

# Second Half 2020 Semi-Annual Groundwater Monitoring Summary Report

## Monument Booster Station Lea County, New Mexico 1RP-156-0

Prepared for:



370 17<sup>th</sup> St., Suite 2500  
Denver, CO 80202

*Prepared by:*



6855 W. 119<sup>th</sup> Ave.  
Broomfield, CO 80020

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## 1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the second half 2020 at the Monument Booster Station (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 17, 2020. The data collected were 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 33, Township 19 South, Range 37 East (Figure 1). The facility coordinates are 32.6240 degrees north and 103.2555 degrees west. This facility is an active natural gas compression plant and consists of a main compressor building and other process-related facilities. DCP also owns the property to the south and east that is contiguous to the fenced facility Site boundary (Figure 2).

In 1992, three underground storage tanks (USTs) that formerly contained used oil and pipeline-liquids (oil and/or natural gas liquid condensate) near the main compressor building were removed. At that time and again in 1994, hydrocarbon-impacted soils (approximately 1,000 cubic yards in total) were excavated and removed from the Site. Also in 1994, subsurface soil and groundwater investigation activities were initiated to define the horizontal and vertical extent of residual hydrocarbon impacts. Two groundwater monitoring wells were installed and six soil borings were advanced as part of this investigation. In 1995, six additional monitoring wells were installed and one soil boring was advanced.

Hand bailing of LNAPL was initiated in monitoring wells MW-1 and MW-5 in 1995 or 1996. In 1997, an automated pneumatic LNAPL recovery pumping system (Xitech System) was installed in these wells. In 1999 or 2000, the Xitech System was taken out of service at both wells and replaced by product absorbent socks and hand bailing. In mid-2000, product removal activities were ceased while groundwater monitoring continued.

The Site currently has eight groundwater monitoring wells (MW-1, MW-1D, MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7). Seven of the wells are located on the gas compressor facility, and MW-3 is located in the southeast corner of the adjacent DCP-owned property. Well MW-2 is located in the northwest corner of the Site and is up-gradient of Site impacts.

Based on previously-collected data, it appears that a release of hydrocarbons occurred near the former pipeline-liquid aboveground storage tank (AST) located near monitoring wells MW-1 and MW-1D in the center of the gas compressor facility along the eastern property boundary (Figure 2). Since 1994 or 1995, monitoring wells MW-1 and MW-5 have historically exhibited LNAPL, however overall measurable thicknesses have been significantly reduced since vacuum enhanced fluid recovery activities were

implemented in the first half 2014. Ongoing fluctuations in LNAPL thicknesses at these locations are likely associated with seasonal fluctuations in regional groundwater levels.

Subsequent to the second half 2016 monitoring event, monitoring well MW-6 was removed from the Site Sampling Plan based on dissolved phase petroleum hydrocarbon constituent concentrations that were reported below laboratory detection limits for 13 consecutive quarters. Additionally, due to the MW-6 location being near the flare stack for the compressor facility, conducting monitoring well gauging and sampling activities in the area was determined an unnecessary added health and safety concern.

### 3. Groundwater Monitoring

This section describes the groundwater field and laboratory activities performed during the second half 2020 semi-annual monitoring event on September 17, 2020. 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 were measured to evaluate hydraulic characteristics and provide information regarding seasonal and annual fluctuations in groundwater and LNAPL elevations at the Site. During the reporting period, groundwater levels were measured at seven site monitoring well locations. Measurable LNAPL was observed in locations MW-1 and MW-5 during the September 2020 sampling event with measured LNAPL thickness of 1.27-feet and 0.56-feet, respectively.

Groundwater 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 levels were later converted to elevations (feet above mean sea level [AMSL]). Measured groundwater levels, calculated groundwater elevations, and LNAPL level data are presented in Table 1.

A second half 2020 groundwater elevation map, included as Figure 3, indicates that groundwater flow at the Site trends to the southeast. Groundwater elevations decreased during the monitoring period compared to the first half 2020. 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>Second Half 2020 (9/17/2020)</b>
Maximum Elevation (Well ID)	3565.90 feet (MW-2)
Minimum Elevation (Well ID)	3559.55 feet (MW-3)
Average Change from Previous Monitoring Event (ft) – All Wells	-0.42 feet
Hydraulic Gradient (ft/ft) / (Well IDs)	0.0069 (MW-2 to MW-3)



### 3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements, groundwater samples were collected from the seven site wells. A minimum of three well casing volumes of groundwater were 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 Laboratories (Pace) in Mount Juliet, Tennessee, for analysis. Water quality samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylenes (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 2020 event are contained in Appendix A, and the laboratory analytical report for the second half 2020 event is included in Appendix B. Analytical results are also displayed on Figure 4.

Analytical results/observations are summarized below:

- LNAPL was observed in monitoring well MW-1 and MW-5 with measurable thickness of 1.27 feet and 0.56 feet, respectively.
- Subsequent to purging LNAPL from the wells MW-1 and MW-5 and removing three purge volumes, analytical groundwater samples were collected to evaluate the dissolved phase BTEX concentrations at these locations. The results of the BTEX concentrations are described 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-1 (0.0993 mg/L), MW-5 (0.014 mg/L), and MW-7 (0.0147 mg/L, Duplicate 0.0150 mg/L).
- Toluene, ethylbenzene, and total xylenes were not observed above the NMWQCC standards at any of the sampled monitoring wells during the second half 2020.

### 3.3 Data Quality Assurance / Quality Control

A trip blank and field duplicate sample (MW-7) was collected during the 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 was reported using the correct method number and reporting units. QA/QC items of note for the second half 2020 include the following:

- Target analytes were not detected in the trip blank; and

- The duplicate sample collected at MW-7 had a calculated relative percentage difference (RPD) of 2% for benzene, which is within the target control range of 20%.

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

## 4. Remediation Activities

Remediation activities conducted during the reporting period included vacuum enhanced fluid recovery (EFR) events.

### 4.1 Vacuum Enhanced Fluid Recovery

EFR events were initiated on a quarterly frequency in June 2013 at monitoring wells MW-1 and MW-5 to address the free phase petroleum hydrocarbon plume on-Site. Beginning the second half 2017, the MW-7 location was added to the EFR events to increase the recovery of dissolved phase BTEX.

EFR activities include the application of high vacuum, using a vacuum truck, to individual well points through a stinger pipe assembly. The stinger was placed slightly below the LNAPL/groundwater interface, thereby removing LNAPL, groundwater, and vapors from the subsurface.

In 2020, bi-monthly EFR events were temporarily suspended until June 2020 to evaluate LNAPL rebound at the Site without the influence of active remediation. On June 23, 2020, EFR activities were re-initiated at the Site on June 23, 2020. Another EFR was completed on September 18, 2020. The table below summarizes the well locations, EFR duration, and the recovered fluid volumes for this second half event. The recovered LNAPL and groundwater was disposed of at the Cooper Disposal Facility in Hobbs, New Mexico.

EFR Location	9/18/20
	Duration (hrs) / Volume Removed (bbl)
MW-5	4/5
*MW-1 / MW-7	4/15

Notes:

\*Vacuum enhanced fluid recovery at MW-1 and MW-7 was conducted simultaneously.

bbl = barrel (42 gallons)

N/A = Not Applicable

## 5. Conclusions

Data and observations collected during the second half 2020 yield the following general conclusions:

- Based on historical groundwater elevations, the potentiometric surface at the Site has remained relatively stable with minor elevation changes likely due to seasonal variations.
- The analytical results from the groundwater samples collected at MW-1, MW-5, and MW-7 indicate that remaining source material at the Site is highly degraded and does not contribute significantly to dissolved phase impacts. MW-2 exhibited benzene concentrations below laboratory detection limits during the September 17, 2020 event, following a one-time exceedance of the NMWQCC standard for benzene reported during the September 20, 2019 event. MW-2 has historically been non-detect for BTEX and the analytical results from the last two monitoring events (June and September 2020) are indicative of this trend.
- Following the first half 2020 period of discontinued EFR events, LNAPL was observed at MW-1 and MW-5 with an increase in thickness during the first and second half 2020 monitoring events. The observed LNAPL thicknesses were the largest observed at MW-1 since February 2013, and at MW-5 since February 2013. The observed rebound in LNAPL thickness demonstrates the effectiveness of active EFR activities for the Site. Bi-monthly EFR activities were re-initiated as of the June 2020 event will continue through 2020 and 2021.
- The overall decrease in historical LNAPL thickness at the Site, the relatively low dissolved phase benzene concentrations at monitoring wells MW-1, MW-5, and MW-7, and the continued non-detect results at downgradient monitoring wells indicate continued mitigation of Site impacts through active remediation efforts.

## 6. Recommendations

Based on evaluation of second half 2020 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 existing monitoring well locations illustrated on Figure 2.
- Continue EFR events at the Site to address LNAPL and dissolved phase BTEX concentrations.

## Tables

**TABLE 1**  
**SECOND HALF 2020 SEMI-ANNUAL**  
**SUMMARY OF GROUNDWATER ELEVATION DATA**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location		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	06/22/20	27.52	27.00	0.52	NM	3591.15	3564.02	0.32
MW-1	09/17/20	28.72	27.45	1.27	NM	3591.15	3563.38	-0.64
MW-1D	06/22/20	27.56			36.34	3591.31	3563.75	0.00
MW-1D	09/17/20	27.92			36.34	3591.31	3563.39	-0.36
MW-2	06/22/20	30.03			43.90	3596.30	3566.27	-0.30
MW-2	09/17/20	30.40			43.90	3596.30	3565.90	-0.37
MW-3	06/22/20	23.74			35.65	3583.60	3559.86	0.02
MW-3	09/17/20	24.05			35.65	3583.60	3559.55	-0.31
MW-4	06/22/20	27.05			39.65	3588.77	3561.72	0.15
MW-4	09/17/20	27.36			39.65	3588.77	3561.41	-0.31
MW-5	06/22/20	29.09	28.91	0.18	NM	3592.16	3563.21	0.24
MW-5	09/17/20	29.85	29.29	0.56	NM	3592.16	3562.73	-0.47
MW-6	03/07/17	Removed from site sampling plan 3/2017						
MW-7	06/22/20	26.70			35.02	3589.40	3562.70	0.36
MW-7	09/17/20	27.15			35.02	3589.40	3562.25	-0.45
Average change in groundwater elevation (6/22/20 to 9/17/20)								-0.42

Notes:

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/cc)

NM = Not Measured

\*\* MW-2 was re-sampled on 10/8/2019. Groundwater elevation was recorded, but result was not used for average change in groundwater elevation or hydraulic gradient equations.

**TABLE 2**  
**SECOND HALF 2020 SEMI-ANNUAL**  
**SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**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)		0.01	1.00	0.75	0.62	
MW-1	09/17/20	0.0993	<0.0100	0.0599	0.00500	
MW-1D	09/17/20	0.00244	<0.00100	<0.00100	<0.00300	
MW-2	09/17/20	<0.00100	<0.00100	<0.00100	<0.00300	
MW-3	09/17/20	<0.00100	<0.00100	<0.00100	<0.00300	
MW-4	09/17/20	0.000163 J	<0.00100	<0.00100	<0.00300	
MW-5	09/17/20	0.0140	0.000429 J	0.0181	<0.00300	
MW-6	03/07/17	Removed from site sampling plan				
MW-7	09/17/20	0.0147	<0.00100	0.00837	0.00225 J	Duplicate sample collected
MW-7 (Duplicate)	09/17/20	0.0150	<0.00100	0.00880	0.00238 J	
Trip Blank	09/17/20	<0.00100	<0.00100	<0.00100	<0.00300	

Notes:

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

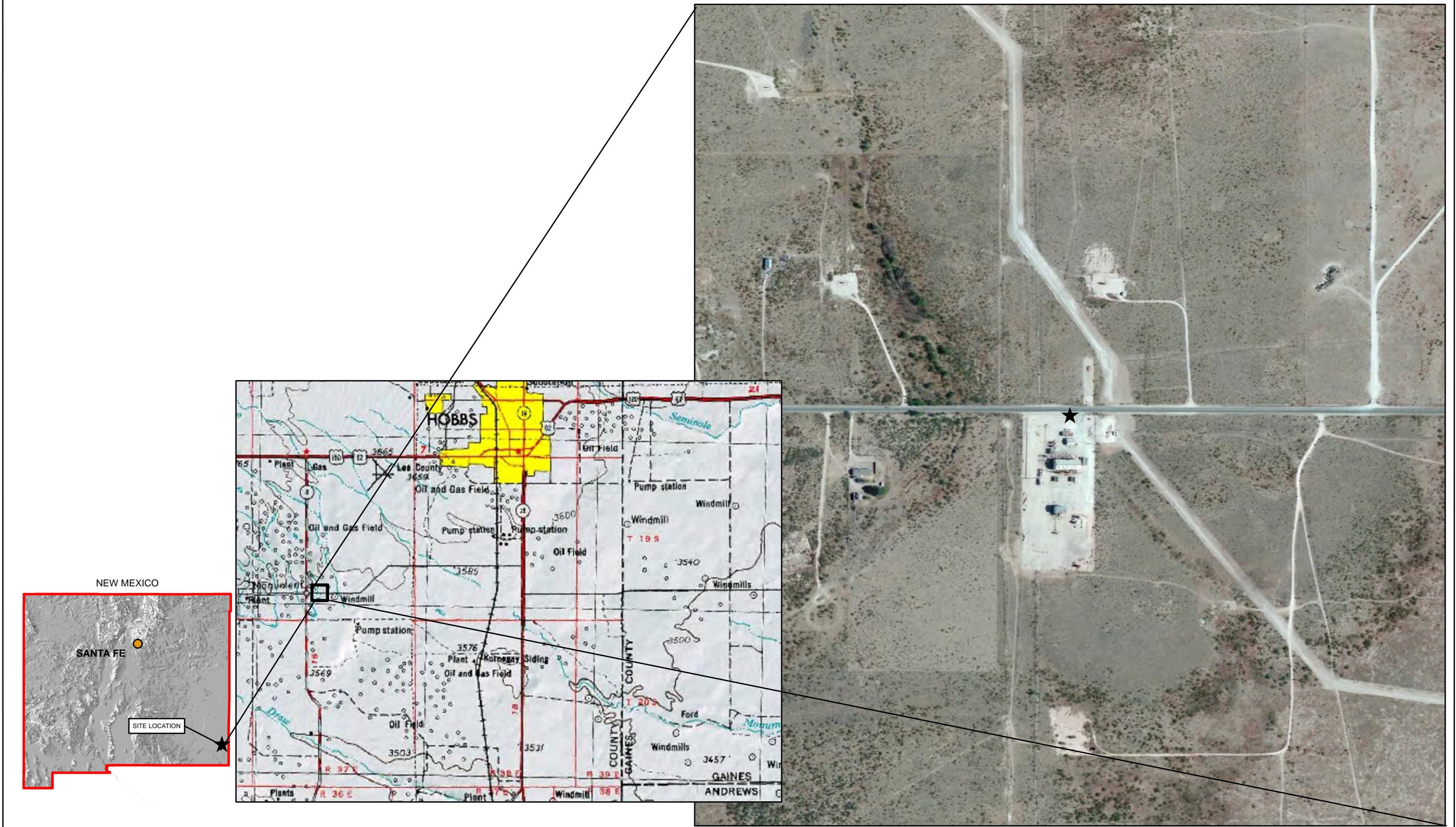
NMWQCC = New Mexico Water Quality Control Commission

mg/L = milligrams per liter

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).

## Figures





DATE:  
May 2015

DESIGNED BY:  
T. Johansen

DRAWN BY:  
D. Arnold



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

**DCP Midstream  
Monument Booster Station**

Unit B, Section 33, Township 19 South, Range 37 East  
Lea County, New Mexico

Site Location  
Map

Figure  
1





DATE:  
January 2020

DESIGNED BY:  
B. Humphrey

DRAWN BY:  
J. Clonts



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

**DCP Midstream**  
**Monument Booster Station**  
Second Half 2020 Semi-Annual Groundwater  
Monitoring Summary Report

Site Map with  
Monitoring Well Locations

Figure  
2





DATE:	October 2020
DESIGNED BY:	B. Humphrey
DRAWN BY:	J. Clonts



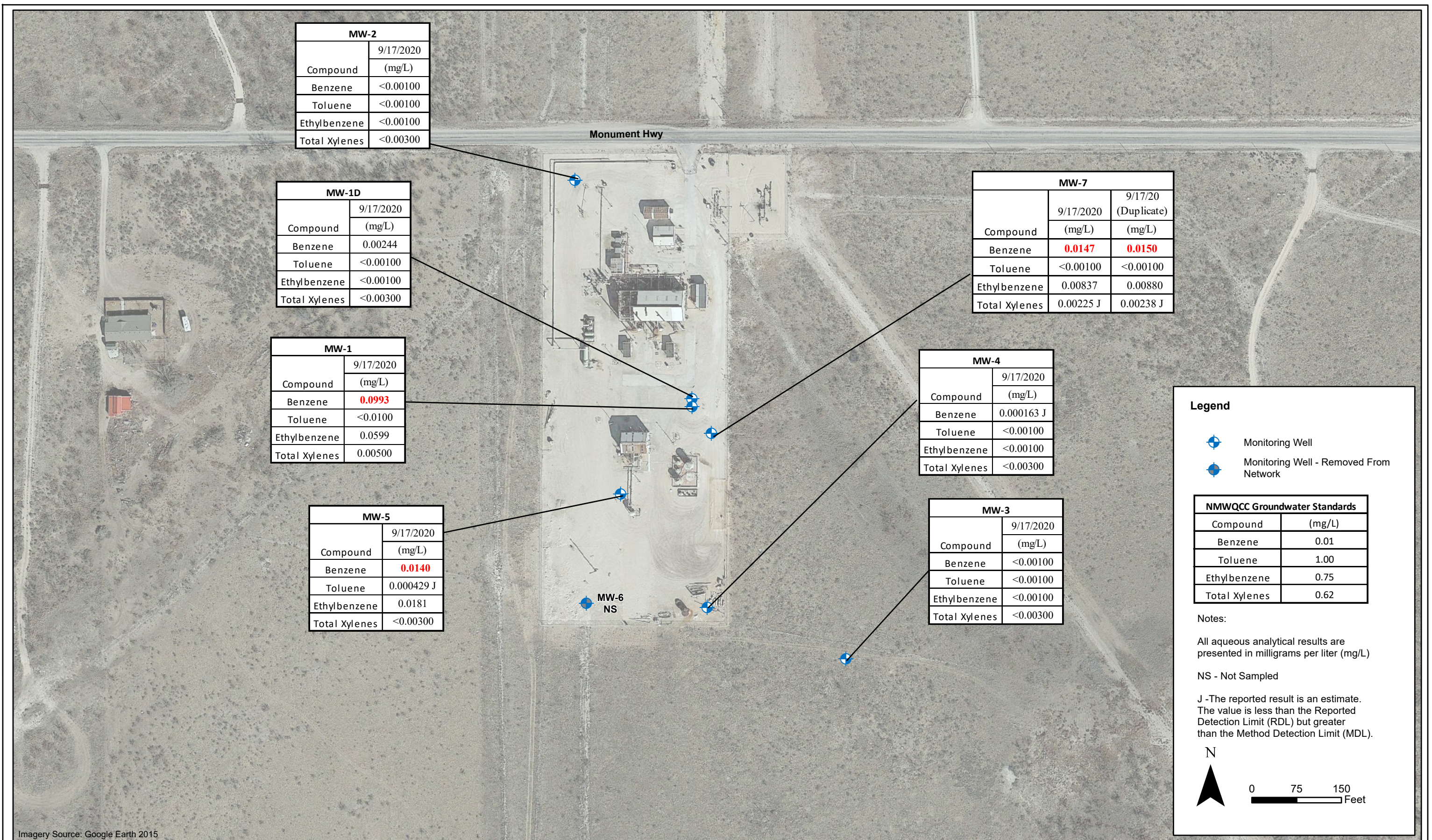
Tasman Geosciences, Inc.  
6855 W. 119th Avenue  
Broomfield, Colorado 80020

DCP Midstream  
Monument Booster Station  
Second Half 2020 Semi-Annual Groundwater Monitoring  
Summary Report

Groundwater Elevation  
Contour Map  
(September 17, 2020)

Figure  
3





DATE:	October 2020
DESIGNED BY:	B. Humphrey
DRAWN BY:	J. Clonts



**DCP Midstream**  
**Monument Booster Station**  
Second Half 2020 Semi-Annual Groundwater Monitoring  
Summary Report

Analytical Results Map  
(September 17, 2020)

Figure  
4



## Appendix A

### Historical Analytical Results

**APPENDIX A**  
**HISTORICAL ANALYTICAL RESULTS**  
**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-1	09/15/11	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	03/06/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	09/05/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	02/21/13	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	02/26/14	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	09/24/14	Not Sampled - LNAPL Residue				
MW-1	02/24/15	0.015	<0.001	0.011	<0.003	
MW-1	09/01/15	0.042	<0.005	<0.005	<0.015	
MW-1	03/21/16	0.098	<0.005	0.052	<0.015	
MW-1	09/26/16	0.011	<0.001	<0.001	<0.003	
MW-1	03/07/17	0.047	<0.001	0.031	0.0021	
MW-1	09/25/17	0.0584	<0.0010	0.0902	0.00485	
MW-1	03/13/18	0.0456	<0.0010	0.0344	0.00221 J	
MW-1	09/17/18	0.0846	0.000445 J	0.141	0.00783	
MW-1	03/20/19	0.134	<0.0010	0.16	0.00833	
MW-1	09/19/19	0.127	<0.0050	0.137	0.0108 J	
MW-1	06/22/20	0.084	<0.0050	0.0603	0.0048	
MW-1	09/17/20	0.0993	<0.0100	0.0599	0.00500	
MW-1D	05/16/95	0.018	0.015	0.006	0.016	
MW-1D	11/15/95	0.003	0.002	<0.001	0.001	
MW-1D	01/18/96	0.004	0.003	<0.001	0.009	
MW-1D	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-1D	01/22/97	0.001	0.001	<0.001	<0.001	
MW-1D	08/11/97	<0.001	<0.001	<0.001	<0.001	
MW-1D	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-1D	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-1D	02/10/99	<0.001	<0.001	<0.001	<0.001	
MW-1D	08/17/99	<0.001	<0.001	<0.001	<0.001	
MW-1D	02/17/00	0.002	0.003	<0.001	0.001	
MW-1D	08/23/00	<0.005	<0.005	<0.005	<0.005	
MW-1D	02/08/01	<0.001	<0.001	<0.001	0.001	
MW-1D	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-1D	02/13/02	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/27/02	<0.001	<0.001	<0.001	<0.001	
MW-1D	04/25/03	<0.005	<0.005	<0.005	<0.005	
MW-1D	09/18/03	0.002	<0.001	<0.001	<0.001	
MW-1D	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-1D	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/20/06	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/22/07	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1D	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-1D	09/17/08	<0.002	<0.002	<0.002	<0.002	
MW-1D	03/10/09	<0.002/<0.002	<0.002/<0.002	<0.002/<0.002	<0.006/<0.006	
MW-1D	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1D	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-1D	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-1D	05/17/10	<0.002	<0.002	<0.002	<0.006	

**APPENDIX A**  
**HISTORICAL ANALYTICAL RESULTS**  
**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-1D	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-1D	09/16/10	<0.002	<0.002	<0.002	<0.004	
MW-1D	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-1D	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-1D	04/26/11	<0.00030	<0.0010	<0.00030	<0.00060	
MW-1D	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-1D	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-1D	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-1D	02/21/13	0.016	<0.001	<0.001	<0.003	
MW-1D	09/11/13	0.0029	<0.001	<0.001	<0.001	
MW-1D	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/24/14	<0.001	<0.001	<0.001	<0.003	
MW-1D	02/24/15	<0.001	<0.001	<0.001	<0.003	
MW-1D	09/01/15	<0.001	<0.001	<0.001	<0.003	
MW-1D	03/21/16	<0.001	<0.001	<0.001	<0.003	
MW-1D	09/26/16	<0.001	<0.001	<0.001	<0.003	
MW-1D	03/07/17	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/25/17	0.000958 J	<0.0010	<0.0010	<0.0030	
MW-1D	03/13/18	0.000918 J	<0.0010	<0.0010	<0.0030	
MW-1D	09/17/18	0.000918 J	<0.0010	<0.0010	<0.0030	
MW-1D	03/20/19	0.00544	<0.0010	0.000403 J	<0.0030	
MW-1D	09/19/19	0.00736	<0.0010	<0.0010	<0.0030	
MW-1D	06/22/20	0.0032	<0.0010	<0.0010	<0.0030	
MW-1D	09/17/20	0.00244	<0.00100	<0.00100	<0.00300	
MW-2	05/16/95	<0.001	<0.001	<0.001	<0.001	
MW-2	11/15/95	NS	0.006	0.002	-	
MW-2	01/18/96	<0.001	<0.001	<0.001	<0.001	
MW-2	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-2	01/22/97	<0.001	<0.001	<0.001	<0.001	
MW-2	08/11/97	<0.001	<0.001	<0.001	<0.001	
MW-2	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-2	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-2	02/10/99	<0.001	<0.001	<0.001	<0.001	
MW-2	08/17/99	0.017	0.002	0.013	0.003	
MW-2	02/17/00	<0.001	<0.001	<0.001	<0.001	
MW-2	08/23/00	<0.001	<0.001	<0.001	<0.001	
MW-2	02/08/01	<0.001	<0.001	<0.001	<0.001	
MW-2	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-2	02/13/02	<0.001	<0.001	<0.001	<0.001	
MW-2	09/27/02	<0.001	<0.001	<0.001	<0.001	
MW-2	04/25/03	<0.001	<0.001	<0.001	<0.001	
MW-2	09/18/03	0.002	<0.001	<0.001	<0.001	

**APPENDIX A**  
**HISTORICAL ANALYTICAL RESULTS**  
**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-2	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-2	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-2	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-2	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-2	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-2	09/20/06	<0.001	<0.001	<0.001	<0.001	
MW-2	03/22/07	<0.001	<0.001	<0.001	<0.001	
MW-2	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-2	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-2	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-2	09/17/08	<0.002	<0.002	<0.002	<0.006	
MW-2	03/10/09	<0.002	<0.002	<0.002	<0.006	
MW-2	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-2	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-2	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-2	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-2	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-2	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-2	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-2	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-2	04/26/11	<0.00030	<0.0010	<0.00030	<0.00060	
MW-2	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-2	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-2	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-2	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-2	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-2	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-2	09/24/14	<0.001	<0.001	<0.001	<0.003	MS/MSD Collected
MW-2	02/24/15	<0.001	<0.001	<0.001	<0.003	
MW-2	09/01/15	<0.001	<0.001	<0.001	<0.003	
MW-2	03/21/16	<0.001	<0.001	<0.001	<0.003	
MW-2	09/26/16	<0.001	<0.001	<0.001	<0.003	
MW-2	03/07/17	<0.001	<0.001	<0.001	<0.001	
MW-2	09/25/17	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	03/13/18	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	09/18/18	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	03/20/19	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	09/19/19	0.00796	0.00224	<0.0010	<0.0030	
MW-2	10/08/19	0.258	0.0886	0.00391 J	0.0146 J	Re-sample
MW-2	06/22/20	<0.0010	<0.0010	<0.0010	<0.0030	
MW-2	09/17/20	<0.00100	<0.00100	<0.00100	<0.00300	
MW-3	05/16/95	<0.001	<0.001	<0.001	<0.001	
MW-3	11/15/95	<0.001	<0.001	<0.001	<0.001	
MW-3	01/18/96	<0.001	<0.001	<0.001	<0.001	
MW-3	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-3	01/22/97	<0.001	<0.001	<0.001	<0.001	
MW-3	08/11/97	<0.001	<0.001	<0.001	<0.001	
MW-3	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-3	08/03/98	0.007	<0.001	<0.001	<0.001	
MW-3	02/10/99	<0.005	<0.005	<0.005	<0.005	
MW-3	08/17/99	0.043	<0.005	<0.005	<0.005	
MW-3	02/17/00	0.021	<0.005	<0.005	<0.005	
MW-3	08/23/00	0.006	<0.005	<0.005	<0.005	
MW-3	02/08/01	0.004	0.001	0.002	0.005	

**APPENDIX A**  
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**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-3	07/30/01	0.002	<0.001	<0.001	<0.001	
MW-3	02/13/02	0.002	<0.001	<0.001	<0.001	
MW-3	09/27/02	<0.005	<0.005	<0.005	<0.005	
MW-3	04/25/03	<0.005	<0.005	<0.005	<0.005	
MW-3	09/18/03	0.002	<0.001	<0.001	<0.001	
MW-3	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-3	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-3	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-3	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-3	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-3	09/20/06	<0.001	<0.001	<0.001	<0.001	
MW-3	03/22/07	<0.001	<0.001	<0.001	<0.001	
MW-3	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-3	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-3	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-3	09/17/08	<0.002	<0.002	<0.002	<0.006	
MW-3	03/10/09	<0.002	<0.002	<0.002	<0.006	
MW-3	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-3	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-3	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-3	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-3	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-3	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-3	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-3	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-3	04/26/11	<0.00030	<0.0010	<0.00030	<0.00060	
MW-3	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-3	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-3	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-3	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-3	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-3	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-3	09/24/14	<0.001	<0.001	<0.001	<0.003	
MW-3	02/24/15	<0.001	<0.001	<0.001	<0.003	
MW-3	09/01/15	<0.001	<0.001	<0.001	<0.003	
MW-3	03/21/16	<0.001	<0.001	<0.001	<0.003	
MW-3	09/26/16	<0.001	<0.001	<0.001	<0.003	
MW-3	03/07/17	<0.001	<0.001	<0.001	<0.001	
MW-3	09/25/17	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	03/13/18	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	09/18/18	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	03/20/19	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	09/19/19	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	06/22/20	<0.0010	<0.0010	<0.0010	<0.0030	
MW-3	09/17/20	<0.00100	<0.00100	<0.00100	<0.00300	
MW-4	05/16/95	<0.001	<0.001	<0.001	<0.001	
MW-4	11/15/95	NS	0.006	0.002	0.1	
MW-4	01/18/96	0.003	<0.001	<0.001	<0.001	
MW-4	04/24/96	<0.002	<0.002	<0.002	<0.002	
MW-4	01/22/97	0.002	<0.001	<0.001	<0.001	
MW-4	08/11/97	0.001	<0.001	<0.001	<0.001	
MW-4	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-4	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-4	02/10/99	<0.001	<0.001	<0.001	<0.001	



**APPENDIX A**  
**HISTORICAL ANALYTICAL RESULTS**  
**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
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Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-4	08/17/99	<0.001	<0.001	<0.001	0.001	
MW-4	02/17/00	<0.005	<0.005	<0.005	<0.005	
MW-4	08/23/00	<0.005	<0.005	<0.005	<0.005	
MW-4	02/08/01	0.002	<0.001	<0.001	0.002	
MW-4	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-4	02/13/02	NS	NS	NS	NS	
MW-4	09/27/02	NS	NS	NS	NS	
MW-4	04/25/03	<0.001	<0.001	<0.001	<0.001	
MW-4	09/18/03	<0.001	<0.001	<0.001	<0.001	
MW-4	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-4	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-4	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-4	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-4	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-4	09/20/06	<0.002	<0.001	<0.001	0.0043	
MW-4	03/22/07	<0.002	<0.001	<0.001	0.0036	
MW-4	09/25/07	<0.002	<0.001	<0.001	<0.001	
MW-4	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-4	09/17/08	<0.002	<0.002	<0.002	<0.006	
MW-4	03/10/09	<0.002	<0.002	<0.002	<0.006	
MW-4	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-4	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-4	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-4	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-4	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-4	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-4	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-4	06/02/11	<0.00025	<0.0010	<0.00050	<0.0020	
MW-4	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-4	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-4	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-4	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-4	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-4	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-4	09/24/14	<0.001	<0.001	<0.001	<0.003	
MW-4	02/24/15	<0.001	<0.001	<0.001	<0.003	
MW-4	09/01/15	<0.001	<0.001	<0.001	<0.003	
MW-4	03/21/16	<0.001	<0.001	<0.001	<0.003	
MW-4	09/26/16	<0.001	<0.001	<0.001	<0.003	
MW-4	03/07/17	<0.001	<0.001	<0.001	<0.001	
MW-4	09/25/17	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	03/13/18	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	09/18/18	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	03/20/19	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	09/19/19	<0.0010	<0.0010	<0.0010	<0.0030	
MW-4	06/22/20	0.000103 J	<0.0010	<0.0010	<0.0030	
MW-4	09/17/20	0.000163 J	<0.00100	<0.00100	<0.00300	

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**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**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)		0.01	1.00	0.75	0.62	
MW-5	09/15/11	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	03/06/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	09/05/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	02/21/13	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	09/11/13	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	02/26/14	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	09/24/14	Not Sampled - LNAPL Residue				
MW-5	02/24/15	Not Sampled - LNAPL				
MW-5	09/01/15	0.034	<0.005	0.073	<0.015	
MW-5	03/21/16	0.0078	<0.005	0.019	<0.015	
MW-5	09/26/16	0.0079	<0.001	0.0045	<0.003	
MW-5	03/07/17	0.032	<0.001	0.054	0.012	
MW-5	09/25/17	0.0155	<0.0010	0.0651	0.0108	
MW-5	03/13/18	0.0151	<0.0010	0.0117	0.00140 J	
MW-5	09/17/18	0.0101	<0.0010	0.0231	0.00118 J	
MW-5	03/20/19	0.0147	<0.0010	0.0283	0.00106 J	
MW-5	09/19/19	0.0103	<0.0010	0.0543	0.00106 J	
MW-5	06/22/20	0.0131	<0.0050	0.0385	<0.0150	
MW-5	09/17/20	0.0140	0.000429 J	0.0181	<0.00300	
MW-6	11/15/95	0.003	0.001	<0.001	0.003	
MW-6	01/18/96	0.002	<0.001	<0.001	<0.001	
MW-6	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-6	01/22/97	0.001	<0.001	<0.001	<0.001	
MW-6	08/11/97	<0.001	<0.001	<0.001	0.001	
MW-6	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-6	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-6	02/10/99	<0.001	<0.001	<0.001	0.014	
MW-6	08/17/99	0.002	<0.001	<0.001	0.012	
MW-6	02/17/00	<0.001	0.004	<0.001	0.006	
MW-6	08/23/00	<0.001	0.004	<0.001	0.011	
MW-6	02/08/01	<0.001	<0.001	<0.001	0.011	
MW-6	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-6	02/13/02	<0.001	<0.001	<0.001	<0.001	
MW-6	09/27/02	<0.005	<0.005	<0.005	<0.005	
MW-6	04/25/03	<0.001	<0.001	<0.001	<0.001	
MW-6	09/18/03	0.002	<0.001	0.002	0.001	
MW-6	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-6	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-6	03/04/05	0.0061	<0.001	0.0032	<0.001	
MW-6	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-6	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-6	09/20/06	0.0391	<0.001	0.0287	0.0194	

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**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-6	03/22/07	<0.001	<0.001	<0.001	0.0013	
MW-6	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-6	03/20/08	NS	NS	NS	NS	
MW-6	09/17/08	NS	NS	NS	NS	
MW-6	03/10/09	NS	NS	NS	NS	
MW-6	09/23/09	0.035	<0.002	0.0215	0.0052J	
MW-6	09/23/09	0.035	<0.00043	0.0215	0.0052	
MW-6	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-6	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-6	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-6	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-6	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-6	06/02/11	<0.00025	<0.0010	<0.00050	<0.0020	
MW-6	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-6	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-6	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-6	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-6	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-6	09/24/14	<0.001	<0.001	<0.001	<0.003	
MW-6	02/24/15	<0.001	<0.001	<0.001	<0.003	
MW-6	09/01/15	<0.001	<0.001	<0.001	<0.003	
MW-6	03/21/16	<0.001	<0.001	<0.001	<0.003	
MW-6	09/26/16	<0.001	<0.001	<0.001	<0.003	
MW-6	03/07/17	Removed from site sampling plan				
MW-7	11/15/95	0.465	0.205	<0.001	0.163	
MW-7	01/18/96	1.13	0.476	0.003	0.365	
MW-7	04/24/96	0.585	0.251	<0.002	0.013	
MW-7	01/22/97	0.896	0.24	<0.005	0.33	
MW-7	08/11/97	0.317	0.155	0.2	0.049	
MW-7	01/23/98	0.876	0.486	<0.005	0.181	
MW-7	08/03/98	0.094	0.064	<0.005	0.007	
MW-7	02/10/99	0.597	0.44	<0.005	0.12	
MW-7	08/17/99	0.705	0.06	<0.005	0.556	
MW-7	02/17/00	0.573	0.49	<0.005	0.226	
MW-7	08/23/00	0.546	0.484	0.006	0.177	
MW-7	02/08/01	0.355	0.424	<0.005	0.052	
MW-7	07/30/01	0.017	0.058	<0.005	<0.005	
MW-7	02/13/02	0.228	0.094	<0.005	0.5	
MW-7	09/27/02	0.015	0.017	<0.005	<0.005	
MW-7	04/25/03	0.157	0.192	<0.005	0.02	
MW-7	09/18/03	0.018	0.023	<0.001	0.004	
MW-7	03/17/04	0.125	0.108	<0.10	0.033	
MW-7	08/17/04	0.237	0.081	<0.20	<0.020	
MW-7	03/04/05	.125/.121	<0.001	0.0467/0.0453	0.0202	
MW-7	09/21/05	.15/0.148	<0.001	0.079/0.0789	0.0248	
MW-7	03/16/06	0.191	0.0032	0.073	<0.001	
MW-7	09/20/06	0.236	<0.001	0.176	0.187	
MW-7	03/22/07	0.209/0.215	<0.05/<0.01	.149/.121	0.116/0.0532	
MW-7	09/25/07	0.465/0.458	<0.01/<0.01	.318/.314	.0307/0.302	

**APPENDIX A**  
**HISTORICAL ANALYTICAL RESULTS**  
**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Comments
NMQCC Groundwater Standards (mg/L)		0.01	1.00	0.75	0.62	
MW-7	03/19/08	0.161	<0.00048	0.057	0.0295	
MW-7	03/20/08	0.161/0.169	<0.002/<0.002	.057/.0637	0.0295/0.0325	
MW-7	09/17/08	0.083	<0.002	0.0475	0.0204	
MW-7	03/10/09	0.039	<0.002	0.0177	0.0052 J	
MW-7	03/11/09	0.0339	<0.00048	0.0177	0.0052	
MW-7	09/23/09	0.0332	<0.00043	0.0176	0.0033	
MW-7	09/23/09	0.0332/<0.002	<0.002/<0.002	.0176/<0.002	0.0033J/<0.006	
MW-7	05/17/10	0.0201/0.0198	<0.002/<0.002	.0095/.0092	0.0033J/0.0033J	
MW-7	05/17/10	0.0201	<0.00043	0.0095	0.0033	
MW-7	09/16/10	0.522/0.512	<0.01/<0.01	0.294/0.289	0.0383/0.0378	
MW-7	09/16/10	0.522	<0.0050	0.294	-	
MW-7	04/26/11	0.0091/0.0104	<0.01/<0.01	0.0042/0.0041	<0.01/<0.01	
MW-7	04/26/11	0.0091	<0.0050	0.0042	<0.0030	
MW-7	09/15/11	0.394	<0.01	0.149	0.0442	Duplicate sample collected
MW-7	03/06/12	0.0098	<0.0050	0.0088	<0.015	
MW-7	09/05/12	0.014	<0.005	0.01	<0.015	Duplicate sample collected
MW-7	02/21/13	0.0059	<0.001	0.0049	<0.003	Duplicate sample collected
MW-7	09/11/13	0.0024	<0.001	0.0013	<0.001	Duplicate sample collected
MW-7	02/26/14	0.003	<0.001	<0.001	<0.001	Duplicate sample collected
MW-7	09/24/14	0.0023	<0.001	<0.001	<0.003	Duplicate sample collected
MW-7 (Duplicate)	09/24/14	0.0021	<0.001	<0.001	<0.003	
MW-7	02/24/15	0.0087	<0.001	0.0026	<0.003	Duplicate sample collected
MW-7 (Duplicate)	02/24/15	0.009	<0.001	0.0035	<0.003	
MW-7	09/01/15	0.044	<0.001	0.037	0.0094	Duplicate sample collected
MW-7 (Duplicate)	09/01/15	0.049	<0.001	0.039	0.01	
MW-7	03/21/16	0.061	<0.001	0.05	0.017	Duplicate sample collected
MW-7 (Duplicate)	03/21/16	0.057	<0.001	0.048	<0.015	
MW-7	09/26/16	0.35	<0.001	0.31	0.055	Duplicate sample collected
MW-7 (Duplicate)	09/26/16	0.33	<0.001	0.3	0.052	
MW-7	03/07/17	0.11	<0.001	0.0069	0.03	Duplicate sample collected
MW-7 (Duplicate)	03/07/17	0.11	<0.001	0.0014	0.029	
MW-7	09/25/17	0.275	<0.0010	0.0886	0.0389	Duplicate sample collected
MW-7 (Duplicate)	09/25/17	0.279	<0.0010	0.0868	0.0383	
MW-7	03/13/18	0.175	<0.0010	0.0875	0.0395	Duplicate sample collected
MW-7 (Duplicate)	03/13/18	0.169	<0.0010	0.0813	0.0366	
MW-7	09/17/18	0.0852	<0.0010	0.122	0.0462	Duplicate sample collected
MW-7 (Duplicate)	09/17/18	0.0803	<0.0010	0.111	0.0422	
MW-7	03/20/19	0.0326	<0.0010	0.0374	0.0192	Duplicate sample collected
MW-7 (Duplicate)	03/20/19	0.0327	<0.0010	0.0367	0.0189	
MW-7	09/19/19	0.0173	<0.0010	0.0206	0.00775	Duplicate sample collected
MW-7 (Duplicate)	09/19/19	0.0169	<0.0010	0.0197	0.00716	
MW-7	06/22/20	0.0444	<0.0010	0.0518	0.0253	Duplicate sample collected
MW-7 (Duplicate)	06/22/20	0.0437	<0.0010	0.0509	0.0251	
MW-7	09/17/20	0.0147	<0.00100	0.00837	0.00225 J	Duplicate sample collected
MW-7 (Duplicate)	09/17/20	0.0150	<0.00100	0.00880	0.00238 J	

**APPENDIX A**  
**HISTORICAL ANALYTICAL RESULTS**  
**BTEX CONCENTRATIONS IN GROUNDWATER**  
**MONUMENT BOOSTER STATION**  
**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)		0.01	1.00	0.75	0.62	
Trip Blank	02/26/14	<0.001	<0.001	<0.001	<0.001	
Trip Blank	09/24/14	<0.001	<0.001	<0.001	<0.003	
Trip Blank	02/24/15	<0.001	<0.001	<0.001	<0.003	
Trip Blank	09/01/15	<0.001	<0.001	<0.001	<0.003	
Trip Blank	03/21/16	<0.001	<0.001	<0.001	<0.003	
Trip Blank	09/26/16	<0.001	<0.001	<0.001	<0.003	
Trip Blank	03/07/17	<0.001	<0.001	<0.001	<0.001	
Trip Blank	09/25/17	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	03/13/18	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	09/18/18	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	03/20/19	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	09/19/19	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	06/22/20	<0.0010	<0.0010	<0.0010	<0.0030	
Trip Blank	09/17/20	<0.00100	<0.00100	<0.00100	<0.00300	

**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 = Estimated Value

NS = Not Sampled

mg/L = milligrams per liter

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).

## Appendix B

### Laboratory Analytical Reports

Pace Laboratories Job #'s: L1263942

## DCP Midstream - Tasman

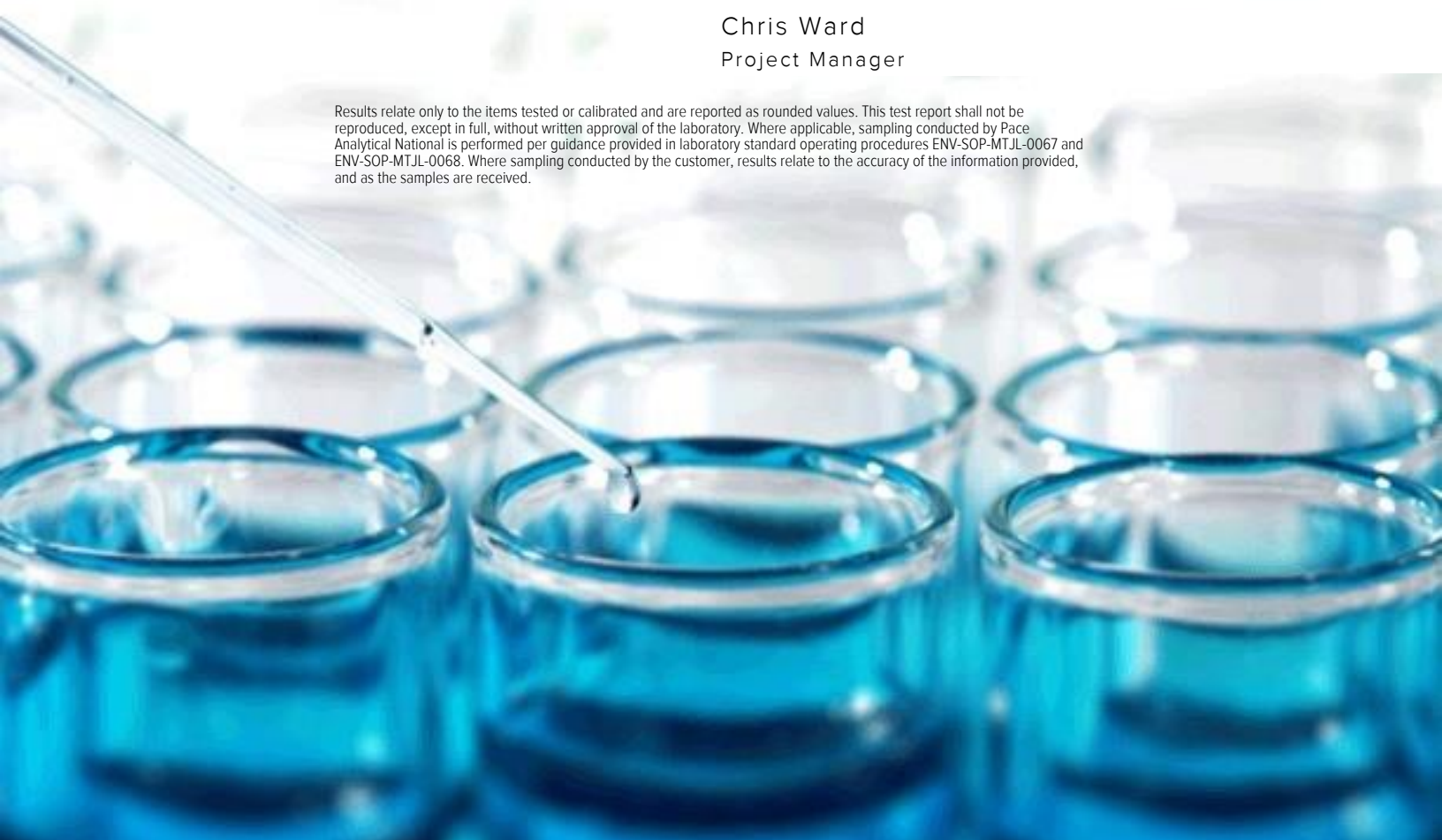
Sample Delivery Group: L1263942  
Samples Received: 09/18/2020  
Project Number:  
Description: Monument Booster Station  
  
Report To: Brian Humphrey  
2620 W. Marland Blvd  
Hobbs, NM 88240

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.





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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-1 L1263942-01 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 08:40	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548988	10	09/25/20 18:26	09/25/20 18:26	BMB	Mt. Juliet, TN

## MW-1D L1263942-02 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 09:05	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548075	1	09/24/20 05:59	09/24/20 05:59	GLN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548988	1	09/25/20 16:26	09/25/20 16:26	ADM	Mt. Juliet, TN

## MW-2 L1263942-03 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 10:30	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548177	1	09/23/20 21:39	09/23/20 21:39	JCP	Mt. Juliet, TN

## MW-3 L1263942-04 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 11:00	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548177	1	09/23/20 21:59	09/23/20 21:59	JCP	Mt. Juliet, TN

## MW-4 L1263942-05 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 11:25	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548177	1	09/23/20 22:20	09/23/20 22:20	JCP	Mt. Juliet, TN

## MW-5 L1263942-06 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 10:00	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548873	1	09/25/20 14:25	09/25/20 14:25	ADM	Mt. Juliet, TN

## MW-7 L1263942-07 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 09:30	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548177	1	09/23/20 22:40	09/23/20 22:40	JCP	Mt. Juliet, TN

## DUPLICATE L1263942-08 GW

				Collected by Becky Griffin	Collected date/time 09/17/20 00:00	Received date/time 09/18/20 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548177	1	09/23/20 23:00	09/23/20 23:00	JCP	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



TRIP BLANK L1263942-09 GW

Collected by  
Becky GriffinCollected date/time  
09/17/20 13:00Received date/time  
09/18/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1548177	1	09/23/20 19:37	09/23/20 19:37	JCP	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> 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	0.0993		0.000941	0.0100	10	09/25/2020 18:26	<a href="#">WG1548988</a>
Toluene	U		0.00278	0.0100	10	09/25/2020 18:26	<a href="#">WG1548988</a>
Ethylbenzene	0.0599		0.00137	0.0100	10	09/25/2020 18:26	<a href="#">WG1548988</a>
Total Xylenes	0.00500		0.000174	0.00300	10	09/25/2020 18:26	<a href="#">WG1548988</a>
(S) Toluene-d8	92.8			80.0-120		09/25/2020 18:26	<a href="#">WG1548988</a>
(S) 4-Bromofluorobenzene	107			77.0-126		09/25/2020 18:26	<a href="#">WG1548988</a>
(S) 1,2-Dichloroethane-d4	95.5			70.0-130		09/25/2020 18:26	<a href="#">WG1548988</a>

<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



## 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	0.00244		0.0000941	0.00100	1	09/25/2020 16:26	<a href="#">WG1548988</a>
Toluene	U		0.000278	0.00100	1	09/24/2020 05:59	<a href="#">WG1548075</a>
Ethylbenzene	U		0.000137	0.00100	1	09/24/2020 05:59	<a href="#">WG1548075</a>
Total Xylenes	U		0.000174	0.00300	1	09/24/2020 05:59	<a href="#">WG1548075</a>
(S) Toluene-d8	97.2			80.0-120		09/24/2020 05:59	<a href="#">WG1548075</a>
(S) Toluene-d8	97.2			80.0-120		09/25/2020 16:26	<a href="#">WG1548988</a>
(S) 4-Bromofluorobenzene	103			77.0-126		09/24/2020 05:59	<a href="#">WG1548075</a>
(S) 4-Bromofluorobenzene	87.8			77.0-126		09/25/2020 16:26	<a href="#">WG1548988</a>
(S) 1,2-Dichloroethane-d4	118			70.0-130		09/24/2020 05:59	<a href="#">WG1548075</a>
(S) 1,2-Dichloroethane-d4	101			70.0-130		09/25/2020 16:26	<a href="#">WG1548988</a>

<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



## 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	09/23/2020 21:39	<a href="#">WG1548177</a>
Toluene	U		0.000278	0.00100	1	09/23/2020 21:39	<a href="#">WG1548177</a>
Ethylbenzene	U		0.000137	0.00100	1	09/23/2020 21:39	<a href="#">WG1548177</a>
Total Xylenes	U		0.000174	0.00300	1	09/23/2020 21:39	<a href="#">WG1548177</a>
(S) Toluene-d8	92.0			80.0-120		09/23/2020 21:39	<a href="#">WG1548177</a>
(S) 4-Bromofluorobenzene	96.6			77.0-126		09/23/2020 21:39	<a href="#">WG1548177</a>
(S) 1,2-Dichloroethane-d4	124			70.0-130		09/23/2020 21:39	<a href="#">WG1548177</a>

<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



## 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	09/23/2020 21:59	<a href="#">WG1548177</a>
Toluene	U		0.000278	0.00100	1	09/23/2020 21:59	<a href="#">WG1548177</a>
Ethylbenzene	U		0.000137	0.00100	1	09/23/2020 21:59	<a href="#">WG1548177</a>
Total Xylenes	U		0.000174	0.00300	1	09/23/2020 21:59	<a href="#">WG1548177</a>
(S) Toluene-d8	91.8			80.0-120		09/23/2020 21:59	<a href="#">WG1548177</a>
(S) 4-Bromofluorobenzene	93.3			77.0-126		09/23/2020 21:59	<a href="#">WG1548177</a>
(S) 1,2-Dichloroethane-d4	123			70.0-130		09/23/2020 21:59	<a href="#">WG1548177</a>

<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



## 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	0.000163	J	0.0000941	0.00100	1	09/23/2020 22:20	<a href="#">WG1548177</a>
Toluene	U		0.000278	0.00100	1	09/23/2020 22:20	<a href="#">WG1548177</a>
Ethylbenzene	U		0.000137	0.00100	1	09/23/2020 22:20	<a href="#">WG1548177</a>
Total Xylenes	U		0.000174	0.00300	1	09/23/2020 22:20	<a href="#">WG1548177</a>
(S) Toluene-d8	91.6			80.0-120		09/23/2020 22:20	<a href="#">WG1548177</a>
(S) 4-Bromofluorobenzene	95.9			77.0-126		09/23/2020 22:20	<a href="#">WG1548177</a>
(S) 1,2-Dichloroethane-d4	130			70.0-130		09/23/2020 22:20	<a href="#">WG1548177</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 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	0.0140		0.0000941	0.00100	1	09/25/2020 14:25	<a href="#">WG1548873</a>
Toluene	0.000429	J	0.000278	0.00100	1	09/25/2020 14:25	<a href="#">WG1548873</a>
Ethylbenzene	0.0181		0.000137	0.00100	1	09/25/2020 14:25	<a href="#">WG1548873</a>
Total Xylenes	U		0.000174	0.00300	1	09/25/2020 14:25	<a href="#">WG1548873</a>
(S) Toluene-d8	99.4			80.0-120		09/25/2020 14:25	<a href="#">WG1548873</a>
(S) 4-Bromofluorobenzene	137	J1		77.0-126		09/25/2020 14:25	<a href="#">WG1548873</a>
(S) 1,2-Dichloroethane-d4	106			70.0-130		09/25/2020 14:25	<a href="#">WG1548873</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



## 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	0.0147		0.0000941	0.00100	1	09/23/2020 22:40	<a href="#">WG1548177</a>
Toluene	U		0.000278	0.00100	1	09/23/2020 22:40	<a href="#">WG1548177</a>
Ethylbenzene	0.00837		0.000137	0.00100	1	09/23/2020 22:40	<a href="#">WG1548177</a>
Total Xylenes	0.00225	J	0.000174	0.00300	1	09/23/2020 22:40	<a href="#">WG1548177</a>
(S) Toluene-d8	89.4			80.0-120		09/23/2020 22:40	<a href="#">WG1548177</a>
(S) 4-Bromofluorobenzene	95.1			77.0-126		09/23/2020 22:40	<a href="#">WG1548177</a>
(S) 1,2-Dichloroethane-d4	127			70.0-130		09/23/2020 22:40	<a href="#">WG1548177</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/17/20 00:00

L1263942

## 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	0.0150		0.0000941	0.00100	1	09/23/2020 23:00	<a href="#">WG1548177</a>
Toluene	U		0.000278	0.00100	1	09/23/2020 23:00	<a href="#">WG1548177</a>
Ethylbenzene	0.00880		0.000137	0.00100	1	09/23/2020 23:00	<a href="#">WG1548177</a>
Total Xylenes	0.00238	J	0.000174	0.00300	1	09/23/2020 23:00	<a href="#">WG1548177</a>
(S) Toluene-d8	89.8			80.0-120		09/23/2020 23:00	<a href="#">WG1548177</a>
(S) 4-Bromofluorobenzene	95.7			77.0-126		09/23/2020 23:00	<a href="#">WG1548177</a>
(S) 1,2-Dichloroethane-d4	125			70.0-130		09/23/2020 23:00	<a href="#">WG1548177</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 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	09/23/2020 19:37	<a href="#">WG1548177</a>
Toluene	U		0.000278	0.00100	1	09/23/2020 19:37	<a href="#">WG1548177</a>
Ethylbenzene	U		0.000137	0.00100	1	09/23/2020 19:37	<a href="#">WG1548177</a>
Total Xylenes	U		0.000174	0.00300	1	09/23/2020 19:37	<a href="#">WG1548177</a>
(S) Toluene-d8	91.0			80.0-120		09/23/2020 19:37	<a href="#">WG1548177</a>
(S) 4-Bromofluorobenzene	99.4			77.0-126		09/23/2020 19:37	<a href="#">WG1548177</a>
(S) 1,2-Dichloroethane-d4	121			70.0-130		09/23/2020 19:37	<a href="#">WG1548177</a>

<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

Method Blank (MB)

(MB) R3574228-3 09/24/20 01:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	97.1			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	119			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3574228-1 09/24/20 00:58 • (LCSD) R3574228-2 09/24/20 01:17

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 %
Ethylbenzene	0.00500	0.00462	0.00475	92.4	95.0	79.0-123			2.77	20
Toluene	0.00500	0.00481	0.00472	96.2	94.4	79.0-120			1.89	20
Xylenes, Total	0.0150	0.0149	0.0153	99.3	102	79.0-123			2.65	20
(S) Toluene-d8				96.9	96.4	80.0-120				
(S) 4-Bromofluorobenzene				106	107	77.0-126				
(S) 1,2-Dichloroethane-d4				118	115	70.0-130				



Method Blank (MB)

(MB) R3574167-2 09/23/20 16:42

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	92.5			80.0-120
(S) 4-Bromofluorobenzene	96.6			77.0-126
(S) 1,2-Dichloroethane-d4	120			70.0-130

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

Laboratory Control Sample (LCS)

(LCS) R3574167-1 09/23/20 15:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00574	115	70.0-123	
Ethylbenzene	0.00500	0.00448	89.6	79.0-123	
Toluene	0.00500	0.00469	93.8	79.0-120	
Xylenes, Total	0.0150	0.0136	90.7	79.0-123	
(S) Toluene-d8			93.0	80.0-120	
(S) 4-Bromofluorobenzene			99.1	77.0-126	
(S) 1,2-Dichloroethane-d4			120	70.0-130	

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3574567-4 09/25/20 10:16

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	96.2			80.0-120
(S) 4-Bromofluorobenzene	85.9			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

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

(LCS) R3574567-1 09/25/20 08:56 • (LCSD) R3574567-2 09/25/20 09:16

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	0.00451	0.00447	90.2	89.4	70.0-123			0.891	20
Ethylbenzene	0.00500	0.00432	0.00422	86.4	84.4	79.0-123			2.34	20
Toluene	0.00500	0.00418	0.00438	83.6	87.6	79.0-120			4.67	20
Xylenes, Total	0.0150	0.0125	0.0130	83.3	86.7	79.0-123			3.92	20
(S) Toluene-d8				92.0	91.9	80.0-120				
(S) 4-Bromofluorobenzene				82.4	89.9	77.0-126				
(S) 1,2-Dichloroethane-d4				104	92.2	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3574569-4 09/25/20 10:16

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	96.2			80.0-120
(S) 4-Bromofluorobenzene	85.9			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

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

(LCS) R3574569-1 09/25/20 08:56 • (LCSD) R3574569-2 09/25/20 09:16

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	0.00451	0.00447	90.2	89.4	70.0-123			0.891	20
Ethylbenzene	0.00500	0.00432	0.00422	86.4	84.4	79.0-123			2.34	20
Toluene	0.00500	0.00418	0.00438	83.6	87.6	79.0-120			4.67	20
Xylenes, Total	0.0150	0.0125	0.0130	83.3	86.7	79.0-123			3.92	20
(S) Toluene-d8				92.0	91.9	80.0-120				
(S) 4-Bromofluorobenzene				82.4	89.9	77.0-126				
(S) 1,2-Dichloroethane-d4				104	92.2	70.0-130				

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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

<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



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

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

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

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
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>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

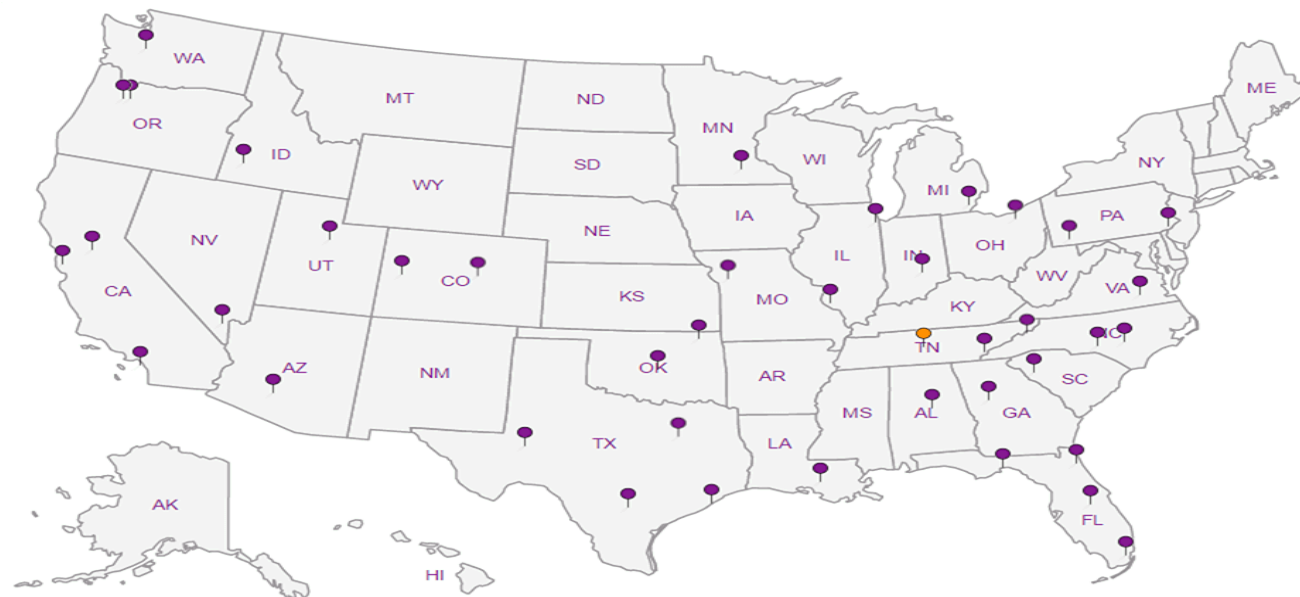
## Third Party Federal Accreditations

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

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



# 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 Page \_\_\_\_ of \_\_\_\_



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



## Report to:

Nick Kopiasz **KYLE NORMAN**

Email To: **bnorm@tasman-geo.com**

## Project Description:

Monument Booster Station

## City/State

Collected:

## Please Circle:

PT MT CT ET

Phone: 720-218-4003

Client Project #

Lab Project #

DCPTASMAN-MONUMENT

## Collected by (print):

**BECKY GRIFFIN**

Site/Facility ID #

P.O. #

0000524231

## Collected by (signature):

**Becky Griffin**

## 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

Immediately

Packed on Ice N Y

Sample ID

Comp/Grab

Matrix \*

Depth

Date

Time

Cntrs

MW-1

GW

9-17-20 0840 3

MW-1D

GW

9-17-20 0905 3

MW-2

GW

9-17-20 1030 3

MW-3

GW

9-17-20 1100 3

MW-4

GW

9-17-20 1125 3

MW-5

GW

9-17-20 1000 3

MW-7

GW

9-17-20 0930 3

**DUPLICATE**

GW

9-17-20 3 3

TRIP BLANK

GW

9-17-20 1300 1

## \* Matrix:

SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other

## Remarks:

pH Temp

Flow Other

Samples returned via:

UPS FedEx Courier

Tracking #

9159 87 80 15 50

Relinquished by: (Signature)

**Becky Griffin**

Date:

9-17-20

Time:

1300

Received by: (Signature)

**Becky Griffin**

Trip Blank Received: Yes / No

HCL MeOH  
TBR

Relinquished by: (Signature)

**Becky Griffin**

Date:

9-17-20

Time:

1300

Received by: (Signature)

**Becky Griffin**

Temp: °C

30-12.943 27

Relinquished by: (Signature)

**Becky Griffin**

Date:

9-17-20

Time:

930

Received for lab by: (Signature)

**Becky Griffin**

Date: Time:

9/18/20 930

## Sample Receipt Checklist

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

If preservation required by Login: Date/Time

Hold: Condition:  
NCF / (OK)