

Second Half 2021 Semi-Annual Groundwater Monitoring Summary Report

Linam Ranch Natural Gas Plant
Lea County, New Mexico
GW-015

APPROVED

By Nelson Velez at 9:01 am, Jan 03, 2022

1. Follow recommendations stated within 2H 2021 Semi-Annual 2020 Groundwater Monitoring Summary Report.

a. Continue semi-annual groundwater monitoring and sampling at the monitoring locations

b. Continue active LNAPL recovery at monitoring well MW-6 using Spill Buster LNAPL recovery system

c. Continue to evaluate conditions at MW-4

d. Submit annual report no later than March 31, 2022

Prepared for:



370 17th St., Suite 2500
Denver, CO 80202

Prepared by:



6855 W. 119th Avenue
Broomfield, Colorado 80020

December 8, 2021



Table of Contents

1.	Introduction	1
2.	Site Location and Background.....	1
3.	Groundwater Monitoring.....	1
3.1	Groundwater and LNAPL Elevation Monitoring	2
3.2	Groundwater Quality Monitoring	2
3.3	Data Quality Assurance / Quality Control.....	3
4.	Remediation Activities	3
5.	Conclusions	4
6.	Recommendations	4

Tables

1	Second Half 2021 Semi-Annual Summary of Groundwater Elevation Data
2	Second Half 2021 Semi-Annual Summary of BTEX Concentrations in Groundwater

Figures

1	Site Location Map
2	Site Map with Monitoring Well Locations
3	Semi-Annual Groundwater Elevation Contour Map – September 23, 2021
4	Semi-Annual Analytical Results Map – September 23, 2021

Appendices

A	Historical Analytical Results – BTEX Concentrations in Groundwater
B	Laboratory Analytical Report - Pace Analytical Job #: L1409095



1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the second half 2021 at the Linam Ranch Natural Gas Plant (Site) in Lea County, New Mexico (Figure 1). Tasman Geosciences (Tasman) performed these activities on behalf of DCP Midstream (DCP). The field activities described herein were conducted with the purpose of monitoring groundwater flow and quality conditions and assessing the presence of light non-aqueous phase liquid (LNAPL) hydrocarbons in the Site subsurface. Current Site conditions were evaluated from field data and analytical laboratory results collected on September 23, 2021. The data collected was used to develop the groundwater elevation map and analytical results figure presented herein.

2. Site Location and Background

The Site is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 6, Township 19 South, Range 37 East (Figure 1). The approximate facility coordinates are 32.6965 degrees north and 103.2883 degrees west. The facility is an active natural gas processing facility and includes an office complex and storage areas in addition to the main plant.

In February 1994, hydrocarbon-impacted groundwater was detected during subsurface investigations performed at two areas within the plant. A follow-up subsurface investigation was performed in May 1994 to delineate the horizontal extent of hydrocarbon-impacted soils and groundwater. The OCD subsequently requested a work plan to completely define the extent of groundwater contamination at the plant. In October 1995, the OCD approved a quarterly sampling and monitoring program for the Site, which was reduced to semi-annual frequency in 1997 after the recommendations of a 1996 report submitted by Geoscience Consultants Ltd. (GCL).

There are currently twelve groundwater monitoring wells at the Site: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-10D, and MW-11 (Figure 2); monitoring well MW-13 was destroyed during the second half of 2012 and has been removed from the sampling program. These wells were installed between 1991 and 1995.

3. Groundwater Monitoring

This section describes the groundwater field and laboratory activities performed during the second half 2021 semi-annual monitoring event on September 23, 2021. Monitoring activities included Site-wide groundwater gauging, LNAPL measurements, and groundwater sampling. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.



3.1 Groundwater and LNAPL Elevation Monitoring

Groundwater and LNAPL levels were measured to evaluate hydraulic characteristics and provide information regarding seasonal and annual fluctuations in groundwater elevations at the Site. During the reporting period, groundwater levels were measured at all 12 Site monitoring wells.

Groundwater and LNAPL levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP). Groundwater level data was converted to elevation (feet above mean sea level [AMSL]). Measured groundwater levels, calculated groundwater elevations, and LNAPL level data are presented in Table 1.

A second half 2021 groundwater elevation map, included as Figure 3, indicates that groundwater flow at the Site trends generally to the southeast. Groundwater elevation ranges, average elevation changes from previous monitoring events, and calculated hydraulic gradients at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters

	Second Half 2021 (9/23/2021)
Maximum Elevation (Well ID)	3,669.40' (MW-5)
Minimum Elevation (Well ID)	3,664.10 (MW-3)
Average Change from Previous Monitoring Event (ft) – All Wells	-0.61
Hydraulic Gradient (ft/ft) / (Well IDs)	0.0024 (MW-5 to MW-3)

LNAPL was observed at MW-4 (3.43 ft) and at MW-6 (0.54), however, this well is equipped with a spill buster and the thickness of LNAPL at MW-6 location has fluctuated since 2009.

3.2 Groundwater Quality Monitoring

After recording groundwater level measurements, groundwater samples were collected from 9 of the 12 wells. MW-4 was not sampled due to the presence of LNAPL (3.43 ft), MW-6 was not sampled due to the presence of LNAPL and an active spill buster, and MW-7 was not sampled this event due to an insufficient amount of water needed for sample collection.

A minimum of three well casing volumes of groundwater was purged from each monitoring well prior to collection of groundwater samples. Groundwater samples were collected using disposable polyethylene bailers, placed in clean laboratory-supplied containers for the selected analytical methods, packed in an ice-filled cooler, and maintained at approximately four (4) degrees Celsius (°C) for transportation to the laboratory. Groundwater samples were then shipped under chain-of-custody procedures to Pace Analytical laboratory (Pace) in Mount Juliet, Tennessee for analysis.

Water quality samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B.



Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Historical analytical results up to and including the September 23, 2021 event are contained in Appendix A, and the laboratory analytical report for the second half 2021 event is included in Appendix B. Analytical results are also displayed on Figure 4.

Analytical results/observations are summarized below:

- Benzene was detected in exceedance of the New Mexico Water Quality Control Commission (NMWQCC) groundwater standard of (0.005 milligrams per liter [mg/L]) in monitoring wells MW-5 (0.0933 mg/L), MW-10 (1.52 mg/L), MW-10D (0.0227 mg/L, Duplicate 0.0221 mg/L), and MW-11 (0.0178 mg/L).
- Ethylbenzene was detected in exceedance of the NMWQCC standard of 0.70 mg/L in monitoring well MW-5 with a concentration of 2.72 mg/L.
- Groundwater samples at remaining monitoring well locations were reported below applicable NMWQCC standards or below laboratory detection limits.

3.3 Data Quality Assurance / Quality Control

A trip blank and field duplicate sample (MW-10D) were collected during the September 2021 sampling event. The data was reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures. All samples were analyzed using the correct analytical methods and within the correct holding times. Chain of custody forms were in order and properly executed and indicate that samples were received at the proper temperature with no headspace. All data were reported using the correct method number and reporting units. QA/QC items of note for the second half 2021 include the following:

- Target analytes were not detected in the trip blank; and
- MW-10D and the associated duplicate sample exhibited benzene concentrations of 0.0227 mg/L and 0.0221 mg/L, respectively. The calculated relative percent difference (RPD) is 2.70%, which is within the target range of 20%.

The overall QA/QC assessment, based on the data review, indicate that data precision and accuracy are acceptable.

4. Remediation Activities

Active LNAPL recovery using a Clean Earth Technologies Magnum Spill Buster™ automatic LNAPL recovery system (Magnum Spill Buster™) deployed at MW-6 was shut down in November 2018 based on the LNAPL being absent in the well at that time. Due to the presence of LNAPL observed at this location during the second half 2019, the Spill Buster was re-initiated on September 18, 2019. Recovery levels were not recorded following the first half 2020 sampling event; however, the recovery measurements have been collected semi-annually since that event. The LNAPL recovery tank for the Spill Buster contains approximately 100 gallons of LNAPL and approximately 50 gallons since re-initiation in late 2019, and the recovery tank will continue to be gauged during subsequent events to determine the amount of LNAPL



present.

5. Conclusions

Comparison of the second half semi-annual 2021 monitoring data with historical information provides the following general observations:

- Based on historical groundwater level measurements, groundwater elevations at the Site typically exhibit seasonal and annual fluctuations. Measurements collected during the second half 2021 monitoring event exhibited a decrease in elevation compared to the first half 2021. The observed decrease is likely due to seasonal groundwater fluctuations.
- Dissolved phase benzene concentrations above NMWQCC standards persist in the central portion of the Site, represented by wells MW-4 (dissolved phase and LNAPL), MW-5, MW-10, MW-10D, and MW-11. Generally, benzene concentrations at these locations demonstrate stable conditions.
- While separate and dissolved phase hydrocarbon impacts persist on-Site, BTEX concentrations in downgradient monitoring wells MW-3 and MW-9 remain below laboratory detection limits.

6. Recommendations

Based on evaluation of second half 2021 and historical Site observations and monitoring results, the following recommendations have been developed for future activities:

- Continue semi-annual groundwater monitoring and sampling at the monitoring locations illustrated on Figure 2.
- Continue active LNAPL recovery at monitoring well MW-6 using Spill Buster LNAPL recovery system and continue to evaluate conditions at MW-4.

Tables

TABLE 1
SECOND HALF 2021 SEMI-ANNUAL
SUMMARY OF GROUNDWATER ELEVATION DATA
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (*) (feet amsl)	Change in Groundwater Elevation Since Previous Event (1) (feet)
MW-1	06/23/20	47.84			54.55	3718.29	3670.45	-1.98
MW-1	09/16/20	48.49			54.55	3718.29	3669.80	-0.65
MW-1	03/25/21	49.55			54.55	3718.29	3668.74	-1.06
MW-1	09/23/21	49.97			54.55	3718.29	3668.32	-0.42
MW-2	06/23/20	46.84			50.57	3714.80	3667.96	-0.41
MW-2	09/16/20	47.22			50.57	3714.80	3667.58	-0.38
MW-2	03/25/21	48.15			50.57	3714.80	3666.65	-0.93
MW-2	09/23/21	48.51			50.57	3714.80	3666.29	-0.36
MW-3	06/24/20	50.40			55.41	3715.50	3665.10	-0.45
MW-3	09/16/20	50.59			55.41	3715.50	3664.91	-0.19
MW-3	03/25/21	49.98			55.41	3715.50	3665.52	0.61
MW-3	09/23/21	51.40			55.41	3715.50	3664.10	-1.42
*MW-4	06/23/20	49.78	49.55	0.23	54.76	3720.46	3670.85	-2.00
*MW-4	09/16/20	50.31	50.15	0.16	54.76	3720.46	3670.27	-0.58
*MW-4	03/25/21	51.45	50.85	0.60	54.76	3720.46	3669.46	-0.81
*MW-4	09/23/21	53.98	50.55	3.43	54.76	3720.46	3669.05	-0.41
MW-5	06/23/20	50.65			56.62	3721.53	3670.88	-1.73
MW-5	09/16/20	51.10			56.62	3721.53	3670.43	-0.45
MW-5	03/25/21	51.40			56.62	3721.53	3670.13	-0.30
MW-5	09/23/21	52.13			56.62	3721.53	3669.40	-0.73
*MW-6	06/23/20	54.30	50.94	3.36	54.30	3720.99	3669.21	-2.66
*MW-6	09/16/20	51.75	51.5	0.25	54.30	3720.99	3669.43	0.22
*MW-6	03/25/21	NM		NM	54.30	3720.99	NM	NM
*MW-6	09/23/21	53.25	52.71	0.54	54.30	3720.99	3668.15	NA
MW-7	06/24/20	DRY						
MW-7	09/16/20	DRY						
MW-7	03/25/21	DRY						
MW-7	09/23/21	DRY						
MW-8	06/23/20	46.56			58.05	3714.18	3667.62	-0.68
MW-8	09/16/20	47.04			58.05	3714.18	3667.14	-0.48
MW-8	03/25/21	47.80			58.05	3714.18	3666.38	-0.76
MW-8	09/23/21	48.25			58.05	3714.18	3665.93	-0.45
MW-9	06/24/20	53.51			59.35	3720.48	3666.97	-0.73
MW-9	09/16/20	53.77			59.35	3720.48	3666.71	-0.26
MW-9	03/25/21	54.27			59.35	3720.48	3666.21	-0.50
MW-9	09/23/21	54.79			59.35	3720.48	3665.69	-0.52
MW-10	06/23/20	53.54			66.10	3720.76	3667.22	-0.77
MW-10	09/16/20	53.84			66.10	3720.76	3666.92	-0.30
MW-10	03/25/21	54.40			66.10	3720.76	3666.36	-0.56
MW-10	09/23/21	54.97			66.10	3720.76	3665.79	-0.57
MW-10D	06/23/20	54.86			79.01	3720.85	3665.99	-0.74
MW-10D	09/16/20	55.15			79.01	3720.85	3665.70	-0.29
MW-10D	03/25/21	55.74			79.01	3720.85	3665.11	-0.59
MW-10D	09/23/21	56.28			79.01	3720.85	3664.57	-0.54
MW-11	06/23/20	54.64			63.27	3722.02	3667.38	-0.91
MW-11	09/16/20	55.06			63.27	3722.02	3666.96	-0.42

TABLE 1
SECOND HALF 2021 SEMI-ANNUAL
SUMMARY OF GROUNDWATER ELEVATION DATA
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (*) (feet amsl)	Change in Groundwater Elevation Since Previous Event (1) (feet)
MW-11	03/25/21	55.70			63.27	3722.02	3666.32	-0.64
MW-11	09/23/21	56.37			63.27	3722.02	3665.65	-0.67
Average change in groundwater elevation (3/25/21 to 9/23/21)								-0.61

1- Changes in groundwater elevation calculated by subtracting the measurement collected during the previous monitoring event from the measurement collected during the most recent monitoring event.

amsl = feet above mean sea level

TOC = top of casing

Groundwater elevation = (TOC Elevation - Measured Depth to Water)

* Groundwater elevation was corrected for product thickness using the following calculation, when applicable:

Groundwater elevation = (TOC Elevation - Measured Depth to Water) + (LNAPL Thickness in Well * LNAPL Relative Density)

LNAPL relative density is assumed to be approximately 0.75 grams per cubic centimeter (g/cm³)

** Monitoring well MW-6 has an active Spill Buster automatic LNAPL recovery pump installed. As such, the calculated groundwater elevations may not be representative of actual groundwater elevations within the well.

NM = Not Measured

NA = Not Applicable

TABLE 2
SECOND HALF 2021 SEMI-ANNUAL
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-1	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	9/23/2021	Not Sampled - LNAPL Present				LNAPL (3.43 feet)
MW-5	9/23/2021	0.0933	<0.0200	2.72	<0.0600	
MW-6	9/23/2021	LNAPL				LNAPL (Spill Buster)
MW-7	9/23/2021	NS				DRY
MW-8	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-10	9/23/2021	1.52	<0.0200	0.272	0.0150 J	
MW-10D	9/23/2021	0.0227	0.0117	0.00360	0.00328	Duplicate Sample Collected
MW-10D (Duplicate)	9/23/2021	0.0221	0.0116	0.00361	0.00325	
MW-11	9/23/2021	0.0178	0.000671 J	0.000456 J	0.00147 J	
Trip Blank	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	

Notes:

Bold red values indicate an exceedance of the NMWQCC groundwater standards for the Site.

NMWQCC = New Mexico Water Quality Control Commission

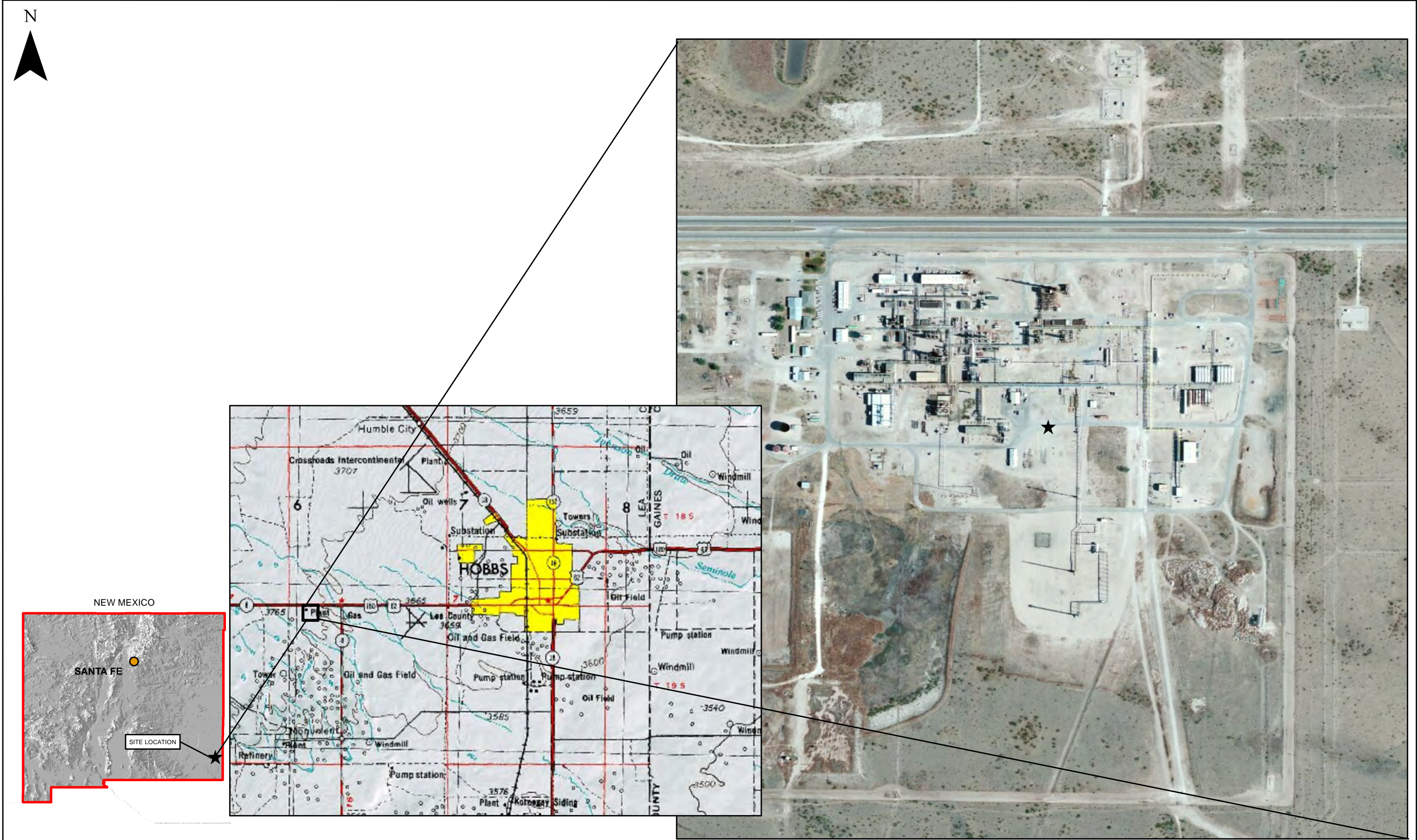
LNAPL = light non-aqueous phase liquid

J = A qualifier indicating an estimated value of a concentration above the laboratory's Method Detection Limit (MDL) but below the Reported Detection Limit (RDL).

mg/L = milligrams per liter

NS = Not Sampled

Figures



DATE:	June 2014
DESIGNED BY:	T. Johansen
DRAWN BY:	D. Arnold



TASMAN
GEOSCIENCES

Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221

DCP Midstream
Linam Ranch Gas Plant
Unit B, Section 6, Township 19 South, Range 37 East
Lea County, New Mexico

Site Location
Map

Figure
1



DATE:	May 2019
DESIGNED BY:	B. Humphrey
DRAWN BY:	C. Olson



Tasman Geosciences, Inc.
6899 Pecos Street - Unit C
Denver, CO 80221

**DCP Midstream
Linam Gas Plant**
Second Half 2021 Semi-Annual
Groundwater Monitoring Summary Report

Site Map with Monitoring
Well Locations

**Figure
2**



DATE:	October 2021
DESIGNED BY:	B. Humphrey
DRAWN BY:	C. Ambler

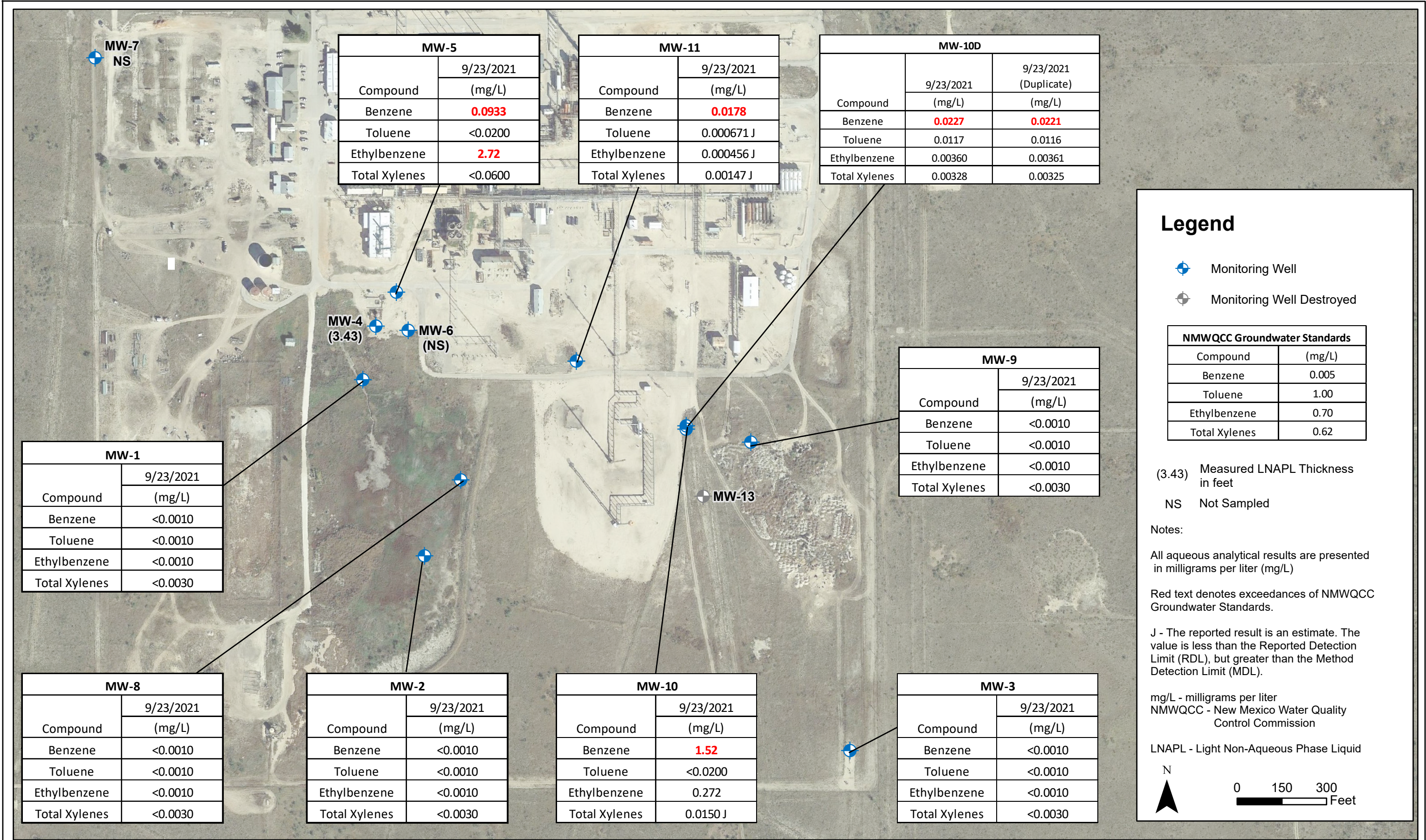


Tasman Geosciences, Inc.
6855 W. 119th Avenue
Broomfield, Colorado 80020

DCP Midstream
Linam Ranch Gas Plant
Second Half 2021 Semi-Annual Groundwater Monitoring
Summary Report

Groundwater Elevation
Contour Map
(September 23, 2021)

Figure
3



DATE:	October 2021
DESIGNED BY:	B. Humphrey
DRAWN BY:	C. Ambler



Tasman Geosciences, Inc.
6855 W. 119th Avenue
Broomfield, Colorado 80020

DCP Midstream
Linam Ranch Gas Plant
Second Half 2021 Semi-Annual Groundwater
Monitoring Summary Report

Analytical Results
Map
(September 23, 2021)

Figure
4

Appendix A
Historical Analytical Results

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-1	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-1	9/28/2010	<0.001	<0.002	<0.002	<0.004	
MW-1	4/28/2011	0.00054 J	<0.002	<0.002	<0.002	
MW-1	9/13/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	3/5/2012	<0.005	<0.005	<0.005	<0.015	
MW-1	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-1	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-1	9/9/2013	0.012	<0.001	0.0024	0.0038	
MW-1	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-1	9/23/2014	<0.001	<0.001	<0.001	<0.003	
MW-1	2/24/2015	<0.001	<0.001	<0.001	<0.003	
MW-1	9/1/2015	<0.001	<0.001	<0.001	<0.003	
MW-1	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-1	9/28/2016	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
MW-1	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	3/25/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	9/18/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	6/23/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	9/16/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-1	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-2	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-2	9/28/2010	<0.001	<0.002	<0.002	<0.004	
MW-2	4/28/2011	<0.001	<0.002	<0.002	<0.002	
MW-2	9/12/2011	<0.001	<0.002	<0.002	<0.004	
MW-2	3/5/2012	<0.005	<0.005	<0.005	<0.015	
MW-2	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-2	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-2	9/9/2013	<0.001	<0.001	<0.01	<0.001	
MW-2	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-2	9/23/2014	NS	NS	NS	NS	Inaccessible
MW-2	2/24/2015	<0.001	<0.001	<0.001	<0.003	
MW-2	9/1/2015	<0.001	<0.001	<0.001	<0.003	
MW-2	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-2	9/28/2016	NS				Well inaccessible due to flooding
MW-2	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
MW-2	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	3/25/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	9/18/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	6/23/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	9/16/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-3	9/28/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	4/28/2011	<0.001	<0.002	<0.002	<0.002	
MW-3	9/12/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	3/5/2012	<0.005	<0.005	<0.005	<0.015	

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-3	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-3	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-3	9/9/2013	<0.001	<0.001	<0.001	<0.001	
MW-3	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-3	9/23/2014	<0.001	<0.001	<0.001	<0.003	
MW-3	2/24/2015	<0.001	<0.001	<0.001	<0.003	
MW-3	9/1/2015	<0.001	<0.001	<0.001	<0.003	
MW-3	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-3	9/28/2016	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
MW-3	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	3/26/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	9/18/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	6/24/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	9/16/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	9/24/2009	LNAPL				
MW-4	3/24/2010	LNAPL				
MW-4	9/28/2010	LNAPL				
MW-4	4/28/2011	LNAPL				LNAPL (0.23 feet)
MW-4	9/13/2011	LNAPL				LNAPL (0.28 feet)
MW-4	3/5/2012	LNAPL				LNAPL (0.34 feet)
MW-4	9/4/2012	LNAPL				LNAPL (0.43 feet)
MW-4	2/18/2013	LNAPL				LNAPL (0.47 feet)
MW-4	9/9/2013	LNAPL				LNAPL (0.06 feet)
MW-4	2/25/2014	LNAPL				LNAPL (0.02 feet)
MW-4	2/24/2015	9.8	<0.005	0.59	<0.015	LNAPL (0.01 feet)
MW-4	9/1/2015	8.6	<0.005	0.53	<0.015	
MW-4	3/24/2016	6.9	<0.005	0.38	<0.015	
MW-4	10/12/2016	5	<0.010	0.027	0.053	
MW-4	3/7/2017	8.9	<0.005	0.024	0.0051	
MW-4	10/3/2017	16.9	<0.100	0.618	<0.300	
MW-4	3/14/2018	18.7	<0.010	0.686	<0.030	
MW-4	9/7/2018	12.3	<0.200	0.74	<0.600	
MW-4	3/26/2019	15.9	<0.200	0.516	<0.600	
MW-4	9/18/2019	19.3	<0.0010	0.829	0.00356	
MW-4	6/23/2020	12.9	<0.0010	0.561	0.0351	
MW-4	9/16/2020	18.5	<0.100	0.601	<0.300	
MW-4	3/25/2021	17.3	<0.100	0.911	0.121 J	LNAPL (0.60 feet)
MW-4	9/23/2021	NA	NA	NA	NA	LNAPL (3.43 feet)
MW-5	9/24/2009	0.0272	<0.002	0.227	<0.006	
MW-5	3/24/2010	0.13	<0.002	0.482	0.46	
MW-5	9/28/2010	0.0095	<0.004	0.188	<0.008	
MW-5	4/28/2011	0.149	<0.004	0.776	<0.004	
MW-5	9/13/2011	0.13	<0.010	0.86	<0.020	
MW-5	3/5/2012	0.24	<0.025	2	<0.075	
MW-5	9/4/2012	0.17	<0.005	1	0.038	Duplicate Sample Collected
MW-5	2/18/2013	0.21	<0.005	1.4	<0.015	Duplicate Sample Collected
MW-5	9/9/2013	0.096	<0.001	0.89	<0.001	Duplicate Sample Collected
MW-5 (Duplicate)	9/9/2013	0.095	<0.001	0.9	<0.001	
MW-5	2/25/2014	0.18	<0.005	1.3	<0.005	
MW-5	9/23/2014	0.33	<0.005	2	<0.015	

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-5	2/24/2015	0.16	<0.005	1.3	<0.015	
MW-5	9/1/2015	0.1	<0.005	0.57	<0.015	
MW-5	3/24/2016	0.095	<0.005	1.4	<0.015	
MW-5	9/28/2016	0.081	<0.0050	1.6	<0.015	
MW-5	3/7/2017	0.081	<0.0050	0.91	<0.0050	
MW-5	10/3/2017	0.151	0.00906 J	2.34	<0.060	
MW-5	3/14/2018	0.0609	<0.010	0.930	<0.030	
MW-5	9/7/2018	0.131	<0.001	2.040	0.00267 J	
MW-5	3/26/2019	0.08	0.000443 J	2.530	<0.003	
MW-5	9/18/2019	0.0980	<0.0200	1.97	<0.0600	
MW-5	6/23/2020	0.0266	<0.0200	1.73	0.00356 J	
MW-5	9/16/2020	0.0358	<0.0200	2.12	<0.0600	
MW-5	3/25/2021	0.105	<0.0200	2.61	<0.0600	
MW-5	9/23/2021	0.0933	<0.0200	2.72	<0.0600	
MW-6	9/24/2009	LNAPL				
MW-6	3/24/2010	LNAPL				
MW-6	9/28/2010	LNAPL				
MW-6	4/28/2011	LNAPL				LNAPL (2.81 feet)
MW-6	9/13/2011	LNAPL				LNAPL (3.33 feet)
MW-6	3/5/2012	LNAPL				LNAPL (3.1 feet)
MW-6	9/4/2012	LNAPL				LNAPL (3.98 feet)
MW-6	2/18/2013	LNAPL				LNAPL (2.32 feet) Active Spill Buster
MW-6	9/9/2013	LNAPL				LNAPL (0.17 feet) Active Spill Buster
MW-6	2/25/2014	LNAPL				LNAPL (1.99 feet) Active Spill Buster
MW-6	9/23/2014	LNAPL				LNAPL (0.09 feet)
MW-6	2/24/2015	LNAPL				LNAPL (0.07 feet)
MW-6	9/1/2015	LNAPL				LNAPL (0.01 feet)
MW-6	3/24/2016	LNAPL				LNAPL (0.13 feet)
MW-6	9/28/2016	LNAPL				LNAPL (3.74 feet)
MW-6	3/7/2017	LNAPL				LNAPL (0.7 feet) Active Spill Buster
MW-6	10/3/2017	LNAPL				LNAPL (0.25 feet) Active Spill Buster
MW-6	3/14/2018	LNAPL				LNAPL (NM) Active Spill Buster
MW-6	9/7/2018	LNAPL				LNAPL (0.32 feet) Active Spill Buster
MW-6	3/26/2019	0.543	<0.001	0.188	<0.003	
MW-6	9/18/2019	LNAPL				LNAPL (2.62 feet)
MW-6	6/23/2020	LNAPL				LNAPL (3.36 feet)
MW-6	9/16/2020	LNAPL				LNAPL (3.36 feet)
MW-6	3/25/2021	LNAPL				LNAPL (Spill Buster)
MW-6	9/23/2021	LNAPL				LNAPL (Spill Buster)
MW-7	9/24/2009	NS				
MW-7	3/24/2010	NS				
MW-7	9/28/2010	NS				
MW-7	4/28/2011	NS				DRY
MW-7	9/13/2011	NS				
MW-7	3/5/2012	NS				
MW-7	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-7	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-7	9/9/2013	<0.001	<0.001	<0.001	<0.001	
MW-7	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-7	9/23/2014	<0.001	<0.001	<0.001	<0.003	
MW-7	2/24/2015	<0.001	<0.001	<0.001	<0.003	
MW-7	9/1/2015	<0.001	<0.001	<0.001	<0.003	
MW-7	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-7	10/12/2016	<0.0010	<0.0010	<0.0010	<0.0030	
MW-7	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
MW-7	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-7	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-7	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-7	3/25/2019	<0.0010	<0.0010	0.000421 J	<0.0030	
MW-7	9/18/2019	NS				Not enough water for sample
MW-7	6/24/2020	NS				DRY
MW-7	9/16/2020	NS				DRY
MW-7	3/25/2021	NS				DRY
MW-7	9/23/2021	NS				DRY
MW-8	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-8	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-8	9/28/2010	<0.001	<0.002	<0.002	<0.004	
MW-8	4/28/2011	<0.001	<0.002	<0.002	<0.002	
MW-8	9/12/2011	<0.005	<0.005	<0.005	<0.015	
MW-8	3/5/2012	<0.005	<0.005	<0.005	<0.015	
MW-8	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-8	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-8	9/9/2013	<0.001	<0.001	<0.001	<0.001	
MW-8	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-8	9/23/2014	NS				Inaccessible
MW-8	2/24/2015	<0.001	<0.001	<0.001	<0.003	
MW-8	9/1/2015	<0.001	<0.001	<0.001	<0.003	
MW-8	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-8	9/28/2016	NS				Well inaccessible due to flooding
MW-8	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
MW-8	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	3/25/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	9/18/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	6/23/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	9/16/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-8	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-9	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-9	9/28/2010	<0.001	<0.002	<0.002	<0.004	
MW-9	4/28/2011	<0.001	<0.002	<0.002	<0.002	
MW-9	9/12/2011	<0.001	<0.002	<0.002	<0.004	
MW-9	3/5/2012	<0.005	<0.005	<0.005	<0.015	
MW-9	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-9	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-9	9/9/2013	<0.001	<0.001	<0.001	<0.001	
MW-9	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-9	9/23/2014	<0.001	<0.001	<0.001	<0.003	
MW-9	2/24/2015	<0.001	<0.001	<0.001	<0.003	
MW-9	9/1/2015	<0.001	<0.001	<0.001	<0.003	
MW-9	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-9	9/28/2016	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
MW-9	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	3/26/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	9/18/2019	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	6/24/2020	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	9/16/2020	<0.0010	<0.0010	<0.0010	<0.0030	

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-9	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-10	4/30/2008	0.769	0.0457	0.0851	0.05	
MW-10	4/29/2009	0.883	0.23	0.0859	0.0759	
MW-10	9/24/2009	1.07	0.126	0.148	0.154	
MW-10	3/24/2010	1.64	0.175	0.246	0.156	
MW-10	9/28/2010	1.9	0.0547 J	0.24	0.104 J	
MW-10	4/28/2011	1.72	0.228	0.195	0.126	Duplicate Sample Collected
MW-10 (Duplicate)	4/28/2011	2.29	0.258	0.234	0.155	
MW-10	9/12/2011	1.97	0.104	0.249	0.145	Duplicate Sample Collected
MW-10 (Duplicate)	9/12/2011	2.08	0.0964	0.25	0.153	
MW-10	3/5/2012	2.2	0.11	0.23	0.13	
MW-10	9/4/2012	2.7	0.0083	0.28	0.12	
MW-10	2/18/2013	2.0	0.019	0.3	0.13	
MW-10	9/9/2013	1.6	0.022	0.26	0.11	
MW-10	2/25/2014	1.7	0.0054	0.35	0.098	
MW-10	9/23/2014	2.2	<0.005	0.53	0.15	
MW-10	2/24/2015	1.6	0.012	0.29	0.086	
MW-10	9/1/2015	1.6	0.012	0.19	0.078	
MW-10	3/24/2016	4.6	0.0068	0.22	0.054	
MW-10	9/28/2016	3.1	0.012	0.25	0.19	
MW-10	3/7/2017	3.1	0.011	0.23	0.09	
MW-10	10/3/2017	4.27	0.0202	0.311	0.158	
MW-10	3/14/2018	4.24	<0.010	0.440	0.109	
MW-10	9/7/2018	3.32	0.0274	0.332	0.155	
MW-10	3/26/2019	2.0	0.0182	0.197	0.0826	
MW-10	9/18/2019	1.66	<0.200	0.284	0.202	
MW-10	6/23/2020	2.66	0.0100 J	0.522	0.141	
MW-10	9/16/2020	2.96	<0.0200	0.500	0.119	
MW-10	3/25/2021	1.64	0.0162 J	0.221	0.0452 J	
MW-10	9/23/2021	1.52	<0.0200	0.272	0.0150 J	
MW-10D	4/30/2008	0.195	0.0677	0.0144	0.0221	
MW-10D	4/29/2009	0.179	0.0772	0.0203	0.0296	
MW-10D	9/24/2009	0.103	0.0496	0.0127	0.0261	
MW-10D	3/24/2010	0.196	0.0703	0.0129	0.0202	
MW-10D	9/28/2010	0.0402	0.0358	0.006	0.0077 J	
MW-10D	4/28/2011	0.0512	0.0373	0.0063	0.0113	
MW-10D	9/12/2011	0.0278	0.0131	0.0032	0.006	
MW-10D	3/5/2012	0.024	0.0081	<0.005	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	3/5/2012	0.022	0.0089	<0.005	<0.015	
MW-10D	9/4/2012	0.023	0.0057	<0.005	<0.015	
MW-10D	2/18/2013	0.034	0.014	0.0023	0.0031	
MW-10D	9/9/2013	0.034	0.019	<0.005	<0.005	
MW-10D	2/25/2014	0.046	0.021	0.005	<0.005	Duplicate Sample Collected
MW-10D (Duplicate)	2/25/2014	0.043	0.019	<0.005	<0.005	
MW-10D	9/23/2014	0.059	0.024	<0.005	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	9/23/2014	0.058	0.024	<0.005	<0.015	
MW-10D	2/24/2015	0.062	0.026	0.008	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	2/24/2015	0.058	0.024	0.0074	<0.015	
MW-10D	9/1/2015	0.062	0.025	0.006	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	9/1/2015	0.065	0.026	0.0075	<0.015	
MW-10D	3/24/2016	0.079	0.021	0.021	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	3/24/2016	0.079	0.019	0.013	<0.015	
MW-10D	9/28/2016	0.024	0.013	<0.0050	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	9/28/2016	0.025	0.013	<0.0050	<0.015	
MW-10D	3/7/2017	0.15	0.017	0.026	0.0072	Duplicate Sample Collected

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
MW-10D (Duplicate)	3/7/2017	0.15	0.016	0.025	0.0066	
MW-10D	10/3/2017	0.0510	0.0153	<0.010	<0.030	Duplicate Sample Collected
MW-10D (Duplicate)	10/3/2017	0.0614	0.020	<0.020	<0.060	
MW-10D	3/14/2018	0.116	0.0178	0.0194	0.00472	Duplicate Sample Collected
MW-10D (Duplicate)	3/14/2018	0.104	0.0169	0.0176	<0.0150	
MW-10D	9/7/2018	0.0499	0.0163	0.00769	0.0033	Duplicate Sample Collected
MW-10D (Duplicate)	9/7/2018	0.0497	0.0181	0.00899	0.00384	
MW-10D	3/26/2019	0.047	0.0126	0.00647	0.00238 J	Duplicate Sample Collected
MW-10D (Duplicate)	3/26/2019	0.0477	0.0124	0.00642	0.00227 J	
MW-10D	9/18/2019	0.0588	0.0119	0.0182	0.00272 J	Duplicate Sample Collected
MW-10D (Duplicate)	9/18/2019	0.0574	0.0116	0.0185	0.00264 J	
MW-10D	6/23/2020	0.0297	0.0151	0.00472	0.00318	Duplicate Sample Collected
MW-10D (Duplicate)	6/23/2020	0.0290	0.0145	0.00418	0.00323	
MW-10D	9/16/2020	0.0466	0.0138	0.0103	0.00248 J	Duplicate Sample Collected
MW-10D (Duplicate)	9/16/2020	0.0523	0.0124	0.0129	0.00261 J	
MW-10D	3/25/2021	0.0318	0.0153	0.00399	0.00328	Duplicate Sample Collected
MW-10D (Duplicate)	3/25/2021	0.0322	0.0148	0.00418	0.0034	
MW-10D	9/23/2021	0.0227	0.0117	0.0036	0.00328	Duplicate Sample Collected
MW-10D (Duplicate)	9/23/2021	0.0221	0.0116	0.00361	0.00325	
MW-11	4/29/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-11	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-11	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-11	9/28/2010	0.0036	<0.002	<0.002	0.004	
MW-11	4/28/2011	<0.001	<0.002	<0.002	<0.002	
MW-11	9/12/2001	<0.001	<0.002	<0.002	<0.004	
MW-11	3/5/2012	<0.005	<0.005	<0.005	<0.015	
MW-11	9/4/2012	<0.005	<0.005	<0.005	<0.015	
MW-11	2/18/2013	<0.001	<0.001	<0.001	<0.003	
MW-11	9/9/2013	<0.001	<0.001	<0.001	0.0033	
MW-11	2/25/2014	<0.001	<0.001	<0.001	<0.001	
MW-11	9/23/2014	<0.001	<0.001	<0.001	<0.003	
MW-11	2/24/2015	0.0019	<0.001	<0.001	<0.003	
MW-11	9/1/2015	0.019	<0.001	<0.001	0.0031	
MW-11	3/24/2016	<0.001	<0.001	<0.001	<0.003	
MW-11	9/28/2016	0.0036	<0.0010	<0.0010	<0.0030	
MW-11	3/7/2017	0.0081	<0.0010	<0.0010	0.0017	
MW-11	10/3/2017	0.000951 J	<0.0010	<0.0010	<0.0030	
MW-11	3/14/2018	0.00385	<0.0010	<0.0010	<0.0030	
MW-11	9/7/2018	0.000467 J	<0.0010	<0.0010	<0.0030	
MW-11	3/26/2019	0.0135	0.00082 J	<0.0010	<0.0030	
MW-11	9/18/2019	0.0207	0.00138	0.000459 J	0.00166 J	
MW-11	6/23/2020	0.05	0.00263	0.000628 J	0.00211 J	
MW-11	9/16/2020	0.0148	0.00138	0.000301 J	0.000603 J	
MW-11	3/25/2021	0.0227	0.000762 J	0.000310 J	0.00150 J	
MW-11	9/23/2021	0.0178	0.000671 J	0.000456 J	0.00147 J	
MW-13	4/29/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-13	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-13	3/24/2010	<0.002	<0.002	<0.002	<0.006	
MW-13	9/28/2010	<0.001	<0.002	<0.002	<0.004	
MW-13	4/28/2011	<0.001	<0.002	<0.002	<0.002	
MW-13	9/12/2011	<0.001	<0.002	<0.002	<0.004	
MW-13	3/5/2012	<0.005	<0.005	<0.005	<0.015	
MW-13	Well Destroyed					
Trip Blank	2/25/2014	<0.001	<0.001	<0.001	<0.001	
Trip Blank	9/23/2014	<0.001	<0.001	<0.001	<0.003	

APPENDIX A
HISTORICAL ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
LINAM RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMWQCC Groundwater Standards (mg/L)		0.005	1.00	0.70	0.62	
Trip Blank	2/24/2015	<0.001	<0.001	<0.001	<0.003	
Trip Blank	9/1/2015	<0.001	<0.001	<0.001	<0.003	
Trip Blank	3/24/2016	<0.001	<0.001	<0.001	<0.003	
Trip Blank	9/28/2016	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	3/7/2017	<0.0010	<0.0010	<0.0010	<0.0010	
Trip Blank	10/3/2017	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	3/14/2018	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	9/7/2018	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	3/26/2019	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	9/18/2019	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	6/24/2020	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	9/16/2020	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0030	

Notes:

Bold red values indicate an exceedance of the NMWQCC groundwater standards for the Site.

NMWQCC = New Mexico Water Quality Control Commission

LNAPL = Light Non-Aqueous Phase Liquid

J = A qualifier indicating an estimated value of a concentration above the laboratory's Method Detection Limit (MDL) but below the Reported Detection Limit (RDL).

NS = Not Sampled

NM = Not Measured

mg/L = milligrams per liter

Appendix B

Laboratory Analytical Report

- Pace Job #: L1409095



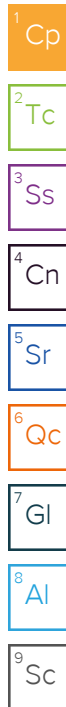
ANALYTICAL REPORT

October 11, 2021

DCP Midstream - Tasman

Sample Delivery Group: L1409095
Samples Received: 09/24/2021
Project Number:
Description: Linam Ranch

Report To: Kyle Norman
2620 W. Marland Blvd
Hobbs, NM 88240



Entire Report Reviewed By:

Chris Ward

Chris Ward
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 National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Sr: Sample Results	6
MW-1 L1409095-01	6
MW-2 L1409095-02	7
MW-3 L1409095-03	8
MW-5 L1409095-04	9
MW-8 L1409095-05	10
MW-9 L1409095-06	11
MW-10 L1409095-07	12
MW-10D L1409095-08	13
MW-11 L1409095-09	14
DUPLICATE L1409095-10	15
TRIP BLANK L1409095-11	16
Qc: Quality Control Summary	17
Volatile Organic Compounds (GC/MS) by Method 8260B	17
Gl: Glossary of Terms	19
Al: Accreditations & Locations	20
Sc: Sample Chain of Custody	21

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

MW-1 L1409095-01 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 09:55	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	09/30/21 23:50	09/30/21 23:50	ACG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-2 L1409095-02 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 10:50	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 00:09	10/01/21 00:09	ACG	Mt. Juliet, TN

MW-3 L1409095-03 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 13:45	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 00:28	10/01/21 00:28	ACG	Mt. Juliet, TN

MW-5 L1409095-04 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 09:30	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	20	10/01/21 05:14	10/01/21 05:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1752416	100	10/07/21 00:34	10/07/21 00:34	JCP	Mt. Juliet, TN

MW-8 L1409095-05 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 10:25	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 00:47	10/01/21 00:47	ACG	Mt. Juliet, TN

MW-9 L1409095-06 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 13:25	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 01:06	10/01/21 01:06	ACG	Mt. Juliet, TN

MW-10 L1409095-07 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 11:35	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	20	10/01/21 05:33	10/01/21 05:33	ACG	Mt. Juliet, TN

MW-10D L1409095-08 GW

				Collected by Becky Griffin	Collected date/time 09/23/21 11:15	Received date/time 09/24/21 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 01:25	10/01/21 01:25	ACG	Mt. Juliet, TN

MW-11 L1409095-09 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 01:44	10/01/21 01:44	ACG	Mt. Juliet, TN

Collected by
Becky Griffin

Collected date/time
09/23/21 10:15

Received date/time
09/24/21 09:45

¹Cp

²Tc

³Ss

DUPLICATE L1409095-10 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	10/01/21 02:03	10/01/21 02:03	ACG	Mt. Juliet, TN

Collected by
Becky Griffin

Collected date/time
09/23/21 00:00

Received date/time
09/24/21 09:45

⁴Cn

⁵Sr

TRIP BLANK L1409095-11 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1749532	1	09/30/21 23:31	09/30/21 23:31	ACG	Mt. Juliet, TN

Collected by
Becky Griffin

Collected date/time
09/23/21 14:30

Received date/time
09/24/21 09:45

⁶Qc

⁷Gl

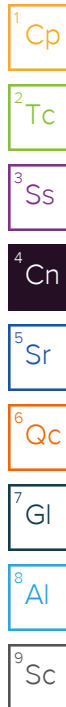
⁸Al

⁹Sc

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.



Chris Ward
Project Manager



Collected date/time: 09/23/21 09:55

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	09/30/2021 23:50	WG1749532
Toluene	U		0.000278	0.00100	1	09/30/2021 23:50	WG1749532
Ethylbenzene	U		0.000137	0.00100	1	09/30/2021 23:50	WG1749532
Total Xylenes	U		0.000174	0.00300	1	09/30/2021 23:50	WG1749532
(S) Toluene-d8	106			80.0-120		09/30/2021 23:50	WG1749532
(S) 4-Bromofluorobenzene	100			77.0-126		09/30/2021 23:50	WG1749532
(S) 1,2-Dichloroethane-d4	124			70.0-130		09/30/2021 23:50	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 10:50

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	10/01/2021 00:09	WG1749532
Toluene	U		0.000278	0.00100	1	10/01/2021 00:09	WG1749532
Ethylbenzene	U		0.000137	0.00100	1	10/01/2021 00:09	WG1749532
Total Xylenes	U		0.000174	0.00300	1	10/01/2021 00:09	WG1749532
(S) Toluene-d8	108			80.0-120		10/01/2021 00:09	WG1749532
(S) 4-Bromofluorobenzene	101			77.0-126		10/01/2021 00:09	WG1749532
(S) 1,2-Dichloroethane-d4	124			70.0-130		10/01/2021 00:09	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 13:45

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	10/01/2021 00:28	WG1749532
Toluene	U		0.000278	0.00100	1	10/01/2021 00:28	WG1749532
Ethylbenzene	U		0.000137	0.00100	1	10/01/2021 00:28	WG1749532
Total Xylenes	U		0.000174	0.00300	1	10/01/2021 00:28	WG1749532
(S) Toluene-d8	106			80.0-120		10/01/2021 00:28	WG1749532
(S) 4-Bromofluorobenzene	100			77.0-126		10/01/2021 00:28	WG1749532
(S) 1,2-Dichloroethane-d4	123			70.0-130		10/01/2021 00:28	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 09:30

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0933		0.00188	0.0200	20	10/01/2021 05:14	WG1749532
Toluene	U		0.00556	0.0200	20	10/01/2021 05:14	WG1749532
Ethylbenzene	2.72		0.0137	0.100	100	10/07/2021 00:34	WG1752416
Total Xylenes	U		0.00348	0.0600	20	10/01/2021 05:14	WG1749532
(S) Toluene-d8	107			80.0-120		10/01/2021 05:14	WG1749532
(S) Toluene-d8	101			80.0-120		10/07/2021 00:34	WG1752416
(S) 4-Bromofluorobenzene	102			77.0-126		10/01/2021 05:14	WG1749532
(S) 4-Bromofluorobenzene	90.6			77.0-126		10/07/2021 00:34	WG1752416
(S) 1,2-Dichloroethane-d4	127			70.0-130		10/01/2021 05:14	WG1749532
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/07/2021 00:34	WG1752416

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 10:25

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	10/01/2021 00:47	WG1749532
Toluene	U		0.000278	0.00100	1	10/01/2021 00:47	WG1749532
Ethylbenzene	U		0.000137	0.00100	1	10/01/2021 00:47	WG1749532
Total Xylenes	U		0.000174	0.00300	1	10/01/2021 00:47	WG1749532
(S) Toluene-d8	109			80.0-120		10/01/2021 00:47	WG1749532
(S) 4-Bromofluorobenzene	101			77.0-126		10/01/2021 00:47	WG1749532
(S) 1,2-Dichloroethane-d4	126			70.0-130		10/01/2021 00:47	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 13:25

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	10/01/2021 01:06	WG1749532
Toluene	U		0.000278	0.00100	1	10/01/2021 01:06	WG1749532
Ethylbenzene	U		0.000137	0.00100	1	10/01/2021 01:06	WG1749532
Total Xylenes	U		0.000174	0.00300	1	10/01/2021 01:06	WG1749532
(S) Toluene-d8	106			80.0-120		10/01/2021 01:06	WG1749532
(S) 4-Bromofluorobenzene	100			77.0-126		10/01/2021 01:06	WG1749532
(S) 1,2-Dichloroethane-d4	125			70.0-130		10/01/2021 01:06	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 11:35

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.52		0.00188	0.0200	20	10/01/2021 05:33	WG1749532
Toluene	U		0.00556	0.0200	20	10/01/2021 05:33	WG1749532
Ethylbenzene	0.272		0.00274	0.0200	20	10/01/2021 05:33	WG1749532
Total Xylenes	0.0150	J	0.00348	0.0600	20	10/01/2021 05:33	WG1749532
(S) Toluene-d8	106			80.0-120		10/01/2021 05:33	WG1749532
(S) 4-Bromofluorobenzene	101			77.0-126		10/01/2021 05:33	WG1749532
(S) 1,2-Dichloroethane-d4	128			70.0-130		10/01/2021 05:33	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 11:15

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0227		0.0000941	0.00100	1	10/01/2021 01:25	WG1749532
Toluene	0.0117		0.000278	0.00100	1	10/01/2021 01:25	WG1749532
Ethylbenzene	0.00360		0.000137	0.00100	1	10/01/2021 01:25	WG1749532
Total Xylenes	0.00328		0.000174	0.00300	1	10/01/2021 01:25	WG1749532
(S) Toluene-d8	106			80.0-120		10/01/2021 01:25	WG1749532
(S) 4-Bromofluorobenzene	102			77.0-126		10/01/2021 01:25	WG1749532
(S) 1,2-Dichloroethane-d4	124			70.0-130		10/01/2021 01:25	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 10:15

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0178		0.0000941	0.00100	1	10/01/2021 01:44	WG1749532
Toluene	0.000671	J	0.000278	0.00100	1	10/01/2021 01:44	WG1749532
Ethylbenzene	0.000456	J	0.000137	0.00100	1	10/01/2021 01:44	WG1749532
Total Xylenes	0.00147	J	0.000174	0.00300	1	10/01/2021 01:44	WG1749532
(S) Toluene-d8	107			80.0-120		10/01/2021 01:44	WG1749532
(S) 4-Bromofluorobenzene	101			77.0-126		10/01/2021 01:44	WG1749532
(S) 1,2-Dichloroethane-d4	122			70.0-130		10/01/2021 01:44	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 00:00

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0221		0.0000941	0.00100	1	10/01/2021 02:03	WG1749532
Toluene	0.0116		0.000278	0.00100	1	10/01/2021 02:03	WG1749532
Ethylbenzene	0.00361		0.000137	0.00100	1	10/01/2021 02:03	WG1749532
Total Xylenes	0.00325		0.000174	0.00300	1	10/01/2021 02:03	WG1749532
(S) Toluene-d8	107			80.0-120		10/01/2021 02:03	WG1749532
(S) 4-Bromofluorobenzene	104			77.0-126		10/01/2021 02:03	WG1749532
(S) 1,2-Dichloroethane-d4	123			70.0-130		10/01/2021 02:03	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 09/23/21 14:30

L1409095

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	09/30/2021 23:31	WG1749532
Toluene	U		0.000278	0.00100	1	09/30/2021 23:31	WG1749532
Ethylbenzene	U		0.000137	0.00100	1	09/30/2021 23:31	WG1749532
Total Xylenes	U		0.000174	0.00300	1	09/30/2021 23:31	WG1749532
(S) Toluene-d8	106			80.0-120		09/30/2021 23:31	WG1749532
(S) 4-Bromofluorobenzene	100			77.0-126		09/30/2021 23:31	WG1749532
(S) 1,2-Dichloroethane-d4	124			70.0-130		09/30/2021 23:31	WG1749532

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3712974-3 09/30/21 23:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	108			80.0-120
(S) 4-Bromofluorobenzene	99.7			77.0-126
(S) 1,2-Dichloroethane-d4	118			70.0-130

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

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

(LCS) R3712974-1 09/30/21 21:56 • (LCSD) R3712974-2 09/30/21 22:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.00436	0.00490	87.2	98.0	70.0-123			11.7	20
Ethylbenzene	0.00500	0.00459	0.00520	91.8	104	79.0-123			12.5	20
Toluene	0.00500	0.00473	0.00529	94.6	106	79.0-120			11.2	20
Xylenes, Total	0.0150	0.0142	0.0159	94.7	106	79.0-123			11.3	20
(S) Toluene-d8				110	108	80.0-120				
(S) 4-Bromofluorobenzene				101	102	77.0-126				
(S) 1,2-Dichloroethane-d4				122	124	70.0-130				

⁷ Gl

⁸ Al

⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

L1409095-04

Method Blank (MB)

(MB) R3714533-3 10/06/21 23:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ethylbenzene	U		0.000137	0.00100
(S) Toluene-d8	106			80.0-120
(S) 4-Bromofluorobenzene	89.3			77.0-126
(S) 1,2-Dichloroethane-d4	109			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3714533-1 10/06/21 22:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	0.00500	0.00535	107	79.0-123	
(S) Toluene-d8			102	80.0-120	
(S) 4-Bromofluorobenzene			93.5	77.0-126	
(S) 1,2-Dichloroethane-d4			112	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier Description

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

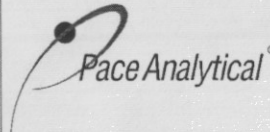
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

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

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

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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Company Name/Address: DCP Midstream - Tasman 2620 W. Marland Blvd Hobbs, NM 88240		Billing Information: Steve Weathers 370 17th St, Ste 2500 Denver, CO 80202		Pres Chk	Analysis / Container / Preservative										Chain of Custody		
Report to: Kyle Norman		Email To: knorman@tasman-geo.com; bhumphrey@tasman-														 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf SDG # 1248 Table Acctnum: DCPTASMAN Template: T127845 Prelogin: P872127 PM: 824 - Chris Ward PB: 9/13/21 Shipped Via: FedEX Ground Remarks Sample # (lab only)	
Project Description: Linam Ranch		City/State Collected:		Please Circle: PT MT CT ET		V8260BTEX 40miAmb-HCl											
Phone: 720-218-4003		Client Project #		Lab Project # DCPTASMAN-LINAM													
Collected by (print): BECKY GRIFFIN		Site/Facility ID #		P.O. # 0000524227													
Collected by (signature): Becky Griffin		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote # Date Results Needed													
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				No. of Cntrs													
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time												
MW-1		GW		9-23-21	0955	3	X										-01
MW-2		GW			1050	3	X										02
MW-3		GW			1345	3	X										03
MW-4		GW															
MW-5		GW			0930	3	X										04
MW-6		GW															
MW-7		GW															
MW-8		GW			1025	3	X										05
MW-9		GW			1325	3	X										06
MW-10		GW			1135	3	X										07
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks:		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N											
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # S318 9943 1490															
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: <input checked="" type="checkbox"/> Yes / No <input type="checkbox"/> HCL / MeOH TBR		Temp: 28.1 °C Bottles Received: 30 If preservation required by Login: Date/Time											
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date: 9/24/21 Time: 0945													
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date: 9/24/21 Time: 0945		Hold:										Condition: NCF <input checked="" type="checkbox"/> OK	

Released to Imaging: 1/3/2022 9:10:21 AM

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

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

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 65604

CONDITIONS

Operator: DCP OPERATING COMPANY, LP 370 17th Street, Suite 2500 Denver, CO 80202	OGRID:
	36785
	Action Number:
	65604
Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)	

CONDITIONS

Created By	Condition	Condition Date
nvelez	1. Follow recommendations stated within 2H 2021 Semi-Annual 2020 Groundwater Monitoring Summary Report. a. Continue semi-annual groundwater monitoring and sampling at the monitoring locations b. Continue active LNAPL recovery at monitoring well MW-6 using Spill Buster LNAPL recovery system c. Continue to evaluate conditions at MW-4 d. Submit annual report no later than March 31, 2022	1/3/2022