



July 15, 2024

**New Mexico Energy and Natural Resources Department**

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Closure Request  
Boundary Raider 7 CTB 2  
Incident Numbers nAPP2414543825 & nAPP2415972085  
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Devon Energy Production Company, LP (Devon), has prepared this *Closure Request* summarizing the response efforts and liner integrity inspection activities performed at the Boundary Raider 7 CTB 2 (Site) in Unit A, Section 18, Township 23 South, Range 32 East, in Lea County, New Mexico (Figure 1). The purpose of the liner integrity inspection was to determine if the lined secondary containment was capable of containing two separate produced water releases that occurred on May 24 and June 7, 2024, and whether impacts to soil in the areas immediately surrounding the containment liner were present or absent. Based on field observations during the liner integrity inspection, Devon is submitting this *Closure Request* and requesting closure for Incident Numbers nAPP2414543825 & nAPP2415972085.

**SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Lea County, New Mexico (32.314206°, -103.709198°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 24, 2024, a ¼-inch plug washed out on a transfer pump, which resulted in the release of 40 barrels (bbls) of produced water inside the lined secondary containment. A vacuum truck successfully recovered all 40 bbls of produced water. Devon reported the release to the New Mexico Oil Conservation Division (NMOCD) via web portal on May 24, 2024. The release was assigned Incident Number nAPP2414543825. A 48-hour advance notice of liner inspection was provided via web portal to the NMOCD on June 3, 2024. A liner integrity inspection was conducted by Ensolum personnel following fluid recovery and upon inspection, the liner was determined to be intact and had the ability to contain the release in question.

On June 7, 2024, a ¼-inch plug washed out on a strainer housing, which resulted in the release of 23 bbls of produced water inside the lined secondary containment. A vacuum truck successfully recovered 22 bbls of produced water. Devon reported the release to the NMOCD via web portal on June 7, 2024. The release was assigned Incident Number nAPP2415972085. A 48-hour advance notice of liner inspection was provided via web portal to the NMOCD on July 2, 2024. A liner integrity inspection was conducted by Ensolum personnel following fluid recovery and upon inspection, the liner was determined to be intact and had the ability to contain the release in question.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well CP 04815 POD1 with a depth to water measurement greater than 55 feet below ground surface (bgs). The well is located 0.55 miles east of the Site and the most recent documented water level measurement was collected on April 16, 2024. All wells used for depth to groundwater determinations are depicted on Figure 1 and the referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 3.04 miles northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

## DELINEATION SOIL SAMPLING ACTIVITIES AND LINER INTEGRITY INSPECTIONS

On June 3, 2024, Ensolum personnel arrived onsite to collect lateral surface samples associated with incident number nAPP2414543825. Four lateral delineation sample points (SS01 through SS04) were collected on all sides of the lined containment at ground surface to verify the release remained inside the lined containment. Delineation soil samples were field screened for chloride and TPH utilizing Mohr's titration method and a PetroFLAG® Soil Analyzer System, respectively. The delineation sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

The delineation soil samples (SS01 through SS04) were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech, Inc. (Envirotech) in Farmington, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

On June 6, 2024, Ensolum personnel competent in conducting liner inspections, returned to the Site to visually inspect the integrity of the containment liner associated with incident number nAPP2414543825. Prior to conducting the inspection, NMOCD was provided with a 48-hour liner inspection notification via email on June 3, 2024 (Appendix B). Ensolum personnel verified there was no visual evidence of a breach in the lined containment or any visible staining in the areas immediately surrounding the

containment walls. It was determined the liner remained intact and had to the ability to contain the release in question. Photographs taken during the liner inspection are included in Appendix C.

On July 1, 2024, Ensolum personnel returned to the Site to collect lateral surface samples associated with incident number nAPP2415972085. Four lateral delineation sample points (SS01 through SS04) were recollected in the same locations as incident number nAPP2414543825 on all sides of the lined containment at ground surface to verify the release remained inside the lined containment. Delineation soil samples were analyzed and handled in the same manner previously described and the sample locations are depicted on Figure 2.

On July 7, 2024, Ensolum personnel competent in conducting liner inspections, returned to the Site to visually inspect the integrity of the containment liner associated with incident number nAPP2415972085. Prior to conducting the inspection, NMOCD was provided with a 48-hour liner inspection notification via email on July 2, 2024 (Appendix B). Due to heavy rains on July 4, 2024, an inch of water was present in the containment during the inspection on July 5, 2024, however the water was clear, and the liner inspection was still possible. Ensolum personnel verified there was no visual evidence of a breach in the lined containment or any visible staining in the areas immediately surrounding the containment walls. It was determined the liner remained intact and had to the ability to contain the release in question.

## LABORATORY ANALYTICAL RESULTS

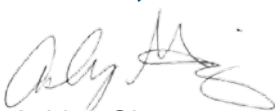
Laboratory analytical results for lateral delineation soil samples (SS01 through SS04) collected at ground surface and associated with Incident Number nAPP2414543825 indicated all COC concentrations were in compliance with strictest Closure Criteria per NMOCD Table I and with the Site Closure Criteria. Laboratory analytical results for delineation soil samples (SS01 through SS04) collected at ground surface and in association with Incident Number nAPP2415972085 indicated that all COC concentrations were in compliance with the strictest Closure Criteria per NMOCD Table I and with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D.

## CLOSURE REQUEST

Following two liner integrity inspections at the Site, it was determined the releases were contained laterally and vertically by the lined secondary containment. Lateral delineation soil samples (SS01 through SS04) associated with Incident Number nAPP2414543825 collected at ground surface and lateral delineation soil samples (SS01 through SS04) collected at ground surface and associated with Incident Number nAPP2415972085 verified the release did not breach the containment walls during either release. Based on initial response efforts, and a reported depth to groundwater of greater than 55 feet bgs, Devon respectfully requests closure for Incident Numbers nAPP2414543825 & nAPP2415972085.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or [agiovengo@ensolum.com](mailto:agiovengo@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Ashley Giovengo  
Senior Scientist



Daniel R. Moir, PG (licensed in WY & TX)  
Senior Managing Geologist

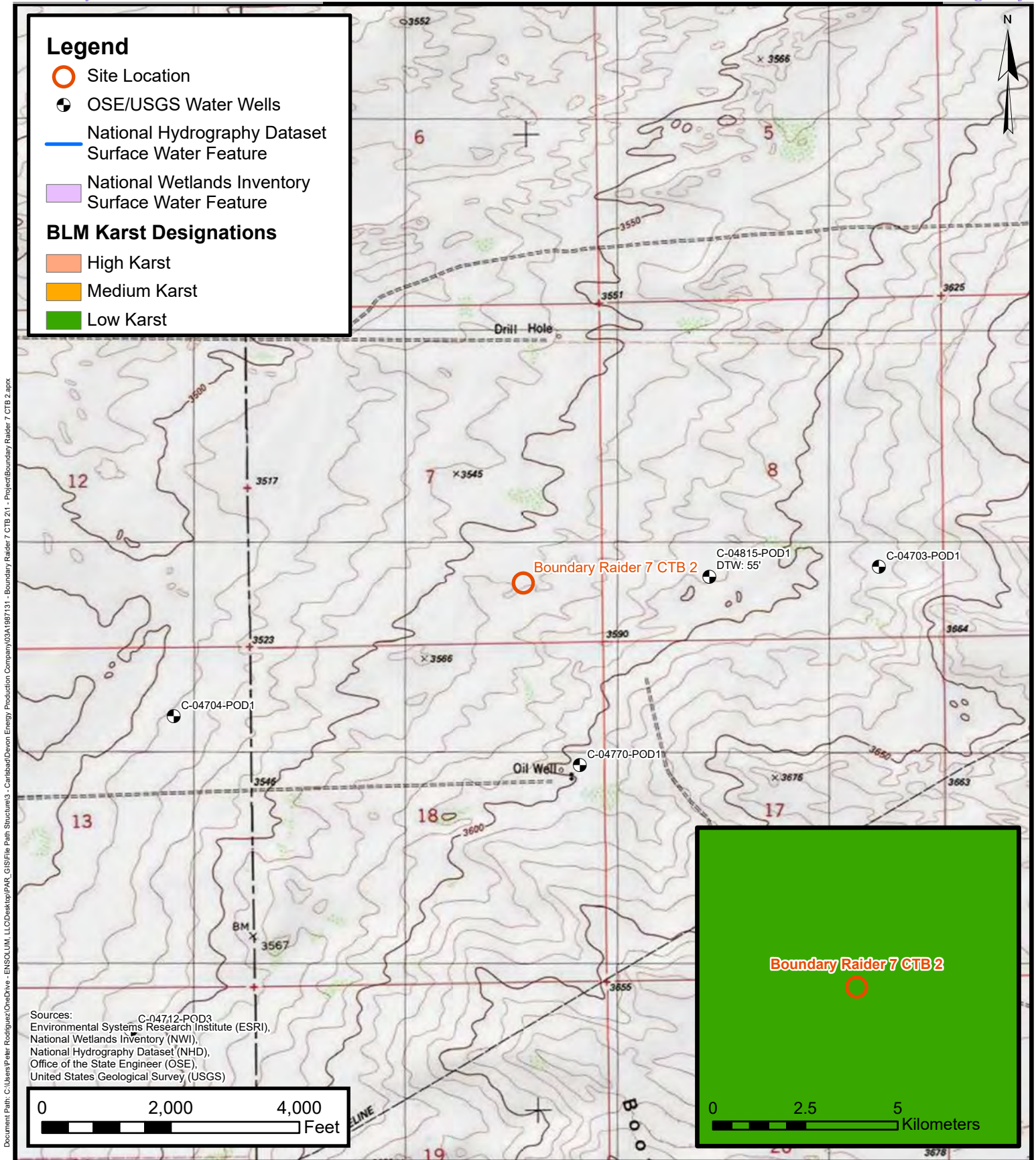
Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results (nAPP2414543825)
Table 2	Soil Sample Analytical Results (nAPP2415972085)
Appendix A	Referenced Well Records
Appendix B	NMOCD Correspondence
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES





## Site Receptor Map

Devon Energy Production Company, LP

Boundary Raider 7 CTB 2

Incident ID: nAPP2414543825 & nAPP2415972085

Unit A, Section 18, T 23S, R 32E

Lea County, New Mexico

FIGURE

1

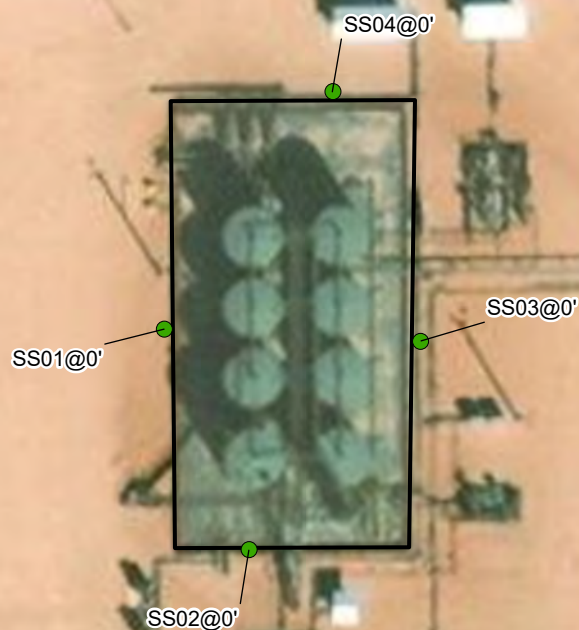


Document Path: C:\Users\Peter.Rodriguez\OneDrive - ENSOLUM.LLC\Desktop\PAR\_GIS\File Path Structure\3 - Carlsbad\Devon Energy Production Company\03A1987131 - Boundary Raider 7 CTB 211 - Project Boundary Raider 7 CTB 2.aprx

**Legend**

● Delineation Soil Sample  
in Compliance with  
NMOCD Closure Criteria

□ Containment Liner



Notes:  
Sample ID @ Depth Below Ground Surface

0 50 100  
Feet

Source:  
Environmental Systems Research Institute (ESRI)

**Delineation Soil Sample Locations**

Devon Energy Production Company, LP  
Boundary Raider 7 CTB 2  
Incident ID: nAPP2414543825 & nAPP2415972085  
Unit A, Section 18, T 23S, R 32E  
Lea County, New Mexico

**FIGURE**  
**2**



TABLES





<b>TABLE 1</b> <b>SOIL SAMPLE ANALYTICAL RESULTS</b> Boundary Raider 7 CTB 2 Devon Energy Production Company, LP Lea County, New Mexico										
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Delineation Soil Samples (nAPP2414543825)</b>										
SS01	6/3/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	48.7
SS02	6/3/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	245
SS03	6/3/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	181
SS04	6/3/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	197
<b>Delineation Soil Samples (nAPP2415972085)</b>										
SS01	7/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
SS02	7/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	295
SS03	7/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	35.6
SS04	7/1/2024	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	55.6

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

&lt;: Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

\* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes



## APPENDIX A


### Referenced Well Records

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# New Mexico Office of the State Engineer

## Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	Tws	Rng	X	Y		
NA	C 04815 POD1	1	4	3	08	23S	32E	622392	3576025		

**Driller License:** 1833**Driller Company:** VISION RESOURCES, INC**Driller Name:** JASON MALEY**Drill Start Date:** 04/16/2024**Drill Finish Date:** 04/16/2024**Plug Date:** 04/22/2024**Log File Date:** 04/25/2024**PCW Rcv Date:****Source:****Pump Type:****Pipe Discharge Size:****Estimated Yield:****Casing Size:****Depth Well:** 55 feet**Depth Water:**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



## APPENDIX B

### NMOCD Correspondence

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**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

QUESTIONS

Action 350453

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 350453
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2414543825
Incident Name	NAPP2414543825 BOUNDARY RAIDER 7 CTB 2 @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2123645710] BOUNDARY RAIDER 7 CTB 2

Location of Release Source	
Site Name	BOUNDARY RAIDER 7 CTB 2
Date Release Discovered	05/24/2024
Surface Owner	Federal

Liner Inspection Event Information	
Please answer all the questions in this group.	
What is the liner inspection surface area in square feet	7,250
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	06/06/2024
Time liner inspection will commence	09:00 AM
Please provide any information necessary for observers to liner inspection	Ashley Giovengo Senior Scientist 575-988-0055 Ensolum, LLC
Please provide any information necessary for navigation to liner inspection site	32.314206, -103.709198

**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 350453

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 350453
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
wdale	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	6/3/2024

**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  
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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

QUESTIONS  
  
Action 360346

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 360346
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2415972085
Incident Name	NAPP2415972085 BOUNDARY RAIDER 7 CTB 2 @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2123645710] BOUNDARY RAIDER 7 CTB 2

Location of Release Source	
Site Name	BOUNDARY RAIDER 7 CTB 2
Date Release Discovered	06/07/2024
Surface Owner	Federal

Liner Inspection Event Information	
Please answer all the questions in this group.	
What is the liner inspection surface area in square feet	7,248
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	07/05/2024
Time liner inspection will commence	09:00 AM
Please provide any information necessary for observers to liner inspection	Contact Cole Burton 575-706-5056
Please provide any information necessary for navigation to liner inspection site	32.314206, -103.709198

**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  
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**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 360346

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 360346
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
jraleey	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	7/2/2024





## APPENDIX C

### Photographic Log

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### Photographic Log

Devon Energy Production Company, LP  
Boundary Raider 7 CTB 2  
nAPP2414543825 & nAPP2415972085



Photograph 1

Date: 5/24/2024

Description: Signage

View: South

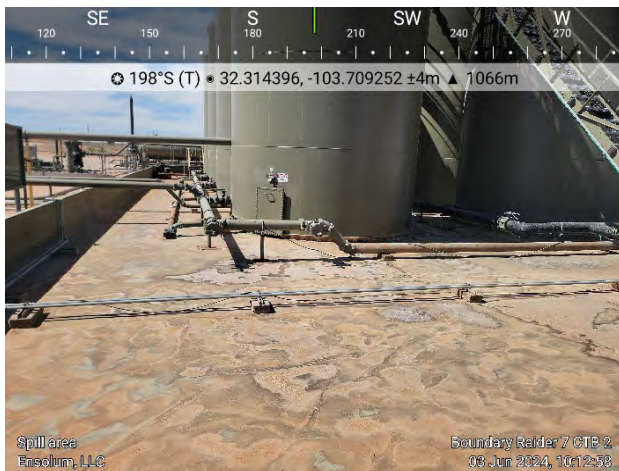


Photograph 2

Date: 5/24/2024

Description: Spill Area - nAPP2414543825

View: East



Photograph 3

Date: 6/3/2024

Description: Spill area - nAPP2414543825

View: South



Photograph 4

Date: 6/3/2024

Description: Delineation Sampling - nAPP2414543825

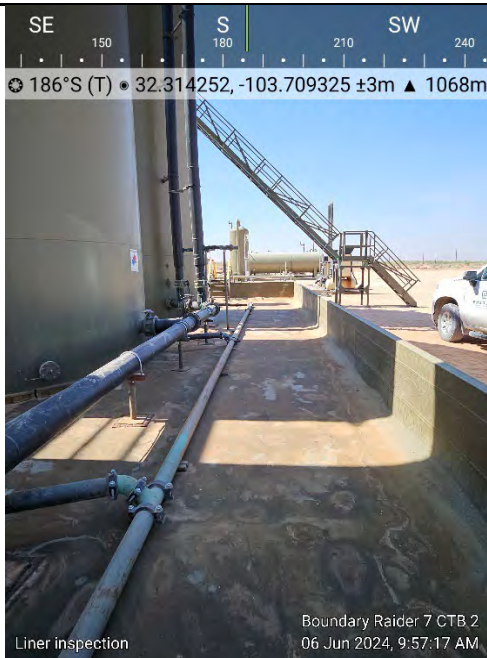
View: West



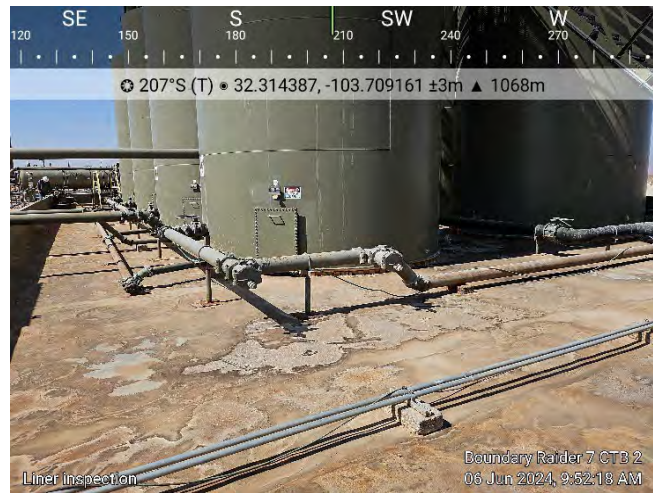


### Photographic Log

Devon Energy Production Company, LP  
Boundary Raider 7 CTB 2  
nAPP2414543825 & nAPP2415972085



Photograph 5 Date: 6/6/2024  
Description: Liner Inspection - nAPP2414543825  
View: South



Photograph 6 Date: 6/6/2024  
Description: Liner Inspection - nAPP2414543825  
View: South



Photograph 7 Date: 6/6/2024  
Description: Liner Inspection - nAPP2414543825  
View: North



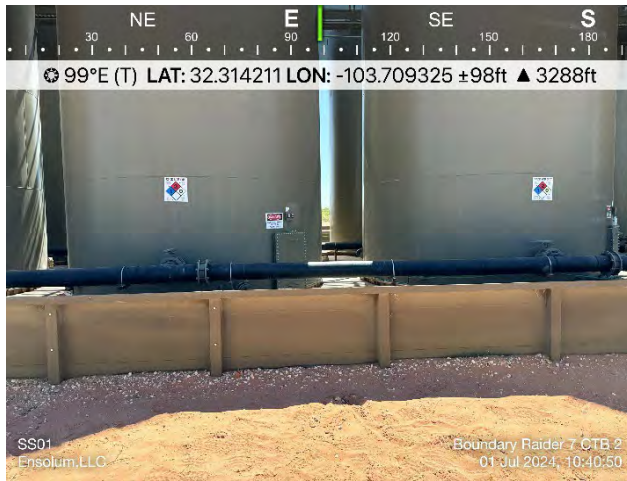
Photograph 8 Date: 6/6/2024  
Description: Liner Inspection - nAPP2414543825  
View: West



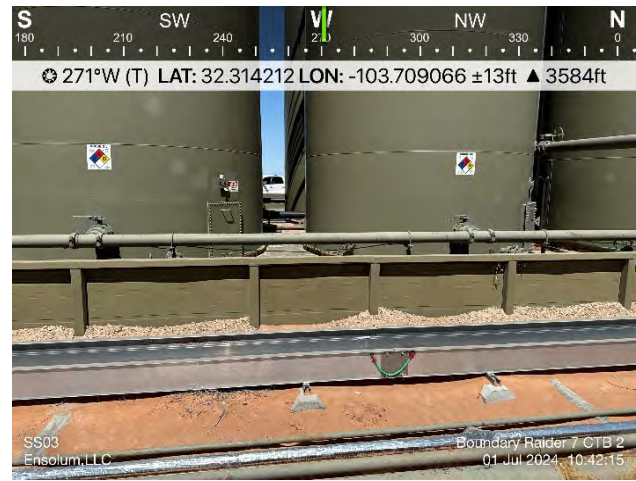


### Photographic Log

Devon Energy Production Company, LP  
Boundary Raider 7 CTB 2  
nAPP2414543825 & nAPP2415972085



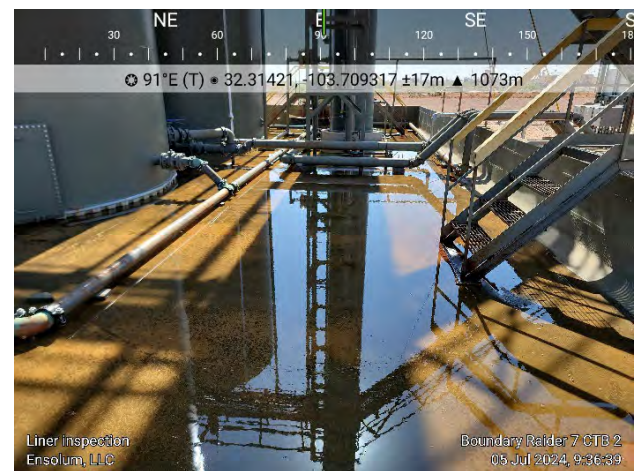
Photograph 9 Date: 7/1/2024  
Description: Delineation - nAPP2415972085  
View: East



Photograph 10 Date: 7/1/2024  
Description: Delineation - nAPP2415972085  
View: West



Photograph 11 Date: 7/5/2024  
Description: Liner Inspection - nAPP2415972085  
View: Southeast



Photograph 12 Date: 7/5/2024  
Description: Liner Inspection - nAPP2415972085  
View: East



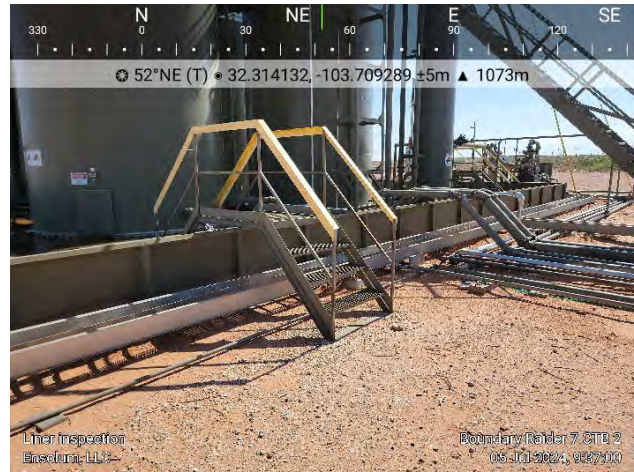


### Photographic Log

Devon Energy Production Company, LP  
Boundary Raider 7 CTB 2  
nAPP2414543825 & nAPP2415972085



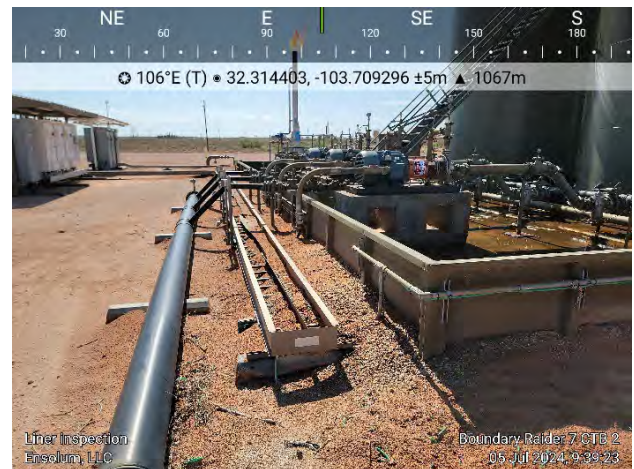
Photograph 13 Date: 7/1/2024  
Description: Liner Inspection - nAPP2415972085  
View: North



Photograph 14 Date: 7/1/2024  
Description: Liner Inspection - nAPP2415972085  
View: Northeast



Photograph 15 Date: 7/5/2024  
Description: Liner Inspection - nAPP2415972085  
View: Southwest



Photograph 16 Date: 7/5/2024  
Description: Liner Inspection - nAPP2415972085  
View: East



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

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Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Boundary Raider 7 CTB 2

Work Order: E406030

Job Number: 01058-0007

Received: 6/5/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/11/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 6/11/24

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: Boundary Raider 7 CTB 2  
Workorder: E406030  
Date Received: 6/5/2024 12:00:00PM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/5/2024 12:00:00PM, under the Project Name: Boundary Raider 7 CTB 2.

The analytical test results summarized in this report with the Project Name: Boundary Raider 7 CTB 2 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**  
Laboratory Technical Representative  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**Michelle Golzaes**  
Client Representative  
Office: 505-421-LABS(5227)  
Cell: 505-947-8222  
[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

Devon Energy - Carlsbad	Project Name:	Boundary Raider 7 CTB 2	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/11/24 12:16

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01-0'	E406030-01A	Soil	06/03/24	06/05/24	Glass Jar, 2 oz.
SS02-0'	E406030-02A	Soil	06/03/24	06/05/24	Glass Jar, 2 oz.
SS03-0'	E406030-03A	Soil	06/03/24	06/05/24	Glass Jar, 2 oz.
SS04-0'	E406030-04A	Soil	06/03/24	06/05/24	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Boundary Raider 7 CTB 2 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 6/11/2024 12:16:15PM
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SS01-0'  
E406030-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2423082	
Benzene	ND	0.0250	1	06/05/24	06/07/24	
Ethylbenzene	ND	0.0250	1	06/05/24	06/07/24	
Toluene	ND	0.0250	1	06/05/24	06/07/24	
o-Xylene	ND	0.0250	1	06/05/24	06/07/24	
p,m-Xylene	ND	0.0500	1	06/05/24	06/07/24	
Total Xylenes	ND	0.0250	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		101 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		99.1 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2423082	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		101 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		99.1 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: JL		Batch: 2423116	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/06/24	06/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/24	06/08/24	
Surrogate: n-Nonane		90.5 %	50-200	06/06/24	06/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2423115	
Chloride	48.7	20.0	1	06/06/24	06/06/24	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Boundary Raider 7 CTB 2 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 6/11/2024 12:16:15PM
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SS02-0'

E406030-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2423082
Benzene	ND	0.0250	1	06/05/24	06/07/24	
Ethylbenzene	ND	0.0250	1	06/05/24	06/07/24	
Toluene	ND	0.0250	1	06/05/24	06/07/24	
o-Xylene	ND	0.0250	1	06/05/24	06/07/24	
p,m-Xylene	ND	0.0500	1	06/05/24	06/07/24	
Total Xylenes	ND	0.0250	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		104 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		98.9 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2423082
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		104 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		98.9 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2423116
Diesel Range Organics (C10-C28)	ND	25.0	1	06/06/24	06/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/24	06/08/24	
Surrogate: n-Nonane		90.9 %	50-200	06/06/24	06/08/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2423115
Chloride	245	20.0	1	06/06/24	06/06/24	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Boundary Raider 7 CTB 2 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 6/11/2024 12:16:15PM
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SS03-0'

E406030-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2423082
Benzene	ND	0.0250	1	06/05/24	06/07/24	
Ethylbenzene	ND	0.0250	1	06/05/24	06/07/24	
Toluene	ND	0.0250	1	06/05/24	06/07/24	
o-Xylene	ND	0.0250	1	06/05/24	06/07/24	
p,m-Xylene	ND	0.0500	1	06/05/24	06/07/24	
Total Xylenes	ND	0.0250	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		103 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		98.5 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		99.4 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2423082
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		103 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		98.5 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		99.4 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2423116
Diesel Range Organics (C10-C28)	ND	25.0	1	06/06/24	06/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/24	06/08/24	
Surrogate: n-Nonane		91.3 %	50-200	06/06/24	06/08/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2423115
Chloride	181	20.0	1	06/06/24	06/06/24	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Boundary Raider 7 CTB 2 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 6/11/2024 12:16:15PM
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SS04-0'

E406030-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2423082
Benzene	ND	0.0250	1	06/05/24	06/07/24	
Ethylbenzene	ND	0.0250	1	06/05/24	06/07/24	
Toluene	ND	0.0250	1	06/05/24	06/07/24	
o-Xylene	ND	0.0250	1	06/05/24	06/07/24	
p,m-Xylene	ND	0.0500	1	06/05/24	06/07/24	
Total Xylenes	ND	0.0250	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		104 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		97.3 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		99.6 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2423082
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/05/24	06/07/24	
Surrogate: Bromofluorobenzene		104 %	70-130	06/05/24	06/07/24	
Surrogate: 1,2-Dichloroethane-d4		97.3 %	70-130	06/05/24	06/07/24	
Surrogate: Toluene-d8		99.6 %	70-130	06/05/24	06/07/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2423116
Diesel Range Organics (C10-C28)	ND	25.0	1	06/06/24	06/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/06/24	06/08/24	
Surrogate: n-Nonane		91.9 %	50-200	06/06/24	06/08/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2423115
Chloride	197	20.0	1	06/06/24	06/06/24	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Boundary Raider 7 CTB 2	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/11/2024 12:16:15PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2423082-BLK1) Prepared: 06/05/24 Analyzed: 06/07/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2423082-BS1) Prepared: 06/05/24 Analyzed: 06/07/24

Benzene	2.56	0.0250	2.50		102	70-130			
Ethylbenzene	2.56	0.0250	2.50		102	70-130			
Toluene	2.45	0.0250	2.50		98.0	70-130			
o-Xylene	2.72	0.0250	2.50		109	70-130			
p,m-Xylene	5.36	0.0500	5.00		107	70-130			
Total Xylenes	8.08	0.0250	7.50		108	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130			

Matrix Spike (2423082-MS1) Source: E406030-03 Prepared: 06/05/24 Analyzed: 06/07/24

Benzene	2.55	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.57	0.0250	2.50	ND	103	45-135			
Toluene	2.45	0.0250	2.50	ND	98.0	48-130			
o-Xylene	2.70	0.0250	2.50	ND	108	43-135			
p,m-Xylene	5.38	0.0500	5.00	ND	108	43-135			
Total Xylenes	8.08	0.0250	7.50	ND	108	43-135			
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.482		0.500		96.4	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.7	70-130			

Matrix Spike Dup (2423082-MSD1) Source: E406030-03 Prepared: 06/05/24 Analyzed: 06/07/24

Benzene	2.50	0.0250	2.50	ND	100	48-131	1.92	23	
Ethylbenzene	2.56	0.0250	2.50	ND	102	45-135	0.117	27	
Toluene	2.43	0.0250	2.50	ND	97.3	48-130	0.717	24	
o-Xylene	2.72	0.0250	2.50	ND	109	43-135	0.960	27	
p,m-Xylene	5.43	0.0500	5.00	ND	109	43-135	0.925	27	
Total Xylenes	8.15	0.0250	7.50	ND	109	43-135	0.936	27	
Surrogate: Bromofluorobenzene	0.522		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.6	70-130			





QC Summary Data

Devon Energy - Carlsbad	Project Name:	Boundary Raider 7 CTB 2	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/11/2024 12:16:15PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2423082-BLK1) Prepared: 06/05/24 Analyzed: 06/07/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2423082-BS2) Prepared: 06/05/24 Analyzed: 06/07/24

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0		93.2	70-130			
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.470		0.500		94.0	70-130			
Surrogate: Toluene-d8	0.507		0.500		101	70-130			

Matrix Spike (2423082-MS2) Source: E406030-03 Prepared: 06/05/24 Analyzed: 06/07/24

Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	95.0	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.6	70-130			

Matrix Spike Dup (2423082-MSD2) Source: E406030-03 Prepared: 06/05/24 Analyzed: 06/07/24

Gasoline Range Organics (C6-C10)	45.4	20.0	50.0	ND	90.7	70-130	4.59	20	
Surrogate: Bromofluorobenzene	0.529		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.2	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Boundary Raider 7 CTB 2	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/11/2024 12:16:15PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2423116-BLK1) Prepared: 06/06/24 Analyzed: 06/08/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.1		50.0		88.1	50-200			

LCS (2423116-BS1) Prepared: 06/06/24 Analyzed: 06/08/24

Diesel Range Organics (C10-C28)	240	25.0	250		96.0	38-132			
Surrogate: n-Nonane	49.2		50.0		98.5	50-200			

Matrix Spike (2423116-MS1) Source: E406030-04 Prepared: 06/06/24 Analyzed: 06/08/24

Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	46.2		50.0		92.5	50-200			

Matrix Spike Dup (2423116-MSD1) Source: E406030-04 Prepared: 06/06/24 Analyzed: 06/08/24

Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132	0.579	20	
Surrogate: n-Nonane	46.5		50.0		93.0	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Boundary Raider 7 CTB 2	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/11/2024 12:16:15PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2423115-BLK1)					Prepared: 06/06/24 Analyzed: 06/06/24				
Chloride	ND	20.0							
LCS (2423115-BS1)					Prepared: 06/06/24 Analyzed: 06/06/24				
Chloride	256	20.0	250		102	90-110			
Matrix Spike (2423115-MS1)					Source: E406032-01		Prepared: 06/06/24 Analyzed: 06/06/24		
Chloride	314	20.0	250	51.7	105	80-120			
Matrix Spike Dup (2423115-MSD1)					Source: E406032-01		Prepared: 06/06/24 Analyzed: 06/06/24		
Chloride	305	20.0	250	51.7	101	80-120	2.96	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Devon Energy - Carlsbad	Project Name:	Boundary Raider 7 CTB 2	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/11/24 12:16

- ND      Analyte NOT DETECTED at or above the reporting limit
- NR      Not Reported
- RPD      Relative Percent Difference
- DNI      Did Not Ignite
- DNR      Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



## Chain of Custody

<b>Client Information</b>				<b>Invoice Information</b>				<b>Lab Use Only</b>				<b>TAT</b>				<b>State</b>							
Client: Devon				Company: Devon				Lab WO#		Job Number		1D	2D	3D	Std	NM	CO	UT	TX				
Project: Boundary Raider 7 CTB 2				Address: 205 E Bender Road #150				E406030		01058-0007					x	x							
Project Manager: Ashley Giovengo				City, State, Zip: Hobbs NM, 88240																			
Address: 3122 National Parks Hwy				Phone: (575)748-1838																			
City, State, Zip: Carlsbad NM, 88220				Email: dale.woodall@dnv.com																			
Phone: 575-988-0055				Miscellaneous: Dale Woodall																			
Email: agiovengo@ensolum.com																							
<b>Sample Information</b>												<b>Analysis and Method</b>								<b>EPA Program</b>			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA						
10:22	6/3/2024	Soil	1	SS01 - 0'		1						X											
10:24	6/3/2024	Soil	1	SS02 - 0'		2						X											
11:35	6/3/2024	Soil	1	SS03 - 0'		3						X											
11:04	6/3/2024	Soil	1	SS04 - 0'		4						X											
<b>Additional Instructions:</b> Please CC: cburton@ensolum.com, agiovengo@ensolum.com, dale.woodall@dnv.com, chamilton@ensolum.com, iestrella@ensolum.com																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																							
Sampled by: Cole Burton																							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.  Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N  T1 _____ T2 _____ T3 _____  AVG Temp °C 4															
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA _____											
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																							



envirotech

## Envirotech Analytical Laboratory

Printed: 6/5/2024 1:14:14PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Devon Energy - Carlsbad	Date Received:	06/05/24 12:00	Work Order ID:	E406030
Phone:	(505) 382-1211	Date Logged In:	06/05/24 13:12	Logged In By:	Alexa Michaels
Email:	ashley.giovengo@wescominc.com	Due Date:	06/11/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

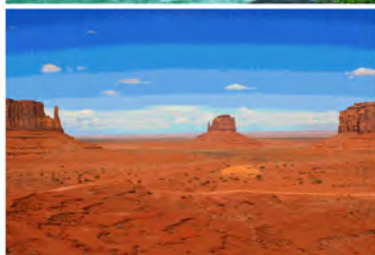
Date



envirotech Inc.

Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Matador Resources, LLC.

Project Name: Boundary Raider 7 CTB 2

Work Order: E407019

Job Number: 23003-0002

Received: 7/3/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
7/10/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 7/10/24

Ashley Giovengo  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240



Project Name: Boundary Raider 7 CTB 2  
Workorder: E407019  
Date Received: 7/3/2024 10:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/3/2024 10:00:00AM, under the Project Name: Boundary Raider 7 CTB 2.

The analytical test results summarized in this report with the Project Name: Boundary Raider 7 CTB 2 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**  
Laboratory Technical Representative  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**Michelle Gonzales**  
Client Representative  
Office: 505-421-LABS(5227)  
Cell: 505-947-8222  
[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Boundary Raider 7 CTB 2 Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 07/10/24 11:41
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01-0'	E407019-01A	Soil	07/01/24	07/03/24	Glass Jar, 2 oz.
SS02-0'	E407019-02A	Soil	07/01/24	07/03/24	Glass Jar, 2 oz.
SS03-0'	E407019-03A	Soil	07/01/24	07/03/24	Glass Jar, 2 oz.
SS04-0'	E407019-04A	Soil	07/01/24	07/03/24	Glass Jar, 2 oz.



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Boundary Raider 7 CTB 2 Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/10/2024 11:41:52AM
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SS01-0'  
E407019-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Benzene	ND	0.0250	1	07/03/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/03/24	07/09/24	
Toluene	ND	0.0250	1	07/03/24	07/09/24	
o-Xylene	ND	0.0250	1	07/03/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/03/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/03/24	07/09/24	
Surrogate: 4-Bromochlorobenzene-PID	91.1 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/03/24	07/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.6 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2427041	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/03/24	07/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/03/24	07/04/24	
Surrogate: n-Nonane	87.6 %	50-200		07/03/24	07/04/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2427051	
Chloride	ND	20.0	1	07/03/24	07/03/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Boundary Raider 7 CTB 2 Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/10/2024 11:41:52AM
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SS02-0'

E407019-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Benzene	ND	0.0250	1	07/03/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/03/24	07/09/24	
Toluene	ND	0.0250	1	07/03/24	07/09/24	
o-Xylene	ND	0.0250	1	07/03/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/03/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/03/24	07/09/24	
Surrogate: 4-Bromochlorobenzene-PID	90.6 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/03/24	07/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.1 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2427041	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/03/24	07/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/03/24	07/04/24	
Surrogate: n-Nonane	84.7 %	50-200		07/03/24	07/04/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2427051	
Chloride	295	20.0	1	07/03/24	07/03/24	





Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Boundary Raider 7 CTB 2 Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/10/2024 11:41:52AM
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SS03-0'

E407019-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Benzene	ND	0.0250	1	07/03/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/03/24	07/09/24	
Toluene	ND	0.0250	1	07/03/24	07/09/24	
o-Xylene	ND	0.0250	1	07/03/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/03/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/03/24	07/09/24	
Surrogate: 4-Bromochlorobenzene-PID	89.5 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/03/24	07/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.7 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2427041	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/03/24	07/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/03/24	07/04/24	
Surrogate: n-Nonane	84.9 %	50-200		07/03/24	07/04/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2427051	
Chloride	35.6	20.0	1	07/03/24	07/03/24	



Sample Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Boundary Raider 7 CTB 2 Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported: 7/10/2024 11:41:52AM
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SS04-0'

E407019-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Benzene	ND	0.0250	1	07/03/24	07/09/24	
Ethylbenzene	ND	0.0250	1	07/03/24	07/09/24	
Toluene	ND	0.0250	1	07/03/24	07/09/24	
o-Xylene	ND	0.0250	1	07/03/24	07/09/24	
p,m-Xylene	ND	0.0500	1	07/03/24	07/09/24	
Total Xylenes	ND	0.0250	1	07/03/24	07/09/24	
Surrogate: 4-Bromochlorobenzene-PID	90.6 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2427034	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/03/24	07/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	96.3 %	70-130		07/03/24	07/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2427041	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/03/24	07/04/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/03/24	07/04/24	
Surrogate: n-Nonane	85.9 %	50-200		07/03/24	07/04/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2427051	
Chloride	55.6	20.0	1	07/03/24	07/03/24	



QC Summary Data

Matador Resources, LLC.	Project Name:	Boundary Raider 7 CTB 2	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	7/10/2024 11:41:52AM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2427034-BLK1)Prepared: 07/03/24 Analyzed: 07/08/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.91		8.00		86.3	70-130			

LCS (2427034-BS1)Prepared: 07/03/24 Analyzed: 07/08/24

Benzene	5.52	0.0250	5.00		110	70-130			
Ethylbenzene	5.28	0.0250	5.00		106	70-130			
Toluene	5.43	0.0250	5.00		109	70-130			
o-Xylene	5.25	0.0250	5.00		105	70-130			
p,m-Xylene	10.7	0.0500	10.0		107	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.06		8.00		88.2	70-130			

Matrix Spike (2427034-MS1)Source: E407017-10Prepared: 07/03/24 Analyzed: 07/08/24

Benzene	5.04	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.83	0.0250	5.00	ND	96.5	61-133			
Toluene	4.96	0.0250	5.00	ND	99.2	61-130			
o-Xylene	4.80	0.0250	5.00	ND	96.0	63-131			
p,m-Xylene	9.79	0.0500	10.0	ND	97.9	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.2	63-131			
Surrogate: 4-Bromochlorobenzene-PID	6.95		8.00		86.9	70-130			

Matrix Spike Dup (2427034-MSD1)Source: E407017-10Prepared: 07/03/24 Analyzed: 07/08/24

Benzene	4.86	0.0250	5.00	ND	97.2	54-133	3.58	20	
Ethylbenzene	4.64	0.0250	5.00	ND	92.9	61-133	3.85	20	
Toluene	4.76	0.0250	5.00	ND	95.3	61-130	3.99	20	
o-Xylene	4.60	0.0250	5.00	ND	91.9	63-131	4.32	20	
p,m-Xylene	9.42	0.0500	10.0	ND	94.2	63-131	3.82	20	
Total Xylenes	14.0	0.0250	15.0	ND	93.4	63-131	3.98	20	
Surrogate: 4-Bromochlorobenzene-PID	6.89		8.00		86.1	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Boundary Raider 7 CTB 2	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	7/10/2024 11:41:52AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2427034-BLK1) Prepared: 07/03/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.39		8.00		92.4	70-130			

LCS (2427034-BS2) Prepared: 07/03/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	45.0	20.0	50.0		90.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		8.00		93.8	70-130			

Matrix Spike (2427034-MS2) Source: E407017-10 Prepared: 07/03/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	49.4	20.0	50.0	ND	98.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		8.00		94.9	70-130			

Matrix Spike Dup (2427034-MSD2) Source: E407017-10 Prepared: 07/03/24 Analyzed: 07/08/24

Gasoline Range Organics (C6-C10)	47.4	20.0	50.0	ND	94.9	70-130	4.07	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.63		8.00		95.3	70-130			



QC Summary Data

Matador Resources, LLC.	Project Name:	Boundary Raider 7 CTB 2	Reported:
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	
Dallas TX, 75240	Project Manager:	Ashley Giovengo	7/10/2024 11:41:52AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2427041-BLK1) Prepared: 07/03/24 Analyzed: 07/03/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.3		50.0		88.6	50-200			

LCS (2427041-BS1) Prepared: 07/03/24 Analyzed: 07/03/24

Diesel Range Organics (C10-C28)	290	25.0	250		116	38-132			
Surrogate: n-Nonane	47.4		50.0		94.8	50-200			

Matrix Spike (2427041-MS1) Source: E407014-02 Prepared: 07/03/24 Analyzed: 07/03/24

Diesel Range Organics (C10-C28)	558	50.0	250	282	110	38-132			
Surrogate: n-Nonane	46.1		50.0		92.2	50-200			

Matrix Spike Dup (2427041-MSD1) Source: E407014-02 Prepared: 07/03/24 Analyzed: 07/03/24

Diesel Range Organics (C10-C28)	526	50.0	250	282	97.8	38-132	5.81	20	
Surrogate: n-Nonane	48.6		50.0		97.2	50-200			





QC Summary Data

Matador Resources, LLC. 5400 LBJ Freeway, Suite 1500 Dallas TX, 75240	Project Name: Boundary Raider 7 CTB 2 Project Number: 23003-0002 Project Manager: Ashley Giovengo	Reported:  7/10/2024 11:41:52AM
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Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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<b>Blank (2427051-BLK1)</b>					Prepared: 07/03/24 Analyzed: 07/03/24				
Chloride	ND	20.0							
<b>LCS (2427051-BS1)</b>					Prepared: 07/03/24 Analyzed: 07/03/24				
Chloride	261	20.0	250		104	90-110			
<b>Matrix Spike (2427051-MS1)</b>					<b>Source: E407019-03</b>		Prepared: 07/03/24 Analyzed: 07/03/24		
Chloride	304	20.0	250	35.6	107	80-120			
<b>Matrix Spike Dup (2427051-MSD1)</b>					<b>Source: E407019-03</b>		Prepared: 07/03/24 Analyzed: 07/03/24		
Chloride	304	20.0	250	35.6	107	80-120	0.0128	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Matador Resources, LLC.	Project Name:	Boundary Raider 7 CTB 2	
5400 LBJ Freeway, Suite 1500	Project Number:	23003-0002	Reported:
Dallas TX, 75240	Project Manager:	Ashley Giovengo	07/10/24 11:41

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



## Page 1 of 1



**envirotech**

## Envirotech Analytical Laboratory

Printed: 7/3/2024 1:16:23PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Matador Resources, LLC.	Date Received:	07/03/24 10:00	Work Order ID:	E407019
Phone:	(972) 371-5200	Date Logged In:	07/02/24 16:15	Logged In By:	Alexa Michaels
Email:	agiovngo@ensolum.com	Due Date:	07/11/24 17:00 (4 day TAT)		

**Chain of Custody (COC)**

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Couier**Comments/Resolution****Sample Turn Around Time (TAT)**

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

**Sample Cooler**

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

**Sample Container**

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

**Field Label**

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? Yes

**Sample Preservation**

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

**Multiphase Sample Matrix**

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

**Subcontract Laboratory**

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

**Client Instruction**

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



## APPENDIX E

### NMOCD Correspondence

---

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
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811 S. First St., Artesia, NM 88210  
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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**

QUESTIONS

Action 350453

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 350453
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2414543825
Incident Name	NAPP2414543825 BOUNDARY RAIDER 7 CTB 2 @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2123645710] BOUNDARY RAIDER 7 CTB 2

Location of Release Source	
Site Name	BOUNDARY RAIDER 7 CTB 2
Date Release Discovered	05/24/2024
Surface Owner	Federal

Liner Inspection Event Information	
Please answer all the questions in this group.	
What is the liner inspection surface area in square feet	7,250
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	06/06/2024
Time liner inspection will commence	09:00 AM
Please provide any information necessary for observers to liner inspection	Ashley Giovengo Senior Scientist 575-988-0055 Ensolum, LLC
Please provide any information necessary for navigation to liner inspection site	32.314206, -103.709198



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CONDITIONS  
  
Action 350453

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 350453
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
wdale	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	6/3/2024

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QUESTIONS  
  
Action 364495

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 364495
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2414543825
Incident Name	NAPP2414543825 BOUNDARY RAIDER 7 CTB 2 @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2123645710] BOUNDARY RAIDER 7 CTB 2

Location of Release Source	
Please answer all the questions in this group.	
Site Name	BOUNDARY RAIDER 7 CTB 2
Date Release Discovered	05/24/2024
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Pump   Produced Water   Released: 40 BBL   Recovered: 40 BBL   Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	1/4" plug washed out on water transfer pump. 40.4 bbls released in lined containment.

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QUESTIONS, Page 2

Action 364495

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	364495
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dmv.com Date: 07/16/2024
--	--

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QUESTIONS, Page 3

Action 364495

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 364495
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	07/05/2024
On what date will (or did) the final sampling or liner inspection occur	07/07/2024
On what date will (or was) the remediation complete(d)	07/07/2024
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS, Page 4

Action 364495

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	364495
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Remediation Plan (continued)**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

*(Select all answers below that apply.)*

Is (or was) there affected material present needing to be removed	Yes
Is (or was) there a power wash of the lined containment area (to be) performed	Yes
OTHER (Non-listed remedial process)	No

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dmn.com Date: 07/16/2024
--	--

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 6

Action 364495

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	364495
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Liner Inspection Information</b>	
Last liner inspection notification (C-141L) recorded	<b>350453</b>
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	<b>06/06/2024</b>
Was all the impacted materials removed from the liner	<b>Yes</b>
What was the liner inspection surface area in square feet	<b>7250</b>

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	<b>Yes</b>
Have the lateral and vertical extents of contamination been fully delineated	<b>Yes</b>
Was this release entirely contained within a lined containment area	<b>Yes</b>
What was the total surface area (in square feet) remediated	<b>0</b>
What was the total volume (cubic yards) remediated	<b>0</b>
Summarize any additional remediation activities not included by answers (above)	<b>see report</b>

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	<b>Name: Dale Woodall</b> <b>Title: EHS Professional</b> <b>Email: Dale.Woodall@dmn.com</b> <b>Date: 07/16/2024</b>
--	--

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CONDITIONS  
  
Action 364495

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 364495
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Liner inspection approved, release resolved.	8/23/2024