



# Second Quarter 2021 Groundwater Monitoring Report

Hobbs Gas Plant NMOCD AP-122 Lea County, New Mexico EMNRD Incident No. NPAC0706832026

DCP Operating Company June 7, 2022



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Map of BTEX Concentrations - June 30, 2021

### 1. Introduction

GHD Services Inc. (GHD), on behalf of DCP Operating Company (DCP), submits this 2021 Second Quarter Groundwater Monitoring Report (Report) in compliance with New Mexico Oil Conservation Division (NMOCD) of the Energy, Minerals, and Natural Resources Department (EMNRD) requirements. This Site has been assigned EMNRD Incident Number NPAC0706832026 and falls under NMOCD Abatement Plan Number AP-122. This Report provides the results of the quarterly groundwater sampling event (GWSE) completed at Hobbs Gas Plant (Site) during the second quarter of 2021 (2Q2021).

The Site is located in SW ¼, NE ¼, Section 36, Township 18 South, Range 36 East in Lea County, New Mexico. The GPS coordinates are 32.705330° N latitude and 103.306600° W longitude. A Site Location Map is provided as Figure 1. The site details are depicted on Figure 2, Site Details Map.

## 1.1 Site History

The Site is an inactive cryogenic gas processing plant that occupies approximately 3.5 acres surrounded by undeveloped land. The facility contained a laboratory, an amine unit, compressors, molecular sieve dehydration equipment, tank batteries, and an on-Site water production well used for non-potable water. There are seven on-Site groundwater monitor wells (MW-AR, MW-B, MW-C, MW-D, MW-E, MW-F, and MW-GR). Replacement monitor well MW-GR was drilled and constructed at the Site upon approval from NMOCD in March 2018. The DCP Apex Compressor Station (GW-163, Incident ID NAUTOFCS000131) is located approximately 750 feet to the north.

A petroleum release was first discovered when Duke Energy Field Services conducted an environmental assessment of the Site in support of a property transaction. Initial findings indicated groundwater from a newly installed monitor well near the amine skid in the southeast corner of the Site contained elevated concentrations of benzene.

# 2. Regulatory Framework

The New Mexico Administrative Code requires groundwater to be analyzed for potential contaminants as defined by the New Mexico Water Quality Control Commission (NMWQCC) Standards 20.6.2.3103 Section A, which provide Human Health Standards for Groundwater. The constituents of concern (COCs) in affected groundwater at the Site are benzene, toluene, ethylbenzene, and total xylenes (BTEX). The regulation also states that light non-aqueous liquids (LNAPL) shall not be present floating atop or immersed within groundwater, as can be reasonably measured. NMWQCC standards as shown in Table 2.1 are used to guide assessment at the Site.

Table 2.1 NMWQCC Human Health Standards for Groundwater

Analyte	Units
Benzene	5 μg/L
Toluene	1000 μg/L
Ethylbenzene	700 μg/L
Total Xylenes	620 µg/L
Notes:	
μg/L = micrograms per Liter	

# Second Quarter 2021 Groundwater Sampling Event

GHD conducted the second quarter Groundwater Sampling Event (GWSE) for seven groundwater monitoring wells in June 2021. Sample locations can be viewed in the Site Details Map, provided as Figure 2. All groundwater monitoring wells were sampled in accordance with the following groundwater sampling schedule as approved by the NMOCD.

Table 3.1 NMOCD-Approved Groundwater Sampling Schedule

Sample Location ID	Groundwater Sampling Schedule
MW-AR; MW-B; MW-C; MW-D; MW-E; MW-F; MW-GR	Quarterly

### 3.1 Groundwater Sampling Methodology

Static fluid levels were gauged with an oil-water interface probe to the nearest hundredth of a foot for all groundwater monitoring wells. Wells not containing LNAPL with sufficient water for sampling were purged of 3 well volumes of groundwater except in situations where the water column was thin. In those circumstances, groundwater samples were collected with limited purging. Hand-bailing, using clean disposable polyvinyl chloride (PVC) bailers, was the method used for groundwater purging and sampling. The purged groundwater was stored in a labelled 55-gallon plastic barrel located at the Site. Purged groundwater are periodically removed for disposal at a licensed facility per directives of DCP.

Laboratory-supplied containers were filled with groundwater directly from the PVC bailer used for purging, then placed on ice and chilled to a temperature of approximately 4 degrees Celsius (°C). All groundwater samples were analyzed for BTEX by EPA Method 8260B. All groundwater samples were analyzed by Pace Analytical Laboratory (Pace) in Mount Juliet, Tennessee. Certified Laboratory Reports and Chain-of-Custody documentation are provided in Appendix B.

### 3.2 Laboratory Analytical Results

BTEX Analytical Results for Groundwater Sampling Events-Second Quarter 2021 GWSE are included in Table 2. A map of BTEX Concentrations for June 2021 is shown on Figure 4. All analytical results are compared to the NMWQCC Human Health Standards found in Table 3.1.

### 3.2.1 Second Quarter Summary

On June 30, 2021, GHD collected groundwater samples from one groundwater monitoring well, MW-C. Approximately 1.5 gallons of groundwater were purged and stored on-Site in a labelled 55-gallon plastic barrel. Monitor well MW-C did not exhibit BTEX concentrations above the NMWQCC criteria. Groundwater samples could not be collected from any other Site wells due to an insufficient amount of groundwater.

Charts of Dissolved Benzene versus Time for monitor well MW-C are provided in Appendix A. All charts show historical trends over the past decade, including this 2Q2021 GWSE. Historical hydrocarbon impacts to groundwater over the past decade for all groundwater monitoring wells that are currently dry can be seen in previous quarterly reports (tables, figures, etc.) submitted to the NMOCD.

# 4. Elevation and Gradient of the Potentiometric Surface

During the 2Q2021 GWSE, GHD conducted gauging events prior to the groundwater sample collection on June 30, 2021. All fluid level measurements were from tops of casings which were professionally surveyed. Due to the lack of 3 elevation points, there was insufficient elevation data to determine the gradient of the potentiometric surface during June 2021. Historical elevation data, which can be seen in previous quarterly reports submitted to the NMOCD, indicates groundwater flow is generally toward the southeast. The elevation of the potentiometric surface indicates an average decline of 0.60 feet (ft) between March and June 2021. Data from the second quarter 2021 gauging and elevation of the Potentiometric Surface is provided in Table 1. A map of Potentiometric Surface for June 2021 is provided as Figure 3.

# 5. Summary of Findings

Base on the GWSE performed at the Site during the 2Q2021, the following summary of findings is presented:

- The only well with sufficient groundwater for sampling in 2Q2021 was monitor well MW-C.
- Monitor wells MW-AR, MW-B, MW-D, MW-E, and MW-GR are dry wells as of June 2021. Historical hydrocarbon impacts to groundwater over the past decade for these groundwater monitoring wells can be seen in previous quarterly reports submitted to the NMOCD.
- There is insufficient data to determine the gradient of the potentiometric surface during June 2021. Historical data indicates groundwater flow is generally southeast.
- The elevation of the potentiometric surface indicates an average decline of 0.60 ft between March and June 2021.
- Measurable LNAPL was not present in any wells due to a decreasing water table. Historical LNAPL thicknesses for all groundwater monitoring wells can be seen in previous quarterly reports submitted to the NMOCD.
- Monitor well MW-C exhibited BTEX concentrations below the NMWQCC Human Health Standards during 2Q2021.

## 6. Recommendations

Based upon the data and findings presented in this Report, the following are recommended for the third quarter of 2021:

- Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8260B for all monitor wells located on-Site.
- Replacement wells are scheduled to be installed during the summer of 2022 to delineate the nature and extent of hydrocarbon impacted groundwater.

### Table 1

# Second Quarter 2021 Gauging and Elevation - Potentiometric Surface DCP Midstream, LP Hobbs Gas Plant Los County New Movice

### Hobbs Gas Plant, Lea County, New Mexico NMOCD AP-122, EMNRD Incident Number NPAC0706832026

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Water (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft)	Elevation of Potentiometric Surface (famsl)	Measured Total Depth (fbtoc)	Volume LNAPL Recovered (gal)	Volume Groundwater Bailed (gal)
MW-AR	3755.73	6/30/2021	-	-	-	Dry	69.27	-	-
MW-B	3755.70	6/30/2021	-	-	-	Dry	71.02	ı	-
MW-C	3755.35	6/30/2021	72.74	-	0.00	3682.61	75.31	1	1.5
MW-D	3755.19	6/30/2021	-	-	-	Dry	69.86	-	-
MW-E	3754.11	6/30/2021	-	-	0.00	Dry	71.28	-	-
MW-F	3755.88	6/30/2021	73.74	-	0.00	3682.14	75.45	-	-
MW-GR	3754.70	6/30/2021	-	-	-	Dry	72.56	-	-

#### Notes:

- 1. famsl = feet above mean sea level
- 2. fbtoc = feet below top of casing
- 3. ft = feet
- 4. gal = gallons
- 5. If measurable LNAPI was present, elevation of the potentiometric surface was calculated using 0.81 as specific gravity of LNAPL.
- 6. MW-GR was installed in March 2018 to replace MW-G and surveyed on June 20, 2018.
- 7. Wells were re-surveyed on September 25, 2013.

Page 1 of 1

### Table 2

# BTEX Analytical Results for Groundwater Sampling Events - Second Quarter 2021 DCP Midstream, LP

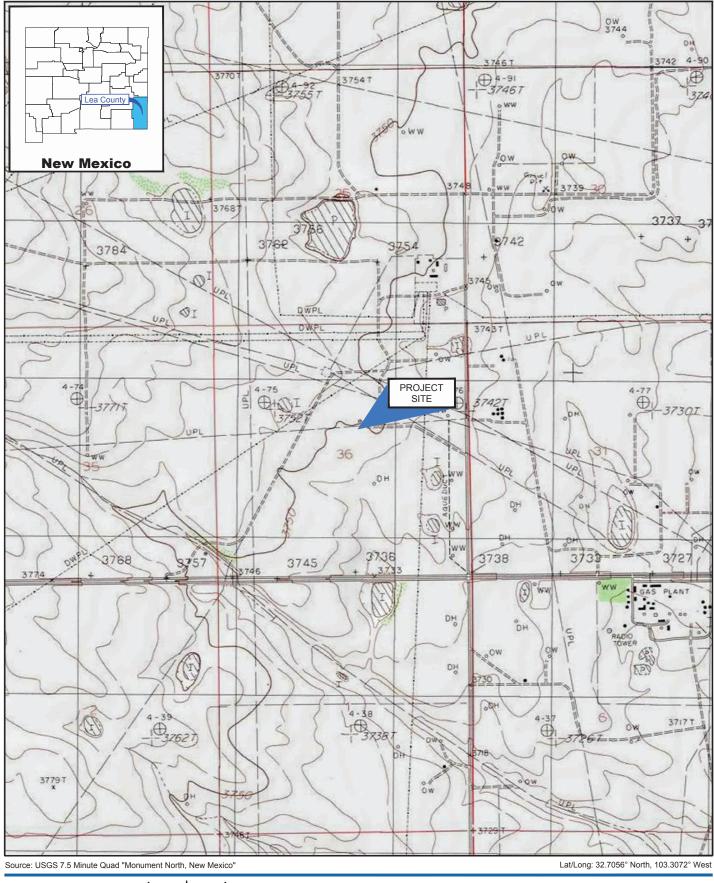
# Hobbs Gas Plant, Lea County, New Mexico NMOCD AP-122, EMNRD Incident Number NPAC0706832026

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (μg/L)
<b>NMWQCC Human Hea</b>	Ith Standards	5	1000	700	620
MW-C	06/30/21	<0.0941	<0.278	<0.137	<0.174

### Notes:

- 1.  $\mu$ g/L = micrograms per Liter
- 2. BTEX analyses by EPA Method 8021B.
- 3. NMWQCC = New Mexico Water Quality Control Commission.
- 4. Bold indicates detection.
- 5. Yellow shaded cells indicate detection above NMWQCC Human Health Standard.
- 6. < indicates analyte not detected.

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0 1000 2000ft

Coordinate System:
NAD 1983 (2011) StatePlaneNew Mexico East (US Feet)

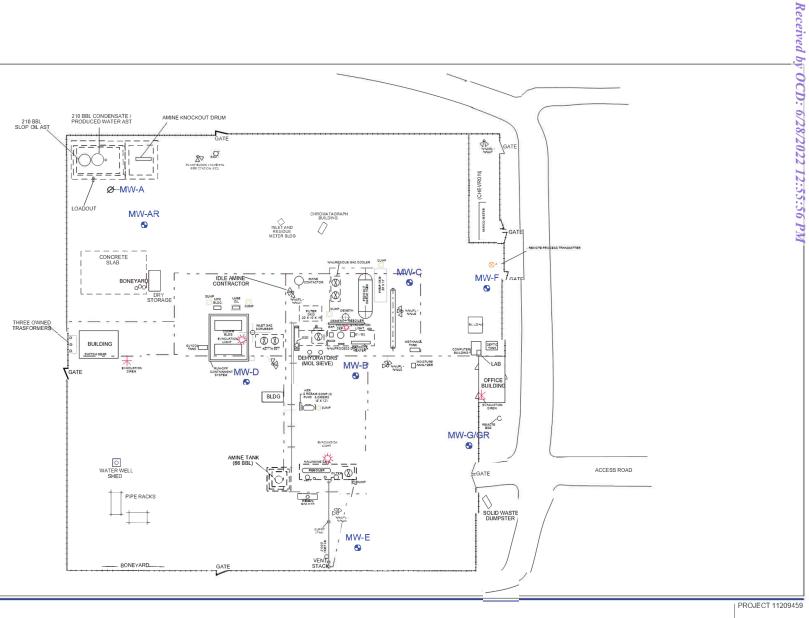


DCP MIDSTREAM, LP HOBBS GAS PLANT NMOCD AP-22

SITE LOCATION MAP

11209459-02 Dec 19, 2018

FIGURE 1







Monitor Well Location

Destroyed Monitor Well ----- Fence Line

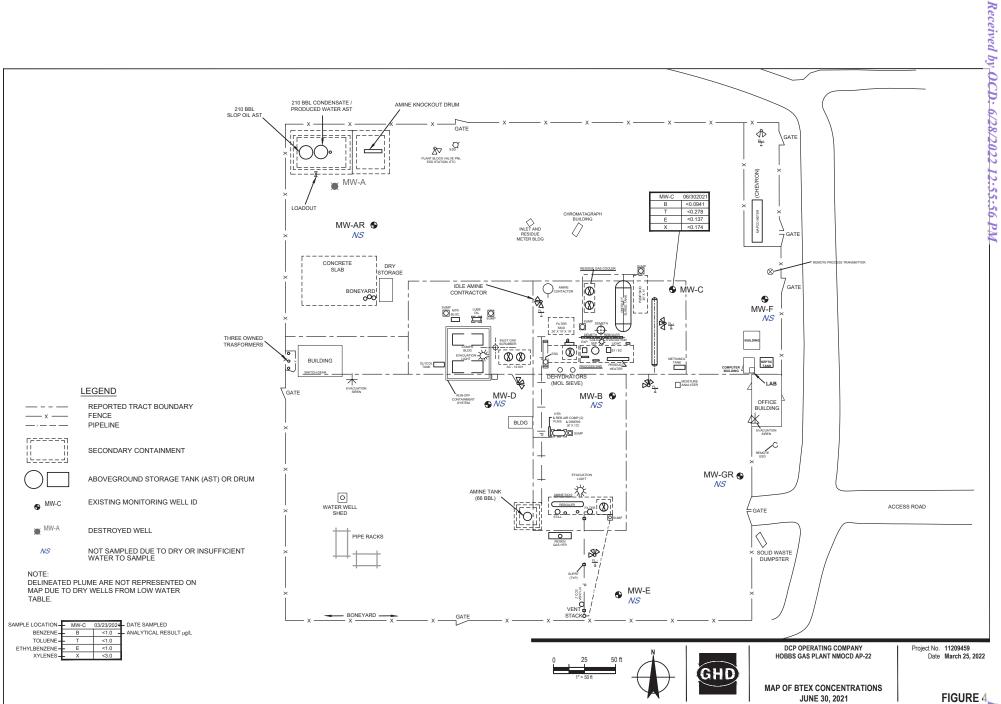
DCP OPERATING COMPANY HOBBS GAS PLANT, NMOCD AP-122

SITE DETAILS MAP

APRIL 7, 2021

FIGURE 2

Filename: N:UIS/MidlandlProjects/562/11209459lDigital\_DesignIACAD/Figures/RPT001\11209459-GHD-00-00-RPT-EN-D102\_GB-001.dwg Plot Date: 18 May 2022 10:05 AM



Filename: N:UIS/MidlandlProjects/562/11209459/Digital\_DesigniACAD/Figures/RPT001\11209459-GHD-00-00-RPT-EN-D106\_G8-001.dwg
Plot Date: 18 May 2022 9:54 AM

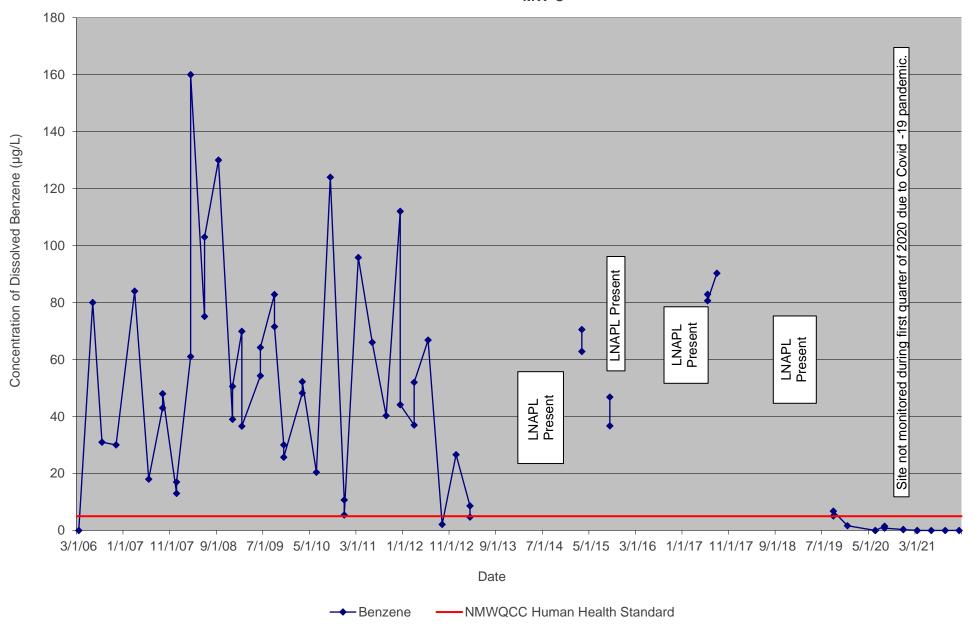
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# Appendices

# Appendix A

**Charts of Dissolved Benzene Concentrations Versus Time** 

DCP Midstream, LP
Hobbs Gas Plant
Lea County, New Mexico
Dissolved Benzene vs. Time
MW-C



# Appendix B

**Certified Laboratory Reports and Chain-of-Custody Documentation** 



# Pace Analytical® ANALYTICAL REPORT



















### **DCP Midstream - GHD**

Sample Delivery Group: L1373550 Samples Received: 07/01/2021 Project Number: 11209459/04

Description: DCP Hobbs Gas Plant

Report To: John Schnable

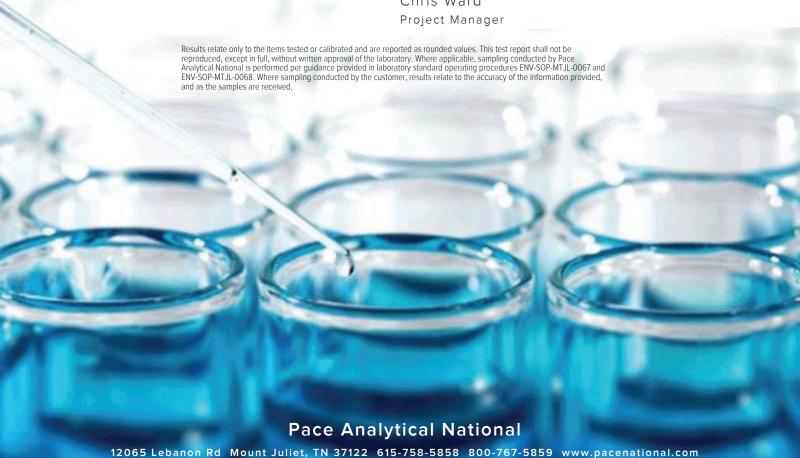
13091 Pond Springs Road, Suite A100

Austin, TX 78729

Entire Report Reviewed By:

Chris Word

Chris Ward



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### SAMPLE SUMMARY

MW-C-063021 L1373550-01 GW			Collected by RL	Collected date/time 06/30/21 12:00	Received date 07/01/21 09:00	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1699942	1	07/04/21 03:45	07/04/21 03:45	JCP	Mt. Juliet, TN



















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



















his Word

### SAMPLE RESULTS - 01

Collected date/time: 06/30/21 12:00

L1373550

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

	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1.00	1	07/04/2021 03:45	WG1699942
Toluene	U		0.278	1.00	1.00	1	07/04/2021 03:45	WG1699942
Ethylbenzene	U		0.137	1.00	1.00	1	07/04/2021 03:45	WG1699942
Total Xylenes	U		0.174	3.00	3.00	1	07/04/2021 03:45	WG1699942
(S) Toluene-d8	105				80.0-120		07/04/2021 03:45	WG1699942
(S) 4-Bromofluorobenzene	88.3				77.0-126		07/04/2021 03:45	WG1699942
(S) 1,2-Dichloroethane-d4	93.9				70.0-130		07/04/2021 03:45	WG1699942



















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QUALITY CONTROL SUMMARY																						SDG:	L1373550
QUALITY													s LCS Qualifier									PROJECT:	11209459/04
			MB RDL ua/l		1.00	1.00	3.00	80.0-120	77.0-126	70.0-130				%	70.0-123	70.0.129	79.0-123	00.0-123	80.0-120	77.0-126	70.0-130		11
10d 8260B			MB MDL	0.0941	0.137	0.278	0.174						LCS Rec.	%	101	001	98.4	C.10	101	91.7	92:6		
IS) by Meth			MB Qualifier								(S)			l/gn	5.04	0.40	4.92 1/1 6	D.					
ounds (GC/M		1 20:58	MB Result	n n	$\cap$	n	Π	901	90.4	6.26	Sample (Lo	1 20:17	Spike Amount	l/gn	5.00	3.00	5.00 15.0	0.5				ACCOUNT:	DCP Midstream - GHD
WG1699942	per Method Blank (MB)	(MB) R3677243-2 07/03/2	<i>nagn</i> Analyte	. Benzene	Ethylbenzene	enene	Xylenes, Total	S) Toluene-d8		45 PM	Laboratory Control Sample (LCS)	(LCS) R3677243-1 07/03/21 20:17		Analyte	Benzene	Tolling	Toluene Xvlenes Total	Ayleiles, Total	(S) 101uene-d8	(S) 4-Bromofluorobenzene	(S) 1,2-Dichloroethane-d4	AC	DCP Mic

### Guide to Reading and Understanding Your Laboratory Report

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

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

#### Abbreviations and Definitions

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

#### Qualifier Description

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









Ss













D A 1 1 N	100051	BIM III	TN 07400
Pace Analytical National	12065 Lebanon	Rd Mount Juliet	TN 3/122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <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	LAO00356
Kentucky <sup>1 6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	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



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

TN00003

EPA-Crypto



















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



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

CONDITIONS

Action 121149

### **CONDITIONS**

Operator:	OGRID:
DCP OPERATING COMPANY, LP	36785
6900 E. Layton Ave	Action Number:
Denver, CO 80237	121149
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

#### CONDITIONS

Created By		Condition Date
nvelez	Accepted for the record on 01/04/2023.	1/4/2023