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:

- 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

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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printed reports)



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.

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,

Rebecca Haskell

GHD

Becky Haskell

Senior Project Manager

Tom Larson

Midland Operations Manager

Thomas Clayon



about GHD

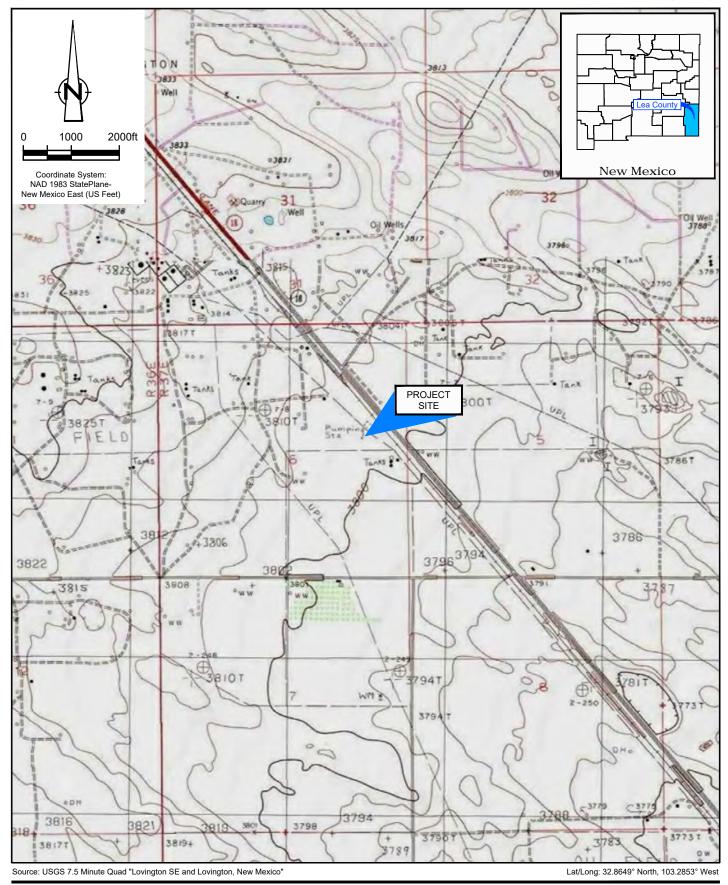
GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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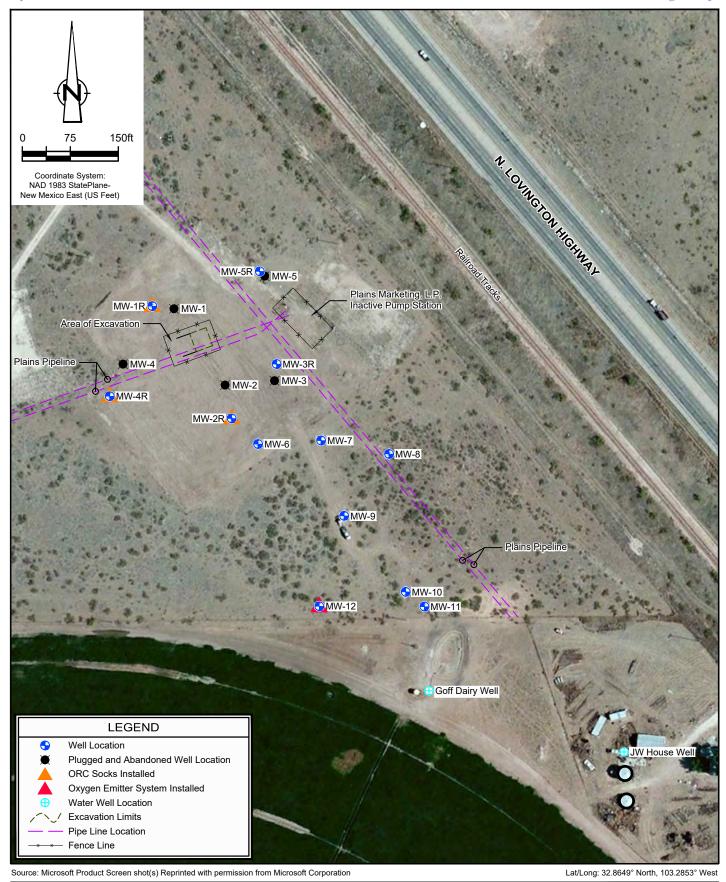
Figures





PLAINS PIPELINE L.P. LEA COUNTY, NEW MEXICO LOVINGTON GATHERING WTI 11209905 May 24, 2021

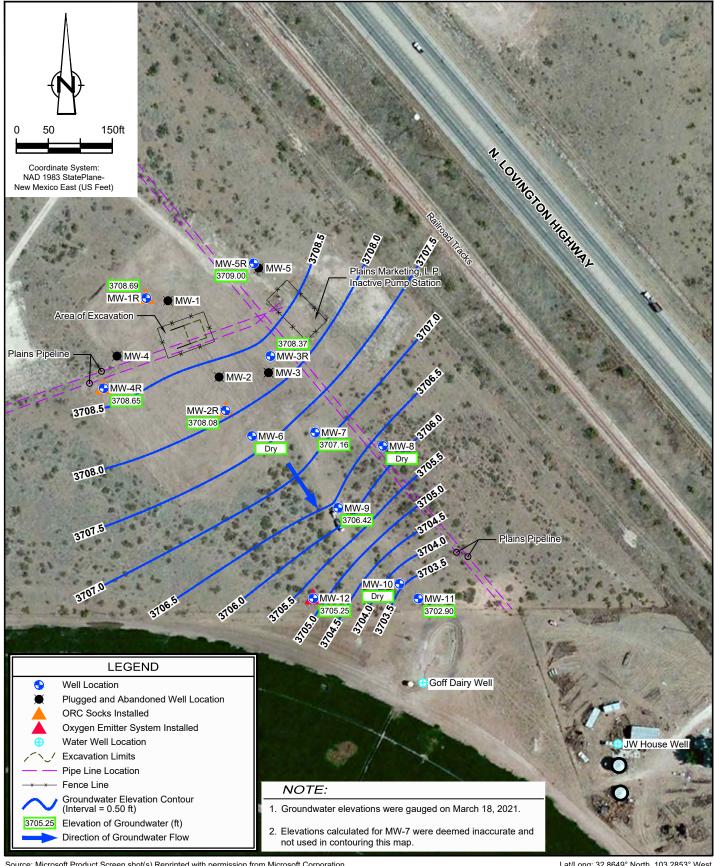
SITE LOCATION MAP



GHD

PLAINS PIPELINE L.P. LEA COUNTY, NEW MEXICO LOVINGTON GATHERING WTI 11209905 Jan 21, 2022

SITE DETAILS MAP



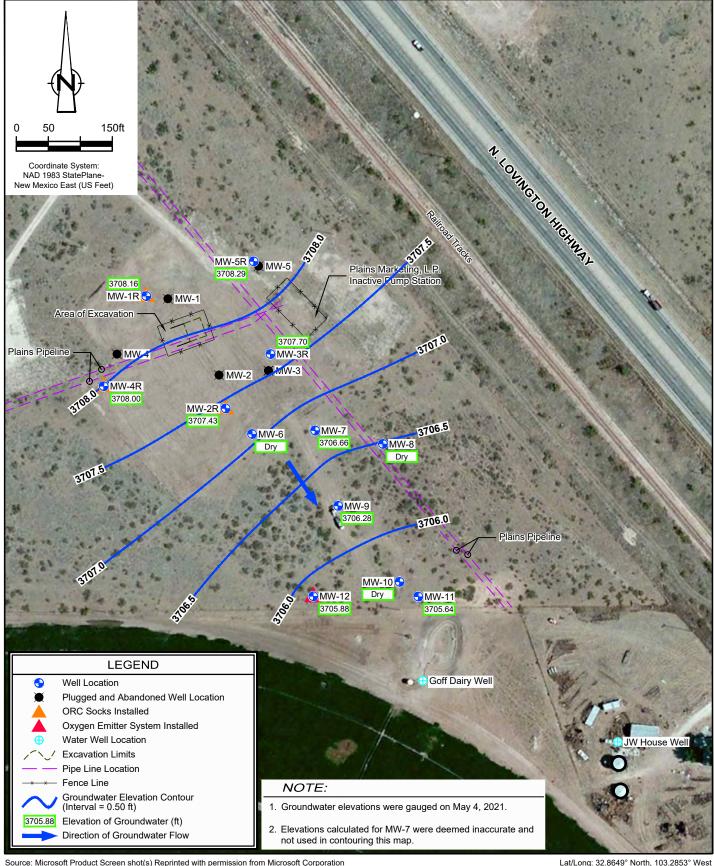
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PLAINS PIPELINE L.P. LEA COUNTY, NEW MEXICO LOVINGTON GATHERING WTI

11209905 Jan 21, 2022

GROUNDWATER GRADIENT MAP - MARCH 2021



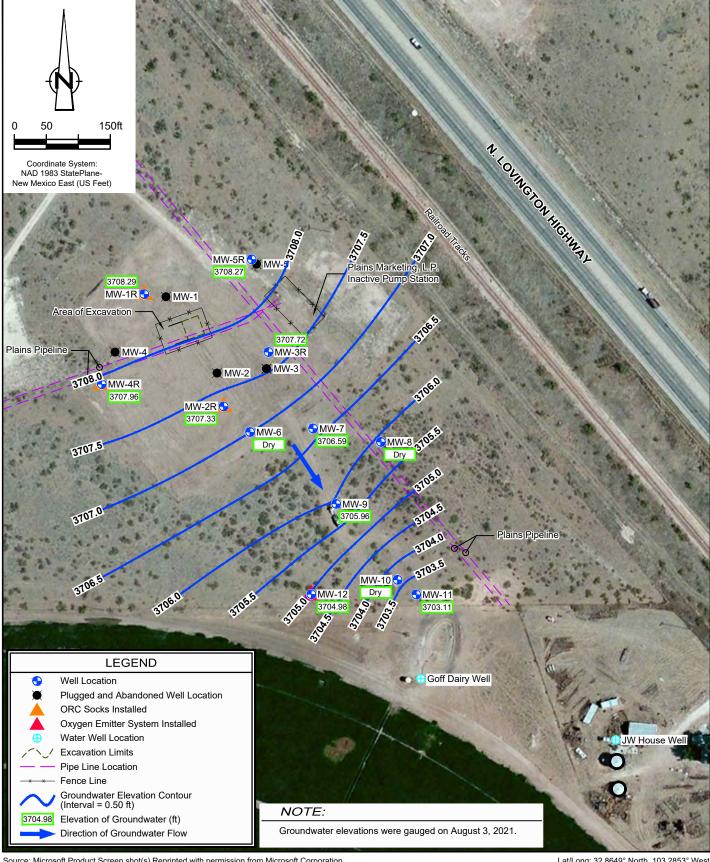
Lat/Long: 32.8649° North, 103.2853° West



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

11209905 Jan 21, 2022

GROUNDWATER GRADIENT MAP - MAY 2021



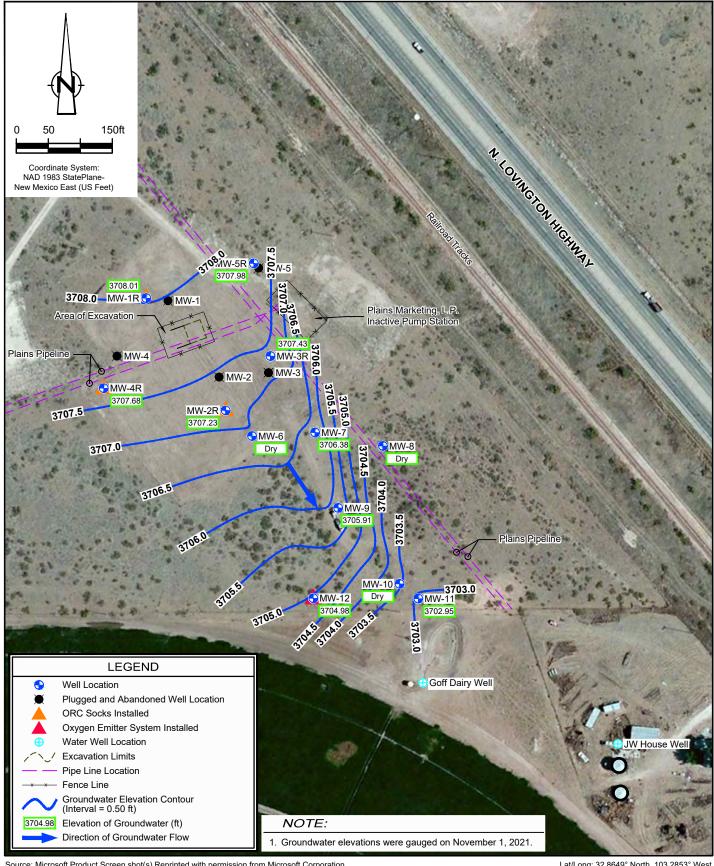
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PLAINS PIPELINE L.P. LEA COUNTY, NEW MEXICO LOVINGTON GATHERING WTI

11209905 Jan 21, 2022

GROUNDWATER GRADIENT MAP - AUGUST 2021



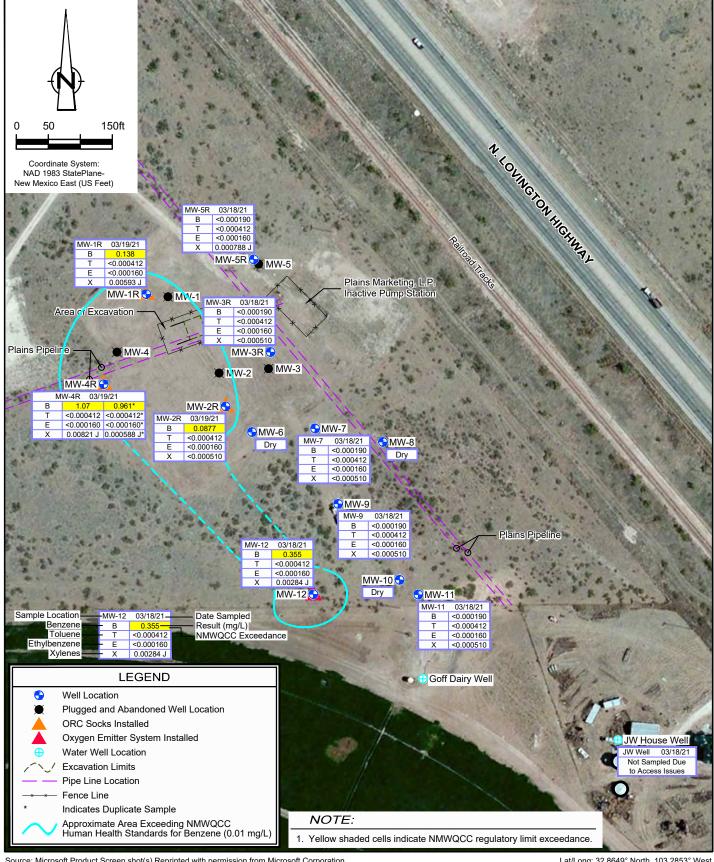
Lat/Long: 32.8649° North, 103.2853° West



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

11209905 Jan 21, 2022

GROUNDWATER GRADIENT MAP - NOVEMBER 2021



Lat/Long: 32.8649° North, 103.2853° West

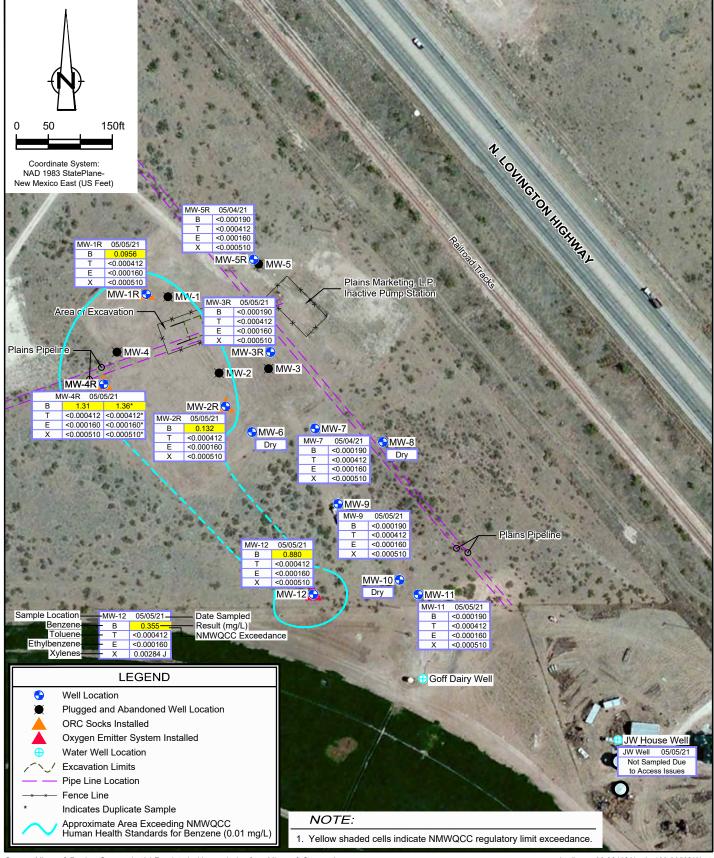
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Jan 21, 2022



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BTEX CONCENTRATIONS IN GROUNDWATER MAP - MARCH 2021



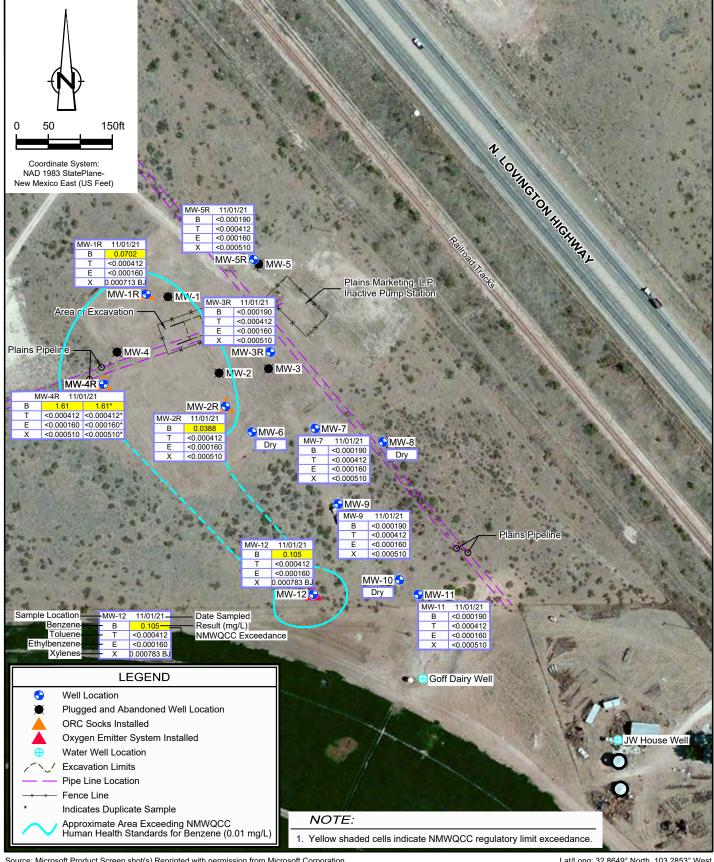
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BTEX CONCENTRATIONS
IN GROUNDWATER MAP - MAY 2021

11209905 Jan 21, 2022



Lat/Long: 32.8649° North, 103.2853° West

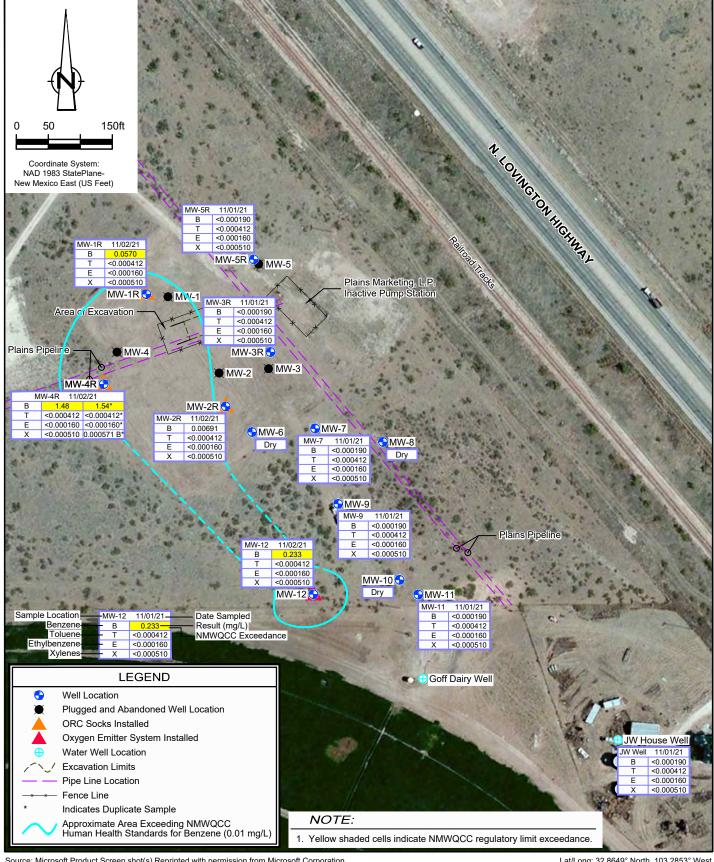
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Jan 21, 2022



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BTEX CONCENTRATIONS IN GROUNDWATER MAP - AUGUST 2021



Lat/Long: 32.8649° North, 103.2853° West



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BTEX CONCENTRATIONS IN GROUNDWATER MAP - NOVEMBER 2021

FIGURE 10

11209905

Jan 21, 2022

Tables

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	-	1	3
MW-1R	3806.62	9/23/21	99.22	-	0.00	3707.40	-	-	1	3
MW-1R	3806.62	9/30/21	98.83	-	0.00	3707.79	108.91	-	1	-
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	-	-	1	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	1	3
MW-3R	3806.15	4/2/20	94.58	-	0.00	3711.57	-	-	1	4
MW-3R	3806.15	4/10/20	95.15	-	0.00	3711.00	-	-	1	3
MW-3R	3806.15	4/17/20	95.58	-	0.00	3710.57	-	-	1	5
MW-3R	3806.15	4/20/20	95.75	-	0.00	3710.40	-	-	1	3
MW-3R	3806.15	4/30/20	96.20	-	0.00	3709.95	-	-	1	3
MW-3R	3806.15	5/6/20	97.48	-	0.00	3708.67	-	-	1	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

Table 1

	Elevation of Top of		Depth to	Depth to	LNAPL	Elevation of the	Measured	Well Screen Interval (fbgs)	Volume Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	-	-

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	1	-	1	Dry	92.70	-	-	-
MW-6	3806.08	4/27/21	•	-	-	Dry	92.72	-	-	-
MW-6	3806.08	5/4/21	1	-	1	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

	Elevation of Top of		Depth to	Depth to	LNAPL	Elevation of the		Well Screen Interval (fbgs)	Volume Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	-	-
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Table 1

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	-	-

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

	Elevation		Depth				Well Screen	Volume		
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	=	-	

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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

	Elevation			Depth				Well Screen	Volume	
	of Top of		Depth to	to	LNAPL	Elevation of the	Measured	Interval (fbgs)	Product	Volume
	Casing		Groundwater	LNAPL	Thickness	Potentiometric	Well Depth	Well Diameter	Bailed	Groundwater
Well ID	(famsl)	Date	(fbtoc)	(fbtoc)	(ft.)	Surface (famsl)	(fbtoc)	(in.)	(gal.)	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	-	1	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	-	1	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	-	-	1	15
MW-12	3806.04	5/6/20	99.80	-	0.00	3706.24	-	-	1	10
MW-12	3806.04	5/12/20	100.10	-	0.00	3705.94	-	-	1	20
MW-12	3806.04	5/20/20	100.35	-	0.00	3705.69	-	-	1	5
MW-12	3806.04	6/17/20	Bubbler	-	1	-		-	1	ı
MW-12	3806.04	7/28/20	Bubbler	-	-	-	-	-	-	-
MW-12	3806.04	8/26/20	101.62	-	0.00	3704.42	-	-	1	ı
MW-12	3806.04	9/2/20	101.80	-	0.00	3704.24	110.01	-	1	4
MW-12	3806.04	10/21/20	Bubbler	-	1	-	-	-	1	ı
MW-12	3806.04	11/5/20	97.89	-	0.00	3708.15	110.01	-	1	7
MW-12	3806.04	12/8/20	Bubbler	-	0.00	-	110.01	-	1	ı
MW-12	3806.04	1/27/21	Bubbler	-	0.00	-	-	-	1	ı
MW-12	3806.04	2/2/21	96.76	-	0.00	3709.28	110.09	-	1	6.5
MW-12	3806.04	3/18/21	100.79	-	0.00	3705.25	110.09	-	1	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

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)		Elevation of the Potentiometric Surface (famsl)	Well Depth	· · · · · · · · · · · · · · · · · · ·	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

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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

Table 2

	Sample	Benzene	Toluene	Ethylbenzene	Total Xylenes
Sample ID	Date	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Campic 12	Date			nan Health Standa	
		0.01	0.75	0.75	0.62
				0.11	5.5
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
10100 - 117	11/2/21	0.0070	10.000112	-0.000100	-0.000010
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
			<0.000412	<0.000160	<0.000510
MW-2R	11/5/20	0.0924			
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) MW-3R	11/5/20 2/3/21	<0.000190	<0.000412 <0.000412	0.000364 J <0.000160	0.00112 J <0.000510
MW-3R	3/18/21	0.000235 J <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

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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	Benzene	Toluene	Ethylbenzene	Total Xylenes
Sample ID	Date	(mg/l)	(mg/l)	(mg/l)	(mg/l)
	_		NMWQCC Hur	nan Health Standa	ards
		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
IVIVV-SIX	1 1/ 1/2 1	40.000130	40.000412	VO.000100	40.000310
MW-6	2/21/20		Dny		
MW-6	5/21/20		Dry 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		
IVIVV-O	0/4/21	L	Diy		

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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)
Sample ID	Date			man Health Standa	
		0.01	0.75	0.75	0.62
MW-8	11/1/21	0.01	Dry	0.70	0.02
10100-0	1 1/ 1/2 1		Біу		
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
	2/2 / / 22				
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
0-# D : \\	4/4/00	10.000100	10.000110	10.000100	0.000050
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	Benzene	Toluene	Ethylbenzene	Total Xylenes
Sample ID	Date	(mg/l)	(mg/l)	(mg/l)	(mg/l)
				nan Health Standa	
		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
, and the second					
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	0.000.00	Off	0.000.00	0.0000.0
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 ac	cess	
JW House Well	5/21/20		Couldn't get ac		
JW House Well	9/3/20		Couldn't get ac		
JW House Well	11/5/20		Couldn't get ac		
JW House Well	3/18/21		Couldn't get ac		
JW House Well	6/11/21		Couldn't get ac		
JW House Well	8/4/21		Couldn't get ac		
JW House Well	11/1/21	<0.000190	<0.000412	<0.000160	<0.000510
	, .,	0.000	5.555112	3.330.00	2.000010
Trip Blank	5/21/20	<0.000190	<0.000412	<0.000160	<0.000510
p Diam.	3/2 1/20	3.000100	3.000 TIZ	3.000 100	0.000010

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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	Benzene	Toluene	Ethylbenzene	Total Xylenes
Sample ID	Date	(mg/l)	(mg/l)	(mg/l)	(mg/l)
			NMWQCC Hui	nan Health Standa	ards
		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)
			T.		1					NM	WQCC Regula	tory Standards					1			
	1	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
104/4D	44/40/40	-0.00004.40	-0.0000400	-0.0000400	-0.00000440	-0.0000440	-0.00000040	-0.0000007	-0.0000400	-0.0000400	-0.0000000	0.0000500	-0.0000457	0.0000404	-0.0000440	0.00400	0.0000000 1	-0.0000447	2.22222	0.000400
MW-1R MW-1R		<0.0000140		<0.0000120 <0.0000120	<0.00000410 <0.00000410	1		<0.00000227 <0.00000227	<0.0000136 <0.0000136		1	0.0000590 0.000234	<0.0000157 <0.0000157		<0.0000148 <0.0000148	0.00169 0.000829	0.0000203 J 0.0000407 J	<0.0000117 <0.0000117	0.000828 0.000471	0.000483 0.000254
IVIVV-TR	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 NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	12/10/00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.000	0.000		0.000	3.333	3.000	3.000	3.333	0.000	0.000	3.000
MW-2R	11/16/18	<0.0000140	<0.000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.000108	<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		<0.0000140	<0.0000100	<0.0000120		1		<0.00000227	1		1	0.00000138 B J	<0.0000157	1	<0.0000148	0.0000671 B J	<0.00000820	<0.0000117	<0.00000821	<0.00000902
MW-3R	10/18/19	<0.000140	<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
D #304 4	40/0/00	.0.005	2.225	0.005	.0.005	.0.005	0.005	.0.005	0.005	.0.005	2.225		0.005	.0.005	.0.005	.0.005	0.005	0.005	2.225	0.005
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 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							<0.00000212				1	0.000226	<0.0000157		<0.0000148		0.000789	0.0000653	0.000986	0.000308
	10, 10, 10	0.00001.10	0.00001020	0.0000.120	0.00000110	0.0000110	0.000002.12	0.0000022.	0.0000100	0.0000.00	0.0000000	3,333	0.0000101		0.00001.10	0.0000.00	0.000.00	0.000000		0.00000
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	<0.000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.0000396	<0.00000105	<0.0000157	<0.00000850	<0.000148	0.0000774 B J	<0.00000820	<0.0000117	<0.0000821	<0.00000902
MW-5R	10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.000108	<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
B4047 =	40/0/00	-0.005	-0.005	-0.005	.0.005	10.005	-0.005	.0.005	-0.005	-0.005	10.005	N/A	10.005	10.005	-0.005	10.005	-0.005	-0.005	-0.005	10.005
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 <0.005	<0.005	<0.005 <0.005	NA NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-7	12/18/09	<u>~0.005</u>	<0.005	<0.005	<0.005	<0.005	<u>~0.005</u>	<0.005	~ 0.005	<0.005	~U.UU5	IVA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		3.333	5.000	3.000	2.000	5.555	3.000	0.000	5.000	3.000	5.555	1	5.555	5.555	3.000	5.555	5.000	5.000	2.000	5.556

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 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-Methyinaphthalene (mg/L)	2-Methylnaphthalene (mg/L)
				<u> </u>									l						
																			0.03
																			<0.005
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
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
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
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
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
11/16/18	<0.0000140	<0.000100	<0.0000120	<0.0000410	<0.0000116	<0.00000212	<0.00000227	<0.0000136	<0.0000108	<0.00000396	<0.0000105	<0.0000157	<0.0000850	<0.0000148	0.0000424 B J	<0.00000820	<0.0000117	<0.0000821	<0.00000902
10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.0000410	<0.000116	<0.00000212	<0.00000227	<0.000136	<0.0000108	<0.0000396	0.00000473 B J	<0.0000157	<0.0000850	<0.000148	0.0000237 J	<0.00000820	<0.0000117	<0.00000821	<0.00000902
11/16/18	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.000116	<0.00000212	<0.00000227	<0.000136	<0.0000108	<0.0000396	0.00000984 B J	<0.0000157	0.0000128 J	<0.000148	0.000249 B J	0.00000954 J	<0.000117	0.0000983 J	0.0000355
10/18/19	<0.0000140	<0.0000100	<0.0000120	<0.00000410	<0.0000116	<0.00000212	<0.00000227	<0.000136	<0.0000108	<0.0000396	0.0000477 B J	<0.0000157	0.0000104 J	<0.000148	0.000684	0.0000162 J	<0.0000117	0.000898	0.000278
	12/2/08 12/18/09 12/15/11 11/27/12 11/16/18 10/18/19	Date 36 0.001 12/2/08 <0.005 12/18/09 <0.005 12/2/08 <0.005 12/2/08 <0.005 9/29/09 <0.005 12/15/11 <0.0102 11/27/12 <0.00017 11/16/18 <0.0000140 10/18/19 <0.0000140 11/16/18 <0.0000140	Date 3001 0.001 12/2/08 <0.005 <0.005 12/18/09 <0.005 <0.005 12/2/08 <0.005 <0.005 12/2/08 <0.005 <0.005 9/29/09 <0.005 <0.005 12/15/11 <0.0102 <0.0102 11/27/12 <0.00017 <0.00038 11/16/18 <0.0000140 <0.0000100 10/18/19 <0.0000140 <0.0000100 11/16/18 <0.0000140 <0.0000100	Date July Author 0.001 0.001 0.001 12/2/08 <0.005 <0.005 <0.005 12/18/09 <0.005 <0.005 <0.005 12/2/08 <0.005 <0.005 <0.005 9/29/09 <0.005 <0.005 <0.005 12/15/11 <0.0102 <0.0102 <0.0102 11/27/12 <0.00017 <0.00038 <0.00035 11/16/18 <0.0000140 <0.0000100 <0.0000120 11/16/18 <0.0000140 <0.0000100 <0.0000120 11/16/18 <0.0000140 <0.0000100 <0.0000120	0.001 0.001 0.001 0.001 12/2/08 <0.005 <0.005 <0.005 <0.005 12/18/09 <0.005 <0.005 <0.005 <0.005 12/2/08 <0.005 <0.005 <0.005 <0.005 9/29/09 <0.005 <0.005 <0.005 <0.005 12/15/11 <0.0102 <0.0102 <0.0102 <0.0102 <0.00025 11/27/12 <0.00017 <0.00038 <0.00035 <0.00025 11/16/18 <0.0000140 <0.0000100 <0.0000120 <0.00000410 11/16/18 <0.0000140 <0.0000100 <0.0000120 <0.00000410 11/16/18 <0.0000140 <0.0000100 <0.0000120 <0.00000410	0.001 0.001 0.001 0.001 0.001 0.0002 12/2/08 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.0005 <0.0005 <0.0005 <0.0000 <0.00000 <0.000000 <0.0000000 <0.000000000 <0.0000000000 <0.00000000000	12/2/08	None	Comple Date Complete Date Date Complete Date Complete Date Complete Date Complete	No.001	NAWQCC Regular Name	NMWQCC Regulatory Standards NM	Name	Name	Name	Name	Fig. Fig.	Fig. Fig.	Fig. Fig.

- 1. Yellow shaded cells indicate New Mexico Oil Conservation Division Regulatory Limit exceedance. Require additional sampling.

- Pellow shaded cells indicate New Mexico on Conservation Division regulatory Entire exceedance. Require additional sampling.
 Bold indicates detection.
 PAH analyses by EPA Method 8270C.
 2008 through 2012 results collected by Basin Environmental Service Technologies, LLC.
 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 1 Reddivedch DQ Advs3×24820402 2:42:50 PM

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 For Page 48 pf 230 Revised October 10, 2003

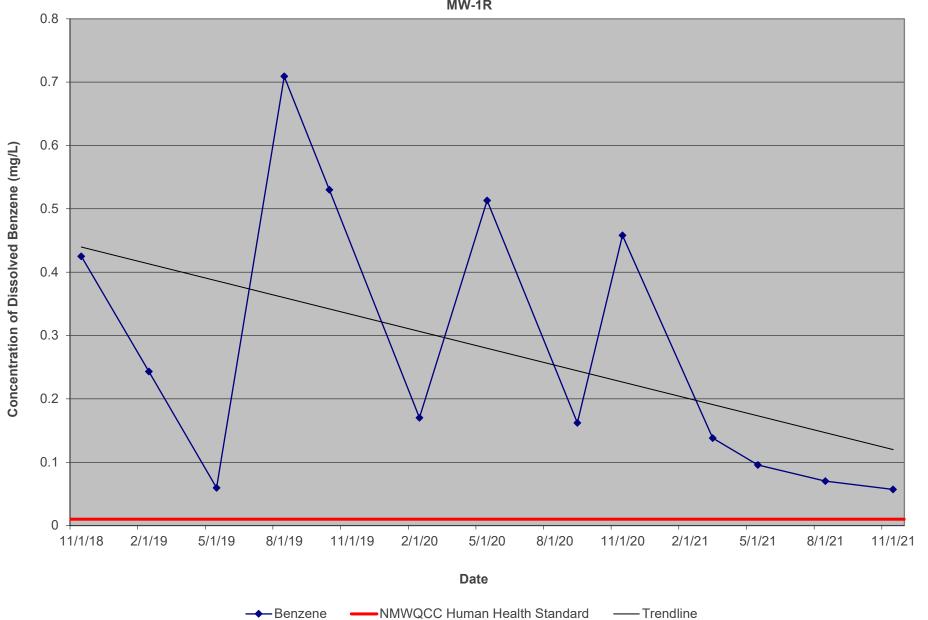
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

						OPER!	ATOR		x Initi	al Report	П	Final Report	
		ains Pipeline			Contact Camille Reynolds								
		Hwy 82, Lo		NM 88260	1	Telephone N	No. 505-441-096	55					
		ton Gatherin	ig WTI			Facility Typ	e 6"Steel Pipeli	ne					
Surface Ow	ner Rober	t Rice		Mineral Ow	ner				Lease N	lo.			
					IOI	OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the N	North/	South Line	Feet from the	East/V	Vest Line	County			
Н	6	178	37E						Lea				
		Latitud	le_32° 51	' 56.0"		Longitude	103° 17' 07.2'	,		_			
				NATU	RE	OF RELI							
Type of Release Source of Rel							Release 12 barrel		Volume F	Recovered 8	3 barrels		
Source of Rei	lease of Ste	el Pipeline					our of Occurrence	e	Date and	Hour of Di	scovery		
Was Immedia	te Notice (Given?				4-21-2006 If YES, To		,	4-21-2006	6@13:15		- 1	
		\boxtimes	Yes	No Not Requ	ired	Pat Caperto				/	22232	425 ₂₆ 23	
By Whom? C						Date and H	lour 4-21-2006 @	15:35		100		2	
Was a Watero	ourse Read	hed?	Yes 🛛	No		If YES, Vo	lume Impacting the	he Wate	rcourse.	/ 63	n.A.	21 6	
If a Watercou	rse was Im	pacted, Descri	be Fully.*							12	6.6	-	
										181 VI 31617 181	Car	ve-	
				Taken Internal corr line. The pressure The line was appro					gravity of	the sweet	crude oil	l was 34.	
Describe Area approximately	Affected a 1,500 ft ² .	und Cleanup A	action Take	en.* The impacted se	oil wa	s excavated a	and stockpiled on	plastic.	Aerial ext	ent of surfa	ice impa	ct was	
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 are regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endange 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 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.									danger				
Signature	am	elet	94	nolds			OIL CONS	ERV	ATION I	DIVISIO	N		
Printed Name:	Camille Re	ynolds	1 0		A	pproved by I	District Supervisor	r:					
Title: Remedia	tion Coordi	inator			A	pproval Date		E	piration D	ate:			
E-mail Address	s: cjreynold	ls@paalp.com	l		Conditions of Approval:								
Date: 4/26/2006 Phone:505-441- Attached													

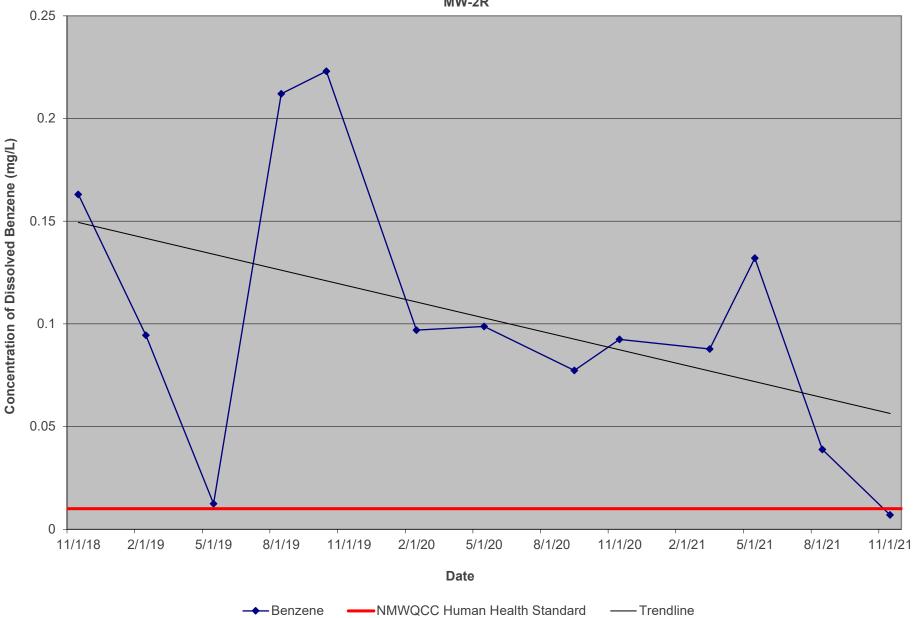
Appendix B Charts of Dissolved Benzene Versus Time

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

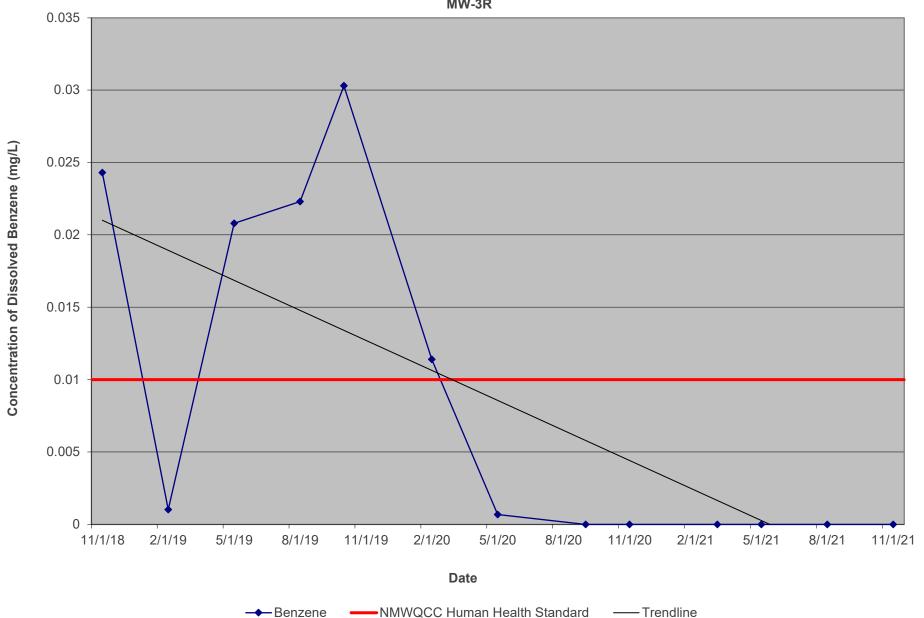


→Benzene

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



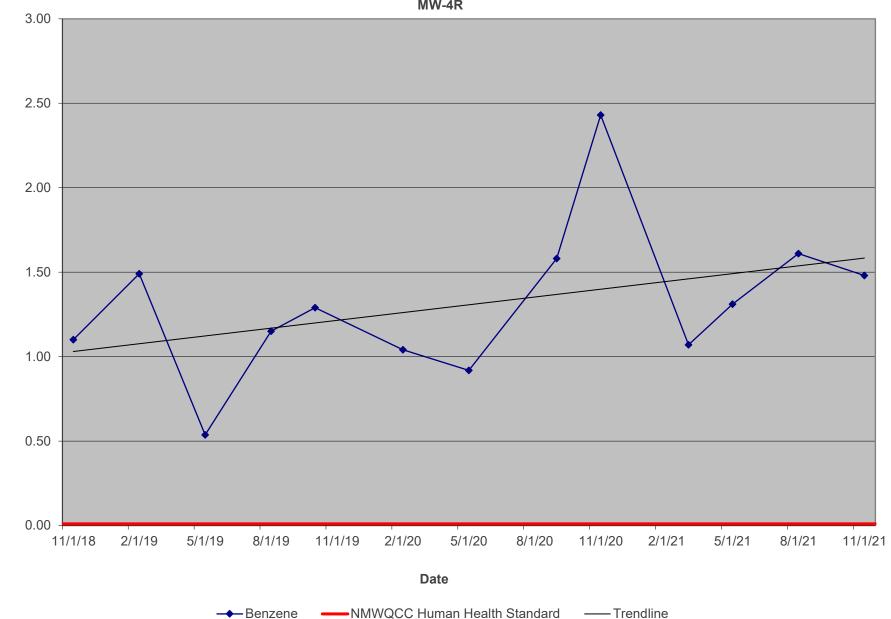
LOVINGTON GATHERING WTI, SRS 2006-142 LEA COUNTY, NEW MEXICO NMOCD AP-96 CONCENTRATION OF DISSOLVED BENZENE vs. TIME MW-3R



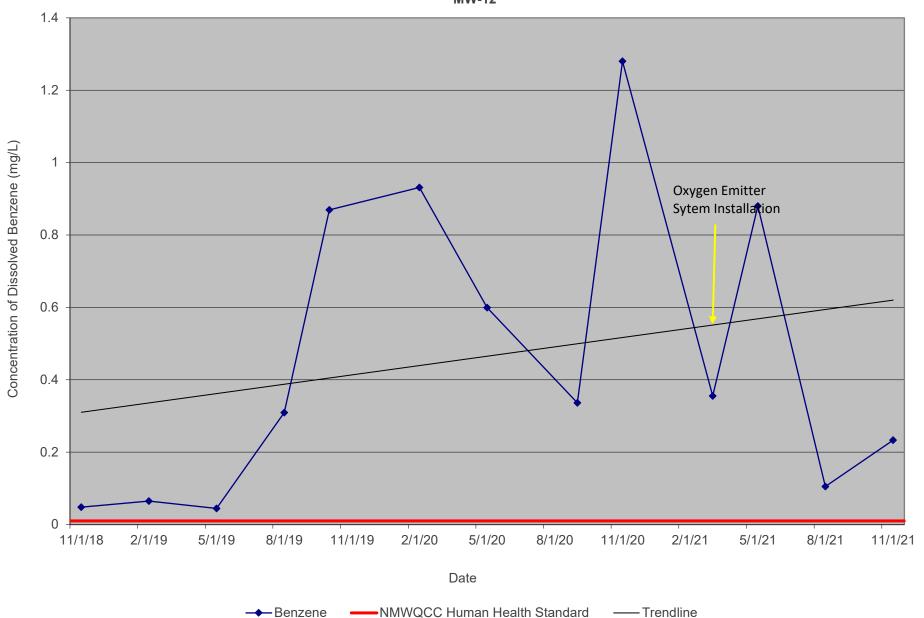
Concentration of Dissolved Benzene (mg/L)

Received by OCD: 3/24/2022 2:42:50 PM

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



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

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.

³Ss















Pace Analytical National

Mount Juliet, TN 37122

615-758-5858

800-767-5859

www.pacenational.com

12065 Lebanon Rd

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Sc: Sample Chain of Custody

24

MW-5R L1313868-01 GW			Collected by Heath Boyd	Collected date/time 02/03/21 11:30	Received da 02/04/21 09	
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 02/03/2112:00	Received da 02/04/21 09	
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 02/03/2112:30	Received da 02/04/21 09	
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 02/03/2113:00	Received da 02/04/21 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B Volatile Organic Compounds (GC) by Method 8021B	WG1617445 WG1617717	1 10	02/06/21 17:17 02/08/21 02:10	02/06/21 17:17 02/08/21 02:10	JAH ACG	Mt. Juliet, TN Mt. Juliet, TN
MW-3R L1313868-05 GW			Collected by Heath Boyd	Collected date/time 02/03/2113:30	Received da 02/04/21 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B Volatile Organic Compounds (GC) by Method 8021B	WG1617445 WG1617717	1	02/06/21 17:39 02/08/21 02:31	02/06/21 17:39 02/08/21 02:31	JAH ACG	Mt. Juliet, TN Mt. Juliet, TN
MW-2R L1313868-06 GW			Collected by Heath Boyd	Collected date/time 02/03/2114:00	Received da 02/04/21 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B Volatile Organic Compounds (GC) by Method 8021B	WG1617445 WG1617717	1 20	02/06/21 18:00 02/08/21 02:53	02/06/21 18:00 02/08/21 02:53	JAH ACG	Mt. Juliet, TN Mt. Juliet, TN
MW-1R L1313868-07 GW			Collected by Heath Boyd	Collected date/time 02/03/2114:30	Received da 02/04/21 09	
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 02/03/2115:30	Received da 02/04/21 09	
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





















	Heath Boyd	02/03/21 15:00	02/04/21 09:	00
Dilution	Preparation	Analysis	Analyst	Location
	date/time	date/time		
1	02/08/21 03:58	02/08/21 03:58	ACG	Mt. Juliet, TN
	Collected by	Collected date/time	Received dat	e/time
	Heath Boyd	02/03/21 00:00	02/04/21 09:	00
Dilution	Preparation	Analysis	Analyst	Location
	date/time	date/time		
1	02/06/21 18:22	02/06/21 18:22	JAH	Mt. Juliet, TN
	02/08/21 04:20	02/08/21 04:20	ACG	Mt. Juliet, TN
	1	date/time 1 02/08/21 03:58 Collected by Heath Boyd Dilution Preparation date/time	date/time date/time	date/time date/time 1 02/08/21 03:58 02/08/21 03:58 ACG Collected by Heath Boyd Collected date/time Received date/time Received date/time Dilution Preparation Analysis Analyst date/time Analyst date/time





















Mark W. Beasley

Project Manager

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.

¹Cp





















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,
 - 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



Lab	orato	ory Name: Pace Analytical National	LRC Date: 02/08/2021 15:50					
Pro	ject N	Name: Lovington Gathering WTI	Laboratory Job Number: L1313868-01, 02, 03, 04, 05	, 06, 0 [°]	7, 08, (09 and	10	
Rev	iewe	r 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?	Х				
		Were all departures from standard conditions describe	d in an exception report?			Х		
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the	e laboratory ID numbers?	Х				
		Are all laboratory ID numbers cross-referenced to the	corresponding QC data?	Х				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding	g times?	Х				
		Other than those results < MQL, were all other raw value	ues bracketed by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
		Were all analyte identifications checked by a peer or si	upervisor?	Х				
		Were sample detection limits reported for all analytes r	not detected?	Х				
		Were all results for soil and sediment samples reported	d on a dry weight basis?	Х				
		Were % moisture (or solids) reported for all soil and sec	diment samples?			Х		
		Were bulk soils/solids samples for volatile analysis extr	acted with methanol per SW846 Method 5035?			Х		
		If required for the project, are TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?		Х				
		Were surrogate percent recoveries in all samples withi	n the laboratory QC limits?	Х				
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		Х				
		Were blanks analyzed at the appropriate frequency?		Х				
		Were method blanks taken through the entire analytical cleanup procedures?	al process, including preparation and, if applicable,	Х				
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical proc	edure, including prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laboration	oratory QC limits?	Х				
		Does the detectability check sample data document th used to calculate the SDLs?	e laboratory's capability to detect the COCs at the MDL	Х				
		Was the LCSD RPD within QC limits?		Х				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	a					
		Were the project/method specified analytes included in	n the MS and MSD?			Х		
		Were MS/MSD analyzed at the appropriate frequency?				Х		
		Were MS (and MSD, if applicable) %Rs within the labora	atory QC limits?			Х		
		Were MS/MSD RPDs within laboratory QC limits?				Х		
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for ea	ch matrix?			Х		
		Were analytical duplicates analyzed at the appropriate	frequency?			Х	<u> </u>	
		Were RPDs or relative standard deviations within the la	boratory QC limits?			Х		
R9	OI	Method quantitation limits (MQLs):				_		
		Are the MQLs for each method analyte included in the	laboratory data package?	Х			ļ	
		Do the MQLs correspond to the concentration of the lo		X				
		Are unadjusted MQLs and DCSs included in the labora	tory data package?	X	<u> </u>			L
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions r		X	<u> </u>	1		ļ
		the sample results?	r the SDL to minimize the matrix interference effects on	Х				
		Is the laboratory NELAC-accredited under the Texas La and methods associated with this laboratory data pack	aboratory Accreditation Program for the analytes, matrices age?	×				

^{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



Lab	orato	ory Name: Pace Analytical National	LRC Date: 02/08/2021 15:50									
Pro	ject N	Name: Lovington Gathering WTI	Laboratory Job Number: L1313868-01, 02, 03, 04	, 05, 06, 0	7, 08,	09 and	10					
Rev	viewe	r Name: Mark W. Beasley	Prep Batch Number(s): WG1617445 and WG161771	7								
# 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	s for each analyte within QC limits?			Х						
		Were percent RSDs or correlation coefficient criteria m	et?	Х			1					
		Was the number of standards recommended in the me	ethod used for all analytes?	Х								
		Were all points generated between the lowest and hig	hest standard used to calculate the curve?	Х								
		Are ICAL data available for all instruments used?		Х								
		Has the initial calibration curve been verified using an	appropriate second source standard?	Х								
S2	OI	Initial and continuing calibration verification (ICCV and	CCV) and continuing calibration blank (CCB):									
		Was the CCV analyzed at the method-required frequen	ncy?	Х								
		Were percent differences for each analyte within the m	nethod-required QC limits?	Х								
		Was the ICAL curve verified for each analyte?		Х								
		Was the absolute value of the analyte concentration in	the inorganic CCB < MDL?			Х						
S3	0	Mass spectral tuning										
		Was the appropriate compound for the method used for	or tuning?			Х						
		Were ion abundance data within the method-required	QC limits?			Х						
S4	0	Internal standards (IS)										
		Were IS area counts and retention times within the me	thod-required QC limits?	Х								
S5	OI	Raw data (NELAC Section 5.5.10)										
		Were the raw data (for example, chromatograms, spec	tral data) reviewed by an analyst?	Х								
		Were data associated with manual integrations flagged	d on the raw data?	Х								
S6	0	Dual column confirmation										
	_	Did dual column confirmation results meet the method	-required QC?			Х						
S7	0	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?				Х						
S9	I	Serial dilutions, post digestion spikes, and method of s										
		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	s of DCSs?	X								
S11	OI	Proficiency test reports					_					
		Was the laboratory's performance acceptable on the a	pplicable proficiency tests or evaluation studies?	X								
S12	OI	Standards documentation		<u> </u>			1	1				
		Are all standards used in the analyses NIST-traceable	or obtained from other appropriate sources?	X			<u> </u>	1				
S13	OI	Compound/analyte identification procedures		1								
-		Are the procedures for compound/analyte identificatio	X				<u> </u>					
S14	OI	Demonstration of analyst competency (DOC)		1								
		Was DOC conducted consistent with NELAC Chapter 5		X	1	-		 				
		Is documentation of the analyst's competency up-to-da		X	<u> </u>			<u> </u>				
S15	OI	Verification/validation documentation for methods (NE	·	1			_					
0/-		Are all the methods used to generate the data docume	ented, verified, and validated, where applicable?	X				<u> </u>				
S16	OI	Laboratory standard operating procedures (SOPs)		1			T					
		Are laboratory SOPs current and on file for each method	od performed	X			<u> </u>					

^{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. EP# = Exception Percept identification number (as Exception Report identification number (as Exception

^{5.} ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Received by OCD: 3/24/2022 2:42:50 PM Revised May 2010

Laboratory Review Checklist: Exception Reports



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						
ED #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);

- NA = Not applicable;
 NR = Not reviewed;
- 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

ONE LAB. NATRAGE 65 of 20

Collected date/time: 02/03/21 11:30

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















ONE LAB. NAT Rage 66 of 20

Collected date/time: 02/03/21 12:00

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















ONE LAB. NAT Baga 67 of 20

Collected date/time: 02/03/21 12:30

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















ONE LAB. NAT Page 68 of 20

Collected date/time: 02/03/21 13:00

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















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Collected date/time: 02/03/21 13:30

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.000235	<u>J</u>	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





















ONE LAB. NAT Rage 70 of 20

Collected date/time: 02/03/21 14:00

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















ONE LAB. NAT Rage 71 of 20

Collected date/time: 02/03/21 14:30

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















ONE LAB. NATRAGE 72 of 20

Collected date/time: 02/03/21 15:30

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















SAMPLE RESULTS - 09

ONE LAB. NAT Page 73 of 20

Collected date/time: 02/03/21 15:00

L1313868

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















SAMPLE RESULTS - 10

ONE LAB. NATRAGE 74 of 20

Collected date/time: 02/03/21 00:00

210

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















QUALITY CONTROL SUMMARY

ONE LAB. NAT Page 75 of 20

Volatile Organic Compounds (GC) by Method 8021B <u>L1313868-01,02,03,04,05,06,10</u>

Method Blank (MB)

(MB) R3620173-3 02/06/	/21 15:19			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	101			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3620173-1 02/06/	/21 14:14				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	























Volatile Organic Compounds (GC) by Method 8021B

QUALITY CONTROL SUMMARY

ONE LAB. NAT Page 76 of 20

L1313868-04,05,06,07,08,09,10

Method Blank (MB)

(MB) R3620295-3 02/07	/21 23:37			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	101			79.0-125

Laboratory Control Sample (LCS)

(LCS) RS620295-2 02/0	//21/22.45				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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 resu 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 fo 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 identification of the analyte is acceptable; the reported value is an estimate.























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 conductive 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.

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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	Al30792	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
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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
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|--|

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

T	T40 470 4000 00 40	
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



















			Billing Info	rmation:		T			Analysis / Container / Preservative				Chain of Custody Page 79 of 23		
Plains All American, LP	- GHD		Camille	Rryant		Pres							0		
2125 C Loon 250 W				iffith Drive		Chk							Pace.	Analytical*	
2135 S. Loop 250 W Midland, TX 79703			Midland	l, TX 79706									Nutional Co	inter for Testing & Innovation	
Report to: Becky Haskell			Email To: becky.ha		.com (see rema								12065 Lebanon Rd Mount Juliet, TN 37 Phone: 615-758-58	8 62 64 1-1	
Project Description: Lovington Gathering WTI				City/State Collected:	ovington, N	m							Phone: 800-767-58 Fax: 615-758-5859		
Phone: 432-250-7917 Fax:	Client Project # Plains SRS #: 2006-142			Lab Project #									D099		
Collected by (print): Heath Boyd				P.O. #			10m/Amb-HCL						Acctnum: Plai	ns GHD	
Collected by (signature):				Quote #			dm							[1313868	
3	Same Day Five Day Next Day 5 Day (Rad Only)			Date Re	esults Needed	1	m/A						Prelogin: TSR:		
Immediately Packed on Ice N Y V	Two	Day10 D		oute in	20010 1100000	No.							PB:		
	-		Donth	Date	Time	Cntrs	ВТЕХ						Shipped Via:		
Sample ID	Comp/Gr	ab Matrix *	Depth	Date	Time		ВТ						Remarks	Sample # (lab only)	
MW-SR	Grab	GW	DTW	2/3/21	1130	3	X							,91	
MW-7	1	GW	1	1	1200	1	X							202	
MW-9		GW			1230		X							_ 93	
MW-11		GW			1300		×							-94	
mW-3R		GW			1330		X							-05	
MW-ZR		GW	1. 1		1400	T	X							496	
MW-IR		GW			1430		X							-08	
MW-12		GW			1530	T	N							-08	
MW-4R		GW			1500	1	K							299	
Dup-1	1	GW	1	1		X	X	1						-10	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water	Remarks: Email final report to becky.haskell@ghd.com, c algroves@paalp.com and maochoa@paalp.com					paal	p.com,		pH	Temp		COC Seal COC Sign Bottles Correct	ample Receipt C Present/Intact ed/Accurate: arrive intact: bottles used: nt volume sent:	: NP Y N	
OT - Other	100000000000000000000000000000000000000	eturned via: _ FedEx Co	urier		Tracking #								If Applicab Headspace:		
Relinquished by : (Signature) Date: Z/3/Z1			Time: /615	Received by: (Signa	ature)			Trip Blank Re	eceived: Yes/ HCL/ TBR	МеоН		tion Correct/Ch	ecked: Y N		
Relinquished by : (Signature) Date:			Time:	Received by: (Signa	ature)			Temp: A3	oc Bottles Rec	ceived:	If preserva	ation required by Lo	gin: Date/Time		
Relinquished by: (Signature) Released to Imaging: 8/3/2	022 7.45.	Date:		Time:	Received for lab by	: (Signa	ature)		Date:/	Time:	0	Hold:		Conditions NCF / QK	



Pace Analytical® ANALYTICAL REPORT

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

Becky Haskell Report To:

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

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Sc: Sample Chain of Custody

24

SAMPLE SUMMARY

MIN ED 1422004C 04 CW			Collected by Zach Comino	Collected date/time 03/18/21 11:00	Received da 03/23/21 08:	
MW-5R L1329846-01 GW Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/25/21 23:18	03/25/21 23:18	TPR	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-7 L1329846-02 GW			Zach Comino	03/18/21 11:40	03/23/21 08:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
V/ L 11 0 1 0 L (00) L M II L0004D	WC4C 40 44C		date/time	date/time	TDD	14: 1 P : T
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/25/21 23:40	03/25/21 23:40	TPR	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-9 L1329846-03 GW			Zach Comino	03/18/21 12:15	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
			Collected by	Collected date/time	Received da	te/time
MW-11 L1329846-04 GW			Zach Comino	03/18/21 13:00	03/23/21 08:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1640416	1	03/26/21 00:24	03/26/21 00:24	TPR	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-12 L1329846-05 GW			Zach Comino	03/18/21 13:40	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	03/27/2112:20	03/27/21 12:20	BMB	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-3R L1329846-06 GW			Zach Comino	03/18/21 14:15	03/23/21 08:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
V - III - O	W1040446.7.2		date/time	date/time	D1.12	
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	1	03/27/21 12:42	03/27/21 12:42	BMB	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-2R L1329846-07 GW			Zach Comino	03/19/21 10:00	03/23/21 08:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	1	date/time 03/27/21 13:04	date/time 03/27/21 13:04	BMB	Mt. Juliet, TN
G p(),,		•				
			Collected by	Collected date/time	Received da	
MW-1R L1329846-08 GW			Zach Comino	03/19/21 10:45	03/23/21 08:	UU
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
			udte/tille	uate/time		





















Volatile Organic Compounds (GC) by Method 8021B

WG1641080

10

03/27/21 13:26

03/27/21 13:26

BMB

Mt. Juliet, TN

SAMPLE SUMMARY

MW-4R L1329846-09 GW			Collected by Zach Comino	Collected date/time 03/19/21 11:15	Received da 03/23/21 08:	
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
			Collected by	Collected date/time	Received da	te/time
DUP-1 L1329846-10 GW			Zach Comino	03/19/21 00:00	03/23/21 08:	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1641080	1	03/27/21 14:09	03/27/21 14:09	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.























Plains All American, LP - GHD

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

Lab	orato	ry Name: Pace Analytical National	LRC Date: 03/29/2021 14:34						
	ject N 06-142	ame: Lovington Gathering WTI, SRS	Laboratory Job Number: L1329846-01, 02, 03, 04, 05	, 06, 0	7, 08,	09 and	10		
Rev	iewe	Name: Mark W. Beasley	Prep Batch Number(s): WG1640416 and WG1641080						
# ¹	A ²	Description		Yes	No	NA ³	NR⁴	ER# ⁵	
R1	OI	Chain-of-custody (C-O-C)							
		Did samples meet the laboratory's standard conditions of	of sample acceptability upon receipt?	X					
		Were all departures from standard conditions described	in an exception report?			Х			
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 co		X					
R3	OI	Test reports							
		Were all samples prepared and analyzed within holding	times?	Х	T	Π			
		Other than those results < MQL, were all other raw value		X		 		<u> </u>	
		Were calculations checked by a peer or supervisor?	s bracketed by cambration standards.	X					
		Were all analyte identifications checked by a peer or supervisor:	nervisor?	X	+	†	 	1	
				X	1	+			
		Were all results for sail and sediment samples reported	X		1	1	 		
		Were all results for soil and sediment samples reported of		 ^	1	\ \ \		+	
		Were % moisture (or solids) reported for all soil and sedin	·	-	<u> </u>	X	-	1	
		Were bulk soils/solids samples for volatile analysis extra	cted with methanol per SW846 Method 5035?	<u> </u>		X	<u> </u>		
		If required for the project, are TICs reported?		<u> </u>		X	<u> </u>		
R4	0	Surrogate recovery data		·					
		Were surrogates added prior to extraction?	X						
		Were surrogate percent recoveries in all samples within	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 cleanup procedures?	Х						
		Were blank concentrations < MQL?		Х					
R6	OI	Laboratory control samples (LCS):							
	•	Were all COCs included in the LCS?		Х					
		Was each LCS taken through the entire analytical proced	dure, including prep and cleanup steps?	X		İ			
		Were LCSs analyzed at the required frequency?	, 31 1	X					
		Were LCS (and LCSD, if applicable) %Rs within the labora	atory QC limits?	Х					
		Does the detectability check sample data document the used to calculate the SDLs?	•	Х					
		Was the LCSD RPD within QC limits?		Х		1			
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?		\vdash	 	X			
		Were MS (and MSD, if applicable) %Rs within the laborate	ory QC limits?			X		1	
		Were MS/MSD RPDs within laboratory QC limits?	., so mino.	\vdash	+	X	\vdash	†	
R8	ОІ	Analytical duplicate data							
INO	10	Were appropriate analytical duplicates analyzed for each	h matrix?	Ι		Ιx	Ι	1	
		Were analytical duplicates analyzed at the appropriate fi			+	T X		†	
		Were RPDs or relative standard deviations within the lab			1	X		1	
R9	OI	Method quantitation limits (MQLs):	voidiory GC IIIIIIG:						
K3	IOI		phoratony data packago?	Ιx	П	Т		I	
		Are the MQLs for each method analyte included in the la	_	+	+	 	1		
		Do the MQLs correspond to the concentration of the low		X	-	1	-	1	
D10	Lou	Are unadjusted MQLs and DCSs included in the laboratory data package? X							
R10	OI	Other problems/anomalies	stad in this LDC and ED2	I v			I	I	
		Are all known problems/anomalies/special conditions no		X			_		
		Was applicable and available technology used to lower the sample results?		Х					
		Is the laboratory NELAC-accredited under the Texas Lab and methods associated with this laboratory data package.	ge?	Х		<u> </u>	<u> </u>	<u></u>	
1 lta	mc ida	ntitiod by the letter "D" must be included in the leberatori	data package submitted in the TRRP-required report(s)	Itama i	dontific	A b +b	0 10++0+		

^{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;

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

Lab	orato	ory Name: Pace Analytical National	LRC Date: 03/29/2021 14:34									
	ject N 06-14	Name: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1329846-01, 02, 03, 04	, 05, 06, 07, 08	, 09 and	10						
Rev	viewe	r Name: Mark W. Beasley	Prep Batch Number(s): WG1640416 and WG1641080									
# ¹	A ²	Description		Yes No	NA ³	NR⁴	ER# ⁵					
S1	OI	Initial calibration (ICAL)										
		Were response factors and/or relative response fact	ors for each analyte within QC limits?		Х							
		Were percent RSDs or correlation coefficient criteria	met?	Х								
		Was the number of standards recommended in the r	method used for all analytes?	Х		1						
		Were all points generated between the lowest and h	ighest standard used to calculate the curve?	X								
		Are ICAL data available for all instruments used?		X								
		Has the initial calibration curve been verified using a	n appropriate second source standard?	X		1						
S2	OI	Initial and continuing calibration verification (ICCV ar	nd CCV) and continuing calibration blank (CCB):	•		•						
		Was the CCV analyzed at the method-required frequ		X		1						
		Were percent differences for each analyte within the		X		1						
		Was the ICAL curve verified for each analyte?	·	X								
		Was the absolute value of the analyte concentration	in the inorganic CCB < MDL?		X	†						
S3	0	Mass spectral tuning	· · · · · · · · · · · · · · · · · · ·			1	1					
		Was the appropriate compound for the method used	for tunina?	T	X	T	I					
		Were ion abundance data within the method-require			X	1	1					
S4	0	Internal standards (IS)				1	1					
		Were IS area counts and retention times within the n	nethod-required QC limits?	T x T	Т	Т	T					
S5	OI	Raw data (NELAC Section 5.5.10)	Touriou roquirou do illinio.			<u> </u>	1					
		Were the raw data (for example, chromatograms, spe	ectral data) reviewed by an analyst?	T x T		T						
		Were data associated with manual integrations flagg	X		+							
S6	О	Dual column confirmation				<u> </u>	1					
		Did dual column confirmation results meet the method	od-required QC?		X	T						
S7	0	Tentatively identified compounds (TICs)				1						
<u> </u>		If TICs were requested, were the mass spectra and	FIC data subject to appropriate checks?	T T	Τx	T	1					
S8	Ti	Interference Check Sample (ICS) results	To data subject to appropriate checks.		1 ~		1					
	<u> </u>	Were percent recoveries within method QC limits?			Τx	T	Ι					
S9	L	Serial dilutions, post digestion spikes, and method o	f standard additions		<u> </u>	<u> </u>	1					
- 55	'	Were percent differences, recoveries, and the linear		T T	X	I						
S10	OI	Method detection limit (MDL) studies	ty want the de limits specified in the method.		1 ^							
0.0	01	Was a MDL study performed for each reported analy	te?	T X T		T	T					
		Is the MDL either adjusted or supported by the analy		X		 						
S11	OI	Proficiency test reports	313 01 2003.		_		1					
011	01	Was the laboratory's performance acceptable on the	applicable proficiency tests or evaluation studies?	T X T		T	T					
S12	OI	Standards documentation	applicable proficiency tests of evaluation studies.				1					
312] 01	Are all standards used in the analyses NIST-traceable	e or obtained from other appropriate sources?	T x T	Т	Т	Τ					
S13	OI	Compound/analyte identification procedures	e of obtained from other appropriate sources.				1					
313	JOI	Are the procedures for compound/analyte identification	tion documented?	T x T	Т	Т	Т					
S14	Toi	Demonstration of analyst competency (DOC)										
317	101	Was DOC conducted consistent with NELAC Chapte	r 5?	I x I	T	T	I					
		Is documentation of the analyst's competency up-to-		^ ×		+						
S15	OI	Verification/validation documentation for methods (N										
313	UI	Are all the methods used to generate the data documentation for methods (N	. ,	T x T		T						
C16		i	menteu, verilleu, anu valluateu, where applicable?			1						
S16	OI	Laboratory standard operating procedures (SOPs)	thad navfarmad	1 v 1		T	1					
ı		Are laboratory SOPs current and on file for each me	нои репотпеа	X								

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.
 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;
 NR = Not reviewed;

^{5.} ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

MUULLI	Cu	ν_J		•
Revised	May	/ Ž	010	

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				
ED #1 Description	•				

ER# | 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).

SAMPLE RESULTS - 01

Collected date/time: 03/18/21 11:00 L1:

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	<u>J</u>	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





















Collected date/time: 03/18/21 11:40

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SAMPLE RESULTS - 02

L1329846

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	Result	Qualifier	JDL	Olidaj. MQL	MIGL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 03/18/21 12:15

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SAMPLE RESULTS - 03

L1329846

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 03/18/21 13:00

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SAMPLE RESULTS - 04

L1329846

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 03/18/21 13:40

SAMPLE RESULTS - 05

L1329846

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	<u>J</u>	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





















Collected date/time: 03/18/21 14:15

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SAMPLE RESULTS - 06

L1329846

= · · · · · · · · · · · · · · · · · · ·								
	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 03/19/21 10:00

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SAMPLE RESULTS - 07

L1329846

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 03/19/21 10:45

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SAMPLE RESULTS - 08

L1329846

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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	<u>J</u>	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





















Collected date/time: 03/19/21 11:15

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SAMPLE RESULTS - 09

L1329

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	<u>J</u>	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





















Collected date/time: 03/19/21 00:00

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SAMPLE RESULTS - 10

L132984

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	<u>J</u>	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





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B

L1329846-01,02,03,04

Method Blank (MB)

(MB) R3635128-3 03/25/	21 14:04			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	105			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3635128-1 03/25	/21 12:42				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	





















QUALITY CONTROL SUMMARY

Page 100 of 230

Volatile Organic Compounds (GC) by Method 8021B

L1329846-05,06,07,08,09,10

Method Blank (MB)

(MB) R3635492-4 03/27	/21 09:36			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	107			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3635492-1 03/27	CS) R3635492-1 03/27/21 07:24								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier				
Analyte	mg/l	mg/l	%	%					
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					



Sr

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 resu 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 fo 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 identification of the analyte is acceptable; the reported value is an estimate.























Pace Analytical National	12065 Lebanon Rd Mount Juli	et TN 37122
i ace Analytical National	12000 Lebanon Na Mount Jun	

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
ldaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ¹⁶	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	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



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

TN00003

EPA-Crypto





















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

Company Name/Address:	200	6	Billing Infor	rmation:		- 31	1 3	8		Analysis / C	ontainer / Pr	eservati	ve		Chain of Cust	ody Page of
Plains All American, LP 2135 S Loop 250 W Midland, TX 79703	- GHD		Camille E 10 Desta Midland,	Dr., Ste	ant ., Ste. 550E		Pres Chk								Pa	CE Analytical * at Center for Testing & Inne
Report to: Becky Haskell		Email To: becky.haskell@ghd.com;Glenn.Quinney@ghd.c											Phone: 615-758-5 Submitting a samp	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		
Project Description: Lovington Gathering WTI, SRS 2006-142		City/State Collected:	1-1	10	184	Please O	Circle:								Pace Terms and C	inditions found at: bs.com/hubfs/pas-standari
Phone: 432-250-7917	Client Project	#	Loung	Lab Proj		1209905							4			A073
Collected by (print):	Site/Facility II	D#		P.O. #	eg des			-							Acctnum: P	LAINSGHD
Collected by (signature):		Lab MUST Be		Quote	#			-qu							Template: T	
Immediately	Same D Next Da Two Da Three D	y10 D	Day ry (Rad Only) Day (Rad Only)	Dat	e Results	Needed	No.	40mlAmb-HCI	34						1115/1150/2-01121/534	lark W. Beasley
Packed on Ice N Y X	Comp/Grab	Matrix *	Depth	Da	ate	Time	of Cntrs	X							Shipped Via	Sample # (lab
1111 -12	1	GW			-	1100	13	X BT								-01
MW-SR MW-7	Grab	GW		0318		1140	3	~								-07
MW-9	Comb	GW		0318	wa	1215	13	~								-03
MW-II		GW			- Al-	1300			En.							-04
MW-12		GW	1	3.1	A.	1340						F SALL			2.92	-05
MLJ-3R		GW	300	4	-	1415						(10 m)				-06
MW-ZR		GW		0319	2671	1000	11					F BOX III	1		· 44	-07
MW-IR		GW		100	100	1045										-08
MW-4R		GW	1			1115				47 (M)		and the				-09
Dup-1	V	GW		011			1	V								-10
* Matrix: R SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	emarks:		*** ***							pH Flow	Tem			COC Sea COC Sig Bottles Correct	Sample Receipt 1 Present/Inta ned/Accurate: arrive intact bottles used:	ct: NP Y
OT - Other	amples returned	Courier	7-2-4	SWA/	Trackin	g#				Trip Plack	Received: \	as/ No		VOA Zer Preserv	ent volume sen If Applic o Headspace: ation Correct/	able Checked:
Relinquished by: (Signature) Zack Coming/3/1		ate: 5-2	21 17	200	Receive	a do	2	_		Trip blank		HCL/Me TBR	еон		een <0.5 mR/hr	
Religious need by resumature)	3	.22-		100	Receive	ed by: Aigna	iture)		120	1413	°C Bot	tles Recei		If preserv	ration required by	Login: Date/Time
Relinquished by : (Signature)	:27 AM	ate:	Time		1	d for lab by	(Signat			Date: 3/23	/2) Tin	ne:		Hold:		NCF / C



Pace Analytical® ANALYTICAL REPORT





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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

Becky Haskell Report To:

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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TRRP form S	8
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MW-3R L1349303-04	13
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Sc: Sample Chain of Custody

24

SAMPLE SUMMARY

MW-5R L1349303-01 GW			Collected by Zach Comino	Collected date/time 05/04/2113:45	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 05/04/2114:30	Received da 05/06/21 09		
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 05/04/2115:10	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 05/05/2110:20	Received da 05/06/21 09		
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 05/05/2110:30	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

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	
			Collected by	Collected date/time	Received da	te/time	
DUP-1 L1349303-10 GW			Zach Comino	05/05/21 00:00	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	





















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.





















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

Lab	orato	ry Name: Pace Analytical National	LRC Date: 05/14/2021 12:24					
	ject N 06-142	lame: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1349303-01, 02, 03, 04, 05	, 06, 0	7, 08,	09 and	10	
Rev	viewe	r Name: Mark W. Beasley	Prep Batch Number(s): WG1667922 and WG1670149					
# ¹	A ²	Description		Yes	No	NA ³	NR⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					•	
	•	Did samples meet the laboratory's standard conditions	of sample acceptability upon receipt?	Х				
		Were all departures from standard conditions describe				Х		
R2	OI	Sample and quality control (QC) identification				•		
		Are all field sample ID numbers cross-referenced to the	e laboratory ID numbers?	Х		I	Ι	
		Are all laboratory ID numbers cross-referenced to the o	·	X				
R3	OI	Test reports				•	1	
		Were all samples prepared and analyzed within holding	a times?	Х	I	T	Т	
		Other than those results < MQL, were all other raw value		X		1	†	
		Were calculations checked by a peer or supervisor?	so staticated by cameration standards.	X			1	
		Were all analyte identifications checked by a peer or si	upervisor?	X	1	t	t	1
		Were sample detection limits reported for all analytes r		X	t	1	 	
		Were all results for soil and sediment samples reported		X			 	
		Were % moisture (or solids) reported for all soil and sec		 ^	+	X	\vdash	1
		Were bulk soils/solids samples for volatile analysis extr				X	 	
		If required for the project, are TICs reported?	acted with methanol per 5w646 Method 5055:			X	1	
R4	То	Surrogate recovery data						
K4	U			T v	Τ	Т	Т	T T
		Were surrogates added prior to extraction?	n the leberatory OC limits?	X	1	+	 	1
DE	Lou	Were surrogate percent recoveries in all samples within	n the laboratory QC limits?					
R5	OI	Test reports/summary forms for blank samples		I v	Т		Т	T
		Were appropriate type(s) of blanks analyzed?		X		-	<u> </u>	1
		Were blanks analyzed at the appropriate frequency?	de constante de la constante de	X	<u> </u>	+	\vdash	<u> </u>
		Were method blanks taken through the entire analytical cleanup procedures?	al process, including preparation and, if applicable,	X				
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical process.	edure, including prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the labor	oratory QC limits?	Х				
		Does the detectability check sample data document th used to calculate the SDLs?	e laboratory's capability to detect the COCs at the MDL	Х				
		Was the LCSD RPD within QC limits?		Х		1	†	
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	a			1	1	
	, ,	Were the project/method specified analytes included in			I	ΙX	Π	
		Were MS/MSD analyzed at the appropriate frequency?		t	1	X	 	
		Were MS (and MSD, if applicable) %Rs within the labora			1	X	 	1
		Were MS/MSD RPDs within laboratory QC limits?	, wo amilo.			X	\vdash	1
R8	OI	Analytical duplicate data						1
I.O	J	Were appropriate analytical duplicates analyzed for ea	ch matrix?		I	Ιx	Г	1
		Were analytical duplicates analyzed to real war analytical duplicates analyzed at the appropriate			+	X	\vdash	<u> </u>
		Were RPDs or relative standard deviations within the la		 	+	X	 	
R9	OI	Method quantitation limits (MQLs):	inoratory QC IIIIIIIS:					1
N.S	J	Are the MQLs for each method analyte included in the	laboratory data package?	X	I	Τ	T	
		Do the MQLs correspond to the concentration of the lo		X	+	+	\vdash	
		·		X		+	 	1
R10	ОІ	Are unadjusted MQLs and DCSs included in the labora Other problems/anomalies	tory uata package:		1			
KIU	UI		parted in this LDC and ED2	T v	T	T	Г	ı
		Are all known problems/anomalies/special conditions r		X		1	 	-
		the sample results?	r the SDL to minimize the matrix interference effects on	×			<u> </u>	
		Is the laboratory NELAC-accredited under the Texas La and methods associated with this laboratory data pack	aboratory Accreditation Program for the analytes, matrices age?	X				
T								

^{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;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Lab	orato	ory Name: Pace Analytical National	LRC Date: 05/14/2021 12:24										
	ject N 06-14:	Name: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1349303-01, 02, 03, 04	1, 05, 06, 0	7, 08,	09 and	10						
Rev	iewe	r Name: Mark W. Beasley	Prep Batch Number(s): WG1667922 and WG1670149 Yes No NA³ NR⁴ ER#										
# ¹	A ²	Description		Yes	No	NA ³	NR⁴	ER# ⁵					
S1	OI	Initial calibration (ICAL)											
		Were response factors and/or relative response fact	tors for each analyte within QC limits?			Х							
		Were percent RSDs or correlation coefficient criteria	met?	Х									
		Was the number of standards recommended in the	method used for all analytes?	Х									
		Were all points generated between the lowest and l	nighest standard used to calculate the curve?	Х		1							
		Are ICAL data available for all instruments used?		Х									
		Has the initial calibration curve been verified using a	an appropriate second source standard?	X			1						
S2	OI	Initial and continuing calibration verification (ICCV a											
	1 0	Was the CCV analyzed at the method-required frequency		T X		T	T						
		Were percent differences for each analyte within the	,	X		1							
		Was the ICAL curve verified for each analyte?	o metroa requirea de ininto:	X	\vdash	+	\vdash	1					
		Was the absolute value of the analyte concentration	in the inerganic CCP < MDI 2	^		X	 						
S3	0	Mass spectral tuning	THE HOIGHING CCB \ MDL:				<u> </u>						
33	10	· •	d for tuning?		Π	TV	Т	l					
		Was the appropriate compound for the method use				X	-	-					
0.1	1.	Were ion abundance data within the method-require	ed QC limits?			X							
S4	0	Internal standards (IS)			1		т —	ı					
		Were IS area counts and retention times within the r	method-required QC limits?	X			<u> </u>						
S5	OI	Raw data (NELAC Section 5.5.10)			_								
		Were the raw data (for example, chromatograms, sp		X									
		Were data associated with manual integrations flago	ged on the raw data?	Х									
S6	0	Dual column confirmation											
		Did dual column confirmation results meet the meth	od-required QC?			X							
S7	0	Tentatively identified compounds (TICs)											
		If TICs were requested, were the mass spectra and	TIC data subject to appropriate checks?			Х							
S8	I	Interference Check Sample (ICS) results											
		Were percent recoveries within method QC limits?				X							
S9	1	Serial dilutions, post digestion spikes, and method of	of standard additions										
		Were percent differences, recoveries, and the linear	rity within the QC limits specified in the method?			Х							
S10	OI	Method detection limit (MDL) studies	·			•							
		Was a MDL study performed for each reported analy	yte?	Х									
		Is the MDL either adjusted or supported by the analysts		Х									
S11	OI	Proficiency test reports				•	•						
		Was the laboratory's performance acceptable on the	e applicable proficiency tests or evaluation studies?	Х			I						
S12	OI	Standards documentation	, approximation (1)			•	1						
	<u> </u>	Are all standards used in the analyses NIST-traceab	le or obtained from other appropriate sources?	T X	l	T	Τ	1					
S13	OI	Compound/analyte identification procedures	to or obtained from other appropriate sources.	1 ~		1							
3.3	101	Are the procedures for compound/analyte identification	tion documented?	l x		T	Т	I					
S14	OI	Demonstration of analyst competency (DOC)	tion documented:			1							
314	101	Was DOC conducted consistent with NELAC Chapte	or 52			T	T						
				X	-	+	 	1					
C1F	Lou	Is documentation of the analyst's competency up-to		X		1	<u> </u>						
S15	OI	Verification/validation documentation for methods (I	. ,	1		1	_	ı					
	1	Are all the methods used to generate the data docu	mented, verified, and validated, where applicable?	X		1	<u> </u>						
S16	OI	Laboratory standard operating procedures (SOPs)		1			_						
		Are laboratory SOPs current and on file for each me	thod performed	X									

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.
 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;
 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

o Number: L1349303-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
mber(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).

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SAMPLE RESULTS - 01

Collected date/time: 05/04/21 13:45

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 05/04/21 14:30

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SAMPLE RESULTS - 02

L1349303

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 05/04/21 15:10

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SAMPLE RESULTS - 03

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 05/05/21 09:20

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SAMPLE RESULTS - 04

113493

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















Collected date/time: 05/05/21 09:30

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SAMPLE RESULTS - 05

L1349303

	• •							
	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















Collected date/time: 05/05/21 10:20

SAMPLE RESULTS - 06

L1349303

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 05/05/21 10:30

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SAMPLE RESULTS - 07

113493

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 05/05/21 11:20

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SAMPLE RESULTS - 08

L1349303

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 05/05/21 11:30

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SAMPLE RESULTS - 09

L134930

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















SAMPLE RESULTS - 10

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Collected date/time: 05/05/21 00:00

L1349303

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B

L1349303-01,02,03,04,05,06,07,08,09,10

Method Blank (MB)

(MB) R3654042-3 05/11/	21 05:03			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	106			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3654042-1 05/11/	21 03:47				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	





















QUALITY CONTROL SUMMARY

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L1349303-10

Volatile Organic Compounds (GC) by Method 8021B

Method Blank (MB)

(MB) R3654363-3 05/14/2	21 03:48				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l		mg/l	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				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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

Abbreviations and	a 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.

¹Cp

²Tc



















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Kentucky² 16 South Dakota n/a Louisiana Al30792 Tennessee¹4 2006 Louisiana LA018 Texas T104704245-20-18 Maine TN00003 Texas⁵ LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont VT2006 Michigan 9958 Virginia 110033 Minnesota 047-999-395 Washington C847				
Arizona AZ0612 New Hampshire 2975 Arkansas 88-0469 New Jersey-PILAP TN002 California 2932 New Mexico¹ TN0003 Colorado TN00003 New York 11742 Connecticut PH-0197 North Carolina¹ Env375 Florida E87487 North Carolina³ My 2704 Georgia¹ 923 North Carolina³ 41 Georgia¹ 923 North Carolina³ 41 Georgia¹ 923 North Carolina³ 41 Idaho TN00003 North Dakota R140 Idaho TN00003 Oklahoma 9915 Illinois 20008 Oklahoma 9915 Illindina CTN-01 Oregon TN00002 Kansas E-10277 Rhode Island A000356 Kentucky² 16 South Dakota n/a Louisiana JA018 Texas Labita Maisian Mayona Texas Labita	Alabama	40660	Nebraska	NE-OS-15-05
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Connecticut PH-0197 North Carolina Env375 Florida E87487 North Carolina 1 DW21704 Georgia NELAP North Carolina 3 41 Georgia 1 923 North Carolina 3 41 Idaho TN00003 Ohio-VAP CL0069 Illinois 200008 Oklahoma 9915 Indiana C-TN-01 Oregon TN200002 Iowa 364 Pensylvania 68-02979 Kansas E-10277 Rhode Island LA000356 Kentucky 16 Ky9010 South Carolina 84004002 Kentucky 2 I6 South Dakota n/a Louisiana LA018 Texas 104702445-20-18 Maine TN0003 Texas 5 LAB0152 Maine TN0003 Texas 5 LAB0152 Massachusetts Mryginia 100033 Michigan 958 Washington 6847 Missosiri Nortin West Virginia 233	California	2932	New Mexico ¹	TN00003
Florida E87487 North Carolina ¹ DW21704 Georgia NELAP North Carolina ³ 41 Georgia¹ 923 North Dakota R-140 Idho TN0003 Ohio-VAP CL0069 Illinois 200008 Oklahoma 9915 Indiana CTN-01 Oregon TN20002 lowa 364 Pennsylvania 68-02979 Kansas E-10277 Rhode Island LA000356 Kentucky¹6 Ky9010 South Dakota n/a Louisiana Al30792 Tennessee ¹⁴ 2006 Louisiana LA018 Texas LAB0152 Maine TN0003 Texas § LAB0152 Maine TN0003 Texas § LAB0152 Massachusetts M-TN03 Yermont TY2006 Mississipi TN0003 Yermont 284 Mississipi TN0003 Yest Virginia 233 Mississipi TX0005 Yest Virginia 233 <t< td=""><td>Colorado</td><td>TN00003</td><td>New York</td><td>11742</td></t<>	Colorado	TN00003	New York	11742
Georgia NELAP North Carolina 3 41 Georgia 1 923 North Dakota R-140 Idaho TM0003 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 6 KY9001 South Carolina 4004002 Kentucky 3 6 KY9001 South Carolina 4004002 Louisiana JA018 Texas 1104704245-20-18 Louisiana LA018 Texas 1104704245-20-18 Maire TN0003 Texas LAB0152 Maryland 324 Uth TV TOOR Massachusetts M-TN003 Yermont YT 2006 Michigan 9958 Wisnington 2847 Mississippi TN0003 Wisnington	Connecticut	PH-0197	North Carolina	Env375
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 LA0000356 Kentucky 16 KY9010 South Carollina 84004002 Kentucky 2 16 South Dakota n/a Louisiana LA018 Tennessee 1 4 2006 Louisiana LA018 Texas 1104704245-20-18 Maine TN00003 Texas 5 LA080152 Maryland 324 Utah TN000032021-11 Massachusetts M-TN003 Vermont V72006 Michigan 9958 Wirginia 10033 Minesota Q47-99-395 Washington C847 Missouri 340 West Virginia 23 Missouri Wigensia Myoning A2LA <	Florida	E87487	North Carolina ¹	DW21704
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 Kentucky¹6 Ky90010 South Carolina 84004002 Kentucky² 16 South Dakota n/a Louisiana LA018 Tennessee¹⁴ 2006 Maine TN00003 Texas 5 LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont Y72006 Michigan 9958 Virginia 110033 Minnesota 047-999-395 Washington 233 Missosiri 340 West Virginia 233 Missouri 340 Wisconsin 98093910 Montana CERTO086 Wyoming A2LA A2LA – ISO 17025 1461.01 A161.02 DOD	Georgia	NELAP	North Carolina ³	41
Illinois 200008 Oklahoma 9915 Indiana C-TN-01 Oregon TN200002 Iowa 364 Pennsylvania 68-02979 Kansas E-10277 Rhode Island LA000356 Kentucky¹6 KY9010 South Carolina 84004002 Kentucky² 16 South Dakota n/a Louisiana LA018 Tennessee¹⁴ 2006 Louisiana LA018 Texas T104704245-20-18 Maine TN00003 Texas 5 LAB0152 Maryland 324 Utah TN000032021-11 Massachusetts M-TN003 Vermont YT2006 Minnesota 047-99-395 Washington C847 Mississippi TN00003 West Virginia 233 Missouri 340 Wisconsin 998093910 Montana CERT0086 Wyoming A2LA A2LA – ISO 17025 1461.01 A1HA-LAP, LLC EMLAP 100789	Georgia ¹	923	North Dakota	R-140
Indiana C-TN-01 Oregon TN200002 lowa 364 Pennsylvania 68-02979 Kansas E-10277 Rhode Island LA000356 Kentucky¹6 KY90010 South Carolina 84004002 Kentucky² 16 South Dakota n/a Louisiana LA018 Tennessee¹⁴ 2006 Louisiana TN0003 Texas 5 LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont V72006 Minnesota 9958 Virginia 1003 Minnesota 047-99-395 Washington C847 Missouri 340 West Virginia 233 Missouri 340 Wisconsin 998093910 Montana CERT0086 Wyoming A2LA A2LA – ISO 17025 1461.01 A1HA-LAP,LLC EMLAP 100789	Idaho	TN00003	Ohio-VAP	CL0069
Iowa 364 Pennsylvania 68-02979 Kansas E-10277 Rhode Island LA000356 Kentucky¹ 16 KY90010 South Carolina 84004002 Kentucky² 16 South Dakota n/a Louisiana A130792 Tennessee 14 2006 Louisiana LA018 Texas 104704245-20-18 Maine TN0003 Texas 5 LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont VT2006 Michigan 9958 Virginia 10033 Minnesota 047-999-395 Washington C847 Missouri 340 West Virginia 233 Missouri 340 Wisconsin 998093910 Montana CERT0086 Wyoming A2LA A2LA – ISO 17025 146.01 AIHA-LAP,LLC EMLAP 100789	Illinois	200008	Oklahoma	9915
Kansas E-10277 Rhode Island LA000356 Kentucky ¹⁶ KY90010 South Carolina 84004002 Kentucky ² 16 South Dakota n/a Louisiana Al30792 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 Missouri 340 West Virginia 233 Missouri 340 Wisconsin 998093910 Montana CERT0086 Wyoming A2LA A2LA – ISO 17025 1461.01 AlHA-LAP,LLC EMLAP 100789 A2LA – ISO 17025 ⁵ 1461.02 DOD 1461.01	Indiana	C-TN-01	Oregon	TN200002
Kentucky ¹ 6 KY90010 South Carolina 84004002 Kentucky ² 16 South Dakota n/a Louisiana Al30792 Tennessee ¹ 4 2006 Louisiana LA018 Texas T104704245-20-18 Maine TN0003 Texas ⁵ LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont VT2006 Michigan 9958 Virginia 10033 Minnesota V4-999-395 Washington C847 Mississippi TN0003 West Virginia 233 Missouri Misconsin 998093910 Montana CERT0086 Wyoming ALLA A2LA – ISO 17025 1461.01 AlHA-LAP, LLC EMLAP 100789 A2LA – ISO 17025 ⁵ 1461.02 DOD 1461.01	lowa	364	Pennsylvania	68-02979
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Louisiana Al30792 Tennessee ^{1 4} 2006 Louisiana LA018 Texas T104704245-20-18 Maine TN0003 Texas ⁵ LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont VT2006 Michigan 9958 Virginia 110033 Minnesota 047-999-395 Washington C847 Mississippi TN0003 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	Kentucky 16	KY90010	South Carolina	84004002
Louisiana LA018 Texas T104704245-20-18 Maine TN0003 Texas 5 LAB0152 Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont VT2006 Michigan 9958 Viginia 10033 Minnesota 047-999-395 Washington C847 Mississippi TN0003 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	Kentucky ²	16	South Dakota	n/a
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Maryland 324 Utah TN00032021-11 Massachusetts M-TN003 Vermont VT2006 Michigan 9958 Virginia 110033 Minnesota 047-999-395 Washington C847 Mississippi TN0003 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	Louisiana	LA018	Texas	T104704245-20-18
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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	Massachusetts	M-TN003	Vermont	VT2006
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A2LA – ISO 17025 ⁵ 1461.02 DOD 1461.01	Montana	CERT0086	Wyoming	A2LA
	A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
Canada 1461.01 USDA P330-15-00234	A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
	Canada	1461.01	USDA	P330-15-00234



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

TN00003

EPA-Crypto





















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

Company Name/Address:			Billing Info	rmation:						Analy	sis / Cont	ainer / P	reservativ	ve		Chain of Custo	dy Page o
Plains All American, LF 2135 S Loop 250 W Midland, TX 79703	- GHD		Camille 10 Desta Midland	Dr., St			Pres Chk									- 18) ce Analytic
Report to: Becky Haskell			Email To: becky.hask			enn.Quinney	@ghd.c									Submitting a sample	Mount Juliet, TN 37122 via this chain of custody edgment and acceptance
Project Description: Lovington Gathering WTI, SRS 2006-14	2	City/State Collected:	/ 1	1	111	Please C	ircle:			HE PLANT						Pace Terms and Cor	
Phone: 432-250-7917	Client Projec		Ching	LabPro		11209905										SDG#	3493 59
Collected by (print):	Site/Facility I	ID#		P.O. #		- 1		ם			- 11					Acctnum: Pl	AINSGHD
Collected by (signature):		(Lab MUST Be		Quote	#	7		I					y = Mills			Template: T1 Prelogin: P8	
Immediately Packed on Ice N Y		ay <u>></u> 5 Da		Da	te Resul	ts Needed	No.	40mlAmb-						-		AT A SECRETARY OF THE RESIDENCE OF THE PARTY.	ark W. Beasley
Sample ID	Comp/Grab	Matrix *	Depth	D	ate	Time	Cntrs	втех			-					Shipped Via: Remarks	Sample # (lal
MW-SR	Gras	GW	1	5/4	1/21	1345	-3	X									20
	1	GW		5/4	121	1430	- 3	X								- 2	-09
MW-7 MW-9		GW		5/4	15/	1570	1	1						. 4			70
MW-3R		GW		5/5	121	ono			725 7	(man) Mari				-		8	-0
MW-ZR		GW		5/5	121	0930	1		No. 18		# 個所						-6
MW-11	Hi J	GW		100		1020					To the second						A
MLD-IR		GW				1030					4		M.Z.	1			-0
MW-4R		GW				1/20	14				J. Control	le .	E 101				- 01
MW-12		GW		1	1	1130		1	- 4		e entre de						-09
Dup-1	V	GW			1		1/2	V			LONG THE LON				是 在清		-10
SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	emarks:						151	7			H	_ Temp	0		COC Seal COC Sign Bottles	Present/Intac ed/Accurate: arrive intact: bottles used:	hecklist NP
DW - Drinking Water OT - Other	amples returned UPSFedEx				Trackir	ng# 78	68	11	32	096	L				Sufficie	nt volume sent If Applica Headspace:	Y
Relinquished by: (Signature)	2 0	slos/20	Time:	00	Receiv	ed by: (Signat	ture)	Ď.			lank Rece		es (No) HCL / Meo TBR		Preserva RAD Scre	tion Correct/Cl en <0.5 mR/hr:	<u> </u>
Relinquished by : (Signature)	Da	ate:	Time:		Receiv	ed by: (Signat	ure)		1	Temp	101	C Bott	les Receive	29	If preserva	tion required by Lo	gin: Date/Time
Relinquished by : (Signature)	Da	ite:	Time:		Receive	ed for lab by:	.0	re)		Date:		Time	= 20	No.	Hold:		Condition NO / O

Page 128 of 230

49303 PLAINSGHD N	CF PM	R
Time estimate: oh	Time spent: 0h	
Members		
Paul Minnich (respons	sible)	
Parameter(s) past holdi	ng time	
Temperature not in range	ge	
Improper container type	2	
pH not in range		
Insufficient sample volu	me	
Sample is biphasic		
Vials received with head	Ispace	
✔ Broken container		
Sufficient sample remai	ns	
If broken container: Ins	ufficient packing material around container	
If broken container: Ins	ufficient packing material inside cooler	
If broken container: Im	proper handling by carrier:	
If broken container: Sar	nple was frozen	
If broken container: Co	ntainer lid not intact	
Client informed by Call		
Client informed by Ema	il	
Client informed by Voice	email	
Date/Time:		
PM initials:		
Client Contact:		
Comments		
Paul Minnich		7 May 2021 9:04 AM
1 vial from sample "DUP	-ı" received broken.	

₹ Released to Imaging: 8/3/2022 7:45:27 AM



Pace Analytical® ANALYTICAL REPORT

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



















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Volatile Organic Compounds (GC) by Method 8021B

SAMPLE SUMMARY

			Collected by	Collected date/time	Received da	te/time
C.P. CENTER L1366169-01 GW			Heath Boyd	06/11/21 09:20	06/15/21 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 00:51	06/24/21 00:51	BMB	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
C.P. MIDDLE L1366169-02 GW			Heath Boyd	06/11/21 09:30	06/15/21 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 01:13	06/24/21 01:13	BMB	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
C.P. END L1366169-03 GW			Heath Boyd	06/11/21 09:40	06/15/21 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1693576	1	06/24/21 01:34	06/24/21 01:34	BMB	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
C.P. WELL L1366169-04 GW			Heath Boyd	06/11/21 10:00	06/15/21 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		

WG1693576

06/24/21 01:56

06/24/21 01:56

BMB

Mt. Juliet, TN





















Olivia Studebaker

Project Manager

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.





















Revised May 2010
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

Lab	orato	ory Name: Pace Analytical National LR	LRC Date: 06/25/2021 10:28							
Pro 200	ject N 06-142	Name: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1366169-01, 02, 03 and 04							
Rev	viewe	r Name: Olivia Studebaker Pre	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 sa	ample acceptability upon receipt?	Х						
		Were all departures from standard conditions described in a	an exception report?			Х				
R2	OI	Sample and quality control (QC) identification								
	_	Are all field sample ID numbers cross-referenced to the labor	oratory ID numbers?	Х						
		Are all laboratory ID numbers cross-referenced to the corres	sponding QC data?	Х						
R3	OI	Test reports	· · · ·	•		•				
		Were all samples prepared and analyzed within holding time	es?	Х						
		Other than those results < MQL, were all other raw values br		Х						
		Were calculations checked by a peer or supervisor?	,	Х						
		Were all analyte identifications checked by a peer or superv	risor?	X	1					
		Were sample detection limits reported for all analytes not de		X				t		
		Were all results for soil and sediment samples reported on a		X				t		
		Were % moisture (or solids) reported for all soil and sedimen	, ,	- ^`		Х		†		
		Were bulk soils/solids samples for volatile analysis extracted	•			X		†		
		If required for the project, are TICs reported?	a with methanor per over 10 method 0000.		l l	X	<u> </u>			
R4	О	Surrogate recovery data		<u> </u>				_		
	10	Were surrogates added prior to extraction?		Х		l	T			
		Were surrogate percent recoveries in all samples within the	Jahoratory OC limits?	X	1					
R5	OI	Test reports/summary forms for blank samples	laboratory &c limits.			l				
IN.S	01	Were appropriate type(s) of blanks analyzed?		Х	I	Ι	Ι	Т		
		Were blanks analyzed at the appropriate frequency?		X	1		 	1		
		Were method blanks taken through the entire analytical procedures?	cess, including preparation and, if applicable,	X						
		Were blank concentrations < MQL?		X						
R6	OI	Laboratory control samples (LCS):				L				
	10.	Were all COCs included in the LCS?		Х	l		Ι	1		
		Was each LCS taken through the entire analytical procedure	e including prep and cleanup steps?	X				1		
		Were LCSs analyzed at the required frequency?	,,	Х	1					
		Were LCS (and LCSD, if applicable) %Rs within the laborator	v QC limits?	X				†		
		Does the detectability check sample data document the laboused to calculate the SDLs?	•	Х						
		Was the LCSD RPD within QC limits?		Х				†		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data			1	l				
		Were the project/method specified analytes included in the	MS and MSD?			Х				
		Were MS/MSD analyzed at the appropriate frequency?				Х				
		Were MS (and MSD, if applicable) %Rs within the laboratory	QC limits?			Х				
		Were MS/MSD RPDs within laboratory QC limits?			1	Х				
R8	OI	Analytical duplicate data								
		Were appropriate analytical duplicates analyzed for each ma	atrix?			Х				
		Were analytical duplicates analyzed at the appropriate frequ				Х				
		Were RPDs or relative standard deviations within the laborat				Х				
R9	OI	Method quantitation limits (MQLs):				.				
		Are the MQLs for each method analyte included in the labor	ratory data package?	Х						
		Do the MQLs correspond to the concentration of the lowest		Х						
		Are unadjusted MQLs and DCSs included in the laboratory of		X	İ		İ	1		
R10	OI	Other problems/anomalies	. •							
		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	Х						
		Was applicable and available technology used to lower the the sample results?		X						
		Is the laboratory NELAC-accredited under the Texas Laborat and methods associated with this laboratory data package?	tory Accreditation Program for the analytes, matrices	Х						
1 l+o	me ide	entified by the letter "R" must be included in the laboratory data	ta package submitted in the TRRR required report(s)	ltoms i	dontifio	d by th	o lottor	"C"		

^{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;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Dual column confirmation

Proficiency test reports

Standards documentation

Tentatively identified compounds (TICs)

Interference Check Sample (ICS) results

Method detection limit (MDL) studies

Compound/analyte identification procedures

Demonstration of analyst competency (DOC)

Laboratory standard operating procedures (SOPs)

Were percent recoveries within method QC limits?

Was a MDL study performed for each reported analyte?

Was DOC conducted consistent with NELAC Chapter 5?

Is the MDL either adjusted or supported by the analysis of DCSs?

Are the procedures for compound/analyte identification documented?

Is documentation of the analyst's competency up-to-date and on file?

Verification/validation documentation for methods (NELAC Chapter 5)

Are laboratory SOPs current and on file for each method performed

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		ory Name: Pace Analytical National	LRC Date: 06/25/2021 10:28	LRC Date: 06/25/2021 10:28								
	Project Name: Lovington Gathering WTI, SRS 2006-142		Laboratory Job Number: L1366169-01, 02, 03	Laboratory Job Number: L1366169-01, 02, 03 and 04								
Rev	viewe	r 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 fac-	ctors for each analyte within QC limits?			Х						
		Were percent RSDs or correlation coefficient criter	ia met?	Х								
		Was the number of standards recommended in the	e 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	d CCV) and continuing calibration blank (CCB):									
		Was the CCV analyzed at the method-required free	quency?	X								
		Were percent differences for each analyte within the	ne method-required QC limits?	X								
		Was the ICAL curve verified for each analyte?		X								
		Was the absolute value of the analyte concentration	n in the inorganic CCB < MDL?			Х						
S3	0	Mass spectral tuning										
Was the appropriate compound for the method used for			ed for tuning?			Х						
		Were ion abundance data within the method-requi	red QC limits?			Х						
S4	0	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)										

S6

S7

S8

S9

S10

S11

S12

S13

S14

S15

S16

OI

OI

OI

OI

OI

OI

OI

Are all the methods used to generate the data documented, verified, and validated, where applicable?

Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?

If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?

Were percent differences, recoveries, and the linearity within the QC limits specified in the method?

Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?

Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?

Were data associated with manual integrations flagged on the raw data?

Serial dilutions, post digestion spikes, and method of standard additions

Did dual column confirmation results meet the method-required QC?

Χ

Χ

Χ

Χ

Χ

X

Χ

Χ

Χ

Χ

Х

Χ

Χ

^{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);

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);
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SAMPLE RESULTS - 01

L1366169

Collected date/time: 06/11/21 09:20

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















Collected date/time: 06/11/21 09:30

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SAMPLE RESULTS - 02

L1366169

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.000347	<u>J</u>	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





















Collected date/time: 06/11/21 09:40

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SAMPLE RESULTS - 03

L136616

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
Benzene	0.000300	<u>J</u>	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





















Collected date/time: 06/11/21 10:00

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SAMPLE RESULTS - 04

L1366169

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B

L1366169-01,02,03,04

Method Blank (MB)

(MB) R3671690-3 06/23/	21 16:21			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	107			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3671690-1 06/23/	CS) R3671690-1 06/23/21 15:16								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier				
Analyte	mg/l	mg/l	%	%					
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.
Jnadj. 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 resure ported. 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 identification of the analyte is acceptable; the reported value is an estimate.























14 of 16

Pace Analytical National	12065 Lebanon Rd Mount Juli	et TN 37122
i ace Analytical National	12000 Lebanon Na Mount Jun	JL, IIN J/122

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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	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



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

TN00003

EPA-Crypto





















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

Plains All American, LP - GHD 2135 S Loop 250 W Midland, TX 79703 Report to: Becky Haskell			Billing Information:				Analysis / Container / Preservative								Chain of Custody	Tuge 144 of
			Camille Bryant 10 Desta Dr., Ste. 550E Midland, TX 79705			Pres Chk									Pace Analytica	
			Email To: becky.haskell@ghd.com;Glenn.Quinney@ghd													this chain of custody ment and acceptance of th
Project Description: City/State				Out nation NM Please Cir										Pace Terms and Condition https://info.pacelabs.com terms.pdf		
hone: 432-250-7917	Client Project # 11709905			Lab Project # PLAINSGHD-11209905											Table E003 Acctnum: PLAINSGHD	
collected by (print): Heath B	Boyo SRS 2006-142			P.O. #			כו							1 1		
Collected by (signature): mmediately Packed on Ice N Y	Same (Quote # Date Results Needed			40mlAmb-HC								PB: 04 5	845867 Mark W. Beasley	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	BTEX								Shipped Via: Fo	Sample # (lab onl
C.P. Center	Grab	GW	1.00	6/11/2	1 920	3	K		100							-01
C.P. middle	li traj	GW			930		X					177	- 1 - 1 - 198			-ri
C.P. End		GW			1940		X	9000 1000								uj
C.P. Well	V	GW		X	1000	1/2	X									ry
									70							
									1 25.00							
	1 42-															
		Credition - 18			100								1			
			E ALE										100			
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater								pH Temp Flow Other					Sample Receipt Checklist COC Seal Present/Intact: NP Y N COC Signed/Accurate: Bottles arrive intact: Correct bottles used:			
DW - Drinking Water DT - Other	Samples returned via: UPS FedEx Courier Tracking #											Sufficient volume sent: If Applicable VOA Zero Headspace:				
Relinquished by : (Signature) Date:			/ Time	Re	ceived by (Signa		10	Trip Blank Received: Yes / No HG / MeoH				Preservation Correct/Checked: // N RAD Screen <0.5 mR/hr: Y N				
Relinquished by : (Signature) Date:		ate:	Time		Received by: (Signature)				Temp: 01 °C Bottles Received: 2.940-2.9 13			If preservation required by Login: Date/Time				
Relinquished by : (Signature)		Date: Time:		: Re	ceived for lab by	: (Signat	ure)		Date: Cols 21 Time Q'W			Hold:			Condition:	



Pace Analytical® ANALYTICAL REPORT

August 13, 2021





Ss

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Sc

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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Sc: Sample Chain of Custody

24

SAMPLE SUMMARY

MW-7-080321 L1387484-01 GW			Collected by RI/JM/HB	Collected date/time 08/03/2113:15	Received dat 08/06/21 11:0	
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 08/03/2113:30	Received date 08/06/21 11:0	
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 08/03/2113:50	Received dat 08/06/21 11:0	
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 08/03/2114:30	Received date 08/06/21 11:0	
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 08/04/2111:00	Received dat 08/06/21 11:0	
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 08/04/2111:30	Received dat 08/06/21 11:0	
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 08/04/2112:00	Received dat 08/06/21 11:0	
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 08/04/2112:30	Received dat 08/06/21 11:0	
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

SAMPLE SUMMARY

			Collected by	Collected date/time	Received da	e/time
MW-1R-080421 L1387484-09 GW			RI/JM/HB	08/04/21 13:00	08/06/21 11:00	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1720646	1	08/10/21 20:18	08/10/21 20:18	ACG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	e/time
DUP-080421 L1387484-10 GW			RI/JM/HB	08/04/21 00:00	08/06/21 11:0	0
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
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





















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 Revised May 2010 Revised May 2010 Revised May 2010 Revised May 2010

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

SRS 2006-142 (GHD 11

Lab	orato	ry Name: Pace Analytical National	LRC Date: 08/13/2021 15:28					
-	ject N 06-142	lame: Lovington Gathering WTI, SRS	Laboratory Job Number: L1387484-01, 02, 03, 04, 05	, 06, 0	7, 08, 09	and o	10	
Rev	viewe	r 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?	Х				
		Were all departures from standard conditions describe	d in an exception report?			Х		
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the	e laboratory ID numbers?	Х				
		Are all laboratory ID numbers cross-referenced to the o	corresponding QC data?	Х				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding	g times?	Х				
		Other than those results < MQL, were all other raw value	-	Х	1 1			
		Were calculations checked by a peer or supervisor?		X	1 1			
		Were all analyte identifications checked by a peer or si	upervisor?	X	 			
		Were sample detection limits reported for all analytes r		X	1 1			
		Were all results for soil and sediment samples reported		X				
		Were % moisture (or solids) reported for all soil and sec	, ,	<u> </u>	1 1	Х		
		Were bulk soils/solids samples for volatile analysis extr			1 1	X		
		If required for the project, are TICs reported?	detec with methanol per over to method occo.		1 1	X		
R4	О	Surrogate recovery data					<u> </u>	
		Were surrogates added prior to extraction?		X	Т		I	
		Were surrogate percent recoveries in all samples within	n the laboratory OC limits?	X				
R5	OI	Test reports/summary forms for blank samples	The laboratory &c limits.				l	
N3	Oi	Were appropriate type(s) of blanks analyzed?		Х	Т		Ι	1
		Were blanks analyzed at the appropriate frequency?		X				
		Were method blanks taken through the entire analytical	al process, including preparation and, if applicable,	X				
		cleanup procedures?			+ +		<u> </u>	
DC	Lou	Were blank concentrations < MQL?		X				
R6	OI	Laboratory control samples (LCS):		ΙV	т		1	1
		Were all COCs included in the LCS?	adura inaliadina nyan and alaanin otano?	X	+ +			
		Was each LCS taken through the entire analytical procedure LCSs analyzed at the required frequency?	edure, including prep and cleanup steps:	X	+			
		, , , , , , , , , , , , , , , , , , , ,	suntain CC limited	_	+			
		Were LCS (and LCSD, if applicable) %Rs within the laborate boes the detectability check sample data document the	e laboratory's capability to detect the COCs at the MDL	X				
		used to calculate the SDLs?		X	\vdash			
	1	Was the LCSD RPD within QC limits?		X				<u> </u>
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					ı	
		Were the project/method specified analytes included in			++	X		
		Were MS/MSD analyzed at the appropriate frequency?			+-+	X		
		Were MS (and MSD, if applicable) %Rs within the labora	atory QC limits?		++	X		
		Were MS/MSD RPDs within laboratory QC limits?				X		L
R8	OI	Analytical duplicate data					ı	
		Were appropriate analytical duplicates analyzed for ea			++	X		
		Were analytical duplicates analyzed at the appropriate	. ,		+-+	X		
		Were RPDs or relative standard deviations within the la	aboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					ı	1
		Are the MQLs for each method analyte included in the		X	+			-
		Do the MQLs correspond to the concentration of the lo		X	+			
D()		Are unadjusted MQLs and DCSs included in the labora	tory data package?	X				
R10	OI	Other problems/anomalies					1	
		Are all known problems/anomalies/special conditions r		X	+			
		Was applicable and available technology used to lower the sample results?	r the SDL to minimize the matrix interference effects on	Х				
		Is the laboratory NELAC-accredited under the Texas La and methods associated with this laboratory data pack	aboratory Accreditation Program for the analytes, matrices age?	Х				

^{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;

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

Lab	orato	ory Name: Pace Analytical National	LRC Date: 08/13/2021 15:28									
	ject N 06-14:	Name: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1387484-01, 02, 03, 04	, 05, 06, 0	7, 08,	09 and	10					
Rev	viewe	er Name: Olivia Studebaker	Prep Batch Number(s): WG1718983 and WG17206	646								
# ¹	A ²	Description	•	Yes	No	NA ³	NR⁴	ER# ⁵				
S1	OI	Initial calibration (ICAL)										
		Were response factors and/or relative response fac	tors for each analyte within QC limits?			Х						
		Were percent RSDs or correlation coefficient criteria	a met?	Х								
		Was the number of standards recommended in the	method used for all analytes?	Х								
		Were all points generated between the lowest and	highest standard used to calculate the curve?	Х								
		Are ICAL data available for all instruments used?	-	X								
		Has the initial calibration curve been verified using	an appropriate second source standard?	X			1					
S2	OI	Initial and continuing calibration verification (ICCV a										
	10.	Was the CCV analyzed at the method-required freq		T X	Π	I	T	T				
		Were percent differences for each analyte within th	·	X	t	1	 	 				
		Was the ICAL curve verified for each analyte?	o montos requires se minio.	X	\vdash	+	\vdash	 				
		Was the absolute value of the analyte concentration	n in the inorganic CCB < MDL?	- ^ -		X	 	 				
S3	0	Mass spectral tuning	Till the morganic CCB < MDE:				<u> </u>					
33		Was the appropriate compound for the method use	d for tuning?		Т	Τx	Т					
		Were ion abundance data within the method-requir		- 		X	 	 				
S4	0	Internal standards (IS)				1						
34	10	,		Т	1	Т						
CE	Loi	Were IS area counts and retention times within the	metriou-required QC limits:	X	<u> </u>	<u>l</u>						
S5	OI	Raw data (NELAC Section 5.5.10)	T v	T T	T	T	Т					
		Were the raw data (for example, chromatograms, sp	·	X	-	+	-	<u> </u>				
00	Τ_	Were data associated with manual integrations flag	ged on the raw data?	X	<u> </u>		<u> </u>					
S6	0	Dual column confirmation			1	1 1/	г -					
07	Ta	Did dual column confirmation results meet the meth	nod-required QC?		<u> </u>	X						
S7	0	Tentatively identified compounds (TICs)	TIQ 1		Т	1 1/	T .	_				
	1.	If TICs were requested, were the mass spectra and	TIC data subject to appropriate checks?		<u> </u>	Х	<u> </u>					
S8		Interference Check Sample (ICS) results			1	1						
		Were percent recoveries within method QC limits?			<u> </u>	X	<u> </u>					
S9		Serial dilutions, post digestion spikes, and method				1						
		Were percent differences, recoveries, and the linea	rity within the QC limits specified in the method?		<u> </u>	X	<u> </u>					
S10	OI	Method detection limit (MDL) studies					,					
		Was a MDL study performed for each reported anal	,	X			ļ	<u> </u>				
		Is the MDL either adjusted or supported by the anal	ysis of DCSs?	X			<u> </u>					
S11	OI	Proficiency test reports										
		Was the laboratory's performance acceptable on th	e applicable proficiency tests or evaluation studies?	X								
S12	OI	Standards documentation				,						
		Are all standards used in the analyses NIST-traceab	le or obtained from other appropriate sources?	X								
S13	OI	Compound/analyte identification procedures				,						
		Are the procedures for compound/analyte identification	ation documented?	X	<u> </u>	1	<u> </u>					
S14	OI	Demonstration of analyst competency (DOC)					,					
		Was DOC conducted consistent with NELAC Chapte	er 5?	Х		1		ļ				
		Is documentation of the analyst's competency up-to	o-date and on file?	Х								
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)									
		Are all the methods used to generate the data docu	mented, verified, and validated, where applicable?	Х								
S16	OI	Laboratory standard operating procedures (SOPs)										
		Are laboratory SOPs current and on file for each me	ethod performed	X								
				_								

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.
 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;
 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

ED #1 Description	
Reviewer Name: Olivia Studebaker	Prep Batch Number(s): WG1718983 and WG1720646
Project Name: Lovington Gathering 2006-142	I, SRS Laboratory Job Number: L1387484-01, 02, 03, 04, 05, 06, 07, 08, 09 and 10
Laboratory Name: Pace Analytical N	onal LRC Date: 08/13/2021 15:28

ER# 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).

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SAMPLE RESULTS - 01

Collected date/time: 08/03/21 13:15

L1387484

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 08/03/21 13:30

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SAMPLE RESULTS - 02

L1387484

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















Collected date/time: 08/03/21 13:50

SAMPLE RESULTS - 03

L1387484

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















Collected date/time: 08/03/21 14:30

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SAMPLE RESULTS - 04

L138748

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	BJ	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





















Collected date/time: 08/04/21 11:00

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SAMPLE RESULTS - 05

L1387484

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 08/04/21 11:30

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SAMPLE RESULTS - 06

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















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SAMPLE RESULTS - 07

Collected date/time: 08/04/21 12:00

	Daniela	0	CDI	Haradi MOI	MOL	Diletien	A I !-	Datala
	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 08/04/21 12:30

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SAMPLE RESULTS - 08

L1387484

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 08/04/21 13:00

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SAMPLE RESULTS - 09

L1387484

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	BJ	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





















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SAMPLE RESULTS - 10

Collected date/time: 08/04/21 00:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B L1387484-01,02,03,05,06,07,08,10

Volatile Organic Compounds (GC) by Method 8021B

Method Blank (MB)

(MB) R3690178-3 08/07/	/21 00:17			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	110			79.0-125

Laboratory Control Sample (LCS)

(LCS) NS030170 2 00/00	72125.25				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	



QUALITY CONTROL SUMMARY

Page 165 of 230

L1387484-04,09,10

Volatile Organic Compounds (GC) by Method 8021B

Method Blank (MB)

(MB) R3690742-1 08/10/2	21 17:08			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	0.000167	<u>J</u>	0.000160	0.000500
Total Xylene	0.000577	<u>J</u>	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
------------------	----------------

(LC3) K3090742-2 00/10	1/211/.31				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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
-----------	-------------

	· · · · · · · · · · · · · · · · · · ·	
В	The same analyte is found in the associated blank.	
J	The identification of the analyte is acceptable: the reported value is an estimate	

























Pace Analytical National	12065 Lebanon Rd Mount Juliet, TN 3	37122
race Analytical National	12005 Lebanon Ru Mount Junet, TN .	3/12/

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 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 14	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



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

TN00003

EPA-Crypto





















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

Plains All American, LP - 2135 S Loop 250 W Midland, TX 79703	GHD					Pres Chk				nalvsis	/ Contai	ner / Pr	eservat	ive			Chain of Cust	ody Page 7 ace Analy
Report to: Becky Haskell	i e		Email To: becky.hask	kell@ghd.com;Gle	nn.Quinney@	ghd.c											Submitting a samp constitutes acknow	Mount Juliet, TN 3 ble via this chain of c wledgment and acce
Project Description: Lovington Gathering WTI, SRS 2006-142		City/State Collected:	Holds/N	m .	Please C		8											onditions found at: abs.com/hubfs/pas-s
Phone: 432-250-7917		06-142 1120990	5)	Lab Project # PLAINSGHD-	11209905		8021										SDG #U	38748 193
Collected by (print): Kyan Livingsfon Joo Mirehen Boyd	SRS 2006-1			P.O. #			ט										Acctnum: P	LAINSGHE
Collected by (signature):	Rush? (L	ab MUST Be	Notified)	Quote#		H-9									THE REAL PROPERTY.	Template: T167394		
	Same Da	y 5 Day	(Rad Only)	Date Result	s Needed		40mlAm	Z. :		18		100					Prelogin: P 8 PM: 823 - O	363973 livia Studeba
Immediately Packed on Ice N YX	Two Day		y (Rad Only)	Per SSOW	e de la	No. of	40m	1									PB:	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	втех				-						Shipped Via:	Sample
MW-7-080321	G	GW	_	8-3-21	1315	3	X					17.						1-0
mw-9-080321	C	GW	I -,	8-3-34	1330	3	x			1								-0
mw-11-080321	G-	GW		8-3-21	13.50	3	x	1		1.	127-11	2		1				-0
mw-12-080321	61	GW	-	8-3-4	1430	3	X							211		and the		-0
MW-5K080421	G	GW	-	8-4-21	1100	3	X											-0
MW-3R-080421	6	GW	-	8-4-21	1130	3	X									9-148		1-0
MW-7R-080421	6	GW	-	8.4-21	1200	3	X											-c
MW-4R-080421	6	GW	-	84-2	1230	3	×								BE			-(
MW-1R-080421	6	GW	-	8-4-2	1300	3	X			. 1			1	ille.				-0
D4P-080421	G-	GW	-	8-4-2		3	+			-) 13)(4				-10
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	marks: . A 2	Report Flag est	to SC imated	Concent	rations			7		pH Flow		_ Temp	1		COC Si Bottle Correc	al Pr gned/ s arr t bot	le Receipt esent/Intac Accurate: ive intact: tles used:	t: <u>_</u> MF
OT Other	mples returned UPS FedEx			Trackin	ng#												volume sent If Applica adspace:	
Relinquished by : (Signature)	Da	te:	Time:	700 Receive	ed by: (Signat	ure)	2			rip Blan	k Receiv		es / No HCL LME TBR		Preser	vatio	n Correct/C <0.5 mR/hr:	
Réligiushed by: (Signature)	Da		Time:	Received D	ed by: (Signat				1	emp: °	-(1)		30	ved:	If preser	rvation	required by L	ogin: Date/T
Relinquished by: (Signature) sed to Imaging: 8/3/2022 7:45:.		te:	Time:	Receive	ed for lab by:	(Signat	ure)	2		ate: 7/6		Tim	110	0	Hold:			Condi NCF /



Pace Analytical® ANALYTICAL REPORT

November 16, 2021

Plains All American, LP - GHD

L1426447 Sample Delivery Group: 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



















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Sc: Sample Chain of Custody

24

SAMPLE SUMMARY

MW3R L1426447-01 GW			Collected by David R.	Collected date/time 11/01/21 13:15	Received da 11/04/21 08:3	
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 da 11/04/21 08:3	
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 da 11/04/21 08:3	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	date/time 11/05/21 22:38	date/time 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 da 11/04/21 08:3	
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 da 11/04/21 08:3	
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 da 11/04/21 08:3	
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 da 11/04/21 08:3	
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 da 11/04/21 08:3	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location





















Volatile Organic Compounds (GC) by Method 8021B

WG1769391

11/06/21 00:26

11/06/21 00:26

BMB

Mt. Juliet, TN

SAMPLE SUMMARY

MW4R L1426447-09 GW			Collected by David R.	11/01/21 12:00	11/04/21 08:3	
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
			Collected by	Collected date/time	Received da	te/time
DUP L1426447-10 GW			David R.	11/01/21 00:00	11/04/21 08:3	30
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
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





















Olivia Studebaker

Project Manager

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.





















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

Labora	ato	ry Name: Pace Analytical National	LRC Date: 11/16/2021 08:17							
Projec 2006-		lame: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1426447-01, 02, 03, 04, 05	, 06, 0	7, 08,	09 and	10			
Review	we	r Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG1774235							
#1 A	Δ²	Description		Yes	No	NA ³	NR ⁴	ER# ⁵		
R1 C	OI	Chain-of-custody (C-O-C)						<u> </u>		
		Did samples meet the laboratory's standard conditions	of sample acceptability upon receipt?	Х			1			
		Were all departures from standard conditions described	d in an exception report?		Х					
R2 C	OI	Sample and quality control (QC) identification	entification							
•		Are all field sample ID numbers cross-referenced to the	e laboratory ID numbers?	Х						
		Are all laboratory ID numbers cross-referenced to the o	corresponding QC data?	Х						
R3 C	OI	Test reports								
		Were all samples prepared and analyzed within holding	g times?	Х						
		Other than those results < MQL, were all other raw value	ues bracketed by calibration standards?	Х						
		Were calculations checked by a peer or supervisor?		Х						
		Were all analyte identifications checked by a peer or su	upervisor?	Х						
		Were sample detection limits reported for all analytes r	not detected?	Х						
		Were all results for soil and sediment samples reported	d on a dry weight basis?	Х						
		Were % moisture (or solids) reported for all soil and sec	diment samples?			X				
		Were bulk soils/solids samples for volatile analysis extr	acted with methanol per SW846 Method 5035?			Х				
		If required for the project, are TICs reported?				X				
R4 C	O	Surrogate recovery data			_					
		Were surrogates added prior to extraction?		Х						
		Were surrogate percent recoveries in all samples within	n the laboratory QC limits?	Х						
R5 C	Ol	Test reports/summary forms for blank samples								
		Were appropriate type(s) of blanks analyzed?		Х						
		Were blanks analyzed at the appropriate frequency?		X	ļ					
		Were method blanks taken through the entire analytica cleanup procedures?	Х							
		Were blank concentrations < MQL?		X						
R6 C	OI	Laboratory control samples (LCS):								
		Were all COCs included in the LCS?		Х			ļ			
		Was each LCS taken through the entire analytical proce	edure, including prep and cleanup steps?	X						
		Were LCSs analyzed at the required frequency?		Х			<u> </u>			
		Were LCS (and LCSD, if applicable) %Rs within the labo	,	Х						
		Does the detectability check sample data document the used to calculate the SDLs?	e laboratory's capability to detect the COCs at the MDL	Х						
		Was the LCSD RPD within QC limits?		Х						
R7 C	OI_	Matrix spike (MS) and matrix spike duplicate (MSD) data						,		
		Were the project/method specified analytes included in			<u> </u>	X	↓			
		Were MS/MSD analyzed at the appropriate frequency?		-	ļ	X	_			
		Were MS (and MSD, if applicable) %Rs within the labora	atory QC limits?		<u> </u>	X				
		Were MS/MSD RPDs within laboratory QC limits?				X				
R8 C	OI_	Analytical duplicate data								
		Were appropriate analytical duplicates analyzed for each			<u> </u>	X				
		Were analytical duplicates analyzed at the appropriate		ļ	ļ	X	 			
		Were RPDs or relative standard deviations within the la	boratory QC limits?	<u> </u>		Х				
R9 C	OI_	Method quantitation limits (MQLs):					1			
		Are the MQLs for each method analyte included in the	,	X	+	+	+			
		Do the MQLs correspond to the concentration of the lo		X	1	1	1	-		
D40 1 -	~ !	Are unadjusted MQLs and DCSs included in the laborate	tory data package?	X			<u> </u>			
R10 C	Ol	Other problems/anomalies		T	т —	_	T			
		Are all known problems/anomalies/special conditions n		X	1	1	1	-		
		the sample results?	r the SDL to minimize the matrix interference effects on	Х			_			
		Is the laboratory NELAC-accredited under the Texas La	aboratory Accreditation Program for the analytes, matrices	X	1					

^{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.

and methods associated with this laboratory data package?

 ^{2.} O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 3. NA = Not applicable;

^{4.} NR = Not reviewed;

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

Lab	orato	ory Name: Pace Analytical National	LRC Date: 11/16/2021 08:17					
	ject N 06-14:	Name: Lovington Gathering WTI, SRS 2	Laboratory Job Number: L1426447-01, 02, 03, 04	1, 05, 06, 0	7, 08,	09 and	10	
Rev	viewe	r Name: Olivia Studebaker	Prep Batch Number(s): WG1769391 and WG17742	35				
# ¹	A ²	Description	•	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)						
		Were response factors and/or relative response factor	ors for each analyte within QC limits?		Ι	X		
		Were percent RSDs or correlation coefficient criteria	•	Х				
		Was the number of standards recommended in the m		X				
		Were all points generated between the lowest and hi	,	X				
		Are ICAL data available for all instruments used?	3	X		+	†	
		Has the initial calibration curve been verified using a	a appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV an				<u> </u>	1	
32	01	Was the CCV analyzed at the method-required frequency	<u> </u>	X	Π	Т	T	l
		Were percent differences for each analyte within the		X			\vdash	
		Was the ICAL curve verified for each analyte?	method-required &C illilits:	X	1	+	+	
		Was the absolute value of the analyte concentration	in the inergenic CCD < MDI 2	- ^	-	X	_	
ca	Τ_	·	III the morganic CCB < MDL!					J
S3	0	Mass spectral tuning	for tuning?		П	T ~	Т	l
		Was the appropriate compound for the method used	_		X	+		
C 4	Ι.	Were ion abundance data within the method-required	a QC limits?			<u> </u>	1	<u> </u>
S4	0	Internal standards (IS)		_	Т	_	ı	
		Were IS area counts and retention times within the m	X			<u> </u>		
S5	OI	Raw data (NELAC Section 5.5.10)	1		1	_		
		Were the raw data (for example, chromatograms, spe		X				
	_	Were data associated with manual integrations flagge	ed on the raw data?	X	<u> </u>			
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the metho	d-required QC?			X		
S7	0	Tentatively identified compounds (TICs)						
		If TICs were requested, were the mass spectra and T	IC data subject to appropriate checks?			X		
S8	ı	Interference Check Sample (ICS) results						
		Were percent recoveries within method QC limits?				Х		
S9	1	Serial dilutions, post digestion spikes, and method of	standard additions					
		Were percent differences, recoveries, and the linearity	y within the QC limits specified in the method?			Х		
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyst	re?	Х				
		Is the MDL either adjusted or supported by the analyst	sis of DCSs?	Х				
S11	OI	Proficiency test reports						
		Was the laboratory's performance acceptable on the	applicable proficiency tests or evaluation studies?	Х				
S12	OI	Standards documentation	·					
	_	Are all standards used in the analyses NIST-traceable	e or obtained from other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures	· · ·	_				
		Are the procedures for compound/analyte identificati	on documented?	Х				
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-		X				
S15	OI	Verification/validation documentation for methods (N						
0.10	J 01	Are all the methods used to generate the data document		X	Т	T	Т	I
S16	OI	Laboratory standard operating procedures (SOPs)	icinca, verifica, and validated, where applicable:	^				
310	101	Are laboratory SOPs current and on file for each met	and performed	Тх	Г	T	Т	
		Are laboratory 30FS current and on the for each met	iou perioriileu		<u> </u>			<u> </u>

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.
 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;
 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					
EP #1 Description						

ER# 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).

Collected date/time: 11/01/21 13:15

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SAMPLE RESULTS - 01

L14264

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 13:40

SAMPLE RESULTS - 02

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 14:00

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SAMPLE RESULTS - 03

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 14:20

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SAMPLE RESULTS - 04

L142644

	•	, ,						
	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 14:50

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SAMPLE RESULTS - 05

L1426447

3 1	(, -,							
	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l	mg/l	mg/l		date / time		
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	





















Collected date/time: 11/01/21 10:30

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SAMPLE RESULTS - 06

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	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





















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SAMPLE RESULTS - 07

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

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















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SAMPLE RESULTS - 08

L1426447

Collected date/time: 11/01/21 11:30

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















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SAMPLE RESULTS - 09

L142

Collected date/time: 11/01/21 12:00

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















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

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SAMPLE RESULTS - 10

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	<u>J</u>	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





















QUALITY CONTROL SUMMARY

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L1426447-01,02,03,04,05,06,07,08,10 Volatile Organic Compounds (GC) by Method 8021B

Method Blank (MB)

(MB) R3729326-2 11/05/2	21 19:15			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	97.9			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3729326-1 11/05/	21 17:40				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B

L1426447-09,10

Method Blank (MB)

(MB) R3729777-3 11/15/2	1 03:27			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	99.8			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3729777-1 11/15/2	1 01:44				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	



Sr

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 resul 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 fo 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 identification of the analyte is acceptable; the reported value is an estimate.























Pace Analytical National	12065 Lebanon Rd Mount Juliet, TN 3	37122
race Analytical National	12005 Lebanon Ru Mount Junet, TN .	3/12/

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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	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



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

TN00003

EPA-Crypto





















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

Plains All American, LP - GHD 2135 S Loop 250 W Midland, TX 79703			Camille Bryant 10 Desta Dr., Ste. 550E Midland, TX 79705					Analysis / Co	ontainer / Pre	servative		Chain	of Custoo	dy Page ⊥ of _) ce Analytical	
Report to: Becky Haskell			Email To: becky.hask	kell@ghd.com;gle	nn.quinney@	ghd.co	30						12065 Lebanon Rd Mount Juliet, TN 3712 Submitting a sample via this chain of cut- constitutes acknowledgment and accepta		via this chain of custody
Project Description: Lovington Gathering WTI, SRS 2006-1	142	City/State Collected:			Please C		70							info.pacelabs	ditions found at: s.com/hubfs/pas-standard-
Phone: 432-250-7917	Client Project	Collected: Lovingto		Lab Project # PLAINSGHD	-11209905		177						SDG	HE-	12644
Collected by (print): Dand Eletar	Site/Facility SRS 2006-			P.O. #			-						Ta Acctr	Ta H097 Acctnum: PLAINSGHD	
Collected by (signature):		Rush? (Lab MUST Be Notified)		Quote#			p-HC							late:T1	
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MW3R	GKAB	GW	NA	1(-1-4)	1315	3	A B							CET I	1-01
MW5B				1(-(-21	1340					100				1,27	- 02
mw7			L. P	15-1-21	1400								3		703
mwa			139	11-1-21	1420										-04
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MW2R				11-2-21	1030						Mad		+6		- 06
mwir	47, 12			11-2-21	1(00		温度							4-	107
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mwer				11-2-21	1260	1								1	- 09
JUP	1//		V			A	D	-27							-12
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:								pH	Temp_Other_		COC Sea COC Sig Bottles	Sample Recal Present, qued/Accura arrive in bottles L	Intact ite: itact:	· WP Y
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Relinquished by: (Signature) sed to Imaging: 8/3/2022 7:4		ate:	Time:	Receiv	red for lab by:	(Signatu	ure)		Date: 11/4/2	Time:	30	Hold:			Condition: NCF / OK



Pace Analytical® ANALYTICAL REPORT

November 16, 2021

Plains All American, LP - GHD

L1426447 Sample Delivery Group: 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



















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TRRP form S	8
TRRP Exception Reports	9
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MW5R L1426447-02	11
MW7 L1426447-03	12
MW9 L1426447-04	13
MW11 L1426447-05	14
MW2R L1426447-06	15
MW1R L1426447-07	16
MW12 L1426447-08	17
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GI: Glossary of Terms	22
Al: Accreditations & Locations	23





















Sc: Sample Chain of Custody

24

SAMPLE SUMMARY

MW3R L1426447-01 GW			Collected by David R.	Collected date/time 11/01/21 13:15	Received da 11/04/21 08:3	
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	ВМВ	Mt. Juliet, TN
MW5R L1426447-02 GW			Collected by David R.	Collected date/time 11/01/21 13:40	Received da: 11/04/21 08:3	
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 da: 11/04/21 08:3	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	date/time 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 da: 11/04/21 08:3	
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	ВМВ	Mt. Juliet, TN
MW11 L1426447-05 GW			Collected by David R.	Collected date/time 11/01/21 14:50	Received da: 11/04/21 08:3	
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 da: 11/04/21 08:3	
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 da: 11/04/21 08:3	
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 da: 11/04/21 08:3	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location





















Volatile Organic Compounds (GC) by Method 8021B

WG1769391

11/06/21 00:26

11/06/21 00:26

BMB

Mt. Juliet, TN

SAMPLE SUMMARY

			Collected by	Collected date/time		
MW4R L1426447-09 GW			David R.	11/01/21 12:00	11/04/21 08:3	30
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1774235	10	11/15/21 07:00	11/15/21 07:00	BMB	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
DUP L1426447-10 GW			David R.	11/01/21 00:00	11/04/21 08:3	30
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
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





















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.





















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

and methods associated with this laboratory data package?

Were appropriate analytical duplicates analyzed for each matrix? Were analytical duplicates analyzed at the appropriate frequency?

Were RPDs or relative standard deviations within the laboratory QC limits?

Are the MQLs for each method analyte included in the laboratory data package?

R8

R9

OI

OI

Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices

Х

Χ

Х

Х

Χ

Analytical duplicate data

the sample results?

Method quantitation limits (MQLs):

Do the MQLs correspond to the concentration of the lowest non-zero calibration standard? Are unadjusted MQLs and DCSs included in the laboratory data package? Χ R10 OI Other problems/anomalies Χ Are all known problems/anomalies/special conditions noted in this LRC and ER? Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on

^{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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

NA = Not applicable;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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 Δ ² Description		Yes	Nο	NΔ3	NP ⁴	FR# ⁵			

Rev	viewe	r Name: Olivia Studebaker Pro	ep 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?	·	Х				
		Was the number of standards recommended in the method	l used for all analytes?	Х			1	
		Were all points generated between the lowest and highest	standard used to calculate the curve?	X		1		
		Are ICAL data available for all instruments used?		Х				
		Has the initial calibration curve been verified using an appro	opriate second source standard?	X			İ	1
S2	OI	Initial and continuing calibration verification (ICCV and CCV				•	•	
		Was the CCV analyzed at the method-required frequency?		X				1
		Were percent differences for each analyte within the metho	od-required QC limits?	X			İ	1
		Was the ICAL curve verified for each analyte?	·	X				
		Was the absolute value of the analyte concentration in the	inorganic CCB < MDL?			X		
S3	0	Mass spectral tuning		1		1		
		Was the appropriate compound for the method used for tur	ning?		I	Τx		
		Were ion abundance data within the method-required QC li	-	1		X	1	
S4	0	Internal standards (IS)				1		
		Were IS area counts and retention times within the method	Тх	I	T			
S5	OI	Raw data (NELAC Section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral d	T x		T	Ι		
		Were data associated with manual integrations flagged on	X		1			
S6	0	Dual column confirmation				1	l	
		Did dual column confirmation results meet the method-requ	T	I	Тх	I	I	
S7	О	Tentatively identified compounds (TICs)	unica do.			1 //		
<u> </u>		If TICs were requested, were the mass spectra and TIC data	a subject to appropriate checks?	T	I	X	T	1
S8		Interference Check Sample (ICS) results	a subject to appropriate checks.			1 ~	l.	
	1	Were percent recoveries within method QC limits?		Т	T	Тх	I	
S9	l i	Serial dilutions, post digestion spikes, and method of stand	ard additions			1 ~	<u> </u>	
		Were percent differences, recoveries, and the linearity with		T	I	Τx	I	I
S10	OI	Method detection limit (MDL) studies	mine de mine epecinea m me memea.			1 //		
	-	Was a MDL study performed for each reported analyte?		X		T	I	T
		Is the MDL either adjusted or supported by the analysis of D	DCSs?	X				1
S11	OI	Proficiency test reports				1	<u> </u>	
	-	Was the laboratory's performance acceptable on the applic	cable proficiency tests or evaluation studies?	X		T	I	T
S12	OI	Standards documentation	,			1		
		Are all standards used in the analyses NIST-traceable or ob	otained from other appropriate sources?	Тх	1	Т	Π	П
S13	OI	Compound/analyte identification procedures				1	l	
0.0	Ο.	Are the procedures for compound/analyte identification do	cumented?	X	I	1	I	I
S14	OI							
	1 -	Was DOC conducted consistent with NELAC Chapter 5?		X		I		
		Is documentation of the analyst's competency up-to-date a	nd on file?	X	1	1		†
S15	OI	Verification/validation documentation for methods (NELAC		1 .,				
0.10		Are all the methods used to generate the data documented	. ,	T X	I	I	I	
S16	OI	Laboratory standard operating procedures (SOPs)	a,			1		
0.0		Are laboratory SOPs current and on file for each method pe	erformed	Тх	I	I		
.								

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.
 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;
 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						
ED #1 Description							

ER# 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).

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SAMPLE RESULTS - 01

Collected date/time: 11/01/21 13:15

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 13:40

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SAMPLE RESULTS - 02

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















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SAMPLE RESULTS - 03

Collected date/time: 11/01/21 14:00

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 14:20

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SAMPLE RESULTS - 04

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 14:50

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SAMPLE RESULTS - 05

L1426447

	•	, ,						
	Result	<u>Qualifier</u>	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 10:30

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SAMPLE RESULTS - 06

11426

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















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SAMPLE RESULTS - 07

L142644

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

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















Collected date/time: 11/01/21 11:30

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SAMPLE RESULTS - 08

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















Collected date/time: 11/01/21 12:00

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SAMPLE RESULTS - 09

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	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





















SAMPLE RESULTS - 10 Page 211 of 230

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

L1426447

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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	<u>J</u>	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





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B

L1426447-01,02,03,04,05,06,07,08,10

Method Blank (MB)

(MB) R3729326-2 11/05/2	MB) R3729326-2 11/05/21 19:15								
	MB Result	MB Qualifier	MB MDL	MB RDL					
Analyte	mg/l		mg/l	mg/l					
Benzene	U		0.000190	0.000500					
Toluene	U		0.000412	0.00100					
Ethylbenzene	U		0.000160	0.000500					
Total Xylene	U		0.000510	0.00150					
(S) a,a,a-Trifluorotoluene(PID)	97.9			79.0-125					

Laboratory Control Sample (LCS)

(LCS) R3729326-1 11/05/	21 17:40				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	





















QUALITY CONTROL SUMMARY

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L1426447-09,10

Volatile Organic Compounds (GC) by Method 8021B

Method Blank (MB)

(MB) R3729777-3 11/15/21	1 03:27			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	99.8			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3729777-1 11/15/2	1 01:44				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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	



Sr

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.
J	Not detected at the Sample Detection Limit.
Jnadj. 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 resureported. 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 identification of the analyte is acceptable; the reported value is an estimate.

























Pace Analytical National	12065 Lebanon Rd Mount Juliet, TN 37122
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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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	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



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

TN00003

EPA-Crypto





















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

Company Name/Address: Plains All American, LP - GHD 2135 S Loop 250 W Midland, TX 79703		Camille Bryant 10 Desta Dr., Ste. 550E Midland, TX 79705			Pres Chk			Analysis / Con	ntainer / Prese	rvative		Ch:	Pac	y Page ⊥ of _) ce Analytical	
Report to: Becky Haskell			Email To: becky.haskell@ghd.com;glenn.quinney@g				35	4					12065 Lebanon Rd Mount Ju Submitting a sample via this constitutes acknowledgment		a this chain of custody gment and acceptance of th
Project Description: City/State Lovington Gathering WTI, SRS 2006-142 Collected:		Please (PT MT				20						http	e Terms and Condi- os://info.pacelabs.c ns.pdf	tions found at: com/hubfs/pas-standard-	
Phone: 432-250-7917	Client Project # 5/2 5 2 00k-142 Site/Facility ID # SRS 2006-142		Lab Project # PLAINSGHD-1120990			K+ 16						SD	SDG# L14264		
Collected by (print): Dan 210 true				P.O.#			CI EX						Ta Acc	Ta H097 Acctnum: PLAINSGHD	
Collected by (signature):	Rush? (Lab MUST Be Notified)		Quote#		1110	р-нс							mplate:T16		
Immediately Packed on Ice N Y	Same Day Five Day S Day (Rad Only) Two Day 10 Day (Rad Only) Three Day		Date Result	Results Needed		40mlAmb-H		N TABLE SA				10000	1: 823 - Olivi	ia Studebaker	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	of Cntrs	BTEX 4				M. Free		Shi	pped Via:	Sample # (lab only
MW3R	GRAB	GW	NA	1(-1-2)	1315	3	8 PB								1-01
mw5B		1		1(-1-21	1340	1									- 02
mw7			L. III	11-1-21	1400								1		73
mω9			(4)	11-1-21	1420										- D4
mwil				(1-1-21	1450						2/2.02			in Section 2	1 05
MW2R			i de	11-2-21	1030	11					The same			40.19	- 06
mwik				11-2-21	1100			360					Last a		107
mw 12			1	11-2-21	1.500				9.87					P 37	- 08
mwyR				11-2-21	1260			- 2							- 09
JUP	11/	11	V			V	D								-12
SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:								pH	TempOther		COC Sea COC Sig Bottles	1 Presen	intact:	NP Y
DW - Drinking Water OT - Other	Samples returned UPS FedEx		THE	Trackir	ng#							Suffici	ent volu	me sent: Applicabl	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon
Relinquished by : (\$)gnature)	Date: Time: Received by Signa			ture)	Trip Blank Received: (Yes) No HCL / MeoH TBR Temp: Bottles Received:					Preserv		rrect/Che	cked: ZY I		
Relinquished by : (Signature)	Da	ate: -2-21	Time:	Receive	ed by: (Signat	ture)			Temp: HS	, ,		If preserv	ation requ	uired by Log	in: Date/Time
Relinquished by : (Signature) sed to Imaging: 8/3/2022 7:4:	Da	ate:	Time:	Receive	Robe	(Signatu	ire)		Date: 11/4/2	Time:	30	Hold:			Condition: NCF / OK



Pace Analytical® ANALYTICAL REPORT

Plains All American, LP - GHD

L1426445 Sample Delivery Group: 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:

and as the samples are received.

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,

Pace Analytical National

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





Ss













TABLE OF CONTENTS

Cp: Cover Page	1
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TRRP Exception Reports	8
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JW WELL L1426445-01	9
Qc: Quality Control Summary	10
Volatile Organic Compounds (GC) by Method 8021B	10
GI: Glossary of Terms	11
Al: Accreditations & Locations	12
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SAMPLE SUMMARY

JW WELL L1426445-01 GW			Collected by David R.	Collected date/time 11/01/21 12:05	Received date 11/04/21 08:30	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC) by Method 8021B	WG1769391	1	11/05/21 20:06	11/05/21 20:06	BMB	Mt. Juliet, TN

















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Olivia Studebaker

Project Manager

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.





















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

Lab	orato	ry Name: Pace Analytical National LRC	C Date: 11/15/2021 11:54					
Pro 200	ject N 06-142	Name: Lovington Gathering WTI, SRS Labo	oratory Job Number: L1426445-01					
Rev	viewe	r 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 sam	mple acceptability upon receipt?	Χ				
		Were all departures from standard conditions described in an	n exception report?			Χ		
R2	OI	Sample and quality control (QC) identification				!	•	
		Are all field sample ID numbers cross-referenced to the labor	ratory ID numbers?	Χ				
		Are all laboratory ID numbers cross-referenced to the corresp	,	Х				
R3	OI	Test reports						
	J 0.	Were all samples prepared and analyzed within holding times	ς?	Х			I	
		Other than those results < MQL, were all other raw values bra		X				
		Were calculations checked by a peer or supervisor?	screted by calibration standards:	X			<u> </u>	
		Were all analyte identifications checked by a peer or supervisions.	sor?	X				<u> </u>
				X			<u> </u>	$\vdash \vdash$
		Were all results for sell and sediment samples reported on a d		X			<u> </u>	$\vdash \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$
		Were all results for soil and sediment samples reported on a delivere % moisture (or solids) reported for all soil and sediment	• •	^		· ·		├──
		, , ,				X	ļ	—
		Were bulk soils/solids samples for volatile analysis extracted	with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?				Х	<u> </u>	
R4	0	Surrogate recovery data					,	
		Were surrogates added prior to extraction?		Х				<u> </u>
		Were surrogate percent recoveries in all samples within the la	aboratory QC limits?	Х				Щ
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		Χ				
		Were blanks analyzed at the appropriate frequency?		Χ				
		Were method blanks taken through the entire analytical procedures?	ess, including preparation and, if applicable,	Х				
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure,	including prep and cleanup steps?	Χ				
		Were LCSs analyzed at the required frequency?	31 1	Χ				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory	QC limits?	Х				
		Does the detectability check sample data document the labor used to calculate the SDLs?		Х				
		Was the LCSD RPD within QC limits?		X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
117] 0.	Were the project/method specified analytes included in the M	MS and MSD?			Х	Ι	
		Were MS/MSD analyzed at the appropriate frequency?	no and mob.			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory Q	OC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?	C IIIIII:5:			X		<u> </u>
R8	OI	Analytical duplicate data					L	
ко	J	·	tviv2			Х	1	
		Were appropriate analytical duplicates analyzed for each mat Were analytical duplicates analyzed at the appropriate freque				X	<u> </u>	\vdash
			·				<u> </u>	├──
DO	Lou	Were RPDs or relative standard deviations within the laborato	ory QC limits?		<u> </u>	Х	l	
R9	OI	Method quantitation limits (MQLs):	dam, data a ada a 2	· ·	1 1		ı	
		Are the MQLs for each method analyte included in the labora		X			<u> </u>	
		Do the MQLs correspond to the concentration of the lowest n		X				—
Dic		Are unadjusted MQLs and DCSs included in the laboratory da	ата раскаде?	Х				
R10	OI	Other problems/anomalies					1	
		Are all known problems/anomalies/special conditions noted in		Х				—
		Was applicable and available technology used to lower the SI the sample results?		Х				<u> </u>
		Is the laboratory NELAC-accredited under the Texas Laborator and methods associated with this laboratory data package?	ory Accreditation Program for the analytes, matrices	Х				
1 lto	ma ida	entified by the letter "R" must be included in the laboratory data	nackage submitted in the TDDD required report(s)	ltama i	dontifica	d b) (+b ("C"

^{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;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Х

Χ

Χ

Χ

Χ

Χ

X

Χ

Χ

Χ

Χ

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National LI		ory Name: Pace Analytical National	LRC Date: 11/15/2021 11:54					
	oject N 06-14		Laboratory Job Number: L1426445-01					
Re	viewe	r Name: Olivia Studebaker	Prep Batch Number(s): WG1769391					
# ¹	A ²	Description		Yes	No	NA ³	NR⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					•	
	•	Were response factors and/or relative response facto	rs for each analyte within QC limits?			X		
		ect Name: Lovington Gathering WTI, SRS 6-142 ewer Name: Olivia Studebaker A ² Description	met?	Х				
		Was the number of standards recommended in the m	ethod used for all analytes?	Х				
		Were all points generated between the lowest and his	ghest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?		Х				
		Has the initial calibration curve been verified using an	appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and	d CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required freque	ency?	Х				
		Were percent differences for each analyte within the	method-required QC limits?	X				
	A ² Description Initial calibration (ICAL) Were response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factors and/or relative response factor		X					
		Was the absolute value of the analyte concentration is	n the inorganic CCB < MDL?			Х		
S3	0	i j						
		Was the appropriate compound for the method used	for tuning?			Х	<u> </u>	
		Were ion abundance data within the method-required	d QC limits?			Х		
S4	0	` '				,		
			ethod-required QC limits?	X				
S5	OI	,						
		, , , , , ,		X				↓
			ed on the raw data?	X			<u> </u>	
S6	0						_	
		Did dual column confirmation results meet the method	d-required QC?		1	X	1	1

Tentatively identified compounds (TICs)

Interference Check Sample (ICS) results

Method detection limit (MDL) studies

Compound/analyte identification procedures

Demonstration of analyst competency (DOC)

Laboratory standard operating procedures (SOPs)

Proficiency test reports

Standards documentation

Were percent recoveries within method QC limits?

Was a MDL study performed for each reported analyte?

Was DOC conducted consistent with NELAC Chapter 5?

Is the MDL either adjusted or supported by the analysis of DCSs?

Are the procedures for compound/analyte identification documented?

Is documentation of the analyst's competency up-to-date and on file?

Verification/validation documentation for methods (NELAC Chapter 5)

S8

S9

S10

S11

S12

S13

S14

S15

S16

OI

OI

OI

OI

OI

OI

OI

Are all the methods used to generate the data documented, verified, and validated, where applicable?

If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?

Were percent differences, recoveries, and the linearity within the QC limits specified in the method?

Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?

Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?

Serial dilutions, post digestion spikes, and method of standard additions

Are laboratory SOPs current and on file for each method performed

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: 11/15/2021 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.
- 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).

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SAMPLE RESULTS - 01

Collected date/time: 11/01/21 12:05

Volatile Organic Compounds (GC) by Method 8021B

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l	mg/l		date / time	
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





















QUALITY CONTROL SUMMARY

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Volatile Organic Compounds (GC) by Method 8021B

L1426445-01

Method Blank (MB)

(MB) R3729326-2 11/05/2	21 19:15			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	97.9			79.0-125

Laboratory Control Sample (LCS)

(LCS) R3729326-1 11/05/2	21 17:40				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
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

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 resu 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 fo 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.























11 of 13

Dags Applytical National	1200E Lohanan Dd Marint Juliat TN 27122
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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	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



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

TN00003

EPA-Crypto





















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

		W. W.	Billing Info	rmation:			2-1		Ar	nalvsis / Co	1.00	Chain of Custody Page of							
2135 S Loon 350 W			Bryant a Dr., Ste. 55 I, TX 79705	OE	Pres Chk									Pac	e Analytica				
Report to: Becky Haskell			Email To: becky.has	kell@ghd.com;	@ghd.co									12065 Lebanon Rd Mount Juliet, TN 3712 Submitting a sample via this chain of cust					
Project Description: Lovington Gathering WTI, SRS 2006-142		City/State Collected:		ON NM	Please (000								Pace Terms and Condi https://info.pacelabs.i terms.pdf	com/hubfs/pas-standard			
hone: 432-250-7917	Client Project	#		Lab Project #	D-11209905		+ +								SDG # L 1 4	26440			
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inguished by : (Signature)	Date /-2	2-21	Time:	10 / 10 King I	eived by: (Signat	ture)		r legality in	Te	mp: TIN	Bottles Received:			eservation	n required by Log	gin: Date/Time			
finquished by : (Signature)	Date	2: 24	Time:		eived for lab by:	(Signatu	ire)		Da	te:	Time:	30	Hold			Condition NCF / OI			

District III

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

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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.	34053
333 Clay Street Suite 1900	Action Number:
Houston, TX 77002	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