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## First Half 2021 Semi-Annual Groundwater Monitoring Summary Report

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

Prepared for:



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**May 18, 2021**



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## 1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the first 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 March 25, 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 first half 2021 semi-annual monitoring event on March 25, 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 of the 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 first half 2021 groundwater elevation map, included as Figure 3, indicates that groundwater flow at the Site trends generally to the southeast. Groundwater elevations 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**

<b>First Half 2021 (3/25/2021)</b>	
Maximum Elevation (Well ID)	3,670.13' (MW-5)
Minimum Elevation (Well ID)	3,665.11 (MW-10D)
Average Change from Previous Monitoring Event (ft) – All Wells	-0.55
Hydraulic Gradient (ft/ft) / (Well IDs)	0.0054 (MW-5 to MW-10D)

LNAPL was observed at MW-4 (0.60 ft) and presumed to be at MW-6, however, this well is equipped with a spill buster and was not gauged during the first half 2021 event. Historically, 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 ten of the twelve wells. MW-6 was not sampled due to the presence of 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 March 2021 event are contained in Appendix A, and the laboratory analytical report for the first 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-4 (17.3 mg/L), MW-5 (0.105 mg/L), MW-10 (1.64 mg/L), MW-10D (0.0318 mg/L, Duplicate 0.0322 mg/L), and MW-11 (0.0227 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 2.61 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) was collected during the March 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 first 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 0.0318 mg/L and 0.0322 mg/L, respectively. The calculated relative percent difference (RPD) is 1.25%, 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 were collected in the second half 2020 and first half 2021. 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 first 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 first half 2021 monitoring event exhibited a decrease in elevation compared to the second half 2020. 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, 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 first half 2021 and historical Site observations and monitoring results, the following recommendation has 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**  
**FIRST 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	09/18/19	45.86			54.55	3718.29	3672.43	-0.49
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-2	09/18/19	46.43			50.57	3714.80	3668.37	-0.81
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-3	09/18/19	49.95			55.41	3715.50	3665.55	-0.33
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-4	09/18/19	47.61			54.76	3720.46	3672.85	-1.24
*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-5	09/18/19	48.92			56.62	3721.53	3672.61	-2.00
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-6	09/18/19	51.09	48.47	2.62	54.30	3720.99	3671.87	-1.66
*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-7	09/18/19	62.24			62.86	3728.57	3666.33	-2.54
MW-7	06/24/20				DRY			
MW-7	09/16/20				DRY			
MW-7	03/25/21				DRY			
MW-8	09/18/19	45.88			58.05	3714.18	3668.30	-0.88
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-9	09/18/19	52.78			59.35	3720.48	3667.70	-0.48
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-10	09/18/19	52.77			66.10	3720.76	3667.99	-0.62
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-10D	09/18/19	54.12			79.01	3720.85	3666.73	-0.69
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-11	09/18/19	53.73			63.27	3722.02	3668.29	-0.90
MW-11	06/23/20	54.64			63.27	3722.02	3667.38	-0.91

**TABLE 1**  
**FIRST 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	09/16/20	55.06			63.27	3722.02	3666.96	-0.42
MW-11	03/25/21	55.70			63.27	3722.02	3666.32	-0.64
Average change in groundwater elevation (9/16/20 to 3/25/21)								-0.55

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/cm<sup>3</sup>)

NM = Not Measured

NA = Not Applicable

**TABLE 2**  
**FIRST 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)		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
MW-1	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	3/25/2021	<b>17.3</b>	<0.100	0.911	0.121 J	LNAPL (0.60 feet)
MW-5	3/25/2021	<b>0.105</b>	<0.0200	<b>2.61</b>	<0.0600	
MW-6	3/25/2021		LNAPL			LNAPL (Spill Buster)
MW-7	3/25/2021		NS			DRY
MW-8	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-9	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-10	3/25/2021	<b>1.64</b>	0.0162 J	0.221	0.0452 J	
MW-10D	3/25/2021	<b>0.0318</b>	0.0153	0.00399	0.00328	Duplicate Sample Collected
MW-10D (Duplicate)	3/25/2021	<b>0.0322</b>	0.0148	0.00418	0.0034	
MW-11	3/25/2021	<b>0.0227</b>	0.000762 J	0.000310 J	0.00150 J	
Trip Blank	3/25/2021	<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

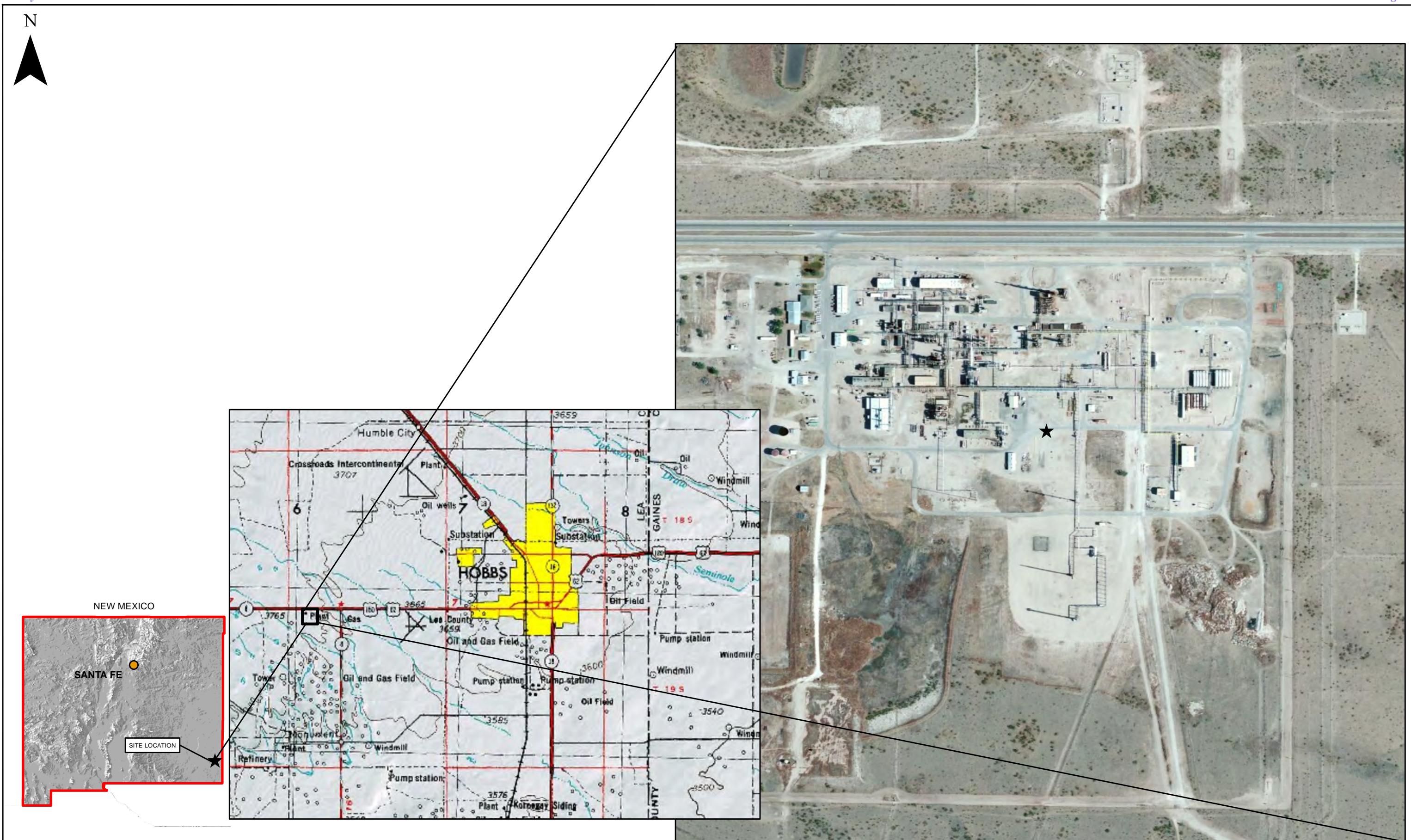
LNAPL = light non-aqueous phase liquid

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, 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**  
First Half 2021 Semi-Annual Groundwater  
Monitoring Summary Report

Site Map with Monitoring  
Well Locations

**Figure  
2**



DATE:	May 2020
DESIGNED BY:	B. Humphrey
DRAWN BY:	C. Ambler

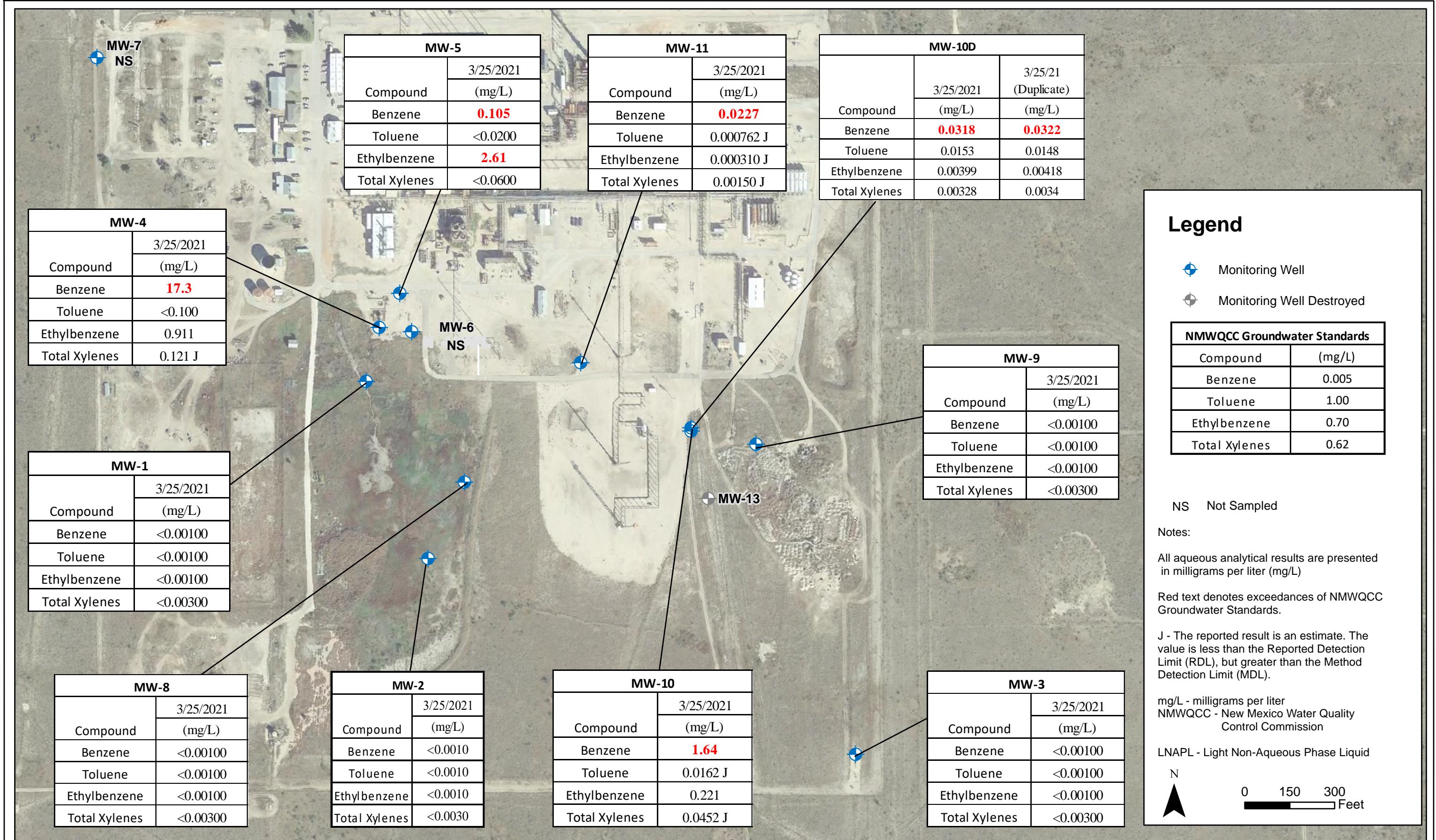


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**DCP Midstream**  
**Linam Ranch Gas Plant**  
First Half 2021 Semi-Annual Groundwater Monitoring  
Summary Report

Groundwater Elevation  
Contour Map  
(March 25, 2021)

**Figure**  
**3**



DATE:  
May 2021  
DESIGNED BY:  
B. Humphrey  
DRAWN BY:  
C.Amber



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### DCP Midstream Linam Ranch Gas Plant

First Half 2021 Semi-Annual Groundwater Monitoring Summary Report

Analytical Results Map  
(March 25, 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
<b>NMWQCC Groundwater Standards (mg/L)</b>		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
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	<b>0.012</b>	<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-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-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	
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	

**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
<b>NMWQCC Groundwater Standards (mg/L)</b>		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
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-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	<b>9.8</b>	<0.005	0.59	<0.015	LNAPL (0.01 feet)
MW-4	9/1/2015	<b>8.6</b>	<0.005	0.53	<0.015	
MW-4	3/24/2016	<b>6.9</b>	<0.005	0.38	<0.015	
MW-4	10/12/2016	<b>5</b>	<0.010	0.027	0.053	
MW-4	3/7/2017	<b>8.9</b>	<0.005	0.024	0.0051	
MW-4	10/3/2017	<b>16.9</b>	<0.100	0.618	<0.300	
MW-4	3/14/2018	<b>18.7</b>	<0.010	0.686	<0.030	
MW-4	9/7/2018	<b>12.3</b>	<0.200	0.74	<0.600	
MW-4	3/26/2019	<b>15.9</b>	<0.200	0.516	<0.600	
MW-4	9/18/2019	<b>19.3</b>	<0.0010	<b>0.829</b>	0.00356	
MW-4	6/23/2020	<b>12.9</b>	<0.0010	0.561	0.0351	
MW-4	9/16/2020	<b>18.5</b>	<0.100	0.601	<0.300	
MW-4	3/25/2021	<b>17.3</b>	<0.100	0.911	0.121 J	LNAPL (0.60 feet)
MW-5	9/24/2009	<b>0.0272</b>	<0.002	0.227	<0.006	
MW-5	3/24/2010	<b>0.13</b>	<0.002	0.482	0.46	
MW-5	9/28/2010	0.0095	<0.004	0.188	<0.008	
MW-5	4/28/2011	<b>0.149</b>	<0.004	<b>0.776</b>	<0.004	
MW-5	9/13/2011	<b>0.13</b>	<0.010	<b>0.86</b>	<0.020	
MW-5	3/5/2012	<b>0.24</b>	<0.025	<b>2</b>	<0.075	
MW-5	9/4/2012	<b>0.17</b>	<0.005	<b>1</b>	0.038	Duplicate Sample Collected
MW-5	2/18/2013	<b>0.21</b>	<0.005	<b>1.4</b>	<0.015	Duplicate Sample Collected
MW-5	9/9/2013	<b>0.096</b>	<0.001	<b>0.89</b>	<0.001	Duplicate Sample Collected
MW-5 (Duplicate)	9/9/2013	<b>0.095</b>	<0.001	<b>0.9</b>	<0.001	
MW-5	2/25/2014	<b>0.18</b>	<0.005	<b>1.3</b>	<0.005	
MW-5	9/23/2014	<b>0.33</b>	<0.005	<b>2</b>	<0.015	
MW-5	2/24/2015	<b>0.16</b>	<0.005	<b>1.3</b>	<0.015	
MW-5	9/1/2015	<b>0.1</b>	<0.005	0.57	<0.015	
MW-5	3/24/2016	<b>0.095</b>	<0.005	<b>1.4</b>	<0.015	
MW-5	9/28/2016	<b>0.081</b>	<0.0050	<b>1.6</b>	<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
<b>NMWQCC Groundwater Standards (mg/L)</b>		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
MW-5	3/7/2017	<b>0.081</b>	<0.0050	<b>0.91</b>	<0.0050	
MW-5	10/3/2017	<b>0.151</b>	0.00906 J	<b>2.34</b>	<0.060	
MW-5	3/14/2018	<b>0.0609</b>	<0.010	<b>0.930</b>	<0.030	
MW-5	9/7/2018	<b>0.131</b>	<0.001	<b>2.040</b>	0.00267 J	
MW-5	3/26/2019	<b>0.08</b>	0.000443 J	<b>2.530</b>	<0.003	
MW-5	9/18/2019	<b>0.0980</b>	<0.0200	<b>1.97</b>	<0.0600	
MW-5	6/23/2020	<b>0.0266</b>	<0.0200	<b>1.73</b>	0.00356 J	
MW-5	9/16/2020	<b>0.0358</b>	<0.0200	<b>2.12</b>	<0.0600	
MW-5	3/25/2021	<b>0.105</b>	<0.0200	<b>2.61</b>	<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	<b>0.543</b>	<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-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	
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

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**LINAM RANCH**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
<b>NMWQCC Groundwater Standards (mg/L)</b>		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
MW-7	3/25/2021		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-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	
MW-9	3/25/2021	<0.0010	<0.0010	<0.0010	<0.0030	
MW-10	4/30/2008	<b>0.769</b>	0.0457	0.0851	0.05	
MW-10	4/29/2009	<b>0.883</b>	0.23	0.0859	0.0759	
MW-10	9/24/2009	<b>1.07</b>	0.126	0.148	0.154	
MW-10	3/24/2010	<b>1.64</b>	0.175	0.246	0.156	
MW-10	9/28/2010	<b>1.9</b>	0.0547 J	0.24	0.104 J	
MW-10	4/28/2011	<b>1.72</b>	0.228	0.195	0.126	Duplicate Sample Collected

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**LINAM RANCH**  
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Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
<b>NMWQCC Groundwater Standards (mg/L)</b>		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
MW-10 (Duplicate)	4/28/2011	<b>2.29</b>	0.258	0.234	0.155	
MW-10	9/12/2011	<b>1.97</b>	0.104	0.249	0.145	Duplicate Sample Collected
MW-10 (Duplicate)	9/12/2011	<b>2.08</b>	0.0964	0.25	0.153	
MW-10	3/5/2012	<b>2.2</b>	0.11	0.23	0.13	
MW-10	9/4/2012	<b>2.7</b>	0.0083	0.28	0.12	
MW-10	2/18/2013	<b>2.0</b>	0.019	0.3	0.13	
MW-10	9/9/2013	<b>1.6</b>	0.022	0.26	0.11	
MW-10	2/25/2014	<b>1.7</b>	0.0054	0.35	0.098	
MW-10	9/23/2014	<b>2.2</b>	<0.005	0.53	0.15	
MW-10	2/24/2015	<b>1.6</b>	0.012	0.29	0.086	
MW-10	9/1/2015	<b>1.6</b>	0.012	0.19	0.078	
MW-10	3/24/2016	<b>4.6</b>	0.0068	0.22	0.054	
MW-10	9/28/2016	<b>3.1</b>	0.012	0.25	0.19	
MW-10	3/7/2017	<b>3.1</b>	0.011	0.23	0.09	
MW-10	10/3/2017	<b>4.27</b>	0.0202	0.311	0.158	
MW-10	3/14/2018	<b>4.24</b>	<0.010	0.440	0.109	
MW-10	9/7/2018	<b>3.32</b>	0.0274	0.332	0.155	
MW-10	3/26/2019	<b>2.0</b>	0.0182	0.197	0.0826	
MW-10	9/18/2019	<b>1.66</b>	<0.200	0.284	0.202	
MW-10	6/23/2020	<b>2.66</b>	0.0100 J	0.522	0.141	
MW-10	9/16/2020	<b>2.96</b>	<0.0200	0.500	0.119	
MW-10	3/25/2021	<b>1.64</b>	0.0162 J	0.221	0.0452 J	
MW-10D	4/30/2008	<b>0.195</b>	0.0677	0.0144	0.0221	
MW-10D	4/29/2009	<b>0.179</b>	0.0772	0.0203	0.0296	
MW-10D	9/24/2009	<b>0.103</b>	0.0496	0.0127	0.0261	
MW-10D	3/24/2010	<b>0.196</b>	0.0703	0.0129	0.0202	
MW-10D	9/28/2010	<b>0.0402</b>	0.0358	0.006	0.0077 J	
MW-10D	4/28/2011	<b>0.0512</b>	0.0373	0.0063	0.0113	
MW-10D	9/12/2011	<b>0.0278</b>	0.0131	0.0032	0.006	
MW-10D	3/5/2012	<b>0.024</b>	0.0081	<0.005	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	3/5/2012	<b>0.022</b>	0.0089	<0.005	<0.015	
MW-10D	9/4/2012	<b>0.023</b>	0.0057	<0.005	<0.015	
MW-10D	2/18/2013	<b>0.034</b>	0.014	0.0023	0.0031	
MW-10D	9/9/2013	<b>0.034</b>	0.019	<0.005	<0.005	
MW-10D	2/25/2014	<b>0.046</b>	0.021	0.005	<0.005	Duplicate Sample Collected
MW-10D (Duplicate)	2/25/2014	<b>0.043</b>	0.019	<0.005	<0.005	
MW-10D	9/23/2014	<b>0.059</b>	0.024	<0.005	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	9/23/2014	<b>0.058</b>	0.024	<0.005	<0.015	
MW-10D	2/24/2015	<b>0.062</b>	0.026	0.008	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	2/24/2015	<b>0.058</b>	0.024	0.0074	<0.015	
MW-10D	9/1/2015	<b>0.062</b>	0.025	0.006	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	9/1/2015	<b>0.065</b>	0.026	0.0075	<0.015	
MW-10D	3/24/2016	<b>0.079</b>	0.021	0.021	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	3/24/2016	<b>0.079</b>	0.019	0.013	<0.015	
MW-10D	9/28/2016	<b>0.024</b>	0.013	<0.0050	<0.015	Duplicate Sample Collected
MW-10D (Duplicate)	9/28/2016	<b>0.025</b>	0.013	<0.0050	<0.015	
MW-10D	3/7/2017	<b>0.15</b>	0.017	0.026	0.0072	Duplicate Sample Collected
MW-10D (Duplicate)	3/7/2017	<b>0.15</b>	0.016	0.025	0.0066	
MW-10D	10/3/2017	<b>0.0510</b>	0.0153	<0.010	<0.030	Duplicate Sample Collected
MW-10D (Duplicate)	10/3/2017	<b>0.0614</b>	0.020	<0.020	<0.060	
MW-10D	3/14/2018	<b>0.116</b>	0.0178	0.0194	0.00472	Duplicate Sample Collected
MW-10D (Duplicate)	3/14/2018	<b>0.104</b>	0.0169	0.0176	<0.0150	
MW-10D	9/7/2018	<b>0.0499</b>	0.0163	0.00769	0.0033	Duplicate Sample Collected
MW-10D (Duplicate)	9/7/2018	<b>0.0497</b>	0.0181	0.00899	0.00384	
MW-10D	3/26/2019	<b>0.047</b>	0.0126	0.00647	0.00238 J	Duplicate Sample Collected
MW-10D (Duplicate)	3/26/2019	<b>0.0477</b>	0.0124	0.00642	0.00227 J	

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**LINAM RANCH**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
<b>NMWQCC Groundwater Standards (mg/L)</b>		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
MW-10D	9/18/2019	<b>0.0588</b>	0.0119	0.0182	0.00272 J	Duplicate Sample Collected
MW-10D (Duplicate)	9/18/2019	<b>0.0574</b>	0.0116	0.0185	0.00264 J	
MW-10D	6/23/2020	<b>0.0297</b>	0.0151	0.00472	0.00318	Duplicate Sample Collected
MW-10D (Duplicate)	6/23/2020	<b>0.0290</b>	0.0145	0.00418	0.00323	
MW-10D	9/16/2020	<b>0.0466</b>	0.0138	0.0103	0.00248 J	Duplicate Sample Collected
MW-10D (Duplicate)	9/16/2020	<b>0.0523</b>	0.0124	0.0129	0.00261 J	
MW-10D	3/25/2021	<b>0.0318</b>	0.0153	0.00399	0.00328	Duplicate Sample Collected
MW-10D (Duplicate)	3/25/2021	<b>0.0322</b>	0.0148	0.00418	0.0034	
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	<b>0.019</b>	<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	<b>0.0135</b>	0.00082 J	<0.0010	<0.0030	
MW-11	9/18/2019	<b>0.0207</b>	0.00138	0.000459 J	0.00166 J	
MW-11	6/23/2020	<b>0.05</b>	0.00263	0.000628 J	0.00211 J	
MW-11	9/16/2020	<b>0.0148</b>	0.00138	0.000301 J	0.000603 J	
MW-11	3/25/2021	<b>0.0227</b>	0.000762 J	0.000310 J	0.00150 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	
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	

**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)		<b>0.005</b>	<b>1.00</b>	<b>0.70</b>	<b>0.62</b>	
Trip Blank	3/25/2021	<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 #: L1331241



# ANALYTICAL REPORT

April 05, 2021

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

## DCP Midstream - Tasman

Sample Delivery Group: L1331241  
 Samples Received: 03/26/2021  
 Project Number:  
 Description: Linam Ranch

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

Entire Report Reviewed By:

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 National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

<b>Cp: Cover Page</b>	<b>1</b>	<b>1</b> Cp
<b>Tc: Table of Contents</b>	<b>2</b>	<b>2</b> Tc
<b>Ss: Sample Summary</b>	<b>3</b>	<b>3</b> Ss
<b>Cn: Case Narrative</b>	<b>5</b>	<b>4</b> Cn
<b>Sr: Sample Results</b>	<b>6</b>	<b>5</b> Sr
MW-1 L1331241-01	6	<b>6</b> Qc
MW-2 L1331241-02	7	<b>7</b> Gl
MW-3 L1331241-03	8	<b>8</b> Al
MW-4 L1331241-04	9	<b>9</b> Sc
MW-5 L1331241-05	10	
MW-8 L1331241-06	11	
MW-9 L1331241-07	12	
MW-10 L1331241-08	13	
MW-10D L1331241-09	14	
MW-11 L1331241-10	15	
DUPLICATE L1331241-11	16	
TRIP BLANK L1331241-12	17	
<b>Qc: Quality Control Summary</b>	<b>18</b>	
<b>Volatile Organic Compounds (GC/MS) by Method 8260B</b>	<b>18</b>	
<b>Gl: Glossary of Terms</b>	<b>19</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>20</b>	
<b>Sc: Sample Chain of Custody</b>	<b>21</b>	

## SAMPLE SUMMARY

MW-1 L1331241-01 GW			Collected by Becky Griffin	Collected date/time 03/25/21 09:05	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 21:59	03/27/21 21:59	TPR	Mt. Juliet, TN
MW-2 L1331241-02 GW			Collected by Becky Griffin	Collected date/time 03/25/21 09:45	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 22:19	03/27/21 22:19	TPR	Mt. Juliet, TN
MW-3 L1331241-03 GW			Collected by Becky Griffin	Collected date/time 03/25/21 11:45	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 22:40	03/27/21 22:40	TPR	Mt. Juliet, TN
MW-4 L1331241-04 GW			Collected by Becky Griffin	Collected date/time 03/25/21 08:45	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	100	03/28/21 02:28	03/28/21 02:28	TPR	Mt. Juliet, TN
MW-5 L1331241-05 GW			Collected by Becky Griffin	Collected date/time 03/25/21 10:05	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	20	03/28/21 02:49	03/28/21 02:49	TPR	Mt. Juliet, TN
MW-8 L1331241-06 GW			Collected by Becky Griffin	Collected date/time 03/25/21 09:25	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 23:01	03/27/21 23:01	TPR	Mt. Juliet, TN
MW-9 L1331241-07 GW			Collected by Becky Griffin	Collected date/time 03/25/21 11:25	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 23:22	03/27/21 23:22	TPR	Mt. Juliet, TN
MW-10 L1331241-08 GW			Collected by Becky Griffin	Collected date/time 03/25/21 10:45	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	20	03/28/21 03:11	03/28/21 03:11	TPR	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-10D L1331241-09 GW			Collected by Becky Griffin	Collected date/time 03/25/21 11:05	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 23:42	03/27/21 23:42	TPR	Mt. Juliet, TN
MW-11 L1331241-10 GW			Collected by Becky Griffin	Collected date/time 03/25/21 10:25	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/28/21 00:03	03/28/21 00:03	TPR	Mt. Juliet, TN
DUPLICATE L1331241-11 GW			Collected by Becky Griffin	Collected date/time 03/25/21 00:00	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/28/21 00:24	03/28/21 00:24	TPR	Mt. Juliet, TN
TRIP BLANK L1331241-12 GW			Collected by Becky Griffin	Collected date/time 03/25/21 14:00	Received date/time 03/26/21 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1641532	1	03/27/21 20:57	03/27/21 20:57	TPR	Mt. Juliet, TN

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

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



Chris Ward  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Sr
- <sup>6</sup> Qc
- <sup>7</sup> GI
- <sup>8</sup> AI
- <sup>9</sup> SC

## 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	03/27/2021 21:59	<a href="#">WG1641532</a>	<sup>1</sup> Cp
Toluene	U		0.000278	0.00100	1	03/27/2021 21:59	<a href="#">WG1641532</a>	<sup>2</sup> Tc
Ethylbenzene	U		0.000137	0.00100	1	03/27/2021 21:59	<a href="#">WG1641532</a>	<sup>3</sup> Ss
Total Xylenes	U		0.000174	0.00300	1	03/27/2021 21:59	<a href="#">WG1641532</a>	
(S) Toluene-d8	103			80.0-120		03/27/2021 21:59	<a href="#">WG1641532</a>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	102			77.0-126		03/27/2021 21:59	<a href="#">WG1641532</a>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	81.5			70.0-130		03/27/2021 21:59	<a href="#">WG1641532</a>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	03/27/2021 22:19	<u>WG1641532</u>	<sup>1</sup> Cp
Toluene	U		0.000278	0.00100	1	03/27/2021 22:19	<u>WG1641532</u>	<sup>2</sup> Tc
Ethylbenzene	U		0.000137	0.00100	1	03/27/2021 22:19	<u>WG1641532</u>	<sup>3</sup> Ss
Total Xylenes	U		0.000174	0.00300	1	03/27/2021 22:19	<u>WG1641532</u>	
(S) Toluene-d8	102			80.0-120		03/27/2021 22:19	<u>WG1641532</u>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	102			77.0-126		03/27/2021 22:19	<u>WG1641532</u>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	83.8			70.0-130		03/27/2021 22:19	<u>WG1641532</u>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	03/27/2021 22:40	<u>WG1641532</u>	<sup>1</sup> Cp
Toluene	U		0.000278	0.00100	1	03/27/2021 22:40	<u>WG1641532</u>	<sup>2</sup> Tc
Ethylbenzene	U		0.000137	0.00100	1	03/27/2021 22:40	<u>WG1641532</u>	<sup>3</sup> Ss
Total Xylenes	U		0.000174	0.00300	1	03/27/2021 22:40	<u>WG1641532</u>	
(S) Toluene-d8	104			80.0-120		03/27/2021 22:40	<u>WG1641532</u>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	104			77.0-126		03/27/2021 22:40	<u>WG1641532</u>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	83.5			70.0-130		03/27/2021 22:40	<u>WG1641532</u>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

Collected date/time: 03/25/21 08:45

L1331241

## 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	17.3		0.00941	0.100	100	03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>1</sup> Cp
Toluene	U		0.0278	0.100	100	03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>2</sup> Tc
Ethylbenzene	0.911		0.0137	0.100	100	03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>3</sup> Ss
Total Xylenes	0.121	J	0.0174	0.300	100	03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>4</sup> Cn
(S) Toluene-d8	100			80.0-120		03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>5</sup> Sr
(S) 4-Bromofluorobenzene	102			77.0-126		03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>6</sup> Qc
(S) 1,2-Dichloroethane-d4	84.1			70.0-130		03/28/2021 02:28	<a href="#">WG1641532</a>	<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	0.105		0.00188	0.0200	20	03/28/2021 02:49	<a href="#">WG1641532</a>	<sup>1</sup> Cp
Toluene	U		0.00556	0.0200	20	03/28/2021 02:49	<a href="#">WG1641532</a>	<sup>2</sup> Tc
Ethylbenzene	2.61		0.00274	0.0200	20	03/28/2021 02:49	<a href="#">WG1641532</a>	<sup>3</sup> Ss
Total Xylenes	U		0.00348	0.0600	20	03/28/2021 02:49	<a href="#">WG1641532</a>	
(S) Toluene-d8	102			80.0-120		03/28/2021 02:49	<a href="#">WG1641532</a>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	105			77.0-126		03/28/2021 02:49	<a href="#">WG1641532</a>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	84.1			70.0-130		03/28/2021 02:49	<a href="#">WG1641532</a>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	03/27/2021 23:01	<a href="#">WG1641532</a>	<sup>1</sup> Cp
Toluene	U		0.000278	0.00100	1	03/27/2021 23:01	<a href="#">WG1641532</a>	<sup>2</sup> Tc
Ethylbenzene	U		0.000137	0.00100	1	03/27/2021 23:01	<a href="#">WG1641532</a>	<sup>3</sup> Ss
Total Xylenes	U		0.000174	0.00300	1	03/27/2021 23:01	<a href="#">WG1641532</a>	
(S) Toluene-d8	101			80.0-120		03/27/2021 23:01	<a href="#">WG1641532</a>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	102			77.0-126		03/27/2021 23:01	<a href="#">WG1641532</a>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	84.7			70.0-130		03/27/2021 23:01	<a href="#">WG1641532</a>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	03/27/2021 23:22	<a href="#">WG1641532</a>	<sup>1</sup> Cp
Toluene	U		0.000278	0.00100	1	03/27/2021 23:22	<a href="#">WG1641532</a>	<sup>2</sup> Tc
Ethylbenzene	U		0.000137	0.00100	1	03/27/2021 23:22	<a href="#">WG1641532</a>	<sup>3</sup> Ss
Total Xylenes	U		0.000174	0.00300	1	03/27/2021 23:22	<a href="#">WG1641532</a>	
(S) Toluene-d8	102			80.0-120		03/27/2021 23:22	<a href="#">WG1641532</a>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	102			77.0-126		03/27/2021 23:22	<a href="#">WG1641532</a>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	84.3			70.0-130		03/27/2021 23:22	<a href="#">WG1641532</a>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	1.64		0.00188	0.0200	20	03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>1</sup> Cp
Toluene	0.0162	J	0.00556	0.0200	20	03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>2</sup> Tc
Ethylbenzene	0.221		0.00274	0.0200	20	03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>3</sup> Ss
Total Xylenes	0.0452	J	0.00348	0.0600	20	03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>4</sup> Cn
(S) Toluene-d8	102			80.0-120		03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>5</sup> Sr
(S) 4-Bromofluorobenzene	105			77.0-126		03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>6</sup> Qc
(S) 1,2-Dichloroethane-d4	82.6			70.0-130		03/28/2021 03:11	<a href="#">WG1641532</a>	<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	0.0318		0.0000941	0.00100	1	03/27/2021 23:42	<u>WG1641532</u>	<sup>1</sup> Cp
Toluene	0.0153		0.000278	0.00100	1	03/27/2021 23:42	<u>WG1641532</u>	<sup>2</sup> Tc
Ethylbenzene	0.00399		0.000137	0.00100	1	03/27/2021 23:42	<u>WG1641532</u>	<sup>3</sup> Ss
Total Xylenes	0.00328		0.000174	0.00300	1	03/27/2021 23:42	<u>WG1641532</u>	
(S) Toluene-d8	103			80.0-120		03/27/2021 23:42	<u>WG1641532</u>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	102			77.0-126		03/27/2021 23:42	<u>WG1641532</u>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	81.4			70.0-130		03/27/2021 23:42	<u>WG1641532</u>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

Collected date/time: 03/25/21 10:25

L1331241

## 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	03/28/2021 00:03	WG1641532	<sup>1</sup> Cp
Toluene	0.000762	J	0.000278	0.00100	1	03/28/2021 00:03	WG1641532	<sup>2</sup> Tc
Ethylbenzene	0.000310	J	0.000137	0.00100	1	03/28/2021 00:03	WG1641532	<sup>3</sup> Ss
Total Xylenes	0.00150	J	0.000174	0.00300	1	03/28/2021 00:03	WG1641532	
(S) Toluene-d8	103			80.0-120		03/28/2021 00:03	WG1641532	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	102			77.0-126		03/28/2021 00:03	WG1641532	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	83.7			70.0-130		03/28/2021 00:03	WG1641532	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## 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	0.0322		0.0000941	0.00100	1	03/28/2021 00:24	WG1641532	<sup>1</sup> Cp
Toluene	0.0148		0.000278	0.00100	1	03/28/2021 00:24	WG1641532	<sup>2</sup> Tc
Ethylbenzene	0.00418		0.000137	0.00100	1	03/28/2021 00:24	WG1641532	<sup>3</sup> Ss
Total Xylenes	0.00340		0.000174	0.00300	1	03/28/2021 00:24	WG1641532	
(S) Toluene-d8	99.2			80.0-120		03/28/2021 00:24	WG1641532	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	99.6			77.0-126		03/28/2021 00:24	WG1641532	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	81.9			70.0-130		03/28/2021 00:24	WG1641532	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Benzene	U		0.0000941	0.00100	1	03/27/2021 20:57	<u>WG1641532</u>	<sup>1</sup> Cp
Toluene	U		0.000278	0.00100	1	03/27/2021 20:57	<u>WG1641532</u>	<sup>2</sup> Tc
Ethylbenzene	U		0.000137	0.00100	1	03/27/2021 20:57	<u>WG1641532</u>	<sup>3</sup> Ss
Total Xylenes	U		0.000174	0.00300	1	03/27/2021 20:57	<u>WG1641532</u>	
(S) Toluene-d8	105			80.0-120		03/27/2021 20:57	<u>WG1641532</u>	<sup>4</sup> Cn
(S) 4-Bromofluorobenzene	100			77.0-126		03/27/2021 20:57	<u>WG1641532</u>	<sup>5</sup> Sr
(S) 1,2-Dichloroethane-d4	80.9			70.0-130		03/27/2021 20:57	<u>WG1641532</u>	<sup>6</sup> Qc
								<sup>7</sup> Gl
								<sup>8</sup> Al
								<sup>9</sup> Sc

## QUALITY CONTROL SUMMARY

## Method Blank (MB)

(MB) R3637213-1 03/27/21 19:34

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	107		80.0-120	
(S) 4-Bromofluorobenzene	103		77.0-126	
(S) 1,2-Dichloroethane-d4	83.9		70.0-130	

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

## Laboratory Control Sample (LCS)

(LCS) R3637213-2 03/27/21 19:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00566	113	70.0-123	
Ethylbenzene	0.00500	0.00519	104	79.0-123	
Toluene	0.00500	0.00494	98.8	79.0-120	
Xylenes, Total	0.0150	0.0150	100	79.0-123	
(S) Toluene-d8		103	80.0-120		
(S) 4-Bromofluorobenzene		101	77.0-126		
(S) 1,2-Dichloroethane-d4		83.4	70.0-130		

## 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.	<sup>1</sup> Cp
RDL	Reported Detection Limit.	<sup>2</sup> Tc
Rec.	Recovery.	<sup>3</sup> Ss
RPD	Relative Percent Difference.	<sup>4</sup> Cn
SDG	Sample Delivery Group.	<sup>5</sup> Sr
(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.	<sup>6</sup> Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	<sup>7</sup> Gl
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	<sup>8</sup> Al
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.	<sup>9</sup> Sc
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.
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## 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 <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.

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

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 Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubs/pas-standard-terms.pdf">https://info.pacelabs.com/hubs/pas-standard-terms.pdf</a>				
Project Description: Linam Ranch		City/State Collected:	Please Circle: PT MT CT ET								SDG # L1331241 B055				
Phone: 720-218-4003	Client Project #		Lab Project # DCPTASMAN-LINAM								Acctnum: DCPTASMAN Template: T127845 Prelogin: P833758 PM: 824 - Chris Ward PB: 03/01/21 Shipped Via: FedEx Ground				
Collected by (print): <i>Becky Griffin</i>	Site/Facility ID #		P.O. # 0000524227								Remarks				
Collected by (signature): <i>Becky J.</i> Immediately Packed on Ice N Y	Rush? (Lab MUST Be Notified) Same Day    Five Day Next Day    5 Day (Rad Only) Two Day    10 Day (Rad Only) Three Day		Quote #		Date Results Needed	No. of Cntrs							Sample # (lab only)		
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time										
MW-1		GW		3-25-21	0905	3	X							-01	
MW-2		GW		3-25-21	0945	3	X							-02	
MW-3		GW		3-25-21	1145	3	X							-03	
MW-4		GW		3-25-21	0845	3	X							-04	
MW-5		GW		3-25-21	1005	3	X							-05	
MW-6		GW													
MW-7		GW													
MW-8		GW		3-25-21	0925	3	X							-06	
MW-9		GW		3-25-21	1125	3	X							-07	
MW-10		GW		3-25-21	1045	3	X							-08	
* Matrix: SS - Soil   AIR - Air   F - Filter GW - Groundwater   B - Bioassay	Remarks:						pH	Temp							Sample Receipt Checklist
							Flow	Other							COC Seal Present/Intact: NP Y N COC Signed/Accurate: Y N Bottles arrive intact: Y N Correct bottles used: Y N Sufficient volume sent: Y N If Applicable VOA Zero Headspace: Y N Preservation Correct/Checked: Y N RAD Screen <0.5 mR/hr: Y N
Samples returned via: UPS   FedEx   Courier		Tracking #		9517 5767 4035											
Relinquished by : (Signature) <i>Becky J.</i>		Date: 3-25-21	Time: 1400 3-25-21	Received by: (Signature)		Trip Blank Received: Yes No HCl MeOH TBR								If preservation required by Login: Date/Time	
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)		Temp: 16.6°C 2-2-22.0		Bottles Received: 34							
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature) <i>Sarah Potts</i>		Date: 3/24/21	Time: 9:00	Hold:							Condition: NCF KOK

## DCP Midstream - Tasman

2620 W. Marland Blvd  
Hobbs, NM 88240

Report to:  
**Kyle Norman**

Project Description:  
Linam Ranch

Phone: 720-218-4003

## Billing Information:

Steve Weathers  
370 17th St, Ste 2500  
Denver, CO 80202

Pres  
Chk

Email To: knorman@tasman-geo.com;bhumphrey@tasman-

Collected by (print):

**Becky Griffin**

Collected by (signature):

**Becky J GT**  
Immediately  
Packed on Ice N Y

## Site/Facility ID #

P.O. #

0000524227

## Rush? (Lab MUST Be Notified)

- Same Day  Five Day   
Next Day  5 Day (Rad Only)   
Two Day  10 Day (Rad Only)   
Three Day

## Quote #

## Date Results Needed

No.  
of  
Cntrs

## Sample ID

## Comp/Grab

## Matrix \*

## Depth

## Date

## Time

MW-10D

GW

3-25-21

1005

3

X

MW-11

GW

3-25-21

1025

3

X

**DUPPLICATE**

GW

3-25-21

3

X

TRIP BLANK

GW

3-25-21

1400

1

-09

-10

-11

-12

## \* Matrix:

SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay

## Remarks:

WW - WasteWater  
DW - Drinking Water  
OT - Other \_\_\_\_\_

Samples returned via:  
UPS  FedEx  Courier

Relinquished by : (Signature)

**Becky J GT**

Date: 3-25-21 Time: 1400

Received by: (Signature)

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Trip Blank Received: Yes / No  
 HCl / MeOH  
TBR

Sample Receipt Checklist  
COC Seal Present/Intact: NP / Y N

COC Signed/Accurate:  N

Bottles arrive intact:  N

Correct bottles used:  N

Sufficient volume sent:  N

If Applicable

VOA Zero Headspace:  Y N

Preservation Correct/Checked:  Y N

RAD Screen <0.5 mR/hr:  Y N

Relinquished by : (Signature)

Date: 2-2-22 Time: 34

Received by: (Signature)

Temp: 46.60 °C Bottles Received: 34

If preservation required by Login: Date/Time

Relinquished by : (Signature)

Date: 03/26/2020 Time: 0900

Received for lab by: (Signature)

Date: 03/26/2020 Time: 0900

Hold:

Condition: NCF / OK

Chain of Custody

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**Pace Analytical®**  
National Center for Testing & Innovation  
12065 Lebanon Road Mt Juliet, TN 37122  
Phone: 615-758-5858 Alt: 800-767-5859  
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG # 61331241

Table #

Acctnum: DCPTASMAN

Template: T127845

Prelogin: P833758

PM: 824 - Chris Ward

PB: 03/10/21

Shipped Via: FedEx Ground

Remarks Sample # (lab only)

**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 28625

#### CONDITIONS

Operator:  DCP OPERATING COMPANY, LP 6900 E. Layton Ave Denver, CO 80237	OGRID:  36785
	Action Number:  28625
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

#### CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 65604 for most updated status.	10/28/2022