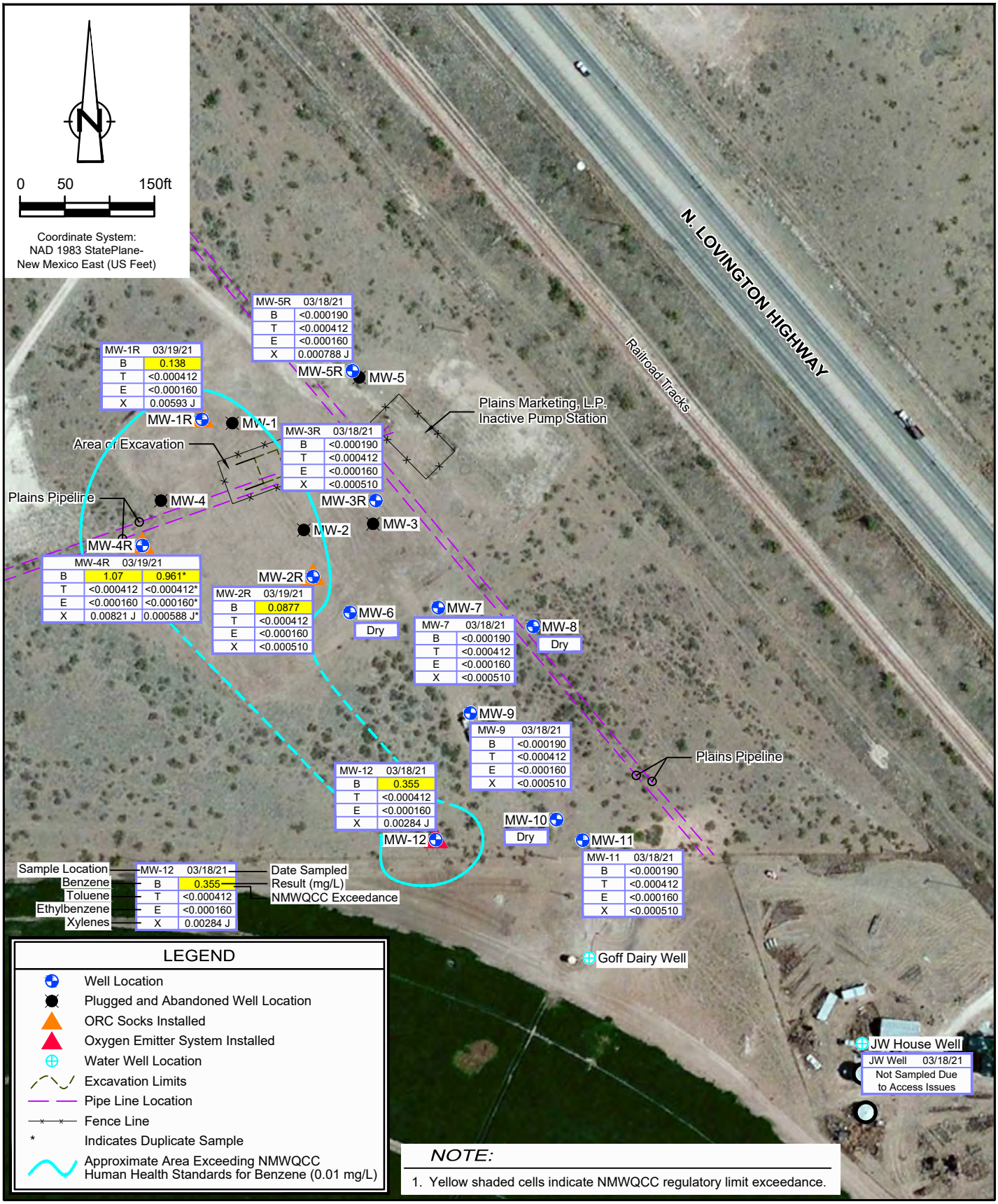

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BTEX CONCENTRATIONS IN GROUNDWATER MAP - MARCH 2021

11209905

Jan 21, 2022

FIGURE 7

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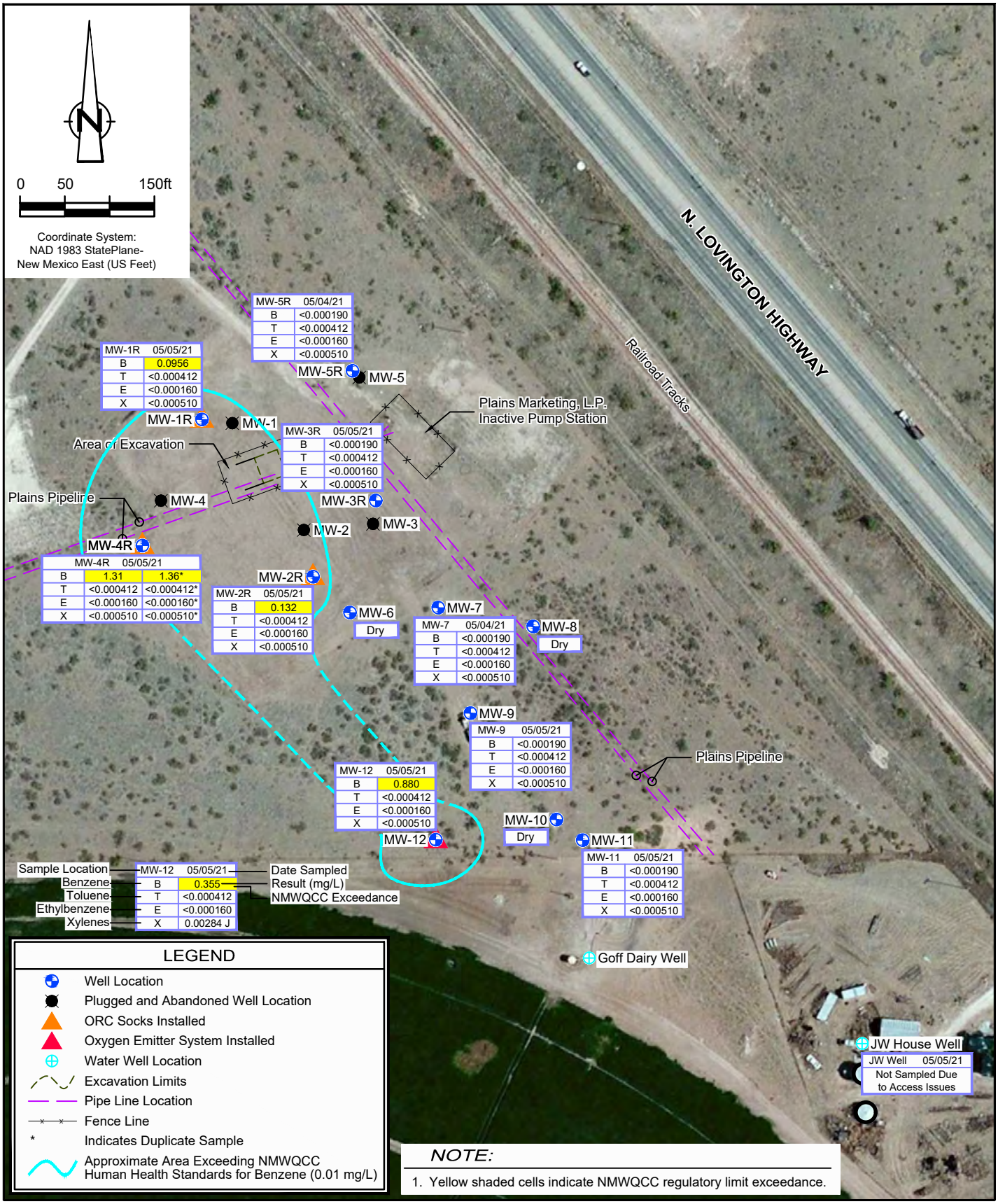

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LOVINGTON GATHERING WTI

BTEX CONCENTRATIONS IN GROUNDWATER MAP - MAY 2021

11209905

Jan 21, 2022

FIGURE 8

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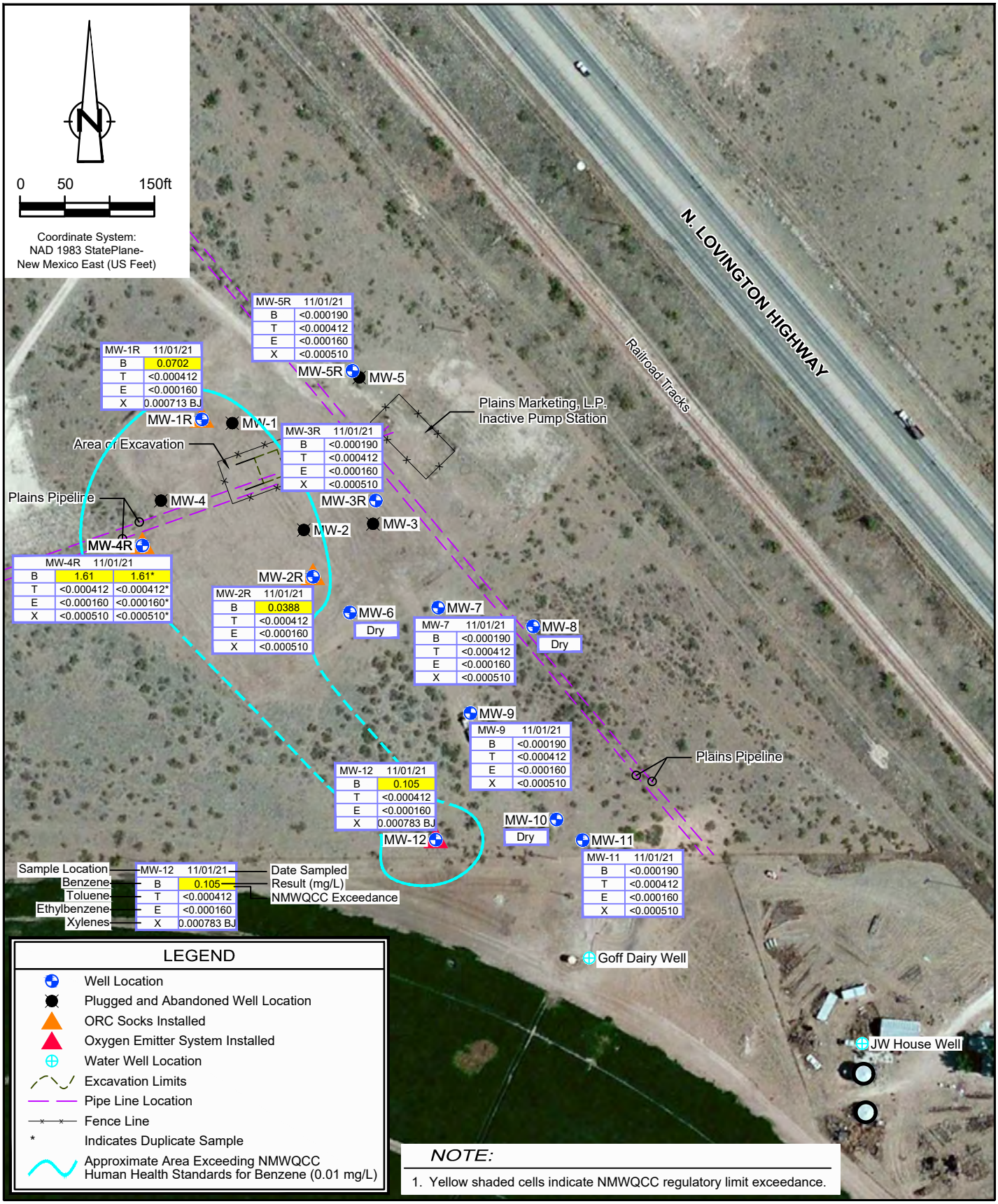

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BTEX CONCENTRATIONS IN GROUNDWATER MAP - AUGUST 2021

11209905

Jan 21, 2022

FIGURE 9

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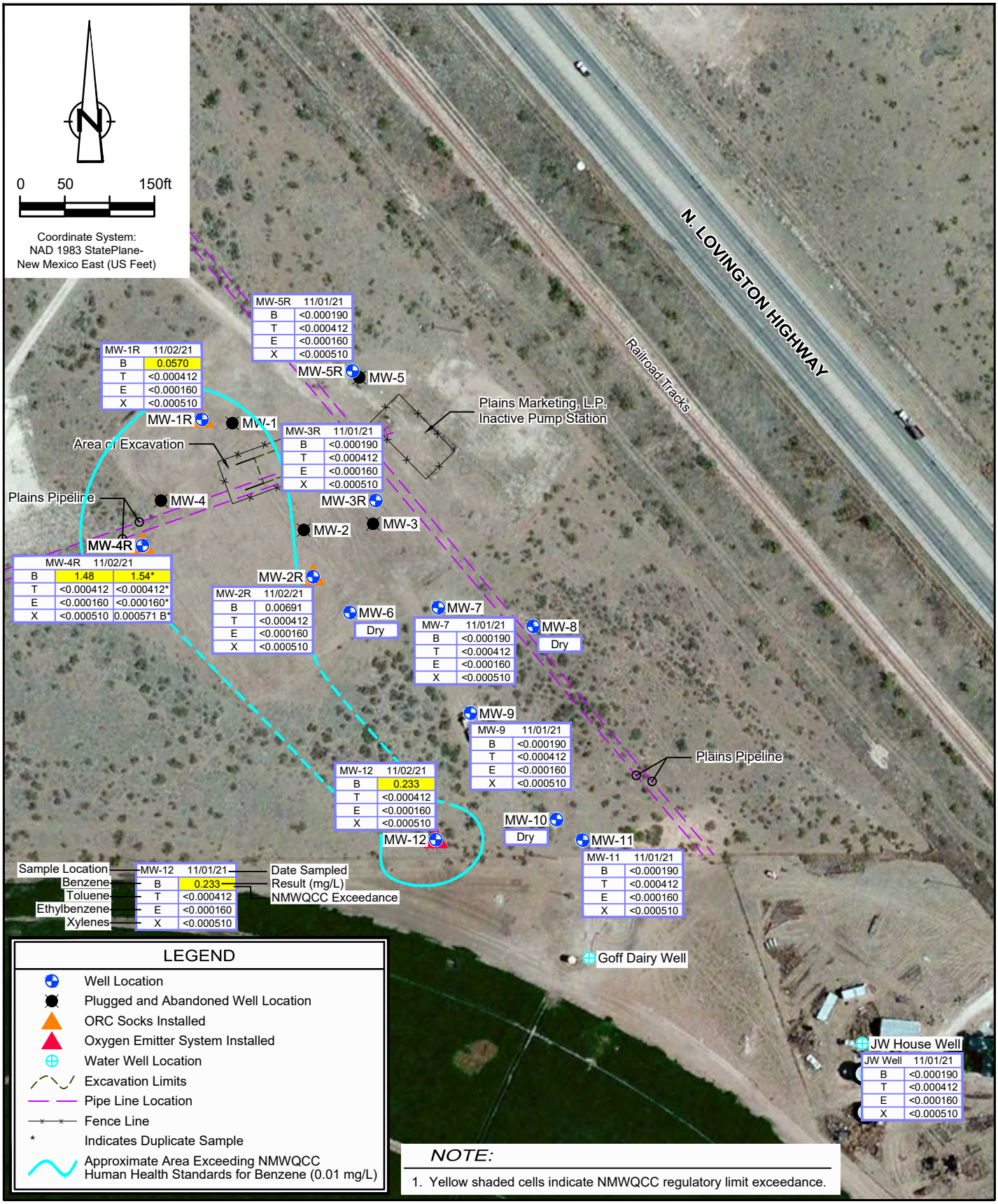

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BTEX CONCENTRATIONS IN GROUNDWATER MAP - NOVEMBER 2021

11209905

Jan 21, 2022

FIGURE 10

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Tables

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-1R	3806.62	2/20/20	94.04	-	0.00	3712.58	108.36	85-105 (2in)	-	7
MW-1R	3806.62	3/26/20	93.90	-	0.00	3712.72	108.37	-	-	3
MW-1R	3806.62	4/2/20	94.59	-	0.00	3712.03	-	-	-	4
MW-1R	3806.62	4/10/20	95.02	-	0.00	3711.60	-	-	-	3
MW-1R	3806.62	4/17/20	95.33	-	0.00	3711.29	-	-	-	5.5
MW-1R	3806.62	4/20/20	95.48	-	0.00	3711.14	-	-	-	3
MW-1R	3806.62	4/30/20	95.87	-	0.00	3710.75	-	-	-	3
MW-1R	3806.62	5/6/20	96.12	-	0.00	3710.50	-	-	-	3
MW-1R	3806.62	5/12/20	96.31	-	0.00	3710.31	-	-	-	5
MW-1R	3806.62	5/20/20	96.57	-	0.00	3710.05	-	-	-	6
MW-1R	3806.62	6/3/20	96.04	-	0.00	3710.58	-	-	-	3
MW-1R	3806.62	6/10/20	95.84	-	0.00	3710.78	-	-	-	3
MW-1R	3806.62	6/17/20	95.75	-	0.00	3710.87	-	-	-	3
MW-1R	3806.62	6/25/20	95.82	-	0.00	3710.80	-	-	-	3
MW-1R	3806.62	7/1/20	96.33	-	0.00	3710.29	-	-	-	3
MW-1R	3806.62	7/8/20	96.58	-	0.00	3710.04	-	-	-	5
MW-1R	3806.62	7/15/20	96.84	-	0.00	3709.78	-	-	-	5
MW-1R	3806.62	7/22/20	97.02	-	0.00	3709.60	-	-	-	5
MW-1R	3806.62	7/28/20	97.17	-	0.00	3709.45	-	-	-	5
MW-1R	3806.62	8/5/20	97.27	-	0.00	3709.35	-	-	-	5
MW-1R	3806.62	8/11/20	97.42	-	0.00	3709.20	-	-	-	3
MW-1R	3806.62	8/20/20	97.55	-	0.00	3709.07	-	-	-	5
MW-1R	3806.62	8/26/20	97.69	-	0.00	3708.93	-	-	-	5
MW-1R	3806.62	9/2/20	97.95	-	0.00	3708.67	108.36	-	-	5
MW-1R	3806.62	9/8/20	97.94	-	0.00	3708.68	-	-	-	3
MW-1R	3806.62	9/24/20	98.26	-	0.00	3708.36	-	-	-	3
MW-1R	3806.62	9/30/20	98.40	-	0.00	3708.22	-	-	-	3
MW-1R	3806.62	10/14/20	97.73	-	0.00	3708.89	-	-	-	3
MW-1R	3806.62	10/21/20	97.48	-	0.00	3709.14	-	-	-	3
MW-1R	3806.62	10/26/20	97.30	-	0.00	3709.32	-	-	-	3
MW-1R	3806.62	11/5/20	97.16	-	0.00	3709.46	108.36	-	-	6

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-1R	3806.62	11/17/20	96.94	-	0.00	3709.68	-	-	-	3
MW-1R	3806.62	11/24/20	97.39	-	0.00	3709.23	-	-	-	3
MW-1R	3806.62	12/1/20	97.79	-	0.00	3708.83	-	-	-	3
MW-1R	3806.62	12/8/20	97.55	-	0.00	3709.07	-	-	-	3
MW-1R	3806.62	12/16/20	97.52	-	0.00	3709.10	-	-	-	3
MW-1R	3806.62	12/23/20	97.29	-	0.00	3709.33	-	-	-	3
MW-1R	3806.62	1/6/21	96.96	-	0.00	3709.66	-	-	-	-
MW-1R	3806.62	1/13/21	97.07	-	0.00	3709.55	-	-	-	-
MW-1R	3806.62	1/21/21	96.81	-	0.00	3709.81	-	-	-	-
MW-1R	3806.62	1/27/21	96.77	-	0.00	3709.85	-	-	-	3
MW-1R	3806.62	2/2/21	96.62	-	0.00	3710.00	108.91	-	-	6
MW-1R	3806.62	2/24/21	96.67	-	0.00	3709.95	-	-	-	3
MW-1R	3806.62	3/9/21	97.08	-	0.00	3709.54	-	-	-	3
MW-1R	3806.62	3/17/21	97.58	-	0.00	3709.04	-	-	-	3
MW-1R	3806.62	3/18/21	97.93	-	0.00	3708.69	-	-	-	5
MW-1R	3806.62	3/26/21	97.94	-	0.00	3708.68	-	-	-	3
MW-1R	3806.62	3/31/21	98.13	-	0.00	3708.49	-	-	-	3
MW-1R	3806.62	4/7/21	97.93	-	0.00	3708.69	-	-	-	3
MW-1R	3806.62	4/12/21	98.25	-	0.00	3708.37	-	-	-	5
MW-1R	3806.62	4/21/21	98.48	-	0.00	3708.14	-	-	-	3
MW-1R	3806.62	4/27/21	98.62	-	0.00	3708.00	-	-	-	3
MW-1R	3806.62	5/4/21	98.46	-	0.00	3708.16	-	-	-	5
MW-1R	3806.62	5/14/21	97.94	-	0.00	3708.68	-	-	-	3
MW-1R	3806.62	5/26/21	97.58	-	0.00	3709.04	-	-	-	3
MW-1R	3806.62	6/11/21	97.49	-	0.00	3709.13	-	-	-	-
MW-1R	3806.62	6/17/21	98.23	-	0.00	3708.39	-	-	-	-
MW-1R	3806.62	6/22/21	98.22	-	0.00	3708.40	-	-	-	3
MW-1R	3806.62	6/28/21	98.40	-	0.00	3708.22	-	-	-	-
MW-1R	3806.62	7/7/21	97.98	-	0.00	3708.64	-	-	-	3
MW-1R	3806.62	7/15/21	97.68	-	0.00	3708.94	-	-	-	3
MW-1R	3806.62	7/27/21	97.86	-	0.00	3708.76	-	-	-	3
MW-1R	3806.62	8/3/21	98.33	-	0.00	3708.29	108.91	-	-	5

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-1R	3806.62	8/11/21	98.55	-	0.00	3708.07	-	-	-	5
MW-1R	3806.62	8/19/21	98.80	-	0.00	3707.82	-	-	-	3
MW-1R	3806.62	8/26/21	98.98	-	0.00	3707.64	-	-	-	3
MW-1R	3806.62	8/31/21	-	-	-	-	-	-	-	3
MW-1R	3806.62	9/8/21	99.20	-	0.00	3707.42	-	-	-	3
MW-1R	3806.62	9/15/21	99.41	-	0.00	3707.21	-	-	-	3
MW-1R	3806.62	9/23/21	99.22	-	0.00	3707.40	-	-	-	3
MW-1R	3806.62	9/30/21	98.83	-	0.00	3707.79	108.91	-	-	-
MW-1R	3806.62	10/5/21	98.73	-	0.00	3707.89	-	-	-	3
MW-1R	3806.62	10/12/21	98.38	-	0.00	3708.24	-	-	-	3
MW-1R	3806.62	10/19/21	98.63	-	0.00	3707.99	-	-	-	3
MW-1R	3806.62	10/28/21	98.39	-	0.00	3708.23	108.91	-	-	-
MW-1R	3806.62	11/1/21	98.61	-	0.00	3708.01	108.91	-	-	5
MW-1R	3806.62	11/9/21	98.82	-	0.00	3707.80	108.91	-	-	3
MW-1R	3806.62	11/23/21	99.08	-	0.00	3707.54	108.91	-	-	3
MW-1R	3806.62	12/7/21	99.02	-	0.00	3707.60	108.91	-	-	3
MW-1R	3806.62	12/16/21	-	-	-	-	108.91	-	-	3
MW-2R	3806.38	2/20/20	94.05	-	0.00	3712.33	109.79	85-105 (2in)	-	8
MW-2R	3806.38	3/26/20	94.02	-	0.00	3712.36	109.86	-	-	3
MW-2R	3806.38	4/2/20	94.95	-	0.00	3711.43	-	-	-	4
MW-2R	3806.38	4/10/20	95.55	-	0.00	3710.83	-	-	-	3
MW-2R	3806.38	4/17/20	96.09	-	0.00	3710.29	-	-	-	5
MW-2R	3806.38	4/20/20	96.20	-	0.00	3710.18	-	-	-	3
MW-2R	3806.38	4/30/20	96.68	-	0.00	3709.70	-	-	-	3
MW-2R	3806.38	5/6/20	97.06	-	0.00	3709.32	-	-	-	3
MW-2R	3806.38	5/12/20	97.21	-	0.00	3709.17	-	-	-	5
MW-2R	3806.38	5/20/20	97.47	-	0.00	3708.91	-	-	-	6
MW-2R	3806.38	6/3/20	96.40	-	0.00	3709.98	-	-	-	3
MW-2R	3806.38	6/10/20	96.30	-	0.00	3710.08	-	-	-	3
MW-2R	3806.38	6/17/20	96.08	-	0.00	3710.30	-	-	-	3
MW-2R	3806.38	6/25/20	96.25	-	0.00	3710.13	-	-	-	3

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-2R	3806.38	7/1/20	96.87	-	0.00	3709.51	-	-	-	3
MW-2R	3806.38	7/8/20	97.29	-	0.00	3709.09	-	-	-	5
MW-2R	3806.38	7/15/20	97.67	-	0.00	3708.71	-	-	-	5
MW-2R	3806.38	7/22/20	97.93	-	0.00	3708.45	-	-	-	5
MW-2R	3806.38	7/28/20	98.10	-	0.00	3708.28	-	-	-	5
MW-2R	3806.38	8/5/20	98.02	-	0.00	3708.36	-	-	-	5
MW-2R	3806.38	8/11/20	97.89	-	0.00	3708.49	-	-	-	5
MW-2R	3806.38	8/20/20	98.48	-	0.00	3707.90	-	-	-	5
MW-2R	3806.38	8/26/20	98.65	-	0.00	3707.73	-	-	-	5
MW-2R	3806.38	9/2/20	98.83	-	0.00	3707.55	109.79	-	-	5
MW-2R	3806.38	9/8/20	98.94	-	0.00	3707.44	-	-	-	3
MW-2R	3806.38	9/24/20	99.28	-	0.00	3707.10	-	-	-	2.5
MW-2R	3806.38	9/30/20	99.45	-	0.00	3706.93	-	-	-	3
MW-2R	3806.38	10/14/20	98.26	-	0.00	3708.12	-	-	-	3
MW-2R	3806.38	10/21/20	92.86	-	0.00	3713.52	-	-	-	3
MW-2R	3806.38	10/26/20	97.60	-	0.00	3708.78	-	-	-	3
MW-2R	3806.38	11/5/20	97.42	-	0.00	3708.96	109.79	-	-	7
MW-2R	3806.38	11/17/20	97.20	-	0.00	3709.18	-	-	-	3
MW-2R	3806.38	11/24/20	97.96	-	0.00	3708.42	-	-	-	3
MW-2R	3806.38	12/1/20	98.43	-	0.00	3707.95	-	-	-	3
MW-2R	3806.38	12/8/20	98.02	-	0.00	3708.36	-	-	-	3
MW-2R	3806.38	12/16/20	97.94	-	0.00	3708.44	-	-	-	3
MW-2R	3806.38	12/23/20	97.59	-	0.00	3708.79	-	-	-	3
MW-2R	3806.38	1/6/21	97.22	-	0.00	3709.16	-	-	-	-
MW-2R	3806.38	1/13/21	97.39	-	0.00	3708.99	-	-	-	-
MW-2R	3806.38	1/21/21	97.02	-	0.00	3709.36	-	-	-	-
MW-2R	3806.38	1/27/21	96.90	-	0.00	3709.48	-	-	-	3
MW-2R	3806.38	2/2/21	96.73	-	0.00	3709.65	109.88	-	-	6.5
MW-2R	3806.38	2/24/21	96.99	-	0.00	3709.39	-	-	-	3
MW-2R	3806.38	3/9/21	97.42	-	0.00	3708.96	-	-	-	3
MW-2R	3806.38	3/17/21	97.58	-	0.00	3708.80	109.37	-	-	3
MW-2R	3806.38	3/18/21	98.30	-	0.00	3708.08	-	-	-	6

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-2R	3806.38	3/26/21	98.74	-	0.00	3707.64	-	-	-	3
MW-2R	3806.38	3/31/21	99.01	-	0.00	3707.37	-	-	-	3
MW-2R	3806.38	4/7/21	98.47	-	0.00	3707.91	-	-	-	3
MW-2R	3806.38	4/12/21	98.97	-	0.00	3707.41	-	-	-	3
MW-2R	3806.38	4/21/21	99.36	-	0.00	3707.02	-	-	-	3
MW-2R	3806.38	4/27/21	99.55	-	0.00	3706.83	-	-	-	3
MW-2R	3806.38	5/4/21	98.95	-	0.00	3707.43	-	-	-	5.5
MW-2R	3806.38	5/17/21	98.40	-	0.00	3707.98	-	-	-	3
MW-2R	3806.38	5/26/21	97.91	-	0.00	3708.47	-	-	-	3
MW-2R	3806.38	6/11/21	97.89	-	0.00	3708.49	-	-	-	-
MW-2R	3806.38	6/17/21	98.46	-	0.00	3707.92	-	-	-	-
MW-2R	3806.38	6/22/21	99.09	-	0.00	3707.29	-	-	-	3
MW-2R	3806.38	6/28/21	99.15	-	0.00	3707.23	-	-	-	-
MW-2R	3806.38	7/7/21	98.52	-	0.00	3707.86	-	-	-	3
MW-2R	3806.38	7/15/21	98.05	-	0.00	3708.33	-	-	-	3
MW-2R	3806.38	7/27/21	98.24	-	0.00	3708.14	-	-	-	3
MW-2R	3806.38	8/3/21	99.05	-	0.00	3707.33	109.88	-	-	5
MW-2R	3806.38	8/11/21	99.40	-	0.00	3706.98	-	-	-	5
MW-2R	3806.38	8/19/21	99.71	-	0.00	3706.67	-	-	-	3
MW-2R	3806.38	8/26/21	100.00	-	0.00	3706.38	-	-	-	3
MW-2R	3806.38	8/31/21	-	-	-	-	-	-	-	3
MW-2R	3806.38	9/8/21	100.11	-	0.00	3706.27	-	-	-	3
MW-2R	3806.38	9/15/21	100.67	-	0.00	3705.71	-	-	-	3
MW-2R	3806.38	9/23/21	99.92	-	0.00	3706.46	-	-	-	3
MW-2R	3806.38	9/30/21	99.33	-	0.00	3707.05	109.88	-	-	-
MW-2R	3806.38	10/5/21	99.21	-	0.00	3707.17	-	-	-	3
MW-2R	3806.38	10/12/21	99.65	-	0.00	3706.73	-	-	-	3
MW-2R	3806.38	10/19/21	99.97	-	0.00	3706.41	-	-	-	3
MW-2R	3806.38	10/28/21	98.95	-	0.00	3707.43	109.88	-	-	-
MW-2R	3806.38	11/1/21	99.15	-	0.00	3707.23	109.88	-	-	5.5
MW-2R	3806.38	11/9/21	99.31	-	0.00	3707.07	109.88	-	-	3
MW-2R	3806.38	11/23/21	99.53	-	0.00	3706.85	109.88	-	-	3

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-2R	3806.38	12/7/21	99.80	-	0.00	3706.58	109.88	-	-	3
MW-2R	3806.38	12/16/21	-	-	-	-	109.88	-	-	3
MW-3R	3806.15	2/20/20	93.73	-	0.00	3712.42	110.05	85-105 (2in)	-	8
MW-3R	3806.15	3/26/20	93.70	-	0.00	3712.45	109.91	-	-	3
MW-3R	3806.15	4/2/20	94.58	-	0.00	3711.57	-	-	-	4
MW-3R	3806.15	4/10/20	95.15	-	0.00	3711.00	-	-	-	3
MW-3R	3806.15	4/17/20	95.58	-	0.00	3710.57	-	-	-	5
MW-3R	3806.15	4/20/20	95.75	-	0.00	3710.40	-	-	-	3
MW-3R	3806.15	4/30/20	96.20	-	0.00	3709.95	-	-	-	3
MW-3R	3806.15	5/6/20	97.48	-	0.00	3708.67	-	-	-	3
MW-3R	3806.15	5/12/20	96.70	-	0.00	3709.45	-	-	-	5
MW-3R	3806.15	5/20/20	96.95	-	0.00	3709.20	-	-	-	7
MW-3R	3806.15	6/3/20	95.95	-	0.00	3710.20	-	-	-	3
MW-3R	3806.15	6/10/20	95.67	-	0.00	3710.48	-	-	-	3
MW-3R	3806.15	6/17/20	95.68	-	0.00	3710.47	-	-	-	3
MW-3R	3806.15	6/25/20	95.84	-	0.00	3710.31	-	-	-	3
MW-3R	3806.15	7/1/20	96.43	-	0.00	3709.72	-	-	-	3
MW-3R	3806.15	7/8/20	96.82	-	0.00	3709.33	-	-	-	5
MW-3R	3806.15	7/15/20	97.16	-	0.00	3708.99	-	-	-	5
MW-3R	3806.15	7/22/20	97.41	-	0.00	3708.74	-	-	-	5
MW-3R	3806.15	7/28/20	97.55	-	0.00	3708.60	-	-	-	5
MW-3R	3806.15	8/5/20	97.51	-	0.00	3708.64	-	-	-	5
MW-3R	3806.15	8/11/20	97.79	-	0.00	3708.36	-	-	-	3
MW-3R	3806.15	8/20/20	97.96	-	0.00	3708.19	-	-	-	5
MW-3R	3806.15	8/26/20	98.09	-	0.00	3708.06	-	-	-	5
MW-3R	3806.15	9/2/20	98.26	-	0.00	3707.89	110.05	-	-	6
MW-3R	3806.15	9/8/20	98.36	-	0.00	3707.79	-	-	-	3
MW-3R	3806.15	9/24/20	98.69	-	0.00	3707.46	-	-	-	2.5
MW-3R	3806.15	9/30/20	98.88	-	0.00	3707.27	-	-	-	3
MW-3R	3806.15	10/14/20	97.77	-	0.00	3708.38	-	-	-	3
MW-3R	3806.15	10/21/20	97.38	-	0.00	3708.77	-	-	-	3

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-3R	3806.15	10/26/20	97.17	-	0.00	3708.98	-	-	-	3
MW-3R	3806.15	11/5/20	96.98	-	0.00	3709.17	110.05	-	-	7
MW-3R	3806.15	11/17/20	96.79	-	0.00	3709.36	-	-	-	3
MW-3R	3806.15	11/24/20	97.53	-	0.00	3708.62	-	-	-	3
MW-3R	3806.15	12/1/20	98.01	-	0.00	3708.14	-	-	-	3
MW-3R	3806.15	12/8/20	97.55	-	0.00	3708.60	-	-	-	3
MW-3R	3806.15	12/16/20	97.48	-	0.00	3708.67	-	-	-	3
MW-3R	3806.15	12/23/20	97.17	-	0.00	3708.98	-	-	-	3
MW-3R	3806.15	1/6/21	96.83	-	0.00	3709.32	-	-	-	-
MW-3R	3806.15	1/13/21	96.94	-	0.00	3709.21	-	-	-	-
MW-3R	3806.15	1/21/21	96.60	-	0.00	3709.55	-	-	-	-
MW-3R	3806.15	1/27/21	96.52	-	0.00	3709.63	-	-	-	3
MW-3R	3806.15	2/2/21	96.35	-	0.00	3709.80	109.89	-	-	6.5
MW-3R	3806.15	3/9/21	97.04	-	0.00	3709.11	-	-	-	3
MW-3R	3806.15	3/17/21	97.73	-	0.00	3708.42	-	-	-	3
MW-3R	3806.15	3/18/21	97.78	-	0.00	3708.37	-	-	-	6
MW-3R	3806.15	3/26/21	98.23	-	0.00	3707.92	-	-	-	3
MW-3R	3806.15	3/31/21	98.49	-	0.00	3707.66	-	-	-	3
MW-3R	3806.15	4/7/21	97.99	-	0.00	3708.16	-	-	-	3
MW-3R	3806.15	4/12/21	98.48	-	0.00	3707.67	-	-	-	3
MW-3R	3806.15	4/21/21	98.83	-	0.00	3707.32	-	-	-	3
MW-3R	3806.15	4/27/21	99.00	-	0.00	3707.15	-	-	-	3
MW-3R	3806.15	5/4/21	98.45	-	0.00	3707.70	-	-	-	5
MW-3R	3806.15	5/14/21	97.87	-	0.00	3708.28	-	-	-	-
MW-3R	3806.15	5/26/21	97.36	-	0.00	3708.79	-	-	-	3
MW-3R	3806.15	6/11/21	97.32	-	0.00	3708.83	-	-	-	3
MW-3R	3806.15	6/17/21	98.02	-	0.00	3708.13	-	-	-	3
MW-3R	3806.15	6/22/21	98.37	-	0.00	3707.78	-	-	-	3
MW-3R	3806.15	6/28/21	98.52	-	0.00	3707.63	-	-	-	3
MW-3R	3806.15	7/7/21	97.84	-	0.00	3708.31	-	-	-	3
MW-3R	3806.15	7/15/21	97.47	-	0.00	3708.68	-	-	-	3
MW-3R	3806.15	7/27/21	97.79	-	0.00	3708.36	-	-	-	3

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-3R	3806.15	8/3/21	98.43	-	0.00	3707.72	109.86	-	-	5
MW-3R	3806.15	8/11/21	98.70	-	0.00	3707.45	-	-	-	2
MW-3R	3806.15	8/19/21	99.02	-	0.00	3707.13	-	-	-	3
MW-3R	3806.15	8/26/21	99.32	-	0.00	3706.83	-	-	-	3
MW-3R	3806.15	8/31/21	-	-	-	-	-	-	-	3
MW-3R	3806.15	9/8/21	99.55	-	0.00	3706.60	-	-	-	3
MW-3R	3806.15	9/15/21	99.79	-	0.00	3706.36	-	-	-	3
MW-3R	3806.15	9/23/21	99.35	-	0.00	3706.80	-	-	-	3
MW-3R	3806.15	9/30/21	98.83	-	0.00	3707.32	109.89	-	-	-
MW-3R	3806.15	10/5/21	98.49	-	0.00	3707.66	-	-	-	3
MW-3R	3806.15	10/12/21	98.19	-	0.00	3707.96	-	-	-	3
MW-3R	3806.15	10/19/21	98.33	-	0.00	3707.82	-	-	-	3
MW-3R	3806.15	10/28/21	98.31	-	0.00	3707.84	-	-	-	-
MW-3R	3806.15	11/1/21	98.72	-	0.00	3707.43	109.89	-	-	5.5
MW-3R	3806.15	11/9/21	98.79	-	0.00	3707.36	109.89	-	-	3
MW-3R	3806.15	11/23/21	99.15	-	0.00	3707.00	109.89	-	-	3
MW-3R	3806.15	12/7/21	98.93	-	0.00	3707.22	109.89	-	-	3
MW-3R	3806.15	12/16/21	-	-	-	-	109.89	-	-	3
MW-4R	3806.67	2/20/20	94.22	-	0.00	3712.45	110.00	85-105 (2in)	-	8
MW-4R	3806.67	3/26/20	94.10	-	0.00	3712.57	110.03	-	-	3
MW-4R	3806.67	4/2/20	94.84	-	0.00	3711.83	-	-	-	20
MW-4R	3806.67	4/10/20	95.31	-	0.00	3711.36	-	-	-	10
MW-4R	3806.67	4/17/20	95.67	-	0.00	3711.00	-	-	-	10
MW-4R	3806.67	4/20/20	95.84	-	0.00	3710.83	-	-	-	-
MW-4R	3806.67	4/30/20	96.27	-	0.00	3710.40	-	-	-	15
MW-4R	3806.67	5/6/20	96.54	-	0.00	3710.13	-	-	-	5
MW-4R	3806.67	5/20/20	97.03	-	0.00	3709.64	-	-	-	7
MW-4R	3806.67	6/3/20	96.38	-	0.00	3710.29	-	-	-	10
MW-4R	3806.67	6/10/20	96.13	-	0.00	3710.54	-	-	-	10
MW-4R	3806.67	6/17/20	96.06	-	0.00	3710.61	-	-	-	10
MW-4R	3806.67	6/25/20	96.14	-	0.00	3710.53	-	-	-	10

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
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Lovington Gathering WTI, SRS #2006-142
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-4R	3806.67	7/1/20	96.67	-	0.00	3710.00	-	-	-	6
MW-4R	3806.67	7/8/20	96.97	-	0.00	3709.70	-	-	-	10
MW-4R	3806.67	7/15/20	96.97	-	0.00	3709.70	-	-	-	10
MW-4R	3806.67	7/22/20	97.49	-	0.00	3709.18	-	-	-	10
MW-4R	3806.67	7/28/20	97.65	-	0.00	3709.02	-	-	-	10
MW-4R	3806.67	8/5/20	97.73	-	0.00	3708.94	-	-	-	10
MW-4R	3806.67	8/11/20	98.31	-	0.00	3708.36	-	-	-	3
MW-4R	3806.67	8/20/20	98.06	-	0.00	3708.61	-	-	-	10
MW-4R	3806.67	8/26/20	98.20	-	0.00	3708.47	-	-	-	10
MW-4R	3806.67	9/2/20	98.38	-	0.00	3708.29	110.00	-	-	6
MW-4R	3806.67	9/8/20	98.47	-	0.00	3708.20	-	-	-	5
MW-4R	3806.67	9/24/20	98.81	-	0.00	3707.86	-	-	-	3
MW-4R	3806.67	9/30/20	98.95	-	0.00	3707.72	-	-	-	3
MW-4R	3806.67	10/14/20	98.18	-	0.00	3708.49	-	-	-	3
MW-4R	3806.67	10/21/20	97.81	-	0.00	3708.86	-	-	-	3
MW-4R	3806.67	10/26/20	97.69	-	0.00	3708.98	-	-	-	5
MW-4R	3806.67	11/5/20	97.48	-	0.00	3709.19	110.00	-	-	7
MW-4R	3806.67	11/17/20	97.27	-	0.00	3709.40	-	-	-	5
MW-4R	3806.67	11/24/20	97.78	-	0.00	3708.89	-	-	-	5
MW-4R	3806.67	12/1/20	98.20	-	0.00	3708.47	-	-	-	5
MW-4R	3806.67	12/8/20	97.93	-	0.00	3708.74	-	-	-	3
MW-4R	3806.67	12/16/20	97.87	-	0.00	3708.80	-	-	-	3
MW-4R	3806.67	12/23/20	97.62	-	0.00	3709.05	-	-	-	3
MW-4R	3806.67	1/6/21	97.23	-	0.00	3709.44	-	-	-	-
MW-4R	3806.67	1/13/21	97.37	-	0.00	3709.30	-	-	-	-
MW-4R	3806.67	1/21/21	97.02	-	0.00	3709.65	-	-	-	-
MW-4R	3806.67	1/27/21	97.03	-	0.00	3709.64	-	-	-	3
MW-4R	3806.67	2/2/21	96.88	-	0.00	3709.79	109.78	-	-	6.5
MW-4R	3806.67	2/24/21	96.97	-	0.00	3709.70	-	-	-	3
MW-4R	3806.67	3/9/21	97.36	-	0.00	3709.31	-	-	-	3
MW-4R	3806.67	3/17/21	98.35	-	0.00	3708.32	-	-	-	3
MW-4R	3806.67	3/18/21	98.02	-	0.00	3708.65	-	-	-	6

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Lovington Gathering WTI, SRS #2006-142
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-4R	3806.67	3/26/21	98.35	-	0.00	3708.32	-	-	-	3
MW-4R	3806.67	3/31/21	98.56	-	0.00	3708.11	-	-	-	3
MW-4R	3806.67	4/7/21	98.31	-	0.00	3708.36	-	-	-	3
MW-4R	3806.67	4/12/21	98.66	-	0.00	3708.01	-	-	-	5
MW-4R	3806.67	4/21/21	98.48	-	0.00	3708.19	-	-	-	5
MW-4R	3806.67	4/27/21	99.10	-	0.00	3707.57	-	-	-	3
MW-4R	3806.67	5/4/21	98.67	-	0.00	3708.00	-	-	-	6
MW-4R	3806.67	5/14/21	98.25	-	0.00	3708.42	-	-	-	3
MW-4R	3806.67	5/26/21	97.85	-	0.00	3708.82	-	-	-	3
MW-4R	3806.67	6/11/21	97.72	-	0.00	3708.95	-	-	-	-
MW-4R	3806.67	6/17/21	98.50	-	0.00	3708.17	-	-	-	-
MW-4R	3806.67	6/22/21	98.60	-	0.00	3708.07	-	-	-	3
MW-4R	3806.67	6/28/21	98.80	-	0.00	3707.87	-	-	-	-
MW-4R	3806.67	7/7/21	98.27	-	0.00	3708.40	-	-	-	3
MW-4R	3806.67	7/15/21	97.98	-	0.00	3708.69	-	-	-	3
MW-4R	3806.67	7/27/21	98.17	-	0.00	3708.50	-	-	-	3
MW-4R	3806.67	8/3/21	98.71	-	0.00	3707.96	109.78	-	-	5.5
MW-4R	3806.67	8/11/21	98.94	-	0.00	3707.73	-	-	-	5
MW-4R	3806.67	8/19/21	99.19	-	0.00	3707.48	-	-	-	3
MW-4R	3806.67	8/26/21	99.45	-	0.00	3707.22	-	-	-	3
MW-4R	3806.67	8/31/21	-	-	-	-	-	-	-	3
MW-4R	3806.67	9/8/21	99.69	-	0.00	3706.98	-	-	-	3
MW-4R	3806.67	9/15/21	99.89	-	0.00	3706.78	-	-	-	3
MW-4R	3806.67	9/23/21	99.64	-	0.00	3707.03	-	-	-	3
MW-4R	3806.67	9/30/21	99.26	-	0.00	3707.41	109.78	-	-	-
MW-4R	3806.67	10/5/21	98.98	-	0.00	3707.69	-	-	-	3
MW-4R	3806.67	10/12/21	98.70	-	0.00	3707.97	-	-	-	3
MW-4R	3806.67	10/19/21	98.74	-	0.00	3707.93	-	-	-	3
MW-4R	3806.67	10/28/21	98.67	-	0.00	3708.00	109.78	-	-	-
MW-4R	3806.67	11/1/21	98.99	-	0.00	3707.68	109.78	-	-	5.5
MW-4R	3806.67	11/9/21	99.16	-	0.00	3707.51	109.78	-	-	3
MW-4R	3806.67	11/23/21	99.45	-	0.00	3707.22	109.78	-	-	3

Table 1

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Lovington Gathering WTI, SRS #2006-142
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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-4R	3806.67	12/7/21	99.33	-	0.00	3707.34	109.78	-	-	3
MW-4R	3806.67	12/16/21	-	-	-	-	109.78	-	-	3
MW-5R	3806.46	2/20/20	93.92	-	0.00	3712.54	107.40	85-105 (2in)	-	6.5
MW-5R	3806.46	4/30/20	95.79	-	0.00	3710.67	-	-	-	-
MW-5R	3806.46	5/20/20	96.44	-	0.00	3710.02	-	-	-	6
MW-5R	3806.46	6/17/20	95.60	-	0.00	3710.86	-	-	-	-
MW-5R	3806.46	7/28/20	97.05	-	0.00	3709.41	-	-	-	-
MW-5R	3806.46	8/26/20	97.56	-	0.00	3708.90	-	-	-	-
MW-5R	3806.46	9/2/20	107.19	-	0.00	3699.27	107.40	-	-	-
MW-5R	3806.46	9/16/20	97.97	-	0.00	3708.49	107.59	-	-	-
MW-5R	3806.46	10/21/20	97.25	-	0.00	3709.21	-	-	-	-
MW-5R	3806.46	11/5/20	96.93	-	0.00	3709.53	107.40	-	-	6
MW-5R	3806.46	12/8/20	97.43	-	0.00	3709.03	107.40	-	-	-
MW-5R	3806.46	1/27/21	96.58	-	0.00	3709.88	-	-	-	-
MW-5R	3806.46	2/2/21	96.45	-	0.00	3710.01	107.62	-	-	5.5
MW-5R	3806.46	3/18/21	97.46	-	0.00	3709.00	-	-	-	5
MW-5R	3806.46	3/26/21	97.84	-	0.00	3708.62	-	-	-	-
MW-5R	3806.46	4/27/21	98.52	-	0.00	3707.94	-	-	-	-
MW-5R	3806.46	5/4/21	98.17	-	0.00	3708.29	-	-	-	4.5
MW-5R	3806.46	6/28/21	98.23	-	0.00	3708.23	-	-	-	-
MW-5R	3806.46	7/27/21	97.68	-	0.00	3708.78	-	-	`	-
MW-5R	3806.46	8/3/21	98.19	-	0.00	3708.27	107.62	-	-	2
MW-5R	3806.46	9/30/21	98.65	-	0.00	3707.81	107.62	-	-	-
MW-5R	3806.46	10/28/21	98.15	-	0.00	3708.31	107.62	-	-	-
MW-5R	3806.46	11/1/21	98.48	-	0.00	3707.98	107.62	-	-	4.5
MW-6	3806.08	2/20/20	-	-	-	Dry	92.72	-	-	-
MW-6	3806.08	4/30/20	-	-	-	Dry	92.72	-	-	-
MW-6	3806.08	5/20/20	-	-	-	Dry	92.72	-	-	-
MW-6	3806.08	6/17/20	-	-	-	Dry	92.76	-	-	-
MW-6	3806.08	7/28/20	-	-	-	Dry	92.76	-	-	-

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Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-6	3806.08	8/26/20	-	-	-	Dry	92.75	-	-	-
MW-6	3806.08	9/2/20	-	-	-	Dry	92.69	-	-	-
MW-6	3806.08	10/21/20	-	-	-	Dry	92.69	-	-	-
MW-6	3806.08	11/5/20	-	-	-	Dry	92.75	-	-	-
MW-6	3806.08	12/8/20	-	-	-	Dry	97.78	-	-	-
MW-6	3806.08	1/27/21	-	-	-	Dry	92.78	-	-	-
MW-6	3806.08	2/2/21	-	-	-	Dry	92.73	-	-	-
MW-6	3806.08	3/18/21	-	-	-	Dry	92.72	-	-	-
MW-6	3806.08	3/26/21	-	-	-	Dry	92.70	-	-	-
MW-6	3806.08	4/27/21	-	-	-	Dry	92.72	-	-	-
MW-6	3806.08	5/4/21	-	-	-	Dry	92.78	-	-	-
MW-6	3806.08	6/28/21	-	-	-	Dry	92.70	-	-	-
MW-6	3806.08	7/27/21	-	-	-	Dry	92.69	-	-	-
MW-6	3806.08	8/3/21	-	-	-	Dry	92.69	-	-	-
MW-6	3806.08	9/30/21	-	-	-	Dry	92.73	-	-	-
MW-6	3806.08	10/28/21	-	-	-	Dry	92.73	-	-	-
MW-6	3806.08	11/1/21	-	-	-	Dry	92.73	-	-	-
MW-7	3806.05	2/20/20	94.23	-	0.00	3711.82	109.35	65-90 (4 in.)	-	29
MW-7	3806.05	4/30/20	97.41	-	0.00	3708.64	-	-	-	-
MW-7	3806.05	5/20/20	98.18	-	0.00	3707.87	-	-	-	22
MW-7	3806.05	6/17/20	96.46	-	0.00	3709.59	-	-	-	-
MW-7	3806.05	7/28/20	98.84	-	0.00	3707.21	-	-	-	-
MW-7	3806.05	8/26/20	99.37	-	0.00	3706.68	-	-	-	-
MW-7	3806.05	9/2/20	99.58	-	0.00	3706.47	110.44	-	-	21
MW-7	3806.05	10/21/20	98.08	-	0.00	3707.97	-	-	-	-
MW-7	3806.05	11/5/20	97.63	-	0.00	3708.42	110.44	-	-	26
MW-7	3806.05	12/8/20	98.42	-	0.00	3707.63	-	-	-	-
MW-7	3806.05	1/27/21	97.09	-	0.00	3708.96	-	-	-	-
MW-7	3806.05	2/2/21	96.89	-	0.00	3709.16	109.95	-	-	26
MW-7	3806.05	3/18/21	98.89	-	0.00	3707.16	-	-	-	23
MW-7	3806.05	3/26/21	99.48	-	0.00	3706.57	-	-	-	-

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-7	3806.05	4/27/21	100.35	-	0.00	3705.70	-	-	-	-
MW-7	3806.05	5/4/21	99.39	-	0.00	3706.66	-	-	-	5
MW-7	3806.05	6/28/21	99.53	-	0.00	3706.52	-	-	-	-
MW-7	3806.05	7/27/21	98.55	-	0.00	3707.50	-	-	-	-
MW-7	3806.05	8/3/21	99.46	-	0.00	3706.59	109.95	-	-	12
MW-7	3806.05	9/30/21	99.65	-	0.00	3706.40	109.95	-	-	-
MW-7	3806.05	10/28/21	99.18	-	0.00	3706.87	109.95	-	-	-
MW-7	3806.05	11/1/21	99.67	-	0.00	3706.38	109.95	-	-	20
MW-8	3805.89	2/20/20	-	-	-	Dry	93.71	61-91 (2 in.)	-	-
MW-8	3805.89	4/30/20	-	-	-	Dry	94.95	-	-	-
MW-8	3805.89	5/20/20	-	-	-	Dry	94.95	-	-	-
MW-8	3805.89	6/17/20	-	-	-	Dry	94.93	-	-	-
MW-8	3805.89	7/28/20	-	-	-	Dry	94.94	-	-	-
MW-8	3805.89	8/26/20	-	-	-	Dry	94.94	-	-	-
MW-8	3805.89	9/2/20	-	-	-	Dry	94.88	-	-	-
MW-8	3805.89	10/21/20	-	-	-	Dry	94.88	-	-	-
MW-8	3805.89	11/5/20	-	-	-	Dry	94.94	-	-	-
MW-8	3805.89	12/8/20	-	-	-	Dry	94.96	-	-	-
MW-8	3805.89	1/27/21	-	-	-	Dry	95.09	-	-	-
MW-8	3805.89	2/2/21	-	-	-	Dry	95.04	-	-	-
MW-8	3805.89	3/18/21	-	-	-	Dry	95.27	-	-	-
MW-8	3805.89	3/26/21	-	-	-	Dry	94.89	-	-	-
MW-8	3805.89	4/27/21	-	-	-	Dry	94.96	-	-	-
MW-8	3805.89	5/4/21	-	-	-	Dry	95.07	-	-	-
MW-8	3805.89	6/28/21	-	-	-	Dry	94.89	-	-	-
MW-8	3805.89	7/27/21	-	-	-	Dry	94.88	-	-	-
MW-8	3805.89	8/3/21	-	-	-	Dry	94.88	-	-	-
MW-8	3805.89	9/30/21	-	-	-	Dry	95.04	-	-	-
MW-8	3805.89	10/28/21	-	-	-	Dry	95.04	-	-	-
MW-8	3805.89	11/1/21	-	-	-	Dry	95.04	-	-	-

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-9	3806.022	2/20/20	93.92	-	0.00	3712.10	108.55	4 in.	-	29
MW-9	3806.022	4/30/20	98.25	-	0.00	3707.77	-	-	-	-
MW-9	3806.022	5/20/20	99.04	-	0.00	3706.98	-	-	-	20
MW-9	3806.022	6/17/20	96.59	-	0.00	3709.43	-	-	-	-
MW-9	3806.022	7/28/20	99.75	-	0.00	3706.27	-	-	-	-
MW-9	3806.022	8/26/20	100.28	-	0.00	3705.74	-	-	-	-
MW-9	3806.022	9/2/20	100.52	-	0.00	3705.50	110.13	-	-	19
MW-9	3806.022	10/21/20	98.05	-	0.00	3707.97	-	-	-	-
MW-9	3806.022	11/5/20	97.63	-	0.00	3708.39	110.13	-	-	26
MW-9	3806.022	12/8/20	98.62	-	0.00	3707.40	-	-	-	-
MW-9	3806.022	1/27/21	96.91	-	0.00	3709.11	-	-	-	-
MW-9	3806.022	2/2/21	96.70	-	0.00	3709.32	108.82	-	-	16
MW-9	3806.022	3/18/21	99.60	-	0.00	3706.42	-	-	-	13
MW-9	3806.022	3/26/21	100.29	-	0.00	3705.73	-	-	-	-
MW-9	3806.022	4/27/21	101.30	-	0.00	3704.72	-	-	-	-
MW-9	3806.022	5/4/21	99.74	-	0.00	3706.28	-	-	-	4.5
MW-9	3806.022	6/28/21	100.07	-	0.00	3705.95	-	-	-	-
MW-9	3806.022	7/27/21	98.67	-	0.00	3707.35	-	-	-	-
MW-9	3806.022	8/3/21	100.06	-	0.00	3705.96	108.82	-	-	11
MW-9	3806.022	9/30/21	99.67	-	0.00	3706.35	108.82	-	-	-
MW-9	3806.022	10/28/21	99.42	-	0.00	3706.60	108.82	-	-	-
MW-9	3806.022	11/1/21	100.11	-	0.00	3705.91	108.82	-	-	15
MW-10	3806.08	2/20/20	-	-	-	Dry	95.80	-	-	-
MW-10	3806.08	4/30/20	-	-	-	Dry	95.76	-	-	-
MW-10	3806.08	5/20/20	-	-	-	Dry	95.80	-	-	-
MW-10	3806.08	6/17/20	-	-	-	Dry	95.76	-	-	-
MW-10	3806.08	7/28/20	-	-	-	Dry	95.76	-	-	-
MW-10	3806.08	8/26/20	-	-	-	Dry	95.76	-	-	-
MW-10	3806.08	9/2/20	-	-	-	Dry	95.72	-	-	-
MW-10	3806.08	10/21/20	-	-	-	Dry	95.72	-	-	-
MW-10	3806.08	11/5/20	-	-	-	Dry	95.80	-	-	-

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-10	3806.08	12/8/20	-	-	-	Dry	95.80	-	-	-
MW-10	3806.08	1/27/21	-	-	-	Dry	95.82	-	-	-
MW-10	3806.08	2/2/21	-	-	-	Dry	95.82	-	-	-
MW-10	3806.08	3/18/21	-	-	-	Dry	95.88	-	-	-
MW-10	3806.08	3/26/21	-	-	-	Dry	95.76	-	-	-
MW-10	3806.08	4/27/21	-	-	-	Dry	95.83	-	-	-
MW-10	3806.08	5/4/21	-	-	-	Dry	95.84	-	-	-
MW-10	3806.08	6/28/21	-	-	-	Dry	95.76	-	-	-
MW-10	3806.08	7/27/21	-	-	-	Dry	95.75	-	-	-
MW-10	3806.08	8/3/21	-	-	-	Dry	95.75	-	-	-
MW-10	3806.08	9/30/21	-	-	-	Dry	95.82	-	-	-
MW-10	3806.08	10/28/21	-	-	-	Dry	95.82	-	-	-
MW-10	3806.08	11/1/21	-	-	-	Dry	95.82	-	-	-
MW-11	3805.88	2/20/20	93.83	-	0.00	3712.05	109.85	-	-	8
MW-11	3805.88	4/30/20	101.61	-	0.00	3704.27	-	-	-	-
MW-11	3805.88	5/20/20	102.55	-	0.00	3703.33	-	-	-	5
MW-11	3805.88	6/17/20	97.71	-	0.00	3708.17	-	-	-	-
MW-11	3805.88	7/28/20	103.21	-	0.00	3702.67	-	-	-	-
MW-11	3805.88	8/26/20	103.67	-	0.00	3702.21	-	-	-	-
MW-11	3805.88	9/2/20	103.92	-	0.00	3701.96	110.05	-	-	4
MW-11	3805.88	10/21/20	98.05	-	0.00	3707.83	-	-	-	-
MW-11	3805.88	11/5/20	97.88	-	0.00	3708.00	110.05	-	-	7
MW-11	3805.88	12/8/20	99.00	-	0.00	3706.88	-	-	-	-
MW-11	3805.88	1/27/21	96.83	-	0.00	3709.05	-	-	-	-
MW-11	3805.88	2/2/21	96.57	-	0.00	3709.31	110.20	-	-	7
MW-11	3805.88	2/24/21	99.21	-	0.00	3706.67	110.06	-	-	7
MW-11	3805.88	3/18/21	102.98	-	0.00	3702.90	-	-	-	6
MW-11	3805.88	3/26/21	103.81	-	0.00	3702.07	-	-	-	-
MW-11	3805.88	4/27/21	104.69	-	0.00	3701.19	-	-	-	-
MW-11	3805.88	5/4/21	100.24	-	0.00	3705.64	-	-	-	5
MW-11	3805.88	6/28/21	101.69	-	0.00	3704.19	-	-	-	-

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-11	3805.88	7/27/21	99.71	-	0.00	3706.17	-	-	-	-
MW-11	3805.88	8/3/21	102.77	-	0.00	3703.11	110.06	-	-	2.5
MW-11	3805.88	9/30/21	99.85	-	0.00	3706.03	110.20	-	-	-
MW-11	3805.88	10/28/21	101.27	-	0.00	3704.61	110.20	-	-	-
MW-11	3805.88	11/1/21	102.93	-	0.00	3702.95	110.20	-	-	3
MW-12	3806.04	2/20/20	93.96	-	0.00	3712.08	110.01	-	-	8
MW-12	3806.04	3/26/20	94.67	-	0.00	3711.37	110.07	-	-	5
MW-12	3806.04	4/2/20	96.80	-	0.00	3709.24	-	-	-	20
MW-12	3806.04	4/10/20	97.92	-	0.00	3708.12	-	-	-	10
MW-12	3806.04	4/17/20	98.60	-	0.00	3707.44	-	-	-	20
MW-12	3806.04	4/20/20	98.82	-	0.00	3707.22	-	-	-	-
MW-12	3806.04	4/30/20	99.46	-	0.00	3706.58	-	-	-	15
MW-12	3806.04	5/6/20	99.80	-	0.00	3706.24	-	-	-	10
MW-12	3806.04	5/12/20	100.10	-	0.00	3705.94	-	-	-	20
MW-12	3806.04	5/20/20	100.35	-	0.00	3705.69	-	-	-	5
MW-12	3806.04	6/17/20	Bubbler	-	-	-		-	-	-
MW-12	3806.04	7/28/20	Bubbler	-	-	-	-	-	-	-
MW-12	3806.04	8/26/20	101.62	-	0.00	3704.42	-	-	-	-
MW-12	3806.04	9/2/20	101.80	-	0.00	3704.24	110.01	-	-	4
MW-12	3806.04	10/21/20	Bubbler	-	-	-	-	-	-	-
MW-12	3806.04	11/5/20	97.89	-	0.00	3708.15	110.01	-	-	7
MW-12	3806.04	12/8/20	Bubbler	-	0.00	-	110.01	-	-	-
MW-12	3806.04	1/27/21	Bubbler	-	0.00	-	-	-	-	-
MW-12	3806.04	2/2/21	96.76	-	0.00	3709.28	110.09	-	-	6.5
MW-12	3806.04	3/18/21	100.79	-	0.00	3705.25	110.09	-	-	5.5
MW-12	3806.04	3/26/21	101.58	-	0.00	3704.46	-	-	-	-
MW-12	3806.04	4/27/21	102.56	-	0.00	3703.48	-	-	-	-
MW-12	3806.04	5/4/21	100.16	-	0.00	3705.88	-	-	-	5
MW-12	3806.04	6/28/21	Bubbler	-	0.00	-	-	-	-	-
MW-12	3806.04	7/27/21	99.18	-	0.00	3706.86	-	-	-	-
MW-12	3806.04	8/3/21	101.06	-	0.00	3704.98	110.09	-	-	2

Table 1

Monthly Gauging and Elevation of the Potentiometric Surface Data for 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Groundwater (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft.)	Elevation of the Potentiometric Surface (famsl)	Measured Well Depth (fbtoc)	Well Screen Interval (fbgs) Well Diameter (in.)	Volume Product Bailed (gal.)	Volume Groundwater Bailed (gal.)
MW-12	3806.04	9/30/21	99.99	-	0.00	3706.05	110.09	-	-	-
MW-12	3806.04	10/28/21	99.99	-	0.00	3706.05	110.09	-	-	-
MW-12	3806.04	11/1/21	101.06	-	0.00	3704.98	110.09	-	-	4.5

Notes:
1. famsl - Feet above mean sea level
2. fbgs - Feet below ground surface
3. MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-8 & MW-10 are 2" Diameter Wells MW-7 & MW-9 are 4" Diameter Wells

Table 2

BTEX Analytical Results for Groundwater Sampling Events 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)
		NMWQCC Human Health Standards			
		0.01	0.75	0.75	0.62
MW-1R	2/21/20	**0.170**	<0.00206	<0.000800	<0.00255
MW-1R	5/21/20	**0.513**	<0.000412	<0.000160	<0.000720
MW-1R	9/3/20	**0.162**	**0.000813 J**	<0.000160	**0.000787 J**
MW-1R	11/5/20	**0.458**	<0.00412	<0.00160	<0.00510
MW-1R	2/3/21	**0.00131**	<0.000412	<0.000160	<0.000510
MW-1R (DUP-1)	2/3/21	**0.00104**	<0.000412	<0.000160	<0.000510
MW-1R	3/19/21	**0.138**	<0.000412	<0.000160	**0.00593 J**
MW-1R	5/5/21	**0.0956**	<0.000412	<0.000160	<0.000510
MW-1R	8/4/21	**0.0702**	<0.000412	<0.000160	**0.000713 B J**
MW-1R	11/2/21	**0.0570**	<0.000412	<0.000160	<0.000510
MW-2R	2/21/20	**0.0969**	<0.000412	<0.000160	**0.000801 J**
MW-2R	5/21/20	**0.0987**	<0.000412	<0.000160	<0.000510
MW-2R	9/3/20	**0.0773**	<0.000412	<0.000160	<0.000510
MW-2R	11/5/20	**0.0924**	<0.000412	<0.000160	<0.000510
MW-2R	2/3/21	**1.42**	<0.000412	<0.000160	<0.000510
MW-2R	3/19/21	**0.0877**	<0.000412	<0.000160	<0.000510
MW-2R	5/5/21	**0.132**	<0.000412	<0.000160	<0.000510
MW-2R	8/4/21	**0.0388**	<0.000412	<0.000160	<0.000510
MW-2R	11/2/21	**0.00691**	<0.000412	<0.000160	<0.000510
MW-3R	2/21/20	**0.0114**	<0.000412	**0.000698**	**0.000937 J**
MW-3R	5/21/20	**0.000684**	<0.000412	<0.000160	<0.000510
MW-3R	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-3R	11/5/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-3R (DUP-1)	11/5/20	<0.000190	<0.000412	**0.000364 J**	**0.00112 J**
MW-3R	2/3/21	**0.000235 J**	<0.000412	<0.000160	<0.000510
MW-3R	3/18/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-3R	5/5/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-3R	8/4/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-3R	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-4R	2/21/20	**1.04**	<0.00412	<0.00160	**0.0119 J**
MW-4R	5/21/20	**0.918**	<0.000412	<0.000160	**0.00132 J**
MW-4R	9/3/20	**1.58 J6**	<0.000412	<0.000160	<0.000510
MW-4R	11/5/20	**2.43**	<0.00824	<0.00320	<0.0102
MW-4R	2/3/21	**0.000935**	<0.000412	<0.000160	<0.000510
MW-4R	3/19/21	**1.07**	<0.000412	<0.000160	**0.00821 J**
MW-4R (DUP-1)	3/19/21	**0.961**	<0.000412	<0.000160	**0.000588 J**
MW-4R	5/5/21	**1.31**	<0.000412	<0.000160	<0.000510

BTEX Analytical Results for Groundwater Sampling Events 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)
		NMWQCC Human Health Standards			
		0.01	0.75	0.75	0.62
MW-4R (DUP-1)	5/5/21	**1.36**	<0.000412	<0.000160	<0.000510
MW-4R	8/4/21	**1.61**	<0.000412	<0.000160	<0.000510
MW-4R (DUP-1)	8/4/21	**1.61**	<0.000412	<0.000160	<0.000510
MW-4R	11/2/21	**1.48**	<0.00412	<0.00160	<0.00510
MW-4R (DUP)	11/2/21	**1.54**	<0.000412	<0.000160	**0.000571 B**
MW-5R	2/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R (DUP-1)	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	11/5/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	2/3/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	3/18/21	<0.000190	<0.000412	<0.000160	**0.000788 J**
MW-5R	5/4/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	8/4/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-5R	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-6	2/21/20		Dry		
MW-6	5/21/20		Dry		
MW-6	9/3/20		Dry		
MW-6	11/5/20		Dry		
MW-6	2/3/21		Dry		
MW-6	3/18/21		Dry		
MW-6	5/4/21		Dry		
MW-6	8/4/21		Dry		
MW-6	11/1/21		Dry		
MW-7	2/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	11/5/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	2/3/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	3/18/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	5/4/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	8/3/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-7	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-8	2/21/20		Dry		
MW-8	5/21/20		Dry		
MW-8	9/3/20		Dry		
MW-8	11/5/20		Dry		
MW-8	2/3/21		Dry		
MW-8	3/18/21		Dry		
MW-8	5/4/21		Dry		
MW-8	8/4/21		Dry		

BTEX Analytical Results for Groundwater Sampling Events 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)
		NMWQCC Human Health Standards			
		0.01	0.75	0.75	0.62
MW-8	11/1/21		Dry		
MW-9	2/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	11/5/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	2/3/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	3/18/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	5/5/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	8/3/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-9	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-10	2/21/20		Dry		
MW-10	5/21/20		Dry		
MW-10	9/3/20		Dry		
MW-10	11/5/20		Dry		
MW-10	2/3/21		Dry		
MW-10	3/18/21		Dry		
MW-10	5/4/21		Dry		
MW-10	8/3/21		Dry		
MW-10	11/1/21		Dry		
MW-11	2/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	11/5/20	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	2/3/21	**0.381**	<0.000412	<0.000160	<0.000510
MW-11	2/24/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	3/18/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	5/5/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	8/3/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-11	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
MW-12	2/21/20	**0.931**	<0.000412	<0.000160	**0.00269 J**
MW-12 (Dup1)	2/21/20	**0.124**	<0.000412	<0.000160	**0.000625 J**
MW-12	5/21/20	**0.599**	<0.000412	<0.000160	**0.00160**
MW-12 (DUP-2)	5/21/20	**0.583**	<0.000412	<0.000160	**0.00113**
MW-12	9/3/20	**0.336**	**0.00488 J**	<0.000160	**0.00609 J**
MW-12	11/5/20	**1.28**	<0.00412	<0.00160	<0.00510
MW-12	2/3/21	**0.00464**	<0.000412	<0.000160	<0.000510
MW-12	3/18/21	**0.355**	<0.000412	<0.000160	**0.00284 J**
MW-12	5/5/21	**0.880**	<0.000412	<0.000160	<0.000510
MW-12	8/3/21	**0.105**	<0.000412	<0.000160	**0.000783 B J**
MW-12	11/2/21	**0.233**	<0.000412	<0.000160	<0.000510
Goff Dairy Well	4/1/20	<0.000190	<0.000412	<0.000160	**0.000850 J**

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BTEX Analytical Results for Groundwater Sampling Events 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)
		NMWQCC Human Health Standards			
		0.01	0.75	0.75	0.62
Goff Dairy Well	7/2/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Well	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Well	11/5/20		Off		
Goff Dairy Well	3/18/21		Off		
Goff Dairy Well	6/11/21	**0.000795**	<0.000412	<0.000160	<0.000510
Goff Dairy Well	8/4/21	Off			
Goff Dairy Well	11/1/21	**0.000452 J**	<0.000412	<0.000160	<0.000510
Goff Dairy - Ctr. Pivot Well	3/26/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy - Ctr. Pivot Well	7/2/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy - Ctr. Pivot Well	9/24/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy - Ctr. Pivot Well	11/5/20		Off		
Goff Dairy - Ctr. Pivot Well	3/18/21		Off		
Goff Dairy - Ctr. Pivot Well	6/11/21	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy - Ctr. Pivot Well	8/4/21	Off			
Goff Dairy - Ctr. Pivot Well	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot Beg.	3/26/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot Beg.	7/2/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot Beg.	9/24/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot Beg.	11/5/20		Off		
Goff Dairy Ctr. Pivot Beg.	3/18/21		Off		
Goff Dairy Ctr. Pivot Beg.	6/11/21	**0.000347 J**	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot Beg.	8/4/21	Off			
Goff Dairy Ctr. Pivot Beg.	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot End	3/26/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot End	7/2/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot End	9/3/20	<0.000190	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot End	11/5/20		Off		
Goff Dairy Ctr. Pivot End	3/18/21		Off		
Goff Dairy Ctr. Pivot End	6/11/21	**0.000300 J**	<0.000412	<0.000160	<0.000510
Goff Dairy Ctr. Pivot End	8/4/21	Off			
Goff Dairy Ctr. Pivot End	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
JW House Well	2/21/20	Not sampled - Couldn't get access			
JW House Well	5/21/20	Not sampled - Couldn't get access			
JW House Well	9/3/20	Not sampled - Couldn't get access			
JW House Well	11/5/20	Not sampled - Couldn't get access			
JW House Well	3/18/21	Not sampled - Couldn't get access			
JW House Well	6/11/21	Not sampled - Couldn't get access			
JW House Well	8/4/21	Not sampled - Couldn't get access			
JW House Well	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
Trip Blank	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510

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BTEX Analytical Results for Groundwater Sampling Events 2020-2021
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)
		NMWQCC Human Health Standards			
		0.01	0.75	0.75	0.62

Notes:

1. Yellow shaded cells indicate NMWQCC Regulatory Limit exceedances.
2. Bold indicates detection.
3. Monitoring wells MW-1, 2, 3, 6, 7, 9 & 10 & Goff Dairy locations sampled quarterly.
4. Monitoring wells MW-4, 5, and MW-8 were sampled semi-annually.
5. The NMWQCC Human Health Standard for toluene listed at the top of the table is from NMAC 20.6.2.3103 and became effective on December 11, 2018.
6. J - The identification of the analyte is acceptable; the reported value is an estimate.
7. B - The sample matrix interfered with the ability to make any accurate determination or the analyte was detected in the associated blank.

Table 3

Polycyclic Aromatic Hydrocarbons (Historical) Analytical Results
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Anthracene (mg/L)	Acenaphthene (mg/L)	Acenaphthylene (mg/L)	Benzo(a)anthracene (mg/L)	Benzo(a)pyrene (mg/L)	Benzo(b)fluoranthene (mg/L)	Benzo(g,h,i)perylene (mg/L)	Benzo(k)fluoranthene (mg/L)	Chrysene (mg/L)	Dibenzo (a,h)anthracene (mg/L)	Dibenzofuran (mg/L)	Fluoranthene (mg/L)	Fluorene (mg/L)	Indeno (1,2,3-cd)pyrene (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Pyrene (mg/L)	1-Methylnaphthalene (mg/L)	2-Methylnaphthalene (mg/L)
		NMWQCC Regulatory Standards																		
		0.001	0.001	0.001	0.001	0.0002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.03	0.001	0.001	0.03	0.03
MW-1	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-1	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-1R	11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.0000590**	<0.0000157	0.0000101	<0.0000148	**0.00169**	**0.0000203 J**	<0.0000117	**0.000828**	**0.000483**
MW-1R	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.000234**	<0.0000157	**0.0000339 J**	<0.0000148	**0.000829**	**0.0000407 J**	<0.0000117	**0.000471**	**0.000254**
MW-2	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-2	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-2R	11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.0000139 B J**	<0.0000157	<0.00000850	<0.0000148	**0.000817**	<0.00000820	<0.0000117	**0.000365**	**0.000131 J**
MW-2R	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.0000332 B J**	<0.0000157	**0.0000120 J**	<0.0000148	**0.000565**	**0.0000250 J**	<0.0000117	**0.000263**	**0.000109 J**
MW-3	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-3	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-3R	11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.00000138 B J**	<0.0000157	<0.00000850	<0.0000148	**0.0000671 B J**	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-3R	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.00000499 B J**	<0.0000157	<0.00000850	<0.0000148	**0.000204 J**	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-4	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-4	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-4R	11/16/18	<0.0000147	<0.0000105	<0.0000126	<0.00000431	<0.0000122	<0.00000223	<0.00000238	<0.0000143	<0.0000113	<0.00000416	**0.0000967**	<0.0000165	**0.0000192 J**	<0.0000155	**0.00506**	**0.0000305 J**	<0.0000123	**0.00254**	**0.00189**
MW-4R	10/18/19	<0.0000140	**0.0000102 J**	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.000226**	<0.0000157	**0.0000407 J**	<0.0000148	<0.0000198	**0.000789**	**0.0000653**	**0.000986**	**0.000308**
MW-5	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-5	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-5R	11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	<0.00000105	<0.0000157	<0.00000850	<0.0000148	**0.0000774 B J**	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-5R	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.00000523 B J**	<0.0000157	<0.00000850	<0.0000148	**0.0000233 J**	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-6	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-6	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-7	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-7	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Table 3

Polycyclic Aromatic Hydrocarbons (Historical) Analytical Results
Plains Pipeline LP
Lovington Gathering WTI, SRS #2006-142
Lea County, New Mexico
NMOCD AP-96

Sample ID	Sample Date	Anthracene (mg/L)	Acenaphthene (mg/L)	Acenaphthylene (mg/L)	Benzo(a)anthracene (mg/L)	Benzo(a)pyrene (mg/L)	Benzo(b)fluoranthene (mg/L)	Benzo(g,h,i)perylene (mg/L)	Benzo(k)fluoranthene (mg/L)	Chrysene (mg/L)	Dibenzo (a,h)anthracene (mg/L)	Dibenzofuran (mg/L)	Fluoranthene (mg/L)	Fluorene (mg/L)	Indeno (1,2,3-cd)pyrene (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Pyrene (mg/L)	1-Methylnaphthalene (mg/L)	2-Methylnaphthalene (mg/L)
		NMWQCC Regulatory Standards																		
		0.001	0.001	0.001	0.001	0.0002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.03	0.001	0.001	0.03	0.03
MW-8	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-8	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-9	12/2/08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-9	9/29/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-10	12/15/11	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	NA	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102
MW-10	11/27/12	<0.00017	<0.00038	<0.00035	<0.00025	<0.00020	<0.00039	<0.00052	<0.00029	<0.00024	<0.00020	NA	<0.00026	<0.00031	<0.00034	<0.00032	<0.00033	<0.00050	<0.00028	<0.00029
MW-11	11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	<0.00000105	<0.0000157	<0.00000850	<0.0000148	**0.0000424 B J**	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-11	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.00000473 B J**	<0.0000157	<0.00000850	<0.0000148	**0.0000237 J**	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-12	11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.00000984 B J**	<0.0000157	**0.0000128 J**	<0.0000148	**0.000249 B J**	**0.00000954 J**	<0.0000117	**0.0000983 J**	**0.0000355**
MW-12	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	**0.0000477 B J**	<0.0000157	**0.0000104 J**	<0.0000148	**0.000684**	**0.0000162 J**	<0.0000117	**0.000898**	**0.000278**

Notes:

1. Yellow shaded cells indicate New Mexico Oil Conservation Division Regulatory Limit exceedance. Require additional sampling.
2. Bold indicates detection.
3. PAH analyses by EPA Method 8270C.
4. 2008 through 2012 results collected by Basin Environmental Service Technologies, LLC.
5. NMWQCC Human Health Standard for naphthalenes + monmethylnaphthalenes is 0.03 mg/l, as shown in NMAC 20.6.2.3103(A.)(1)(jj).
6. J flag indicates the identification of the analyte is acceptable; the reported value is an estimate.
7. B flag indicates analyte found in associated blank.

Appendix A Form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965
Facility Name Lovington Gathering WTI	Facility Type 6"Steel Pipeline

Surface Owner Robert Rice	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	6	17S	37E					Lea

Latitude 32° 51' 56.0" **Longitude** 103° 17' 07.2"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 barrels	Volume Recovered 8 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 4-21-2006 @ 13:00	Date and Hour of Discovery 4-21-2006 @ 13:15
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H_2S content of <10 ppm. The line was approximately 1.5 feet bgs at the release point.

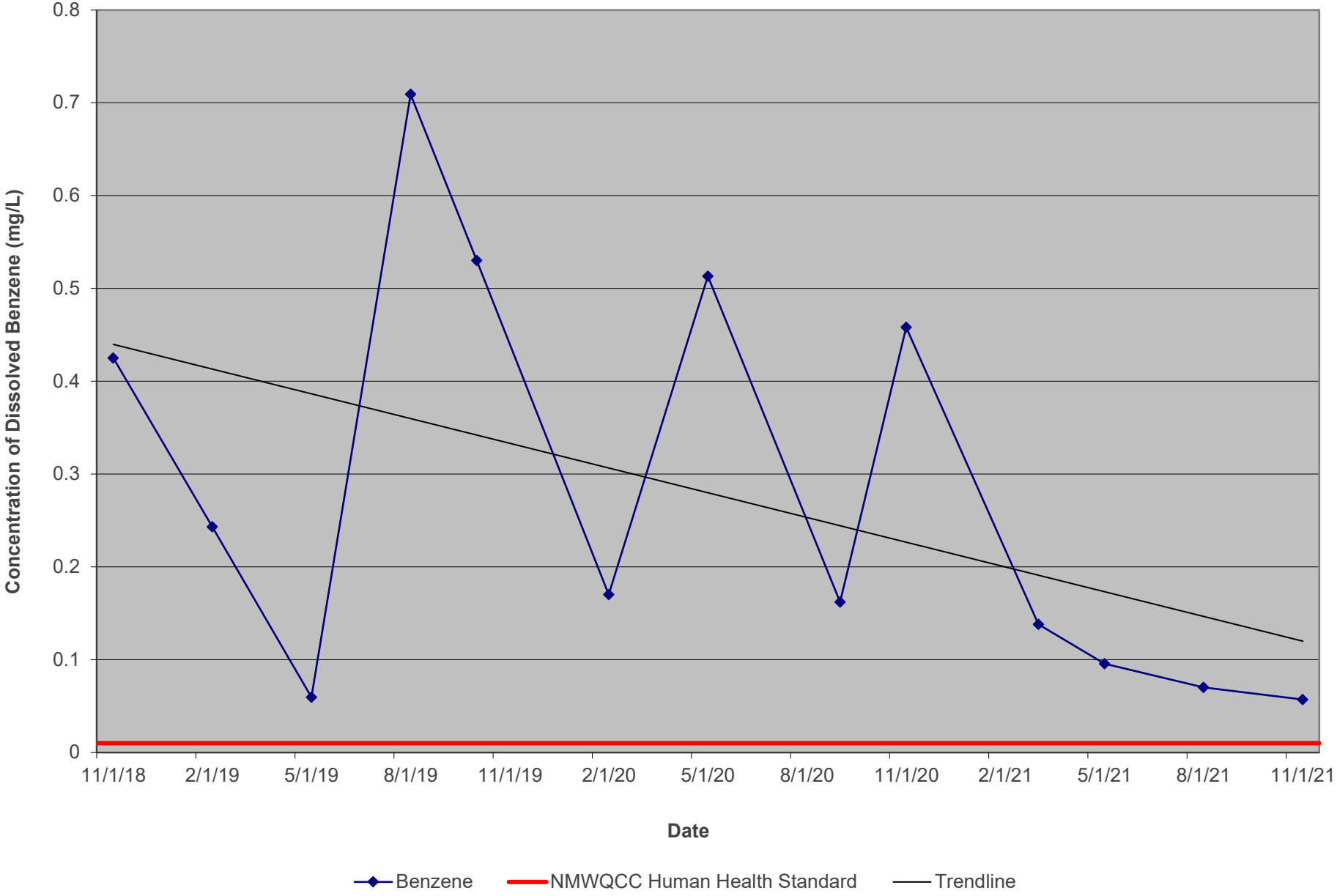
Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 1,500 ft^2.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

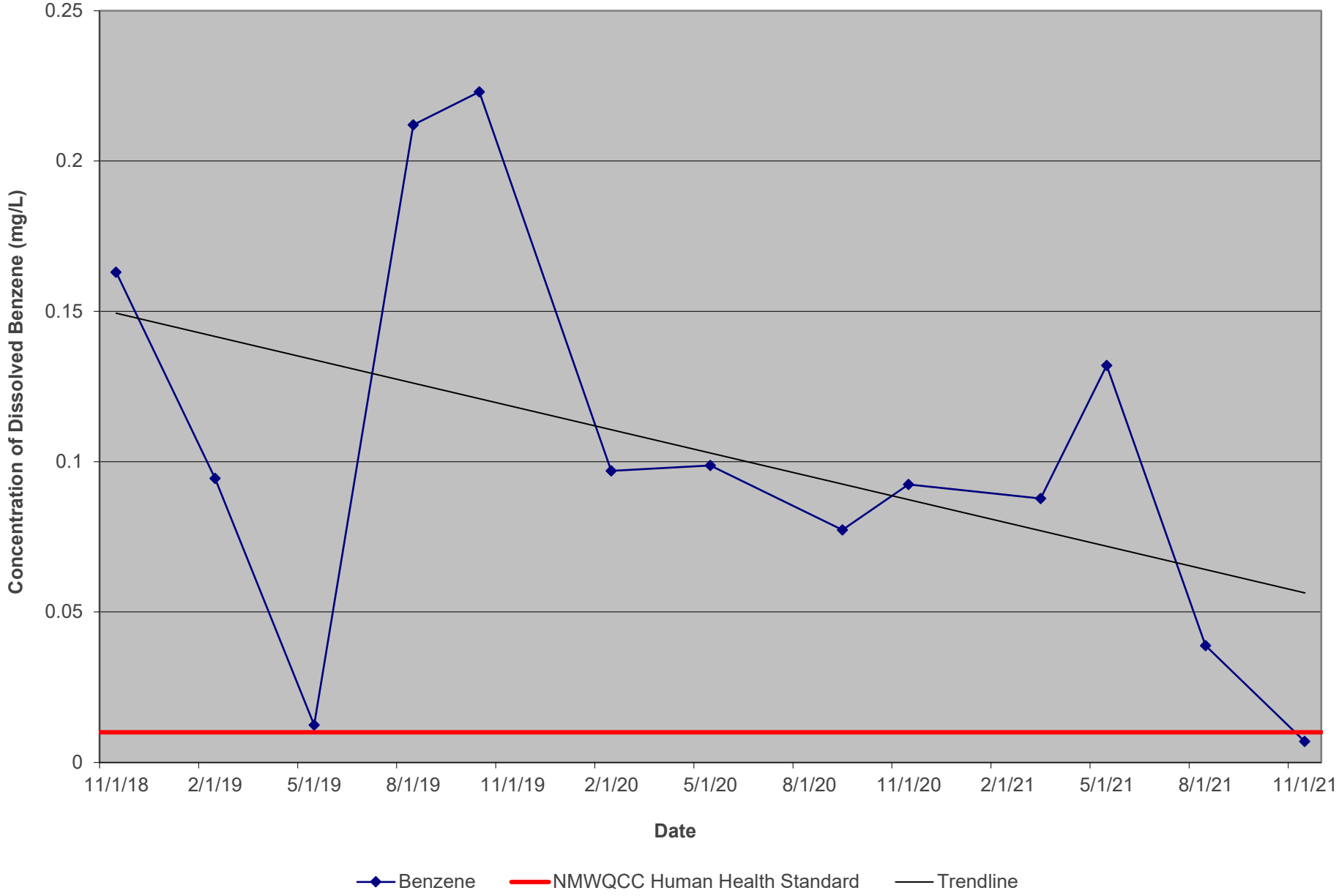
Signature: Camille Reynolds	OIL CONSERVATION DIVISION
Printed Name: Camille Reynolds	Approved by District Supervisor:
Title: Remediation Coordinator	Approval Date: / Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval: / Attached ☐
Date: 4/26/2006 Phone:505-441-0965	

Appendix B
Charts of Dissolved Benzene Versus Time

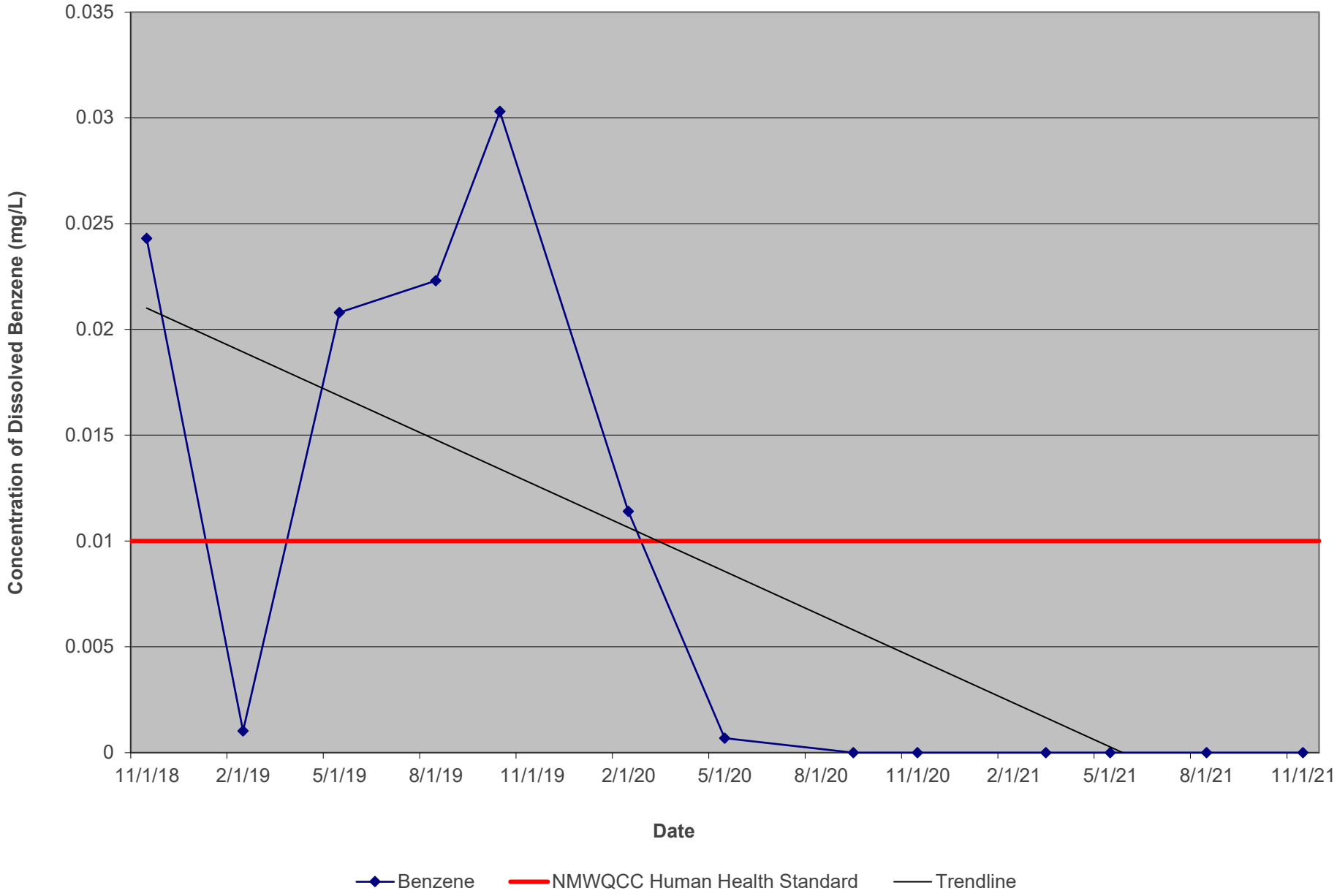
LOVINGTON GATHERING WTI, SRS 2006-142
LEA COUNTY, NEW MEXICO
NMOCD AP-96
CONCENTRATION OF DISSOLVED BENZENE vs. TIME
MW-1R



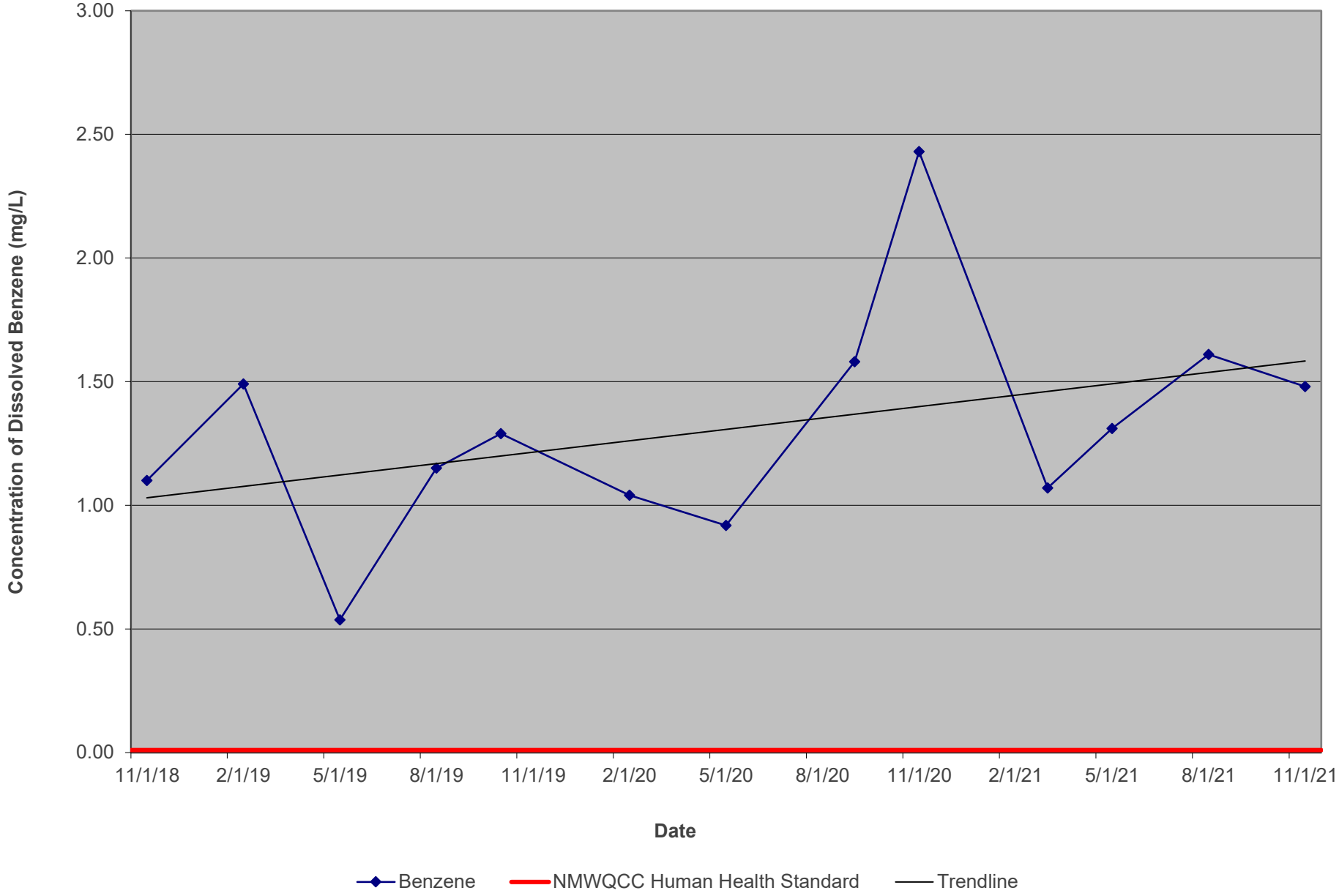
LOVINGTON GATHERING WTI, SRS 2006-142
LEA COUNTY, NEW MEXICO
NMOCD AP-96
CONCENTRATION OF DISSOLVED BENZENE vs. TIME
MW-2R



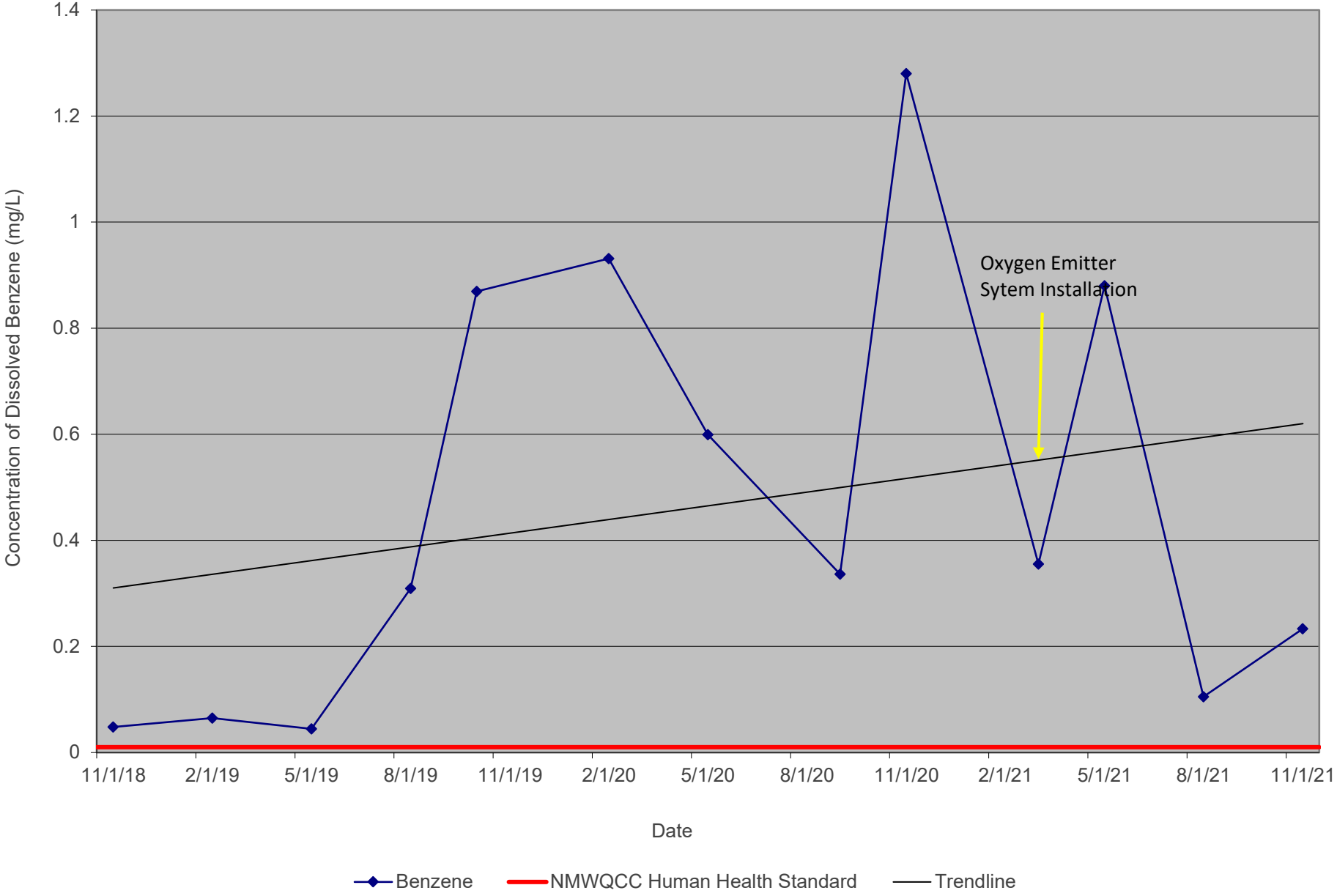
LOVINGTON GATHERING WTI, SRS 2006-142
LEA COUNTY, NEW MEXICO
NMOCD AP-96
CONCENTRATION OF DISSOLVED BENZENE vs. TIME
MW-3R



LOVINGTON GATHERING WTI, SRS 2006-142
LEA COUNTY, NEW MEXICO
NMOCD AP-96
CONCENTRATION OF DISSOLVED BENZENE vs. TIME
MW-4R



LOVINGTON GATHERING WTI, SRS 2006-142
LEA COUNTY, NEW MEXICO
NMOCD AP-96
CONCENTRATION OF DISSOLVED BENZENE vs. TIME
MW-12



Appendix C
Laboratory Analytical Reports and Chain-of-Custody

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

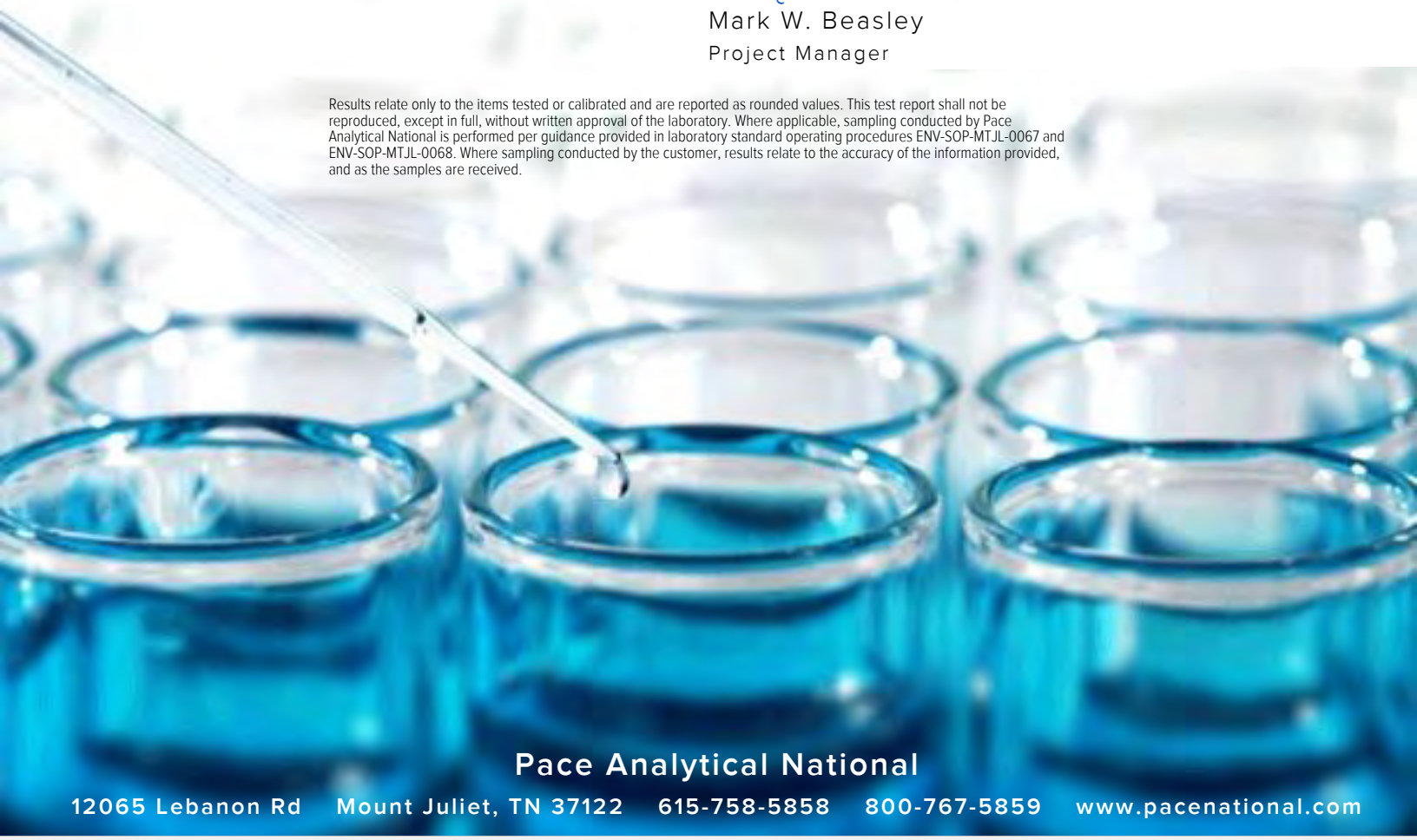
February 08, 2021

Plains All American, LP - GHD

Sample Delivery Group:	L1313868
Samples Received:	02/04/2021
Project Number:	PLAINS SRS #: 2006-1
Description:	Lovington Gathering WTI
Site:	SRS #2006-142
Report To:	Christopher Knight 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Mark W. Beasley
Project Manager



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

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MW-5R L1313868-01 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 11:30 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 16:12	02/06/21 16:12	JAH	Mt. Juliet, TN

MW-7 L1313868-02 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 12:00 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 16:34	02/06/21 16:34	JAH	Mt. Juliet, TN

MW-9 L1313868-03 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 12:30 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 16:55	02/06/21 16:55	JAH	Mt. Juliet, TN

MW-11 L1313868-04 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 13:00 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 17:17	02/06/21 17:17	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	10	02/08/21 02:10	02/08/21 02:10	ACG	Mt. Juliet, TN

MW-3R L1313868-05 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 13:30 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 17:39	02/06/21 17:39	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	1	02/08/21 02:31	02/08/21 02:31	ACG	Mt. Juliet, TN

MW-2R L1313868-06 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 14:00 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 18:00	02/06/21 18:00	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	20	02/08/21 02:53	02/08/21 02:53	ACG	Mt. Juliet, TN

MW-1R L1313868-07 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 14:30 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	1	02/08/21 03:15	02/08/21 03:15	ACG	Mt. Juliet, TN

MW-12 L1313868-08 GW

Collected by: Heath Boyd | Collected date/time: 02/03/21 15:30 | Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	1	02/08/21 03:37	02/08/21 03:37	ACG	Mt. Juliet, TN

MW-4R L1313868-09 GW

Collected by: Heath Boyd
Collected date/time: 02/03/21 15:00
Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	1	02/08/21 03:58	02/08/21 03:58	ACG	Mt. Juliet, TN

DUP-1 L1313868-10 GW

Collected by: Heath Boyd
Collected date/time: 02/03/21 00:00
Received date/time: 02/04/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1617445	1	02/06/21 18:22	02/06/21 18:22	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1617717	1	02/08/21 04:20	02/08/21 04:20	ACG	Mt. Juliet, TN

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

Mark W. Beasley
Project Manager

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Revised May 2010

ONE LAB. NATIONWIDE.

Laboratory Name: Pace Analytical National	LRC Date: 02/08/2021 15:50
Project Name: Lovington Gathering WTI	Laboratory Job Number: L1313868-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1617445 and WG1617717

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

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

Revised May 2010

Laboratory Review Checklist: Supporting Data

ONE LAB. NATIONWIDE.

Laboratory Name: Pace Analytical National	LRC Date: 02/08/2021 15:50
Project Name: Lovington Gathering WTI	Laboratory Job Number: L1313868-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1617445 and WG1617717

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exceptions Reports

ONE LAB. NATIONWIDE.

Laboratory Name: Pace Analytical National	LRC Date: 02/08/2021 15:50
Project Name: Lovington Gathering WTI	Laboratory Job Number: L1313868-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1617445 and WG1617717

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	02/06/2021 16:12	WG1617445
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 16:12	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 16:12	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 16:12	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*02/06/2021 16:12*	WG1617445

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	02/06/2021 16:34	WG1617445
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 16:34	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 16:34	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 16:34	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*02/06/2021 16:34*	WG1617445

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	02/06/2021 16:55	WG1617445
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 16:55	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 16:55	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 16:55	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*02/06/2021 16:55*	WG1617445

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.381		0.00190	0.000500	0.00500	10	02/08/2021 02:10	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 17:17	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 17:17	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 17:17	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*98.4*				*79.0-125*		*02/06/2021 17:17*	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*99.5*				*79.0-125*		*02/08/2021 02:10*	WG1617717

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000235	J	0.000190	0.000500	0.000500	1	02/08/2021 02:31	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 17:39	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 17:39	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 17:39	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*02/06/2021 17:39*	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*02/08/2021 02:31*	WG1617717

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.42		0.00380	0.000500	0.0100	20	02/08/2021 02:53	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 18:00	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 18:00	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 18:00	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*91.8*				*79.0-125*		*02/06/2021 18:00*	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*99.4*				*79.0-125*		*02/08/2021 02:53*	WG1617717

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.00131		0.000190	0.000500	0.000500	1	02/08/2021 03:15	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/08/2021 03:15	WG1617717
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/08/2021 03:15	WG1617717
Total Xylene	U		0.000510	0.00150	0.00150	1	02/08/2021 03:15	WG1617717
(S) a,a,a-Trifluorotoluene(PID)	*99.0*				*79.0-125*		*02/08/2021 03:15*	WG1617717

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00464		0.000190	0.000500	0.000500	1	02/08/2021 03:37	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/08/2021 03:37	WG1617717
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/08/2021 03:37	WG1617717
Total Xylene	U		0.000510	0.00150	0.00150	1	02/08/2021 03:37	WG1617717
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*02/08/2021 03:37*	WG1617717

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.000935		0.000190	0.000500	0.000500	1	02/08/2021 03:58	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/08/2021 03:58	WG1617717
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/08/2021 03:58	WG1617717
Total Xylene	U		0.000510	0.00150	0.00150	1	02/08/2021 03:58	WG1617717
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*02/08/2021 03:58*	WG1617717

DUP-1
Collected date/time: 02/03/21 00:00

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00104		0.000190	0.000500	0.000500	1	02/08/2021 04:20	WG1617717
Toluene	U		0.000412	0.00100	0.00100	1	02/06/2021 18:22	WG1617445
Ethylbenzene	U		0.000160	0.000500	0.000500	1	02/06/2021 18:22	WG1617445
Total Xylene	U		0.000510	0.00150	0.00150	1	02/06/2021 18:22	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*02/06/2021 18:22*	WG1617445
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*02/08/2021 04:20*	WG1617717

Method Blank (MB)

(MB) R3620173-3 02/06/21 15:19

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)	*101*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3620173-1 02/06/21 14:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0447	89.4	77.0-122	
Toluene	0.0500	0.0478	95.6	80.0-121	
Ethylbenzene	0.0500	0.0511	102	80.0-123	
Total Xylene	0.150	0.155	103	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*101*	*79.0-125*	

Method Blank (MB)

(MB) R3620295-3 02/07/21 23:37

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)	*101*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3620295-2 02/07/21 22:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0436	87.2	77.0-122	
Toluene	0.0500	0.0502	100	80.0-121	
Ethylbenzene	0.0500	0.0551	110	80.0-123	
Total Xylene	0.150	0.158	105	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*100*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

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	LAO00356
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		

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

Alabama	40160
ANSI National Accreditation Board	L2239

Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

California	2961	Oregon	CA300002
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North Dakota	R-214		

Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1

Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18

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

Plains All American, LP - GHD

2135 S. Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
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Midland, TX 79706

Pres Chk

Analysis / Container / Preservative

Chain of Custody

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Becky Haskell**

Email To: **becky.haskell@ghd.com (see remarks)**

Project Description: **Lovington Gathering WTI**

City/State Collected: Lovington, NM

Phone: **432-250-7917**
Fax:

Client Project # **Plains SRS #: 2006-142**

Lab Project #

D099

Collected by (print): Heath Boyd

Site/Facility ID #

P.O. #

Acctnum: **Plains GHD**
Template: L1313868
Prelogin:
TSR:
PB:
Shipped Via:

Collected by (signature): [signature]

Immediately Packed on Ice N___ Y X

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

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 10m/Amb-HCL	Remarks	Sample # (lab only)
MW-5R	Grab	GW	DTW	2/3/21	1130	3	X		-01
MW-7	↓	GW	↓	↓	1200	↓	X		-02
MW-9		GW			1230		X		-03
MW-11		GW			1300		X		-04
MW-3R		GW			1330		X		-05
MW-2R		GW			1400		X		-06
MW-1R		GW			1430		X		-07
MW-12		GW			1530		X		-08
MW-4R		GW			1500		X		-09
Dup-1	↓	GW	↓	↓		X	X		-10

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

Remarks:
Email final report to becky.haskell@ghd.com, cjbryan@paalp.com, algroves@paalp.com and maochoa@paalp.com

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
[signature]	2/3/21	1615			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: A7o 0.3 °C / Bottles Received: 27	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 2/4 Time: 0900	Hold: / Condition: NCF / (OK)

Pace Analytical®

ANALYTICAL REPORT

March 29, 2021

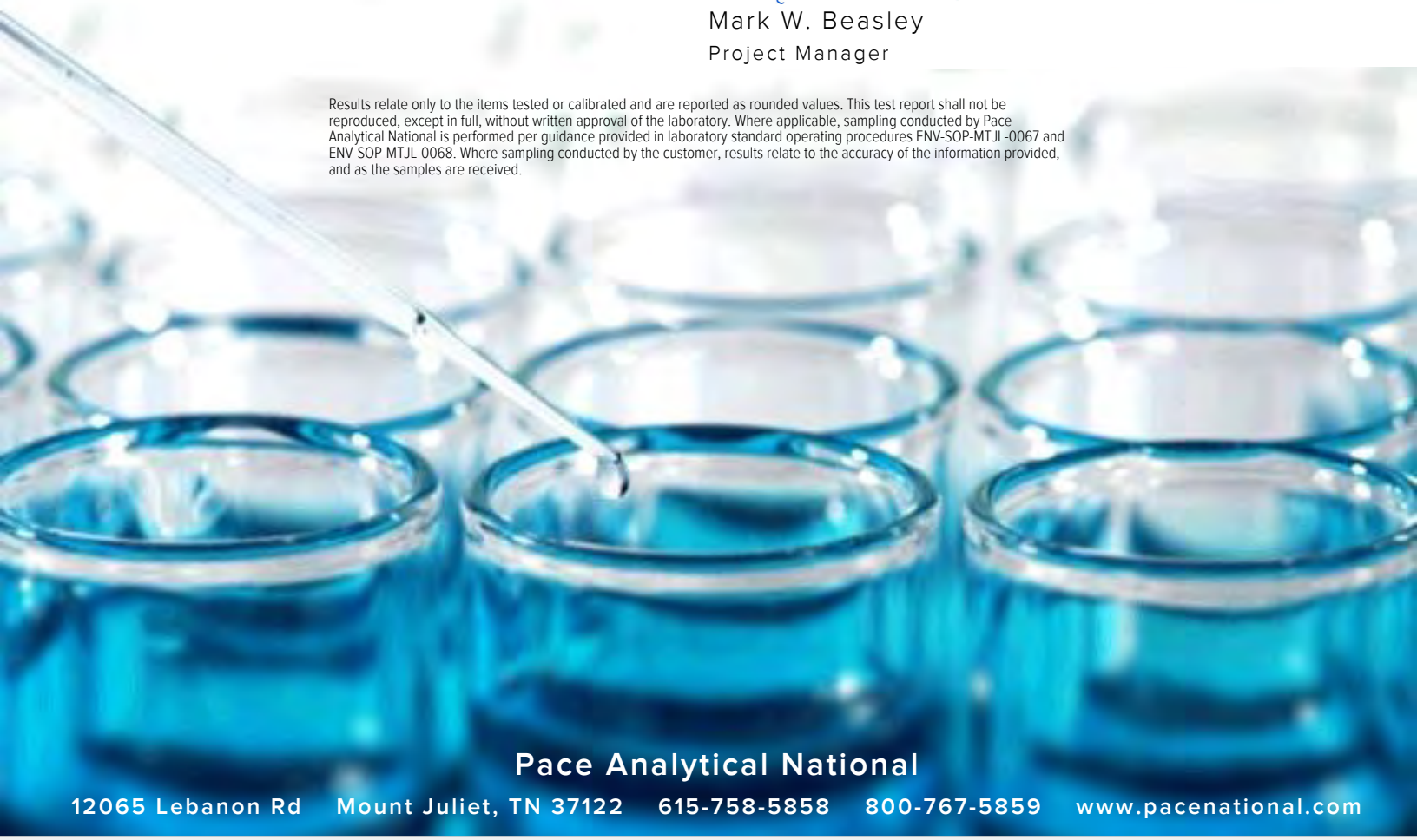
Plains All American, LP - GHD

Sample Delivery Group:	L1329846
Samples Received:	03/23/2021
Project Number:	11209905
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Mark W. Beasley
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.



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MW-5R L1329846-01 GW

Collected by: Zach Comino | Collected date/time: 03/18/21 11:00 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/25/21 23:18	03/25/21 23:18	TPR	Mt. Juliet, TN

MW-7 L1329846-02 GW

Collected by: Zach Comino | Collected date/time: 03/18/21 11:40 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/25/21 23:40	03/25/21 23:40	TPR	Mt. Juliet, TN

MW-9 L1329846-03 GW

Collected by: Zach Comino | Collected date/time: 03/18/21 12:15 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/26/21 00:02	03/26/21 00:02	TPR	Mt. Juliet, TN

MW-11 L1329846-04 GW

Collected by: Zach Comino | Collected date/time: 03/18/21 13:00 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/26/21 00:24	03/26/21 00:24	TPR	Mt. Juliet, TN

MW-12 L1329846-05 GW

Collected by: Zach Comino | Collected date/time: 03/18/21 13:40 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	5	03/27/21 12:20	03/27/21 12:20	BMB	Mt. Juliet, TN

MW-3R L1329846-06 GW

Collected by: Zach Comino | Collected date/time: 03/18/21 14:15 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	1	03/27/21 12:42	03/27/21 12:42	BMB	Mt. Juliet, TN

MW-2R L1329846-07 GW

Collected by: Zach Comino | Collected date/time: 03/19/21 10:00 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	1	03/27/21 13:04	03/27/21 13:04	BMB	Mt. Juliet, TN

MW-1R L1329846-08 GW

Collected by: Zach Comino | Collected date/time: 03/19/21 10:45 | Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	10	03/27/21 13:26	03/27/21 13:26	BMB	Mt. Juliet, TN

MW-4R L1329846-09 GW

Collected by: Zach Comino
Collected date/time: 03/19/21 11:15
Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	10	03/27/21 13:47	03/27/21 13:47	BMB	Mt. Juliet, TN

DUP-1 L1329846-10 GW

Collected by: Zach Comino
Collected date/time: 03/19/21 00:00
Received date/time: 03/23/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	1	03/27/21 14:09	03/27/21 14:09	BMB	Mt. Juliet, TN

CASE NARRATIVE

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

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/29/2021 14:34
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1329846-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1640416 and WG1641080

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

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

Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/29/2021 14:34
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1329846-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1640416 and WG1641080

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/29/2021 14:34
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1329846-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1640416 and WG1641080

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	03/25/2021 23:18	WG1640416
Toluene	U		0.000412	0.00100	0.00100	1	03/25/2021 23:18	WG1640416
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/25/2021 23:18	WG1640416
Total Xylene	0.000788	J	0.000510	0.00150	0.00150	1	03/25/2021 23:18	WG1640416
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/25/2021 23:18*	WG1640416

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	03/25/2021 23:40	WG1640416
Toluene	U		0.000412	0.00100	0.00100	1	03/25/2021 23:40	WG1640416
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/25/2021 23:40	WG1640416
Total Xylene	U		0.000510	0.00150	0.00150	1	03/25/2021 23:40	WG1640416
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/25/2021 23:40*	WG1640416

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	03/26/2021 00:02	WG1640416
Toluene	U		0.000412	0.00100	0.00100	1	03/26/2021 00:02	WG1640416
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/26/2021 00:02	WG1640416
Total Xylene	U		0.000510	0.00150	0.00150	1	03/26/2021 00:02	WG1640416
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/26/2021 00:02*	WG1640416

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	03/26/2021 00:24	WG1640416
Toluene	U		0.000412	0.00100	0.00100	1	03/26/2021 00:24	WG1640416
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/26/2021 00:24	WG1640416
Total Xylene	U		0.000510	0.00150	0.00150	1	03/26/2021 00:24	WG1640416
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/26/2021 00:24*	WG1640416

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.355		0.000950	0.000500	0.00250	5	03/27/2021 12:20	WG1641080
Toluene	U		0.00206	0.00100	0.00500	5	03/27/2021 12:20	WG1641080
Ethylbenzene	U		0.000800	0.000500	0.00250	5	03/27/2021 12:20	WG1641080
Total Xylene	0.00284	J	0.00255	0.00150	0.00750	5	03/27/2021 12:20	WG1641080
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/27/2021 12:20*	WG1641080

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	03/27/2021 12:42	WG1641080
Toluene	U		0.000412	0.00100	0.00100	1	03/27/2021 12:42	WG1641080
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/27/2021 12:42	WG1641080
Total Xylene	U		0.000510	0.00150	0.00150	1	03/27/2021 12:42	WG1641080
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/27/2021 12:42*	WG1641080

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0877		0.000190	0.000500	0.000500	1	03/27/2021 13:04	WG1641080
Toluene	U		0.000412	0.00100	0.00100	1	03/27/2021 13:04	WG1641080
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/27/2021 13:04	WG1641080
Total Xylene	U		0.000510	0.00150	0.00150	1	03/27/2021 13:04	WG1641080
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/27/2021 13:04*	WG1641080

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.138		0.00190	0.000500	0.00500	10	03/27/2021 13:26	WG1641080
Toluene	U		0.00412	0.00100	0.0100	10	03/27/2021 13:26	WG1641080
Ethylbenzene	U		0.00160	0.000500	0.00500	10	03/27/2021 13:26	WG1641080
Total Xylene	0.00593	J	0.00510	0.00150	0.0150	10	03/27/2021 13:26	WG1641080
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*03/27/2021 13:26*	WG1641080

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.07		0.00190	0.000500	0.00500	10	03/27/2021 13:47	WG1641080
Toluene	U		0.00412	0.00100	0.0100	10	03/27/2021 13:47	WG1641080
Ethylbenzene	U		0.00160	0.000500	0.00500	10	03/27/2021 13:47	WG1641080
Total Xylene	0.00821	J	0.00510	0.00150	0.0150	10	03/27/2021 13:47	WG1641080
(S) a,a,a-Trifluorotoluene(PID)	*106*				*79.0-125*		*03/27/2021 13:47*	WG1641080

DUP-1
Collected date/time: 03/19/21 00:00
L1329846

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0961		0.000190	0.000500	0.000500	1	03/27/2021 14:09	WG1641080
Toluene	U		0.000412	0.00100	0.00100	1	03/27/2021 14:09	WG1641080
Ethylbenzene	U		0.000160	0.000500	0.000500	1	03/27/2021 14:09	WG1641080
Total Xylene	0.000588	J	0.000510	0.00150	0.00150	1	03/27/2021 14:09	WG1641080
(S) a,a,a-Trifluorotoluene(PID)	*106*				*79.0-125*		*03/27/2021 14:09*	WG1641080

Method Blank (MB)

(MB) R3635128-3 03/25/21 14:04

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)	*105*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3635128-1 03/25/21 12:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0461	92.2	77.0-122	
Toluene	0.0500	0.0444	88.8	80.0-121	
Ethylbenzene	0.0500	0.0469	93.8	80.0-123	
Total Xylene	0.150	0.136	90.7	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*105*	*79.0-125*	

Method Blank (MB)

(MB) R3635492-4 03/27/21 09:36

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)	*107*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3635492-1 03/27/21 07:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0494	98.8	77.0-122	
Toluene	0.0500	0.0491	98.2	80.0-121	
Ethylbenzene	0.0500	0.0524	105	80.0-123	
Total Xylene	0.150	0.156	104	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*107*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
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

Report to: **Becky Haskell**

Email To: **becky.haskell@ghd.com;Glenn.Quinney@ghd.c**

Project Description: **Lovington Gathering WTI, SRS 2006-142**

City/State Collected: Lovington, NM

Please Circle: PT (MT) CT ET

SDG # L1329846

Table A073

Phone: **432-250-7917**

Client Project # 11209905

Lab Project # **PLAINSGHD-11209905**

Collected by (print): Zach Comino

Site/Facility ID # **SRS 2006-142**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Acctnum: **PLAINSGHD**
Template: **T167394**
Prelogin: **P834811**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-5R	Grab	GW		03/18/2021	1100	3	X		-01
MW-7	Grab	GW		03/18/2021	1140	3	X		-02
MW-9		GW			1215				-03
MW-11		GW			1300				-04
MW-12		GW			1340				-05
MW-3R		GW			1415				-06
MW-2R		GW		03/19/2021	1000				-07
MW-1R		GW		03/19/2021	1045				-08
MW-4R		GW		03/19/2021	1115				-09
Dup-1		GW							-10

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier SWA

Tracking #

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Zach Comino	3.22.21 ~~03/19/2021~~	1200		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
	3.22.21	14:00	SWA	NA13 1.4+2=1.6 30
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			B. Ballou	3/23/21 0800

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Pace Analytical®

ANALYTICAL REPORT

May 14, 2021

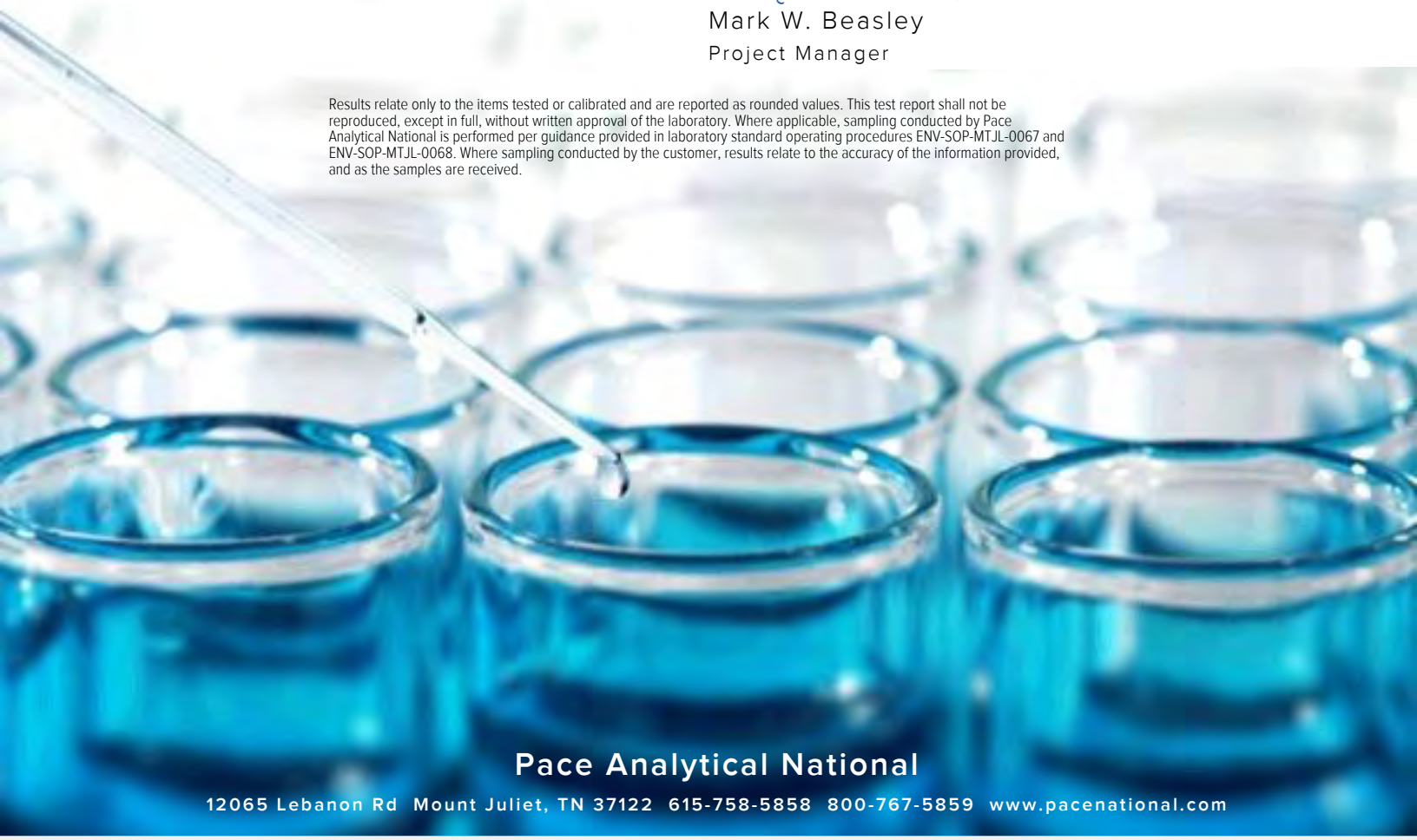
Plains All American, LP - GHD

Sample Delivery Group:	L1349303
Samples Received:	05/06/2021
Project Number:	11209905
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Mark W. Beasley
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

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MW-5R L1349303-01 GW

Collected by: Zach Comino | Collected date/time: 05/04/21 13:45 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 07:37	05/11/21 07:37	TPR	Mt. Juliet, TN

MW-7 L1349303-02 GW

Collected by: Zach Comino | Collected date/time: 05/04/21 14:30 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 07:58	05/11/21 07:58	TPR	Mt. Juliet, TN

MW-9 L1349303-03 GW

Collected by: Zach Comino | Collected date/time: 05/04/21 15:10 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 08:20	05/11/21 08:20	TPR	Mt. Juliet, TN

MW-3R L1349303-04 GW

Collected by: Zach Comino | Collected date/time: 05/05/21 09:20 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 08:42	05/11/21 08:42	TPR	Mt. Juliet, TN

MW-2R L1349303-05 GW

Collected by: Zach Comino | Collected date/time: 05/05/21 09:30 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 09:04	05/11/21 09:04	TPR	Mt. Juliet, TN

MW-11 L1349303-06 GW

Collected by: Zach Comino | Collected date/time: 05/05/21 10:20 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 09:26	05/11/21 09:26	TPR	Mt. Juliet, TN

MW-1R L1349303-07 GW

Collected by: Zach Comino | Collected date/time: 05/05/21 10:30 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	10	05/11/21 11:37	05/11/21 11:37	TPR	Mt. Juliet, TN

MW-4R L1349303-08 GW

Collected by: Zach Comino | Collected date/time: 05/05/21 11:20 | Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	10	05/11/21 11:59	05/11/21 11:59	TPR	Mt. Juliet, TN

SAMPLE SUMMARY

MW-12 L1349303-09 GW

Collected by: Zach Comino
Collected date/time: 05/05/21 11:30
Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	5	05/11/21 11:15	05/11/21 11:15	TPR	Mt. Juliet, TN

DUP-1 L1349303-10 GW

Collected by: Zach Comino
Collected date/time: 05/05/21 00:00
Received date/time: 05/06/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1667922	1	05/11/21 09:48	05/11/21 09:48	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1670149	20	05/14/21 04:10	05/14/21 04:10	AV	Mt. Juliet, TN

CASE NARRATIVE

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

Mark W. Beasley
Project Manager

Revised May 2010

Laboratory Data Package Cover Page

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Mark W. Beasley

Project Manager

Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 05/14/2021 12:24
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1349303-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1667922 and WG1670149

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

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

SG-365 (TRRP-13)
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 05/14/2021 12:24
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1349303-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1667922 and WG1670149

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 05/14/2021 12:24
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1349303-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1667922 and WG1670149

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	05/11/2021 07:37	WG1667922
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 07:37	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 07:37	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 07:37	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*05/11/2021 07:37*	WG1667922

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	05/11/2021 07:58	WG1667922
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 07:58	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 07:58	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 07:58	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*05/11/2021 07:58*	WG1667922

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	05/11/2021 08:20	WG1667922
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 08:20	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 08:20	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 08:20	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*05/11/2021 08:20*	WG1667922

MW-3R
Collected date/time: 05/05/21 09:20
L1349303

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	0.000500	1	05/11/2021 08:42	WG1667922
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 08:42	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 08:42	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 08:42	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*05/11/2021 08:42*	WG1667922

MW-2R
Collected date/time: 05/05/21 09:30
L1349303

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.132		0.000190	0.000500	0.000500	1	05/11/2021 09:04	WG1667922
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 09:04	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 09:04	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 09:04	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*106*				*79.0-125*		*05/11/2021 09:04*	WG1667922

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	05/11/2021 09:26	WG1667922
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 09:26	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 09:26	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 09:26	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*05/11/2021 09:26*	WG1667922

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0956		0.00190	0.000500	0.00500	10	05/11/2021 11:37	WG1667922
Toluene	U		0.00412	0.00100	0.0100	10	05/11/2021 11:37	WG1667922
Ethylbenzene	U		0.00160	0.000500	0.00500	10	05/11/2021 11:37	WG1667922
Total Xylene	U		0.00510	0.00150	0.0150	10	05/11/2021 11:37	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*106*				*79.0-125*		*05/11/2021 11:37*	WG1667922

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.31		0.00190	0.000500	0.00500	10	05/11/2021 11:59	WG1667922
Toluene	U		0.00412	0.00100	0.0100	10	05/11/2021 11:59	WG1667922
Ethylbenzene	U		0.00160	0.000500	0.00500	10	05/11/2021 11:59	WG1667922
Total Xylene	U		0.00510	0.00150	0.0150	10	05/11/2021 11:59	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*106*				*79.0-125*		*05/11/2021 11:59*	WG1667922

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.880		0.000950	0.000500	0.00250	5	05/11/2021 11:15	WG1667922
Toluene	U		0.00206	0.00100	0.00500	5	05/11/2021 11:15	WG1667922
Ethylbenzene	U		0.000800	0.000500	0.00250	5	05/11/2021 11:15	WG1667922
Total Xylene	U		0.00255	0.00150	0.00750	5	05/11/2021 11:15	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*106*				*79.0-125*		*05/11/2021 11:15*	WG1667922

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

DUP-1
Collected date/time: 05/05/21 00:00
L1349303

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.36		0.00380	0.000500	0.0100	20	05/14/2021 04:10	WG1670149
Toluene	U		0.000412	0.00100	0.00100	1	05/11/2021 09:48	WG1667922
Ethylbenzene	U		0.000160	0.000500	0.000500	1	05/11/2021 09:48	WG1667922
Total Xylene	U		0.000510	0.00150	0.00150	1	05/11/2021 09:48	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*05/11/2021 09:48*	WG1667922
(S) a,a,a-Trifluorotoluene(PID)	*103*				*79.0-125*		*05/14/2021 04:10*	WG1670149

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

Method Blank (MB)

(MB) R3654042-3 05/11/21 05:03

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)	*106*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3654042-1 05/11/21 03:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0542	108	77.0-122	
Toluene	0.0500	0.0532	106	80.0-121	
Ethylbenzene	0.0500	0.0555	111	80.0-123	
Total Xylene	0.150	0.155	103	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*106*	*79.0-125*	

Method Blank (MB)

(MB) R3654363-3 05/14/21 03:48

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000190	0.000500
(S) a,a,a-Trifluorotoluene(PID)	*104*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3654363-1 05/14/21 01:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0489	97.8	77.0-122	
(S) a,a,a-Trifluorotoluene(PID)			*103*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Report to:
Becky Haskell

Email To:
becky.haskell@ghd.com;Glenn.Quinney@ghd.c

Project Description:
Lovington Gathering WTI, SRS 2006-142

City/State Collected: Lovington, NM

Please Circle: PT (MT) CT ET

Phone: **432-250-7917**

Client Project # 1120905

Lab Project # **PLAINSGHD-11209905**

Collected by (print): Zach Comino

Site/Facility ID # **SRS 2006-142**

P.O. #

Collected by (signature): ZC

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®

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 # 134303

J159

Acctnum: **PLAINSGHD**

Template: **T167394**

Prelogin: **P844053**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40ml Amb-HCl	Remarks	Sample # (lab only)
MW-5R	Grab	GW		5/4/21	1345	3	X		-01
MW-7		GW		5/4/21	1430	3	X		-02
MW-9		GW		5/4/21	1510				-03
MW-3R		GW		5/5/21	0920				-04
MW-2R		GW		5/5/21	0930				-05
MW-11		GW			1020				-06
MW-1R		GW			1030				-07
MW-4R		GW			1120				-08
MW-12		GW			1130				-09
Dup-1		GW				12			-10

5/7

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7868 1132 0964

Sample Receipt Checklist
COC Seal Present/Intact: ✓ NP __Y __N
COC Signed/Accurate: ✓ __Y __N
Bottles arrive intact: ✓ __Y __N 5/7
Correct bottles used: ✓ __Y __N
Sufficient volume sent: ✓ __Y __N
If Applicable
VOA Zero Headspace: ✓ __Y __N
Preservation Correct/Checked: ✓ __Y __N
RAD Screen <0.5 mR/hr: ✓ __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
Zach Comino ZC	05/05/2021	1200			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.2 1.7 1.4 1.8 °C Bottles Received: 30 29	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Trina Robertson	Date: 5/6/21 Time: 9:30	Hold: 5/7 Condition: NCF / OK

L1349303 PLAINSGHD NCF PM

R5

Time estimate: oh **Time spent:** oh

Members

Paul Minnich (responsible)

- [ ] Parameter(s) past holding time
- [ ] Temperature not in range
- [ ] Improper container type
- [ ] pH not in range
- [ ] Insufficient sample volume
- [ ] Sample is biphasic
- [ ] Vials received with headspace
- [x] Broken container
- [x] Sufficient sample remains
- [ ] If broken container: Insufficient packing material around container
- [ ] If broken container: Insufficient packing material inside cooler
- [ ] If broken container: Improper handling by carrier:_____
- [ ] If broken container: Sample was frozen
- [ ] If broken container: Container lid not intact
- [ ] Client informed by Call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [ ] PM initials:_____
- [ ] Client Contact:_____

Comments

Paul Minnich *7 May 2021 9:04 AM*

1 vial from sample "DUP-1" received broken.

Pace Analytical®

ANALYTICAL REPORT

June 25, 2021

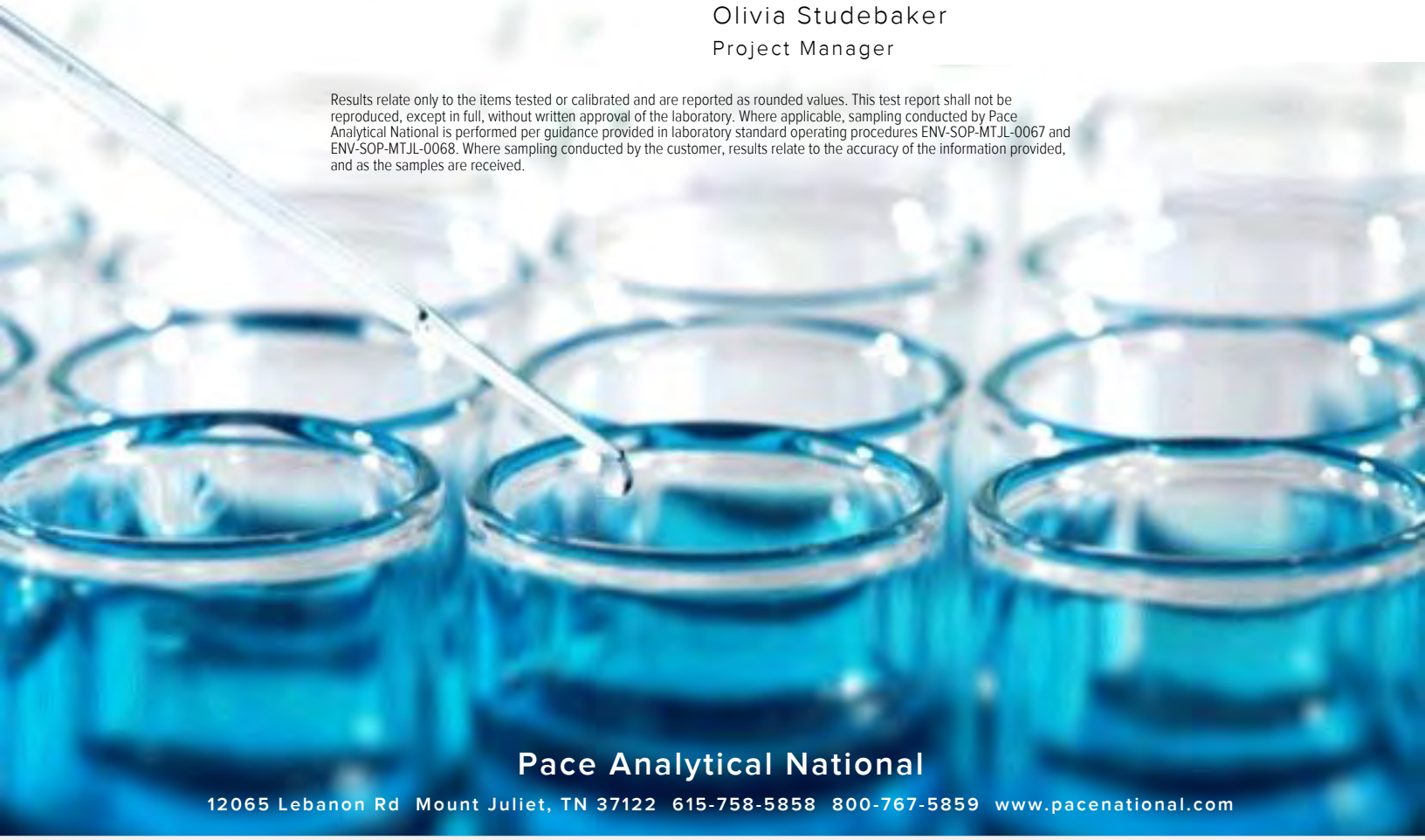
Plains All American, LP - GHD

Sample Delivery Group:	L1366169
Samples Received:	06/15/2021
Project Number:	11209905
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Olivia Studebaker
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

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C.P. CENTER L1366169-01 GW

Collected by: Heath Boyd
Collected date/time: 06/11/21 09:20
Received date/time: 06/15/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 00:51	06/24/21 00:51	BMB	Mt. Juliet, TN

C.P. MIDDLE L1366169-02 GW

Collected by: Heath Boyd
Collected date/time: 06/11/21 09:30
Received date/time: 06/15/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 01:13	06/24/21 01:13	BMB	Mt. Juliet, TN

C.P. END L1366169-03 GW

Collected by: Heath Boyd
Collected date/time: 06/11/21 09:40
Received date/time: 06/15/21 09:00

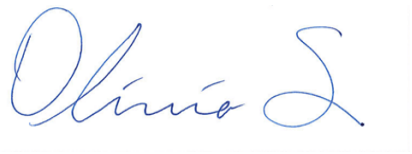
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 01:34	06/24/21 01:34	BMB	Mt. Juliet, TN

C.P. WELL L1366169-04 GW

Collected by: Heath Boyd
Collected date/time: 06/11/21 10:00
Received date/time: 06/15/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 01:56	06/24/21 01:56	BMB	Mt. Juliet, TN

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



Olivia Studebaker
Project Manager

Revised May 2010

Laboratory Data Package Cover Page

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Olivia Studebaker
Project Manager

Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 06/25/2021 10:28
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1366169-01, 02, 03 and 04
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1693576

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

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

Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 06/25/2021 10:28
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1366169-01, 02, 03 and 04
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1693576

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 06/25/2021 10:28
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1366169-01, 02, 03 and 04
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1693576

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	0.000500	1	06/24/2021 00:51	WG1693576
Toluene	U		0.000412	0.00100	0.00100	1	06/24/2021 00:51	WG1693576
Ethylbenzene	U		0.000160	0.000500	0.000500	1	06/24/2021 00:51	WG1693576
Total Xylene	U		0.000510	0.00150	0.00150	1	06/24/2021 00:51	WG1693576
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*06/24/2021 00:51*	WG1693576

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000347	J	0.000190	0.000500	0.000500	1	06/24/2021 01:13	WG1693576
Toluene	U		0.000412	0.00100	0.00100	1	06/24/2021 01:13	WG1693576
Ethylbenzene	U		0.000160	0.000500	0.000500	1	06/24/2021 01:13	WG1693576
Total Xylene	U		0.000510	0.00150	0.00150	1	06/24/2021 01:13	WG1693576
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*06/24/2021 01:13*	WG1693576

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000300	J	0.000190	0.000500	0.000500	1	06/24/2021 01:34	WG1693576
Toluene	U		0.000412	0.00100	0.00100	1	06/24/2021 01:34	WG1693576
Ethylbenzene	U		0.000160	0.000500	0.000500	1	06/24/2021 01:34	WG1693576
Total Xylene	U		0.000510	0.00150	0.00150	1	06/24/2021 01:34	WG1693576
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*06/24/2021 01:34*	WG1693576

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.000795		0.000190	0.000500	0.000500	1	06/24/2021 01:56	WG1693576
Toluene	U		0.000412	0.00100	0.00100	1	06/24/2021 01:56	WG1693576
Ethylbenzene	U		0.000160	0.000500	0.000500	1	06/24/2021 01:56	WG1693576
Total Xylene	U		0.000510	0.00150	0.00150	1	06/24/2021 01:56	WG1693576
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*06/24/2021 01:56*	WG1693576

Method Blank (MB)

(MB) R3671690-3 06/23/21 16:21

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)	*107*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3671690-1 06/23/21 15:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0515	103	77.0-122	
Toluene	0.0500	0.0481	96.2	80.0-121	
Ethylbenzene	0.0500	0.0506	101	80.0-123	
Total Xylene	0.150	0.154	103	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*106*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Report to: **Becky Haskell**

Email To: **becky.haskell@ghd.com;Glenn.Quinney@ghd.c**

Project Description: **Lovington Gathering WTI, SRS 2006-142**

City/State Collected: **Lovington, NM**

Please Circle: PT (MT) CT ET

Phone: **432-250-7917**

Client Project # **11209905**

Lab Project # **PLAINSGHD-11209905**

Collected by (print): **Heath Boyd**

Site/Facility ID # **SRS 2006-142**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl	Remarks	Sample # (lab only)
C.P. Center	Grab	GW		6/11/21	920	3	X		-01
C.P. Middle		GW			930		X		-02
C.P. End		GW			940		X		-03
C.P. Well		GW			1000		X		-04

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®

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 # L1366169

Table E003

Acctnum: **PLAINSGHD**

Template: **T167394**

Prelogin: **P845867**

PM: **134 - Mark W. Beasley**

PB: 6/5/21

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
	6/14/21	1600		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.9 °C Bottles Received: 12
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/15/21 Time: 9:00

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

ANALYTICAL REPORT

August 13, 2021

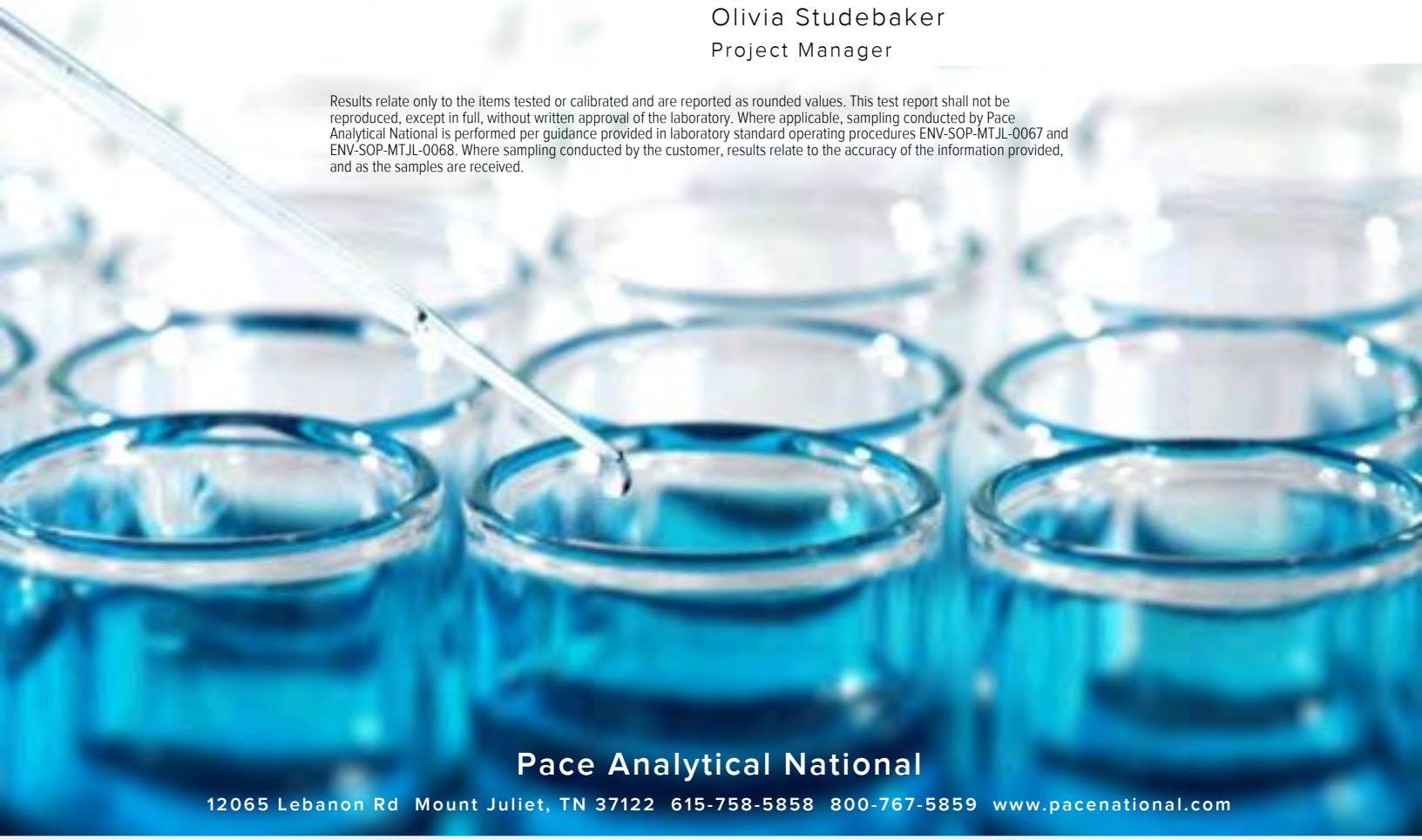
Plains All American, LP - GHD

Sample Delivery Group:	L1387484
Samples Received:	08/06/2021
Project Number:	SRS 2006-142 (GHD 11
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Olivia Studebaker
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

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MW-7-080321 L1387484-01 GW

Collected by: RI/JM/HB | Collected date/time: 08/03/21 13:15 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 01:09	08/07/21 01:09	DWR	Mt. Juliet, TN

MW-9-080321 L1387484-02 GW

Collected by: RI/JM/HB | Collected date/time: 08/03/21 13:30 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 01:30	08/07/21 01:30	DWR	Mt. Juliet, TN

MW-11-080321 L1387484-03 GW

Collected by: RI/JM/HB | Collected date/time: 08/03/21 13:50 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 01:52	08/07/21 01:52	DWR	Mt. Juliet, TN

MW-12-080321 L1387484-04 GW

Collected by: RI/JM/HB | Collected date/time: 08/03/21 14:30 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1720646	1	08/10/21 19:54	08/10/21 19:54	ACG	Mt. Juliet, TN

MW-5R-080421 L1387484-05 GW

Collected by: RI/JM/HB | Collected date/time: 08/04/21 11:00 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 02:14	08/07/21 02:14	DWR	Mt. Juliet, TN

MW-3R-080421 L1387484-06 GW

Collected by: RI/JM/HB | Collected date/time: 08/04/21 11:30 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 02:36	08/07/21 02:36	DWR	Mt. Juliet, TN

MW-2R-080421 L1387484-07 GW

Collected by: RI/JM/HB | Collected date/time: 08/04/21 12:00 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 02:57	08/07/21 02:57	DWR	Mt. Juliet, TN

MW-4R-080421 L1387484-08 GW

Collected by: RI/JM/HB | Collected date/time: 08/04/21 12:30 | Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	10	08/07/21 14:09	08/07/21 14:09	DWR	Mt. Juliet, TN

MW-1R-080421 L1387484-09 GW

Collected by: RI/JM/HB
Collected date/time: 08/04/21 13:00
Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1720646	1	08/10/21 20:18	08/10/21 20:18	ACG	Mt. Juliet, TN

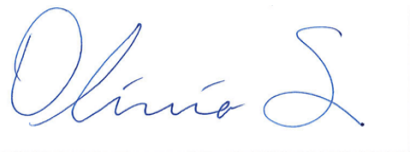
DUP-080421 L1387484-10 GW

Collected by: RI/JM/HB
Collected date/time: 08/04/21 00:00
Received date/time: 08/06/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1718983	1	08/07/21 03:19	08/07/21 03:19	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1720646	20	08/10/21 22:15	08/10/21 22:15	ACG	Mt. Juliet, TN

CASE NARRATIVE

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



Olivia Studebaker
Project Manager

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Olivia Studebaker
Project Manager

Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 08/13/2021 15:28
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1387484-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1718983 and WG1720646

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

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

SW-846 Update IVB
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 08/13/2021 15:28
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1387484-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1718983 and WG1720646

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 08/13/2021 15:28
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1387484-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1718983 and WG1720646

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	08/07/2021 01:09	WG1718983
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 01:09	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 01:09	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 01:09	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*109*				*79.0-125*		*08/07/2021 01:09*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	0.000500	1	08/07/2021 01:30	WG1718983
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 01:30	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 01:30	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 01:30	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*109*				*79.0-125*		*08/07/2021 01:30*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	U		0.000190	0.000500	0.000500	1	08/07/2021 01:52	WG1718983
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 01:52	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 01:52	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 01:52	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*109*				*79.0-125*		*08/07/2021 01:52*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.105		0.000190	0.000500	0.000500	1	08/10/2021 19:54	WG1720646
Toluene	U		0.000412	0.00100	0.00100	1	08/10/2021 19:54	WG1720646
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/10/2021 19:54	WG1720646
Total Xylene	0.000783	B J	0.000510	0.00150	0.00150	1	08/10/2021 19:54	WG1720646
(S) a,a,a-Trifluorotoluene(PID)	*99.7*				*79.0-125*		*08/10/2021 19:54*	WG1720646

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	08/07/2021 02:14	WG1718983
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 02:14	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 02:14	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 02:14	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*109*				*79.0-125*		*08/07/2021 02:14*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	08/07/2021 02:36	WG1718983
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 02:36	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 02:36	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 02:36	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*109*				*79.0-125*		*08/07/2021 02:36*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0388		0.000190	0.000500	0.000500	1	08/07/2021 02:57	WG1718983
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 02:57	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 02:57	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 02:57	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*109*				*79.0-125*		*08/07/2021 02:57*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.61		0.00190	0.000500	0.00500	10	08/07/2021 14:09	WG1718983
Toluene	U		0.00412	0.00100	0.0100	10	08/07/2021 14:09	WG1718983
Ethylbenzene	U		0.00160	0.000500	0.00500	10	08/07/2021 14:09	WG1718983
Total Xylene	U		0.00510	0.00150	0.0150	10	08/07/2021 14:09	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*107*				*79.0-125*		*08/07/2021 14:09*	WG1718983

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0702		0.000190	0.000500	0.000500	1	08/10/2021 20:18	WG1720646
Toluene	U		0.000412	0.00100	0.00100	1	08/10/2021 20:18	WG1720646
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/10/2021 20:18	WG1720646
Total Xylene	0.000713	B J	0.000510	0.00150	0.00150	1	08/10/2021 20:18	WG1720646
(S) a,a,a-Trifluorotoluene(PID)	*98.3*				*79.0-125*		*08/10/2021 20:18*	WG1720646

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.61		0.00380	0.000500	0.0100	20	08/10/2021 22:15	WG1720646
Toluene	U		0.000412	0.00100	0.00100	1	08/07/2021 03:19	WG1718983
Ethylbenzene	U		0.000160	0.000500	0.000500	1	08/07/2021 03:19	WG1718983
Total Xylene	U		0.000510	0.00150	0.00150	1	08/07/2021 03:19	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*99.2*				*79.0-125*		*08/07/2021 03:19*	WG1718983
(S) a,a,a-Trifluorotoluene(PID)	*101*				*79.0-125*		*08/10/2021 22:15*	WG1720646

Method Blank (MB)

(MB) R3690178-3 08/07/21 00:17

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)	*110*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3690178-2 08/06/21 23:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0520	104	77.0-122	
Toluene	0.0500	0.0527	105	80.0-121	
Ethylbenzene	0.0500	0.0539	108	80.0-123	
Total Xylene	0.150	0.159	106	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*108*	*79.0-125*	

Method Blank (MB)

(MB) R3690742-1 08/10/21 17:08

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	0.000167	J	0.000160	0.000500
Total Xylene	0.000577	J	0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	*104*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3690742-2 08/10/21 17:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0551	110	77.0-122	
Toluene	0.0500	0.0533	107	80.0-121	
Ethylbenzene	0.0500	0.0535	107	80.0-123	
Total Xylene	0.150	0.159	106	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*101*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Report to:
Becky Haskell

Email To:
becky.haskell@ghd.com;Glenn.Quinney@ghd.c

Project Description:
Lovington Gathering WTI, SRS 2006-142

City/State Collected: Hobbs/NM

Please Circle: PT MT (CT) ET

Phone: **432-250-7917**

Client Project # SRS 2006-142 (GHD 11209905)

Lab Project # **PLAINSGHD-11209905**

Collected by (print): Ryan Livingston, Joe Mireles, Heath Boyd

Site/Facility ID # **SRS 2006-142**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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: Per SSOW

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®

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 # L1387484

C193

Acctnum: **PLAINSGHD**
Template: **T167394**
Prelogin: **P863973**
PM: **823 - Olivia Studebaker**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl 8021B	Remarks	Sample # (lab only)
MW-7-080321	G	GW	—	8-3-21	1315	3	X		-01
MW-9-080321	G	GW	—	8-3-21	1330	3	X		-02
MW-11-080321	G	GW	—	8-3-21	1350	3	X		-03
MW-12-080321	G	GW	—	8-3-21	1430	3	X		-04
MW-5R080421	G	GW	—	8-4-21	1100	3	X		-05
MW-3R-080421	G	GW	—	8-4-21	1130	3	X		-06
MW-7R-080421	G	GW	—	8-4-21	1200	3	X		-07
MW-4R-080421	G	GW	—	8-4-2	1230	3	X		-08
MW-1R-080421	G	GW	—	8-4-2	1300	3	X		-09
DUP-080421	G	GW	—	8-4-2	—	3	X		-10

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

Remarks: 1. Report to SOL's.
2. Flag estimated concentrations

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) Joe Mireles	8-5-21	0700	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by: (Signature)	8-5-21	1500	Received by: (Signature)	Temp: 1.1+0=1.1 °C Bottles Received: 30
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/6 Time: 1100

If preservation required by Login: Date/Time

Hold: Condition: NCF / (OK)

ANALYTICAL REPORT

November 16, 2021

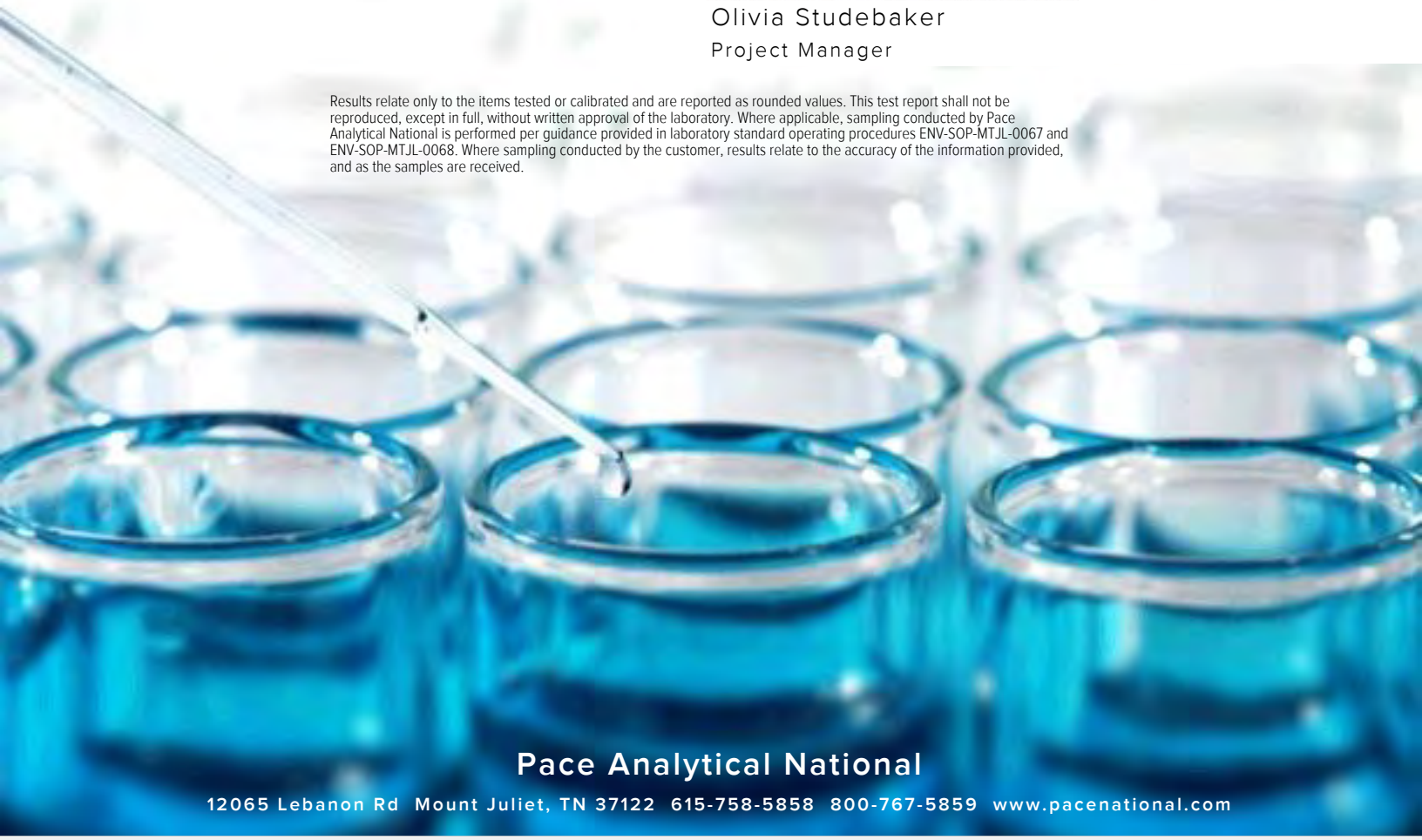
Plains All American, LP - GHD

Sample Delivery Group:	L1426447
Samples Received:	11/04/2021
Project Number:	SRS 2006-142
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Olivia Studebaker
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

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MW3R L1426447-01 GW

Collected by: David R. | Collected date/time: 11/01/21 13:15 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 21:54	11/05/21 21:54	BMB	Mt. Juliet, TN

MW5R L1426447-02 GW

Collected by: David R. | Collected date/time: 11/01/21 13:40 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 22:16	11/05/21 22:16	BMB	Mt. Juliet, TN

MW7 L1426447-03 GW

Collected by: David R. | Collected date/time: 11/01/21 14:00 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 22:38	11/05/21 22:38	BMB	Mt. Juliet, TN

MW9 L1426447-04 GW

Collected by: David R. | Collected date/time: 11/01/21 14:20 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 22:59	11/05/21 22:59	BMB	Mt. Juliet, TN

MW11 L1426447-05 GW

Collected by: David R. | Collected date/time: 11/01/21 14:50 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 23:21	11/05/21 23:21	BMB	Mt. Juliet, TN

MW2R L1426447-06 GW

Collected by: David R. | Collected date/time: 11/01/21 10:30 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 23:43	11/05/21 23:43	BMB	Mt. Juliet, TN

MW1R L1426447-07 GW

Collected by: David R. | Collected date/time: 11/01/21 11:00 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/06/21 00:05	11/06/21 00:05	BMB	Mt. Juliet, TN

MW12 L1426447-08 GW

Collected by: David R. | Collected date/time: 11/01/21 11:30 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/06/21 00:26	11/06/21 00:26	BMB	Mt. Juliet, TN

MW4R L1426447-09 GW

Collected by: David R.
Collected date/time: 11/01/21 12:00
Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1774235	10	11/15/21 07:00	11/15/21 07:00	BMB	Mt. Juliet, TN

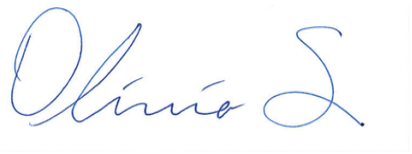
DUP L1426447-10 GW

Collected by: David R.
Collected date/time: 11/01/21 00:00
Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/06/21 00:48	11/06/21 00:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1774235	20	11/15/21 07:22	11/15/21 07:22	BMB	Mt. Juliet, TN

CASE NARRATIVE

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



Olivia Studebaker
Project Manager

Laboratory Data Package Cover Page

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Olivia Studebaker
Project Manager

Laboratory Review Checklist: Reportable Data

Revised May 2010

Laboratory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426447-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235

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

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

SG-365 (TRRP-13)
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426447-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426447-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 21:54	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 21:54	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 21:54	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 21:54	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.8*				*79.0-125*		*11/05/2021 21:54*	WG1769391

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 22:16	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 22:16	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 22:16	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 22:16	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.7*				*79.0-125*		*11/05/2021 22:16*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 22:38	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 22:38	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 22:38	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 22:38	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*99.0*				*79.0-125*		*11/05/2021 22:38*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 22:59	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 22:59	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 22:59	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 22:59	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*99.1*				*79.0-125*		*11/05/2021 22:59*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 23:21	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 23:21	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 23:21	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 23:21	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.9*				*79.0-125*		*11/05/2021 23:21*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00691		0.000190	0.000500	0.000500	1	11/05/2021 23:43	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 23:43	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 23:43	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 23:43	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.7*				*79.0-125*		*11/05/2021 23:43*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0570		0.000190	0.000500	0.000500	1	11/06/2021 00:05	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/06/2021 00:05	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/06/2021 00:05	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/06/2021 00:05	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*97.4*				*79.0-125*		*11/06/2021 00:05*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.233		0.000190	0.000500	0.000500	1	11/06/2021 00:26	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/06/2021 00:26	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/06/2021 00:26	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/06/2021 00:26	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*97.4*				*79.0-125*		*11/06/2021 00:26*	WG1769391

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	1.48		0.00190	0.000500	0.00500	10	11/15/2021 07:00	WG1774235
Toluene	U		0.00412	0.00100	0.0100	10	11/15/2021 07:00	WG1774235
Ethylbenzene	U		0.00160	0.000500	0.00500	10	11/15/2021 07:00	WG1774235
Total Xylene	U		0.00510	0.00150	0.0150	10	11/15/2021 07:00	WG1774235
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*11/15/2021 07:00*	WG1774235

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

DUP
Collected date/time: 11/01/21 00:00
L1426447

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.54		0.00380	0.000500	0.0100	20	11/15/2021 07:22	WG1774235
Toluene	U		0.000412	0.00100	0.00100	1	11/06/2021 00:48	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/06/2021 00:48	WG1769391
Total Xylene	0.000571	J	0.000510	0.00150	0.00150	1	11/06/2021 00:48	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*93.2*				*79.0-125*		*11/06/2021 00:48*	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*11/15/2021 07:22*	WG1774235

Method Blank (MB)

(MB) R3729326-2 11/05/21 19:15

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)	*97.9*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3729326-1 11/05/21 17:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0440	88.0	77.0-122	
Toluene	0.0500	0.0426	85.2	80.0-121	
Ethylbenzene	0.0500	0.0461	92.2	80.0-123	
Total Xylene	0.150	0.135	90.0	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*97.5*	*79.0-125*	

Method Blank (MB)

(MB) R3729777-3 11/15/21 03:27

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)	*99.8*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3729777-1 11/15/21 01:44

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0500	100	77.0-122	
Toluene	0.0500	0.0480	96.0	80.0-121	
Ethylbenzene	0.0500	0.0523	105	80.0-123	
Total Xylene	0.150	0.152	101	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*98.6*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Report to:
Becky Haskell

Email To:
becky.haskell@ghd.com;glenn.quinney@ghd.co

Project Description:
Lovington Gathering WTI, SRS 2006-142

City/State Collected: Lovington NM

Please Circle: PT MT CT ET

Phone: **432-250-7917**

Client Project # 5125 2006-142

Lab Project # **PLAINSGHD-11209905**

Collected by (print): David Fletcher

Collected by (signature):

Site/Facility ID # **SRS 2006-142**

P.O. #

Quote #

Immediately Packed on Ice N ___ Y V

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

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

BTEX 40mlAmb-HCl EXT to C35

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Remarks	Sample # (lab only)
MW3R	GRAB	GW	N/A	11-1-21	1315	3		-01
MW5R				11-1-21	1340			-02
MW7				11-1-21	1400			-03
MW9				11-1-21	1420			-04
MW11				11-1-21	1450			-05
MW2R				11-2-21	1030			-06
MW1R				11-2-21	1100			-07
MW12				11-2-21	1130			-08
MW4R				11-2-21	1200			-09
DUP								-10

Chain of Custody Page 1 of 1

Pace Analytical®

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 # L1426447

Ta H097

Acctnum: **PLAINSGHD**

Template: **T167394**

Prelogin: **P883784**

PM: **823 - Olivia Studebaker**

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	11-2-21	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.6 °C Bottles Received: 30	
	11-2-21	1500			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/4/21 Time: 830	Hold: Condition: NCF / OK
			T. Robertson		

ANALYTICAL REPORT

November 16, 2021

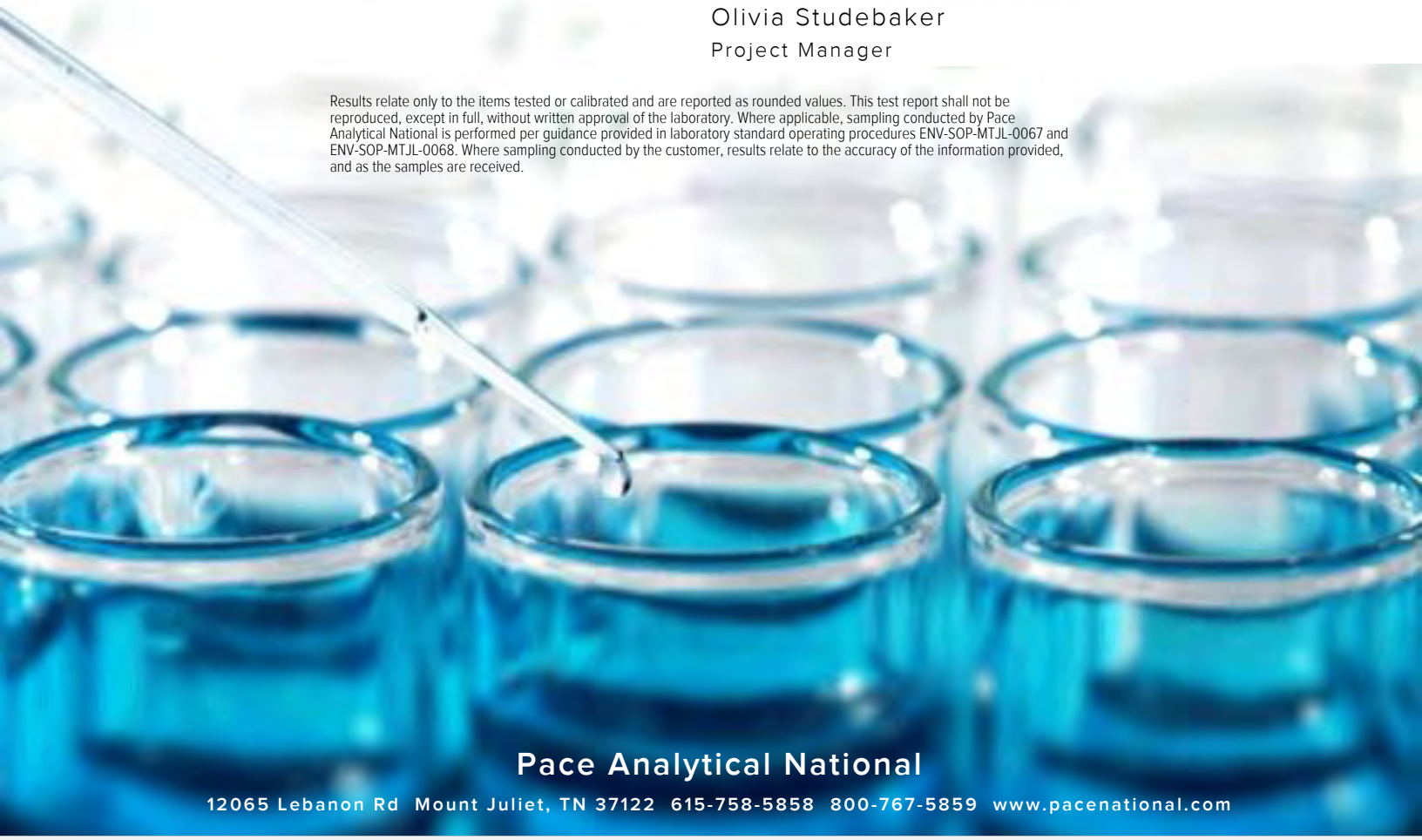
Plains All American, LP - GHD

Sample Delivery Group:	L1426447
Samples Received:	11/04/2021
Project Number:	SRS 2006-142
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Olivia Studebaker
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

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MW3R L1426447-01 GW

Collected by: David R. | Collected date/time: 11/01/21 13:15 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 21:54	11/05/21 21:54	BMB	Mt. Juliet, TN

MW5R L1426447-02 GW

Collected by: David R. | Collected date/time: 11/01/21 13:40 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 22:16	11/05/21 22:16	BMB	Mt. Juliet, TN

MW7 L1426447-03 GW

Collected by: David R. | Collected date/time: 11/01/21 14:00 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 22:38	11/05/21 22:38	BMB	Mt. Juliet, TN

MW9 L1426447-04 GW

Collected by: David R. | Collected date/time: 11/01/21 14:20 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 22:59	11/05/21 22:59	BMB	Mt. Juliet, TN

MW11 L1426447-05 GW

Collected by: David R. | Collected date/time: 11/01/21 14:50 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 23:21	11/05/21 23:21	BMB	Mt. Juliet, TN

MW2R L1426447-06 GW

Collected by: David R. | Collected date/time: 11/01/21 10:30 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 23:43	11/05/21 23:43	BMB	Mt. Juliet, TN

MW1R L1426447-07 GW

Collected by: David R. | Collected date/time: 11/01/21 11:00 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/06/21 00:05	11/06/21 00:05	BMB	Mt. Juliet, TN

MW12 L1426447-08 GW

Collected by: David R. | Collected date/time: 11/01/21 11:30 | Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/06/21 00:26	11/06/21 00:26	BMB	Mt. Juliet, TN

SAMPLE SUMMARY

MW4R L1426447-09 GW

Collected by: David R.
Collected date/time: 11/01/21 12:00
Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1774235	10	11/15/21 07:00	11/15/21 07:00	BMB	Mt. Juliet, TN

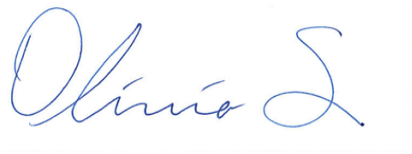
DUP L1426447-10 GW

Collected by: David R.
Collected date/time: 11/01/21 00:00
Received date/time: 11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/06/21 00:48	11/06/21 00:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021B	WG1774235	20	11/15/21 07:22	11/15/21 07:22	BMB	Mt. Juliet, TN

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



Olivia Studebaker
Project Manager

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Olivia Studebaker
Project Manager

Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426447-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235

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

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

Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426447-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426447-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 21:54	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 21:54	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 21:54	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 21:54	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.8*				*79.0-125*		*11/05/2021 21:54*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 22:16	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 22:16	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 22:16	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 22:16	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.7*				*79.0-125*		*11/05/2021 22:16*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 22:38	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 22:38	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 22:38	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 22:38	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*99.0*				*79.0-125*		*11/05/2021 22:38*	WG1769391

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 22:59	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 22:59	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 22:59	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 22:59	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*99.1*				*79.0-125*		*11/05/2021 22:59*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 23:21	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 23:21	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 23:21	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 23:21	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.9*				*79.0-125*		*11/05/2021 23:21*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.00691		0.000190	0.000500	0.000500	1	11/05/2021 23:43	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 23:43	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 23:43	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 23:43	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*98.7*				*79.0-125*		*11/05/2021 23:43*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0570		0.000190	0.000500	0.000500	1	11/06/2021 00:05	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/06/2021 00:05	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/06/2021 00:05	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/06/2021 00:05	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*97.4*				*79.0-125*		*11/06/2021 00:05*	WG1769391

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.233		0.000190	0.000500	0.000500	1	11/06/2021 00:26	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/06/2021 00:26	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/06/2021 00:26	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/06/2021 00:26	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*97.4*				*79.0-125*		*11/06/2021 00:26*	WG1769391

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

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.48		0.00190	0.000500	0.00500	10	11/15/2021 07:00	WG1774235
Toluene	U		0.00412	0.00100	0.0100	10	11/15/2021 07:00	WG1774235
Ethylbenzene	U		0.00160	0.000500	0.00500	10	11/15/2021 07:00	WG1774235
Total Xylene	U		0.00510	0.00150	0.0150	10	11/15/2021 07:00	WG1774235
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*11/15/2021 07:00*	WG1774235

DUP
Collected date/time: 11/01/21 00:00
L1426447

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.54		0.00380	0.000500	0.0100	20	11/15/2021 07:22	WG1774235
Toluene	U		0.000412	0.00100	0.00100	1	11/06/2021 00:48	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/06/2021 00:48	WG1769391
Total Xylene	0.000571	J	0.000510	0.00150	0.00150	1	11/06/2021 00:48	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*93.2*				*79.0-125*		*11/06/2021 00:48*	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*100*				*79.0-125*		*11/15/2021 07:22*	WG1774235

Method Blank (MB)

(MB) R3729326-2 11/05/21 19:15

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)	*97.9*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3729326-1 11/05/21 17:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0440	88.0	77.0-122	
Toluene	0.0500	0.0426	85.2	80.0-121	
Ethylbenzene	0.0500	0.0461	92.2	80.0-123	
Total Xylene	0.150	0.135	90.0	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*97.5*	*79.0-125*	

Method Blank (MB)

(MB) R3729777-3 11/15/21 03:27

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)	*99.8*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3729777-1 11/15/21 01:44

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0500	100	77.0-122	
Toluene	0.0500	0.0480	96.0	80.0-121	
Ethylbenzene	0.0500	0.0523	105	80.0-123	
Total Xylene	0.150	0.152	101	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*98.6*	*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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®

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

Report to: **Becky Haskell**

Email To: **becky.haskell@ghd.com;glenn.quinney@ghd.co**

Project Description: **Lovington Gathering WTI, SRS 2006-142**

City/State Collected: Lovington NM

Please Circle: PT MT CT ET

Phone: **432-250-7917**

Client Project # 5125 2006-142

Lab Project # **PLAINSGHD-11209905**

SDG # L1426447

Table # H097

Collected by (print): David Fletcher

Site/Facility ID # **SRS 2006-142**

P.O. #

Acctnum: **PLAINSGHD**

Template: **T167394**

Prelogin: **P883784**

PM: **823 - Olivia Studebaker**

PB:

Collected by (signature):

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

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y V

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl EXT to C35	Remarks	Sample # (lab only)
MW3R	GRAB	GW	N/A	11-1-21	1315	3	X		-01
MW5R				11-1-21	1340				-02
MW7				11-1-21	1400				-03
MW9				11-1-21	1420				-04
MW11				11-1-21	1450				-05
MW2R				11-2-21	1030				-06
MW1R				11-2-21	1100				-07
MW12				11-2-21	1130				-08
MW4R				11-2-21	1200				-09
DUP									-10

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	11-2-21	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.6 °C Bottles Received: 30	
	11-2-21	1500			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/4/21 Time: 830	Hold: Condition: NCF / OK
			T. Robertson		

Pace Analytical®

ANALYTICAL REPORT

November 15, 2021

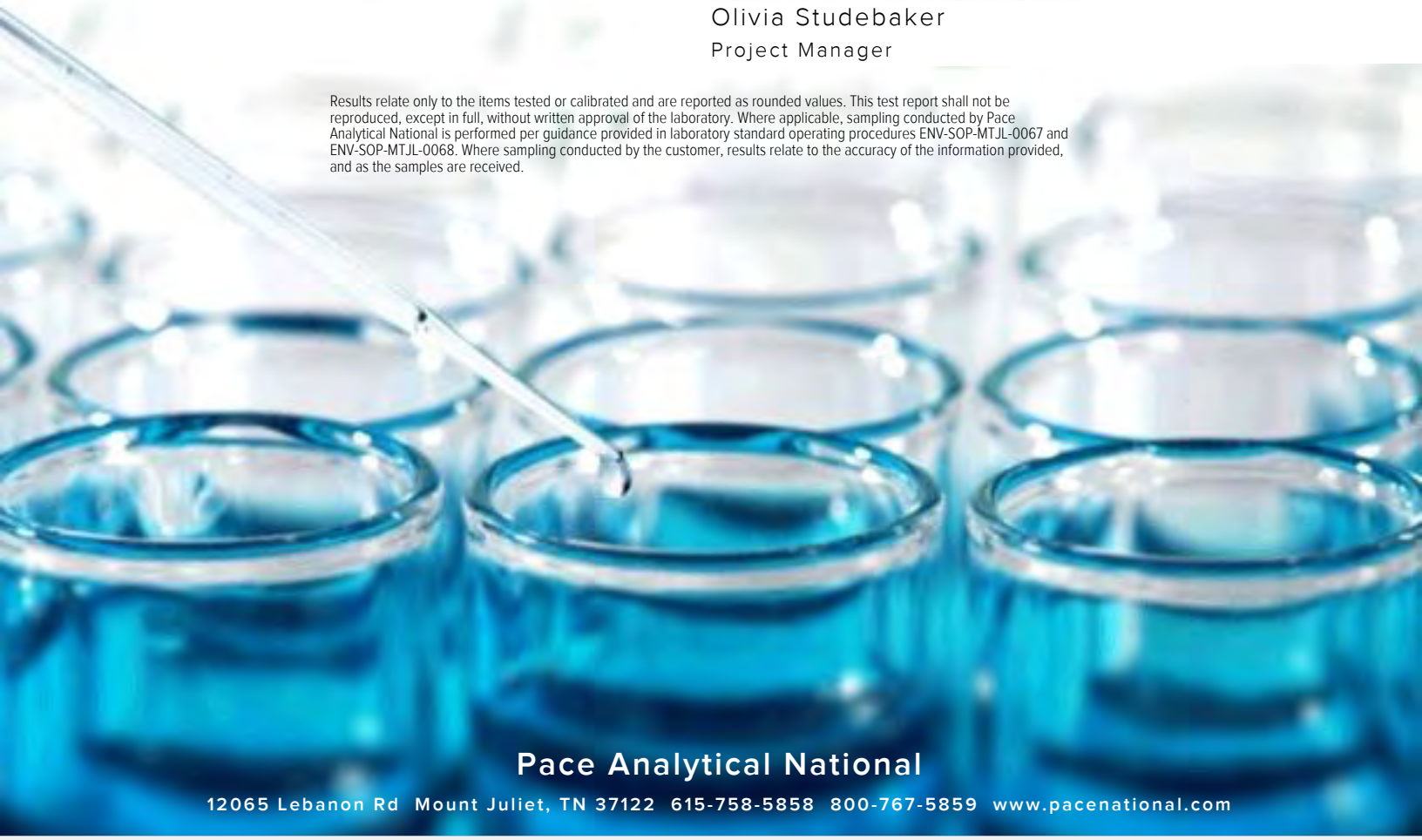
Plains All American, LP - GHD

Sample Delivery Group:	L1426445
Samples Received:	11/04/2021
Project Number:	SRS 2006-142
Description:	Lovington Gathering WTI, SRS 2006-142
Site:	SRS 2006-142
Report To:	Becky Haskell 2135 S Loop 250 W Midland, TX 79703

Entire Report Reviewed By:

Olivia Studebaker
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

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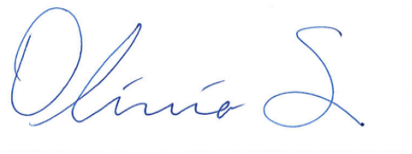
SAMPLE SUMMARY

JW WELL L1426445-01 GW

			Collected by	Collected date/time	Received date/time
			David R.	11/01/21 12:05	11/04/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 20:06	11/05/21 20:06	BMB	Mt. Juliet, TN

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



Olivia Studebaker
Project Manager

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

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

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

Olivia Studebaker
Project Manager

Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 11/15/2021 11:54
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426445-01
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391

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

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

Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 11/15/2021 11:54
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426445-01
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 11/15/2021 11:54
Project Name: Lovington Gathering WTI, SRS 2006-142	Laboratory Job Number: L1426445-01
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1769391

ER #[1]	Description
	The Exception Report intentionally left blank, there are no exceptions applied to this SDG.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.000190	0.000500	0.000500	1	11/05/2021 20:06	WG1769391
Toluene	U		0.000412	0.00100	0.00100	1	11/05/2021 20:06	WG1769391
Ethylbenzene	U		0.000160	0.000500	0.000500	1	11/05/2021 20:06	WG1769391
Total Xylene	U		0.000510	0.00150	0.00150	1	11/05/2021 20:06	WG1769391
(S) a,a,a-Trifluorotoluene(PID)	*99.2*				*79.0-125*		*11/05/2021 20:06*	WG1769391

Method Blank (MB)

(MB) R3729326-2 11/05/21 19:15

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)	*97.9*			*79.0-125*

Laboratory Control Sample (LCS)

(LCS) R3729326-1 11/05/21 17:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0440	88.0	77.0-122	
Toluene	0.0500	0.0426	85.2	80.0-121	
Ethylbenzene	0.0500	0.0461	92.2	80.0-123	
Total Xylene	0.150	0.135	90.0	47.0-154	
(S) a,a,a-Trifluorotoluene(PID)			*97.5*	*79.0-125*	

Guide to Reading and Understanding Your Laboratory Report

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

Qualifier Description

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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	LA000356
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, LP - GHD

2135 S Loop 250 W
Midland, TX 79703

Billing Information:
Camille Bryant
10 Desta Dr., Ste. 550E
Midland, TX 79705

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®

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

Report to: **Becky Haskell**

Email To: **becky.haskell@ghd.com;glenn.quinney@ghd.co**

Project Description: **Lovington Gathering WTI, SRS 2006-142**

City/State Collected: Lovington NM

Please Circle: PT MT CT ET

Phone: **432-250-7917**

Client Project # SRS 2006-142

Lab Project # **PLAINSGHD-11209905**

SDG # L1426445

H098

Collected by (print): David Fletcher

Site/Facility ID # **SRS 2006-142**

P.O. #

Acctnum: **PLAINSGHD**

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

Template: **T167394**

Prelogin: **P883784**

PM: **823 - Olivia Studebaker**

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX 40mlAmb-HCl Ext to C35	Remarks	Sample # (lab only)
JW Well	GRAB	GW	NA	11-1-21	1205	3	X		-01
		GW							
		GW							
		GW							
		GW							
		GW							
		GW							
		GW							
		GW							
		GW							

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	11-2-21	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C	Bottles Received:
	11-2-21	1500		4.6 +0.2 =4.6	3
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:
			T. Robertson	11/4/21	830

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 93008

CONDITIONS

Operator:	OGRID:
PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	34053
	Action Number: 93008
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2021 Annual Groundwater Monitoring Report: Content satisfactory Contractor recommendations approved by NMOCD and are as follows; 1. Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8021B for all monitor wells located on-site 2. Removal of MW-3R from weekly BTEX abatement 3. Replace the ORC filter socks after 12 months of use in MW-1R, MW-2R, and MW-4R 4. Continue the operation of the oxygen emitter system installed at monitor well MW-12 5. Submit the Annual Groundwater Monitoring Report to the NMOCD no later than March 31, 2023.	8/3/2022