



December 16, 2024

**New Mexico Oil Conservation Division**

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

**Re: Closure Request  
PLU 079 Rustler Bluff 33/34 SWD  
API Number 30-015-27438  
Incident Number NAPP2426027791  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document liner inspection, delineation, and soil sampling activities performed at the PLU 079 Rustler Bluff 33/34 SWD (Site). The purpose of the Site activities was to assess for the presence or absence of impacts to soil resulting from a release of produced water within a lined containment at the Site. Based on field observations and laboratory analytical results, XTO is submitting this *Closure Request*, describing the liner inspection and delineation activities that have occurred and requesting closure for Incident Number NAPP2426027791.

**SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit N, Section 2, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.15392°, -103.85767°) and is associated with oil and gas exploration and production operations on State Trust Land managed by the New Mexico State Land Office (SLO) under lease number B106790001.

On September 15, 2024, a clamp located on a 4-inch produced water pipeline failed resulting in the release of approximately 10 barrels (bbls) of produced water into a lined containment. A vacuum truck was dispatched to the Site and recovered all 10 bbls of released fluids. XTO submitted a Notification of Release (NOR) and Initial C-141 Application (C-141) to the New Mexico Oil Conservation Division (NMOCD) on September 16, 2024. The release was assigned Incident Number NAPP2426027791.

**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 below.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a soil boring drilled for determination of regional groundwater depth. On August 2, 2023, a soil boring (C-4757) was drilled 0.48 miles west of the Site utilizing an air rotary drilling rig. Soil boring C-4757 was drilled to a depth of 119 feet bgs. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing

XTO Energy, Inc.  
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PLU 079 Rustler Bluff 33/34 SWD



groundwater, it was confirmed that groundwater beneath the Site is greater than 119 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The location of the borehole is depicted on Figure 1 and the Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 2,839 feet east 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). Potential Site receptors are presented 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)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

## NMSLO CULTURAL RESOURCES AND BIOLOGICAL REVIEW

### Cultural Properties Protection

Since the release occurred within the containment area on the well pad, the site is exempt from the Cultural Properties Protection Rule (CPP). As such, no additional cultural resource surveys were completed in connection with this release.

### Biological Review

Ensolum personnel conducted a desktop review to establish if the Site is within an area of possible threatened, endangered, and sensitive wildlife and plant species, environmentally sensitive areas, surface waters, and sensitive soils.

- A review of the U.S. Fish and Wildlife Services Information for Planning and Consultation (IPaC) resources indicated there are no critical wildlife habitats at the Site.
- The site is not underlain by unstable geology (low karst) as described above. No other environmentally sensitive receptors were located near the Site, as determined by the Site Characterization.
- The Natural Resources Conservation Service (NRCS) Web Soil Survey classifies the soil type at the Site as Berino Complex (fine sand). The entirety of the release occurred within the lined containment on the caliche surface of the well pad limiting contact with potentially sensitive native soil.

XTO Energy, Inc.  
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## SITE ASSESSMENT AND DELINEATION ACTIVITIES

On September 27, 2024, Ensolum personnel visited the Site to conduct site assessment and delineation activities based on information provided on the C-141, information provided by XTO, and visual observations. A 48-hour advance notice of the liner inspection was submitted, and the lined containment was inspected by Ensolum personnel. Results indicated there were two small holes immediately adjacent to each other and the liner was not operating as designed. One borehole (BH01) was advanced to a depth of 2 feet bgs utilizing a hand auger in the location of the largest hole found during the inspection. Discrete soil samples were collected and field screened at depths ranging from 0.5 feet to 2 feet bgs. Four delineation soil samples (SS01 through SS04) were collected at a depth of 0.5 feet bgs, around the lined containment to confirm release stayed within the containment walls. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing and Hach® chloride QuanTab® test strips. The lined containment and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Field screening results and observations from the borehole were documented on lithologic/soil sampling logs, which are included as Appendix B. Photographic documentation was collected and a photographic log is included in Appendix C.

The delineation soil samples 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 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 Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method SM4500.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples collected indicated all COC concentrations were compliant with the Closure Criteria. While soil sample BH01 collected at 0.5 feet bgs indicated elevated chloride concentrations (18,800 mg/kg) directly underneath the liner, analytical results for BH01A collected at 2 feet bgs confirms vertical definition to the strictest Table I Closure Criteria. Laboratory analytical results for soil samples SS01 through SS04 collected around the containment, were compliant with the Closure Criteria and the most stringent Table I Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Appendix D.

## CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, Ensolum personnel advanced one borehole (BH01) at the location of the breach in the liner to assess for the presence or absence of impacted soil resulting from the September 15, 2024, produced water release within the lined containment. Two delineation soil samples were collected from borehole BH01 at depths of approximately 0.5 feet and 2 feet bgs. Laboratory analytical results for all delineation soil samples collected indicated that all COC concentrations were compliant with the Closure Criteria. Though soil sample BH01 collected at 0.5 feet bgs indicates the presence of waste-containing soil, the soil sample is located directly underneath the liner and impacts are vertically defined by BH01A collected at 2 feet bgs. Soil sample BH01 will be removed during pad abandonment or major facility construction. Additionally, laboratory analytical results for soil samples SS01 through SS04, collected around the containment, were compliant with the most stringent Table I Closure Criteria, confirming the release stayed within the containment walls. The

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release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The breach in the liner was subsequently repaired.

Based on initial response efforts, depth to groundwater greater than 100 feet bgs, and soil sample laboratory analytical results compliant with the Closure Criteria directly beneath the breach in the liner, XTO respectfully requests closure for Incident Number NAPP2426027791.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or [tmorrissey@ensolum.com](mailto:tmorrissey@ensolum.com).

Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink that reads "Ben J. Belill".

Benjamin J. Belill  
Senior Geologist

A handwritten signature in black ink that reads "T Morrissey".

Tacoma Morrissey, MS  
Associate Principal

cc: Colton Brown, XTO  
Kaylan Dirkx, XTO  
SLO

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Well Record and Log
Appendix B	Lithologic Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



## Site Receptor Map

XTO Energy, Inc.  
 PLU 079 Rustler Bluff 33/34 SWD  
 Incident Number: NAPP2426027791  
 Unit N, Sec 2, T25S, R30E  
 Eddy Co, New Mexico, United States

## FIGURE

# 1



**Legend**

● Delineation Soil Samples in Compliance with Closure Criteria

■ Lined Containment Area



0 12.5 25 50 75 100  
Feet

Sources: Environmental Systems Research Institute (ESRI)

**Delineation Soil Sample Locations**

XTO Energy, Inc.  
PLU 079 Rustler Bluff 33/34 SWD  
Incident Number: NAPP2426027791  
Unit N, Sec 2, T25S, R30E  
Eddy Co, New Mexico, United States

**FIGURE  
2**



TABLES





TABLE 1  
SOIL SAMPLE ANALYTICAL RESULTS  
PLU 079 Rustler Bluff 33/34 SWD  
XTO Energy, Inc  
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample 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)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	10/07/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS02	10/07/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS03	10/07/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS04	10/07/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
BH01	10/07/2024	0.5	<0.050	<0.300	<10.0	35.2	<10.0	35.2	35.2	18,800
BH01A	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon


NMAC: New Mexico Administrative Code



## APPENDIX A

### Referenced Well Records

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								Sample Name: C-4757 (BH01)		Date: 8/2/2023	
								Site Name: PLU CVX JV BS #016H			
								Incident Number: NAB1519556419			
								Job Number: 03C1558238			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: MR		Method: Air Rotary	
Coordinates: 32.152842, -103.866772								Hole Diameter: NA		Total Depth: 119' bgs	
Comments: No field screenings.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
						0	CCHE	0'-20' CALICHE GRAVEL, light brown/white, coarse grained, poorly sorted with sub-angular to sub-rounded grains, dry.			
						10					
						20	SP	20'-70' SAND with trace caliche, medium brown, medium grained with small grained caliche, poorly sorted, sub-rounded. Injected water and foaming agent @ 25'.			
						30					
						40					
						50					
						60					
						70	GM	70'-90' GRAVEL conglomerate with sand, small gravel w medium grained sand, grains include quartzite and chert, poorly sorted, sub-angular grains, ~30% sand. 20% sand.			
						80					
						90	SP	90'-115' SAND, medium brown/orange, medium grained, poorly sorted.			
						100					
						110					
						120	SP-SM	115' SAND with silt, red, medium to fine grained, poorly sorted.			
						TD		Total Depth @ 119' bgs.			




## APPENDIX B

### Lithologic Soil Sampling Logs

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								Sample Name: BH01		Date: 10/7/2024	
								Site Name: PLU 079 Rustler Bluff 33/34 SWD			
								Incident Number: Napp2426027791			
								Job Number: 03C1558546			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: CW		Method: Hand Auger	
Coordinates: 32.153913, -103.857936								Hole Diameter: 3.5"		Total Depth: 2'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture	Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions		
D		23,016	0.0	N	BH01	0.5	0	CCHE (fill)	0-1', CALICHE, dry, tan, very sandy, no stain, no odor, fill.		
D		1,400	0.0	N		1	1	SP	1'-2', SAND, dry, brown, poorly graded, very fine grained, very silty, no stain, no odor.		
D		420	0.0	N	BH01A	2	2	TD	Total Depth at 2 feet bgs.		
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				



## APPENDIX C

### Photographic Log

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# Photographic Log

XTO Energy, Inc

PLU 079 Rustler Bluff 33/34 SWD

Incident Number nAPP2426027791



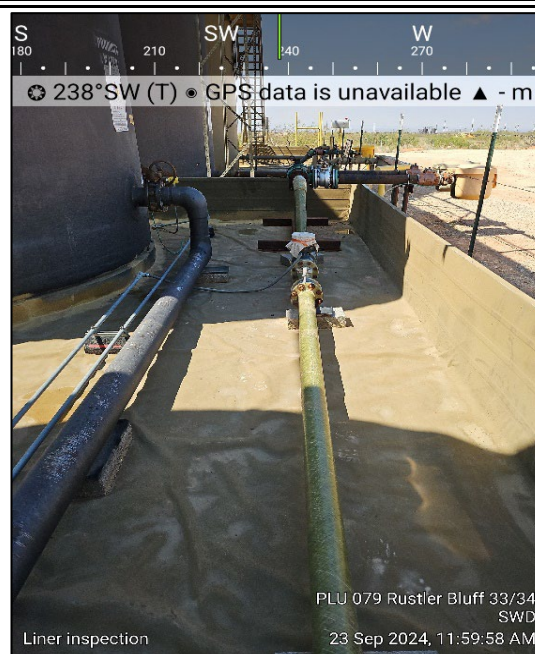
Photograph: 1 Date: 9/23/2024  
Description: Liner inspection activities, facility sign.  
View: Southeast



Photograph: 2 Date: 9/23/2024  
Description: Liner inspection activities.  
View: West



Photograph: 3 Date: 9/23/2024  
Description: Liner inspection activities.  
View: West



Photograph: 4 Date: 9/23/2024  
Description: Liner inspection activities.  
View: Southwest





# Photographic Log

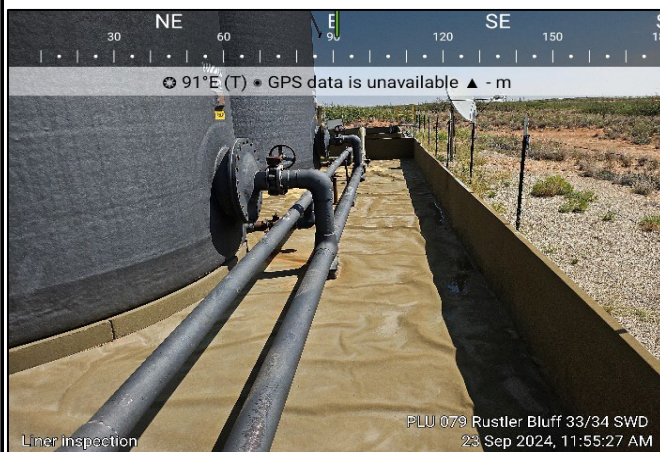
XTO Energy, Inc

PLU 079 Rustler Bluff 33/34 SWD

Incident Number nAPP2426027791



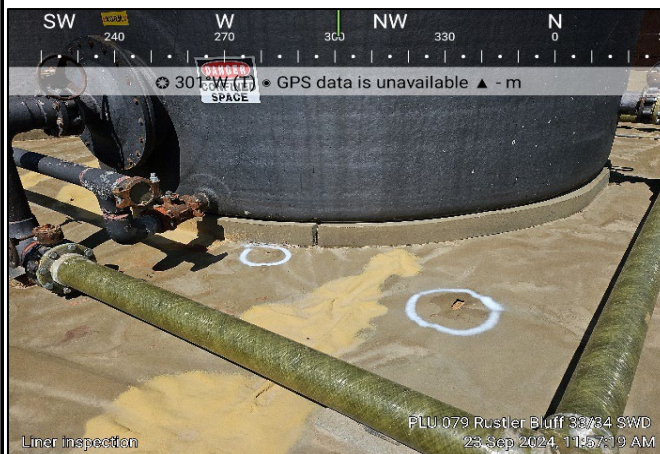
Photograph: 5 Date: 9/23/2024  
Description: Liner inspection activities.  
View: East



Photograph: 6 Date: 9/23/2024  
Description: Liner inspection activities.  
View: East



Photograph: 7 Date: 9/23/2024  
Description: Liner inspection activities.  
View: South



Photograph: 8 Date: 9/23/2024  
Description: Liner inspection activities, liner breach.  
View: Northwest

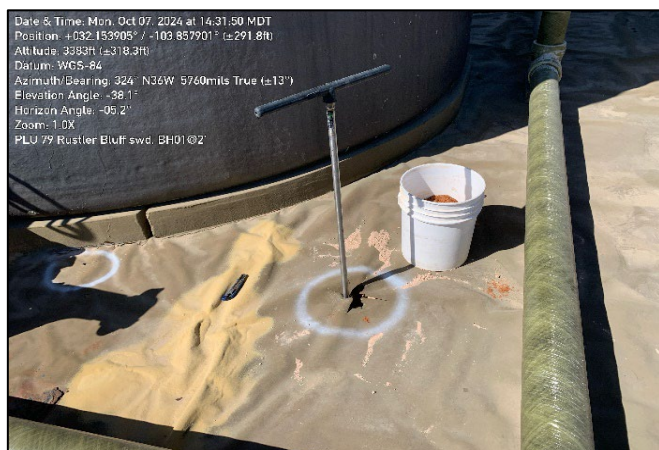


**Photographic Log**

XTO Energy, Inc

PLU 079 Rustler Bluff 33/34 SWD

Incident Number nAPP2426027791



Photograph: 9                      Date: 10/7/2024  
Description: Liner delineation activities, BH01.  
View: Northwest



Photograph: 10                      Date: 10/15/2024  
Description: Patching of borehole BH01.  
View: N/A



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

October 10, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU 079 RUSTLER BLUFF 33/34 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/08/24 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
BEN BELILL  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/08/2024  
Reported: 10/10/2024  
Project Name: PLU 079 RUSTLER BLUFF 33/34 SWD  
Project Number: 03C1558546  
Project Location: XTO

Sampling Date: 10/07/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: BH 01 0.5 (H246094-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	2.62	
Toluene*	<0.050	0.050	10/09/2024	ND	2.28	114	2.00	2.51	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.33	117	2.00	2.11	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.06	118	6.00	1.21	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18800	16.0	10/09/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	35.2	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 98.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.1 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
 BEN BELILL  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: PLU 079 RUSTLER BLUFF 33/34 SWD  
 Project Number: 03C1558546  
 Project Location: XTO

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 01A 2 (H246094-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	2.62		
Toluene*	<0.050	0.050	10/09/2024	ND	2.28	114	2.00	2.51		
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.33	117	2.00	2.11		
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.06	118	6.00	1.21		
Total BTEX	<0.300	0.300	10/09/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	10/09/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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October 10, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU 079 RUSTLER BLUFF 33/34 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/08/24 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
 BEN BELILL  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: PLU 079 RUSTLER BLUFF 33/34 SWD  
 Project Number: 03C1558546  
 Project Location: XTO

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SS 01 0.5 (H246104-01)**

BTEx 8021B		mg / kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.23	111	2.00	1.39	
Toluene*	<0.050	0.050	10/09/2024	ND	2.31	116	2.00	4.72	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.40	120	2.00	6.50	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.23	121	6.00	7.81	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/09/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
BEN BELILL  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/08/2024  
Reported: 10/10/2024  
Project Name: PLU 079 RUSTLER BLUFF 33/34 SWD  
Project Number: 03C1558546  
Project Location: XTO

Sampling Date: 10/07/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SS 02 0.5 (H246104-02)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.23	111	2.00	1.39	
Toluene*	<0.050	0.050	10/09/2024	ND	2.31	116	2.00	4.72	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.40	120	2.00	6.50	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.23	121	6.00	7.81	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/09/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
BEN BELILL  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/08/2024  
Reported: 10/10/2024  
Project Name: PLU 079 RUSTLER BLUFF 33/34 SWD  
Project Number: 03C1558546  
Project Location: XTO

Sampling Date: 10/07/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SS 03 0.5 (H246104-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2024	ND	2.23	111	2.00	1.39		
Toluene*	<0.050	0.050	10/09/2024	ND	2.31	116	2.00	4.72		
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.40	120	2.00	6.50		
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.23	121	6.00	7.81		
Total BTEX	<0.300	0.300	10/09/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/09/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
BEN BELILL  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/08/2024  
Reported: 10/10/2024  
Project Name: PLU 079 RUSTLER BLUFF 33/34 SWD  
Project Number: 03C1558546  
Project Location: XTO

Sampling Date: 10/07/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SS 04 0.5 (H246104-04)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/09/2024	ND	2.23	111	2.00	1.39		
Toluene*	<0.050	0.050	10/09/2024	ND	2.31	116	2.00	4.72		
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.40	120	2.00	6.50		
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.23	121	6.00	7.81		
Total BTEX	<0.300	0.300	10/09/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/09/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



---

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---

### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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A handwritten signature in black ink, appearing to read "C. D. Keene", is written over a horizontal line.

---

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Ensolum, LLC

Project Manager: Ben Beill

Address: 3122 National Parks Hwy

City: Carlsbad

State: NM Zip: 88220

Phone #: 337 257-8307

Fax #:

Project #: 03C1558546

Project Owner: XTO

Project Name: PLU 079 Rustler Bluff 33/34 SWD

Project Location:

Sampler Name: *Conner Whitman*

FOR LAB USE ONLY

Sample I.D. *15441004*

Lab I.D.

Sample I.D.

Sample Depth (feet)

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

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TIME

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TIME

BTEX

TPH

CHLORIDE

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Relinquished By:

Date: *10/24/24*

Received By: *Stoddard*

Verbal Result: ☐ Yes ☐ No ☐ Add'l Phone #:

All Results are emailed. Please provide Email address: *bbeill@ensolum.com, TMorrissey@ensolum.com*

REMARKS: Cost Center: 1136471371 Incident ID: nAP2426027791

Relinquished By:

Date: *10/24/24*

Received By: *Stoddard*

Verbal Result: ☐ Yes ☐ No ☐ Add'l Phone #:

All Results are emailed. Please provide Email address: *bbeill@ensolum.com, TMorrissey@ensolum.com*

REMARKS: Cost Center: 1136471371 Incident ID: nAP2426027791

Delivered By: (Circle One)

Observed Temp.: °C *-2.0*

Sample Condition

Cool Intact ☐ Yes ☐ No

Checked By: *SP*

Turnaround Time: *140-0.00*

Thermometer ID: *414*

Correction Factor: *0.5*

Standard ☐ *Kush*

Bacteria (only) ☐ *20-1*

Cool Intact ☐ Yes ☐ No

Sample Condition

Observed Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Sampler - UPS - Bus - Other:

Observed Temp.: °C *-2.0*

Sample Condition

Cool Intact ☐ Yes ☐ No

Checked By: *SP*

Turnaround Time: *140-0.00*

Thermometer ID: *414*

Correction Factor: *0.5*

Standard ☐ *Kush*

Bacteria (only) ☐ *20-1*

Cool Intact ☐ Yes ☐ No

Sample Condition

Observed Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

Corrected Temp.: °C

† Cardinal cannot accept verbal changes. Please email changes to *celej.keene@cardinallabsnm.com*



Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 412443

QUESTIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  412443
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2426027791
Incident Name	NAPP2426027791 PLU 079 RUSTLER BLUFF 33/34 SWD @ 30-015-27438
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-27438] POKER LAKE UNIT #079

Location of Release Source	
Please answer all the questions in this group.	
Site Name	PLU 079 RUSTLER BLUFF 33/34 SWD
Date Release Discovered	09/15/2024
Surface Owner	State

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: Other   Other (Specify)   Produced Water   Released: 10 BBL   Recovered: 10 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)	Vic clamp was loose

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Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
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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, Page 2

Action 412443

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 412443
	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	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
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: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 12/16/2024
--	--

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 3

Action 412443

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  412443
	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 100 and 500 (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 ½ and 1 (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	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (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	Between 1000 (ft.) and ½ (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
<i>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.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	18800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	35.2
GRO+DRO (EPA SW-846 Method 8015M)	35.2
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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	09/15/2024
On what date will (or did) the final sampling or liner inspection occur	10/07/2024
On what date will (or was) the remediation complete(d)	10/07/2024
What is the estimated surface area (in square feet) that will be reclaimed	5650
What is the estimated volume (in cubic yards) that will be reclaimed	420
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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**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 412443

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	412443
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>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.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>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>	
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: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 12/16/2024
<i>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.</i>	

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Action 412443

QUESTIONS (continued)

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  412443
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 412443

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	412443
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	389425
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/07/2024
What was the (estimated) number of samples that were to be gathered	10
What was the sampling surface area in square feet	2000

**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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	5650
What was the total volume (in cubic yards) reclaimed	420

Summarize any additional remediation activities not included by answers (above)	Following the failed liner integrity inspection at the Site, Ensolum personnel advanced one borehole (BH01) at the location of the breach in the liner to assess for the presence or absence of impacted soil resulting from the September 15, 2024, produced water release within the lined containment. Two delineation soil samples were collected from borehole BH01 at depths of approximately 0.5 feet and 2 feet bgs. Laboratory analytical results for all delineation soil samples collected indicated that all COC concentrations were compliant with the Closure Criteria. Though soil sample BH01 collected at 0.5 feet bgs indicates the presence of waste-containing soil, the soil sample is located directly underneath the liner and impacts are vertically defined by BH01A collected at 2 feet bgs. Soil sample BH01 will be removed during pad abandonment or major facility construction. Additionally, laboratory analytical results for soil samples SS01 through SS04, collected around the containment, were compliant with the most stringent Table I Closure Criteria, confirming the release stayed within the containment walls. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The breach in the liner was subsequently repaired.
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*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	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 12/16/2024
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Action 412443

QUESTIONS (continued)

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  412443
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 412443

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
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CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.	2/5/2025