



January 2, 2025

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

**Re: Remediation Work Plan  
PLU CVX JV BS 013H  
Incident Number NAPP2428842762  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan (Work Plan)* to document the site assessment activities completed to date and propose a work plan to address waste-containing soil identified at the PLU CVX JV BS 013H (Site). The purpose of the site assessment activities was to delineate the lateral and vertical extent of waste-containing soil resulting from a release of crude oil and produced water at the Site. The following *Work Plan* proposes to excavate waste-containing soil identified within the release extent.

## **SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit O, Section 25, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.18173°, -103.83361°) and is associated with oil and gas exploration and production operations on Federal land managed by the Bureau of Land Management (BLM).

On October 11, 2024, corrosion on a production flow line resulted in the release of 10 barrels (bbls) of produced water and 2 bbls of crude oil onto a right-of-way (ROW) and into the adjacent pasture. No fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via Notification of Release (NOR) and submitted an Initial C-141 Application (C-141) on October 14, 2024. The release was assigned Incident Number NAPP2428842762.

## **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 and potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. In October 2020, a New Mexico Office of the State Engineer (NMOSE) permitted well (C-4478) was advanced to a depth of 110 feet bgs located approximately 0.5 miles north of the Site and is depicted on Figure 1. Depth to groundwater is documented to be 110 feet bgs. The Well Record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash located approximately 6,285 feet northwest of the Site. The Site is greater than 200 feet from a lakebed,

XTO Energy, Inc.  
Remediation Work Plan  
PLU CVX JV BS 013H

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).

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 diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

## SITE ASSESSMENT AND DELINEATION ACTIVITIES

On October 31, 2024, Ensolum personnel conducted a Site visit to evaluate the release extent based on information provided on the C-141 and visual observations. Ensolum personnel collected eleven delineation soil samples (SS01 through SS11) within and around the release extent from a depth of 0.5 feet bgs to assess the lateral extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix B.

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 (COC): 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 Standard Method SM4500.

On November 27, 2024, Ensolum personnel returned to the Site to assess the vertical extent of the release. Delineation boreholes BH01 through BH03 were advanced in the approximate locations of SS01 through SS03, respectively. The delineation boreholes were advanced via handauger to a maximum depth of 1-foot bgs at BH01 through BH03 due to hand auger refusal. Discrete soil samples were collected from each borehole at a depth of 1-foot bgs. Soil from the boreholes was field screened for VOCs and chloride. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. Soil samples from the boreholes were collected, handled and analyzed as described above at Cardinal in Hobbs, New Mexico. The soil sample locations are depicted on Figure 2.

XTO Energy, Inc.  
Remediation Work Plan  
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## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples SS01 through SS03 and BH01, collected at depths ranging from 0.5 feet to 1 foot bgs, indicated that chloride concentrations exceeded the reclamation requirement applied in the top 4 feet. The terminal depth sample from delineation boreholes SS02/BH02 and SS03/BH03, collected at 1 foot bgs, indicated concentrations of all COCs were compliant with the Closure Criteria and reclamation requirement and successfully defined the vertical extent of waste-containing soil. In addition, laboratory analytical results for delineation soil samples SS04 through SS11 collected outside of the release extent indicated concentrations of all COCs were compliant with the reclamation requirement and successfully defined the lateral extent of the release. Laboratory analytical results are summarized in Table 1 and Laboratory Analytical Reports & Chain-of-Custody Documentation are presented in Appendix D.

## PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soil containing elevated chloride concentrations exists across an approximate 1,750 square foot area and extends to an approximate depth of 1-foot bgs. XTO proposes to complete the following remediation activities:

- Excavate waste-containing soil to a depth of approximately 1 foot bgs. Excavation will proceed laterally until sidewall samples confirm chloride concentrations are compliant with the Closure Criteria.
- XTO estimates approximately 130 cubic yards of waste-containing soil will be removed. The excavated soil will be transferred a New Mexico approved landfill facility for disposal.
- Confirmation soil sampling of the floor and sidewall of the excavation will be completed at a sampling frequency not to exceed 200 square feet in area. The confirmation soil samples will be handled as described above and analyzed for all COCs.
- The excavation will be backfilled and recontoured to match pre-existing conditions.

XTO will proceed with the excavation and soil sampling activities and will submit a Closure Report within 90 days of the date of approval of this Work Plan by the NMOCD.

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**



Uriel Santillana  
Associate Scientist



Tacoma Morrissey, MS  
Associate Principal

XTO Energy, Inc.  
Remediation Work Plan  
PLU CVX JV BS 013H

cc: Colton Brown, XTO  
Kaylan Dirkx, XTO  
BLM

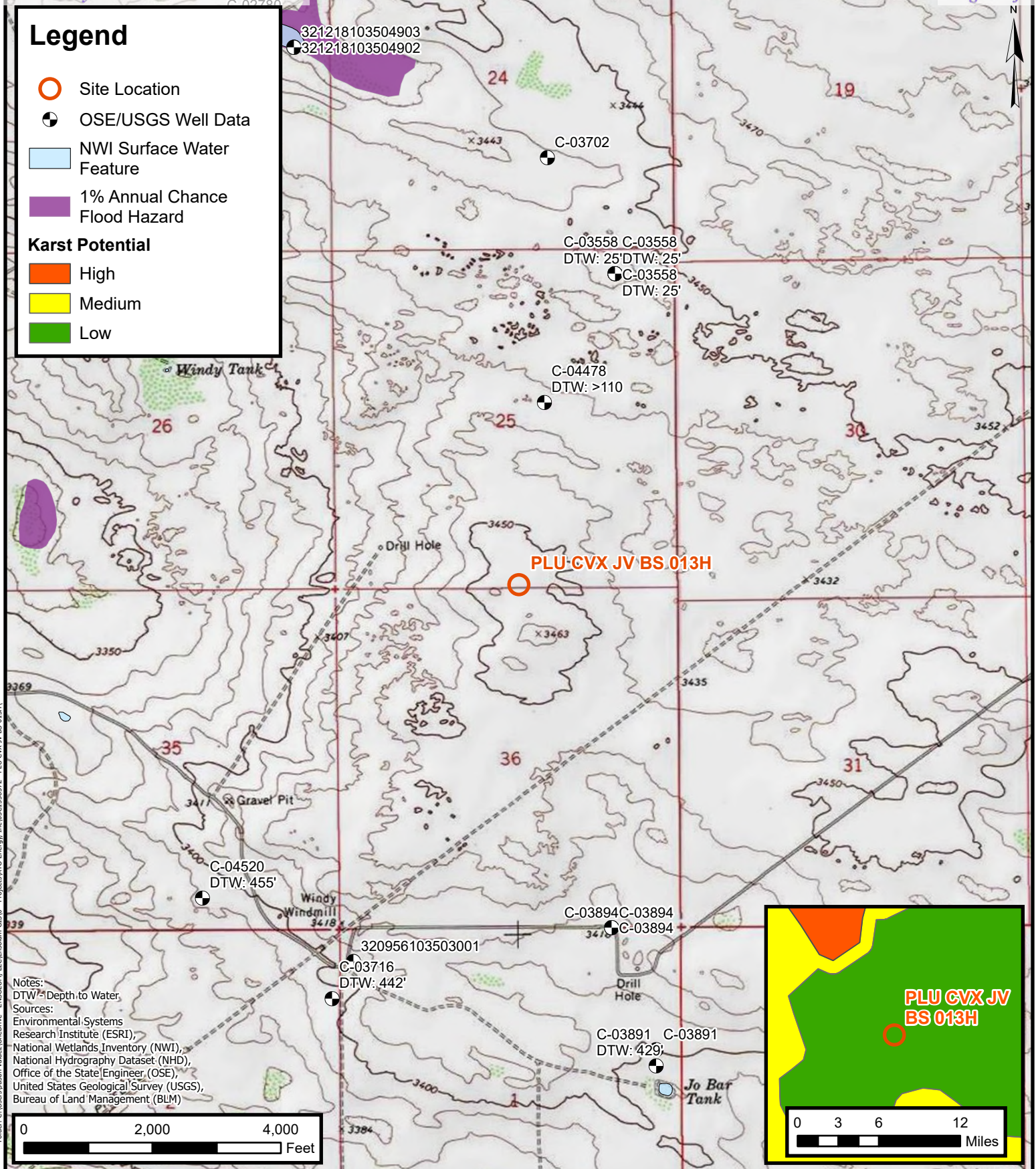
Appendices:

Figure 1 Site Receptor Map  
Figure 2 Delineation Soil Sample Locations  
Figure 3 Proposed Excavation Map  
Table 1 Soil Sample Analytical Results  
Appendix A Referenced Well Records  
Appendix B Photographic Log  
Appendix C Lithologic / Soil Sampling Logs  
Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES





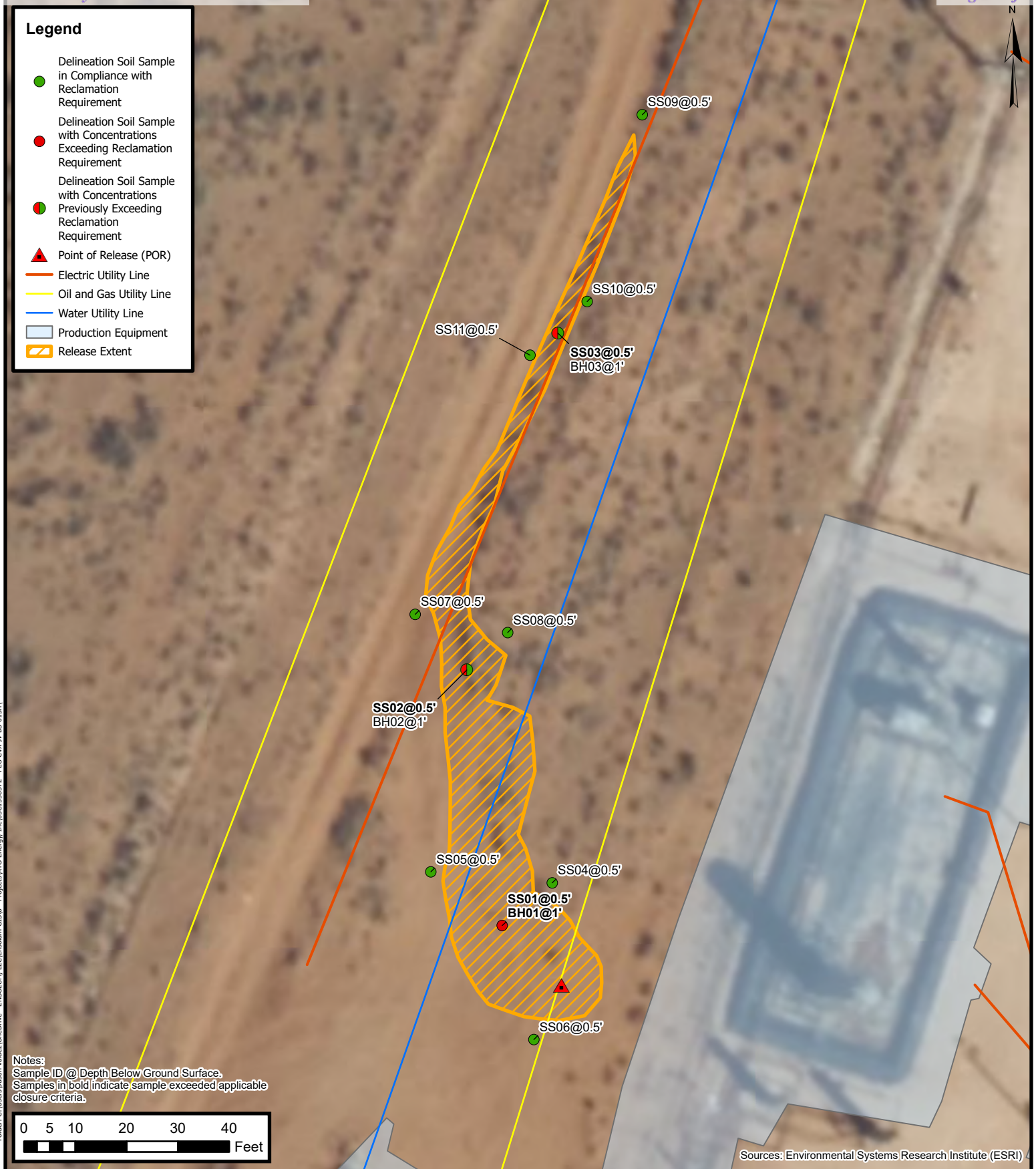
## Site Receptor Map

XTO Energy, Inc.  
PLU CVX JV BS 013H  
Incident Number: nAPP2428842762  
Unit O, Section 25, T 24S, R 30E  
Eddy County, New Mexico

**FIGURE**

**1**

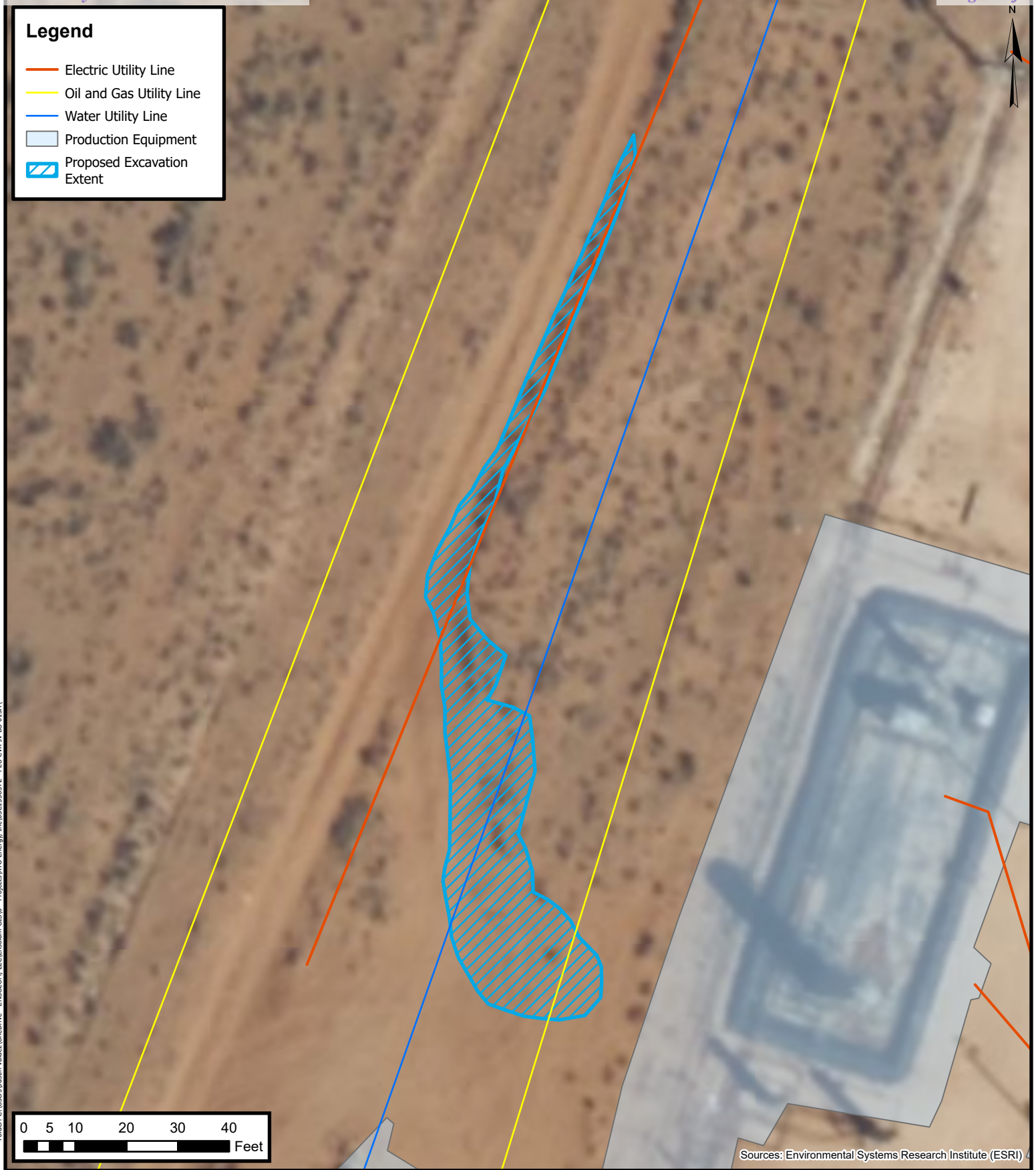




## Delineation Soil Sample Locations

XTO Energy, Inc.  
PLU CVX JV BS 013H  
Incident Number: nAPP2428842762  
Unit O, Section 25, T 24S, R 30E  
Eddy County, New Mexico

**FIGURE**  
**2**



## Proposed Excavation Area

XTO Energy, Inc.  
PLU CVX JV BS 013H  
Incident Number: nAPP2428842762  
Unit O, Section 25, T 24S, R 30E  
Eddy County, New Mexico

FIGURE

3







TABLES



TABLE 1  
SOIL SAMPLE ANALYTICAL RESULTS  
PLU CVX JV BS 013H / Incident Number nAPP2428842762  
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	10/31/2024	0.5	<0.050	<0.300	<10.0	25.6	<10.0	25.6	25.6	8,780
BH01	11/27/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,420
SS02	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,640
BH02	11/27/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS03	10/31/2024	0.5	<0.050	<0.300	<10.0	67.5	12.6	67.5	80.1	4,000
BH03	11/27/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS04	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SS05	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS06	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	384
SS07	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS08	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS09	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS10	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS11	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0

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 or reclamation requirement where applicable.

GRO: Gasoline Range Organics  
DRO: Diesel Range Organics  
ORO: Oil Range Organics  
TPH: Total Petroleum Hydrocarbon  
NMAC: New Mexico Administrative Code  
Grey text indicates soil sample removed during excavation activities



## APPENDIX A

### Referenced Well Records

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# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

2020 OCT 29 PM 1:03  
STATE ENGINEER  
OFFICE

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4478			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32°	MINUTES 11'	SECONDS 22.57" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE -103°	49'	56.14" W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW SE NE Sec. 25 T24S R30E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 10/07/2020		DRILLING ENDED 10/07/2020		DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) n/a	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	110	±8.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. <b>0-4478</b>	POD NO. <b>1</b>	TRN NO. <b>678382</b>
LOCATION <b>24S-30E-25 23-3</b>	WELL TAG ID NO. <b>NA</b>	PAGE 1 OF 2

#### 4. HYDROGEOLOGIC LOG OF WELL

### 5. TEST; RIG SUPERVISION

## 5. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO.	C-4478	POD NO.	1
LOCATION	24S-30F-25	WELL TAG ID NO.	NA
	2-3-3		
			PAGE 2 OF 2






# 2020-10-26\_C-4478POD1\_OSE\_Well Record and Log-89-forsign

Final Audit Report

2020-10-27

Created:	2020-10-27
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAESGKFRG9AU3NcytvOCSRntC1Y-zTs43Y

## "2020-10-26\_C-4478POD1\_OSE\_Well Record and Log-89-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2020-10-27 - 3:14:03 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2020-10-27 - 3:14:17 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2020-10-27 - 3:21:12 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2020-10-27 - 3:22:09 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.  
2020-10-27 - 3:22:09 PM GMT

2020 OCT 29 PM 1:03  
OFFICE  
10/29/2020





## APPENDIX B

### Photographic Log

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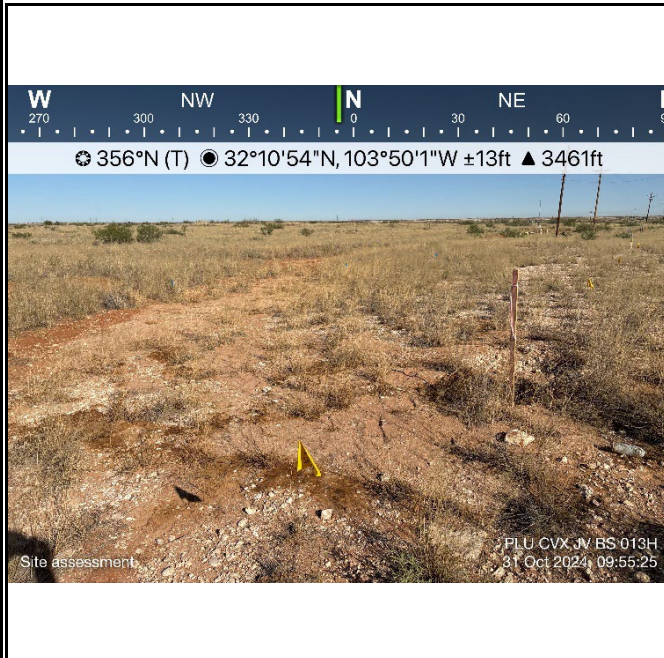


## Photographic Log

XTO Energy, Inc

PLU CVX JV BS 013H

Incident Number: nAPP2428842762



Photograph 1

Date: 10/31/2024

Description: Site assessment on ROW.

View: North



Photograph 2

Date: 10/31/2024

Description: Site assessment on ROW.

View: West



Photograph 3

Date: 10/31/2024

Description: Site assessment on ROW.

View: North



Photograph 4

Date: 10/31/2024

Description: Site assessment on ROW.

View: South



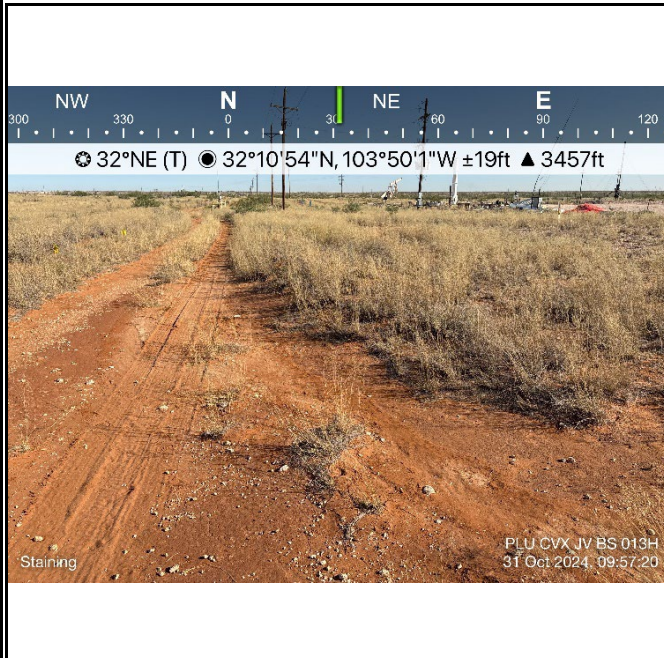


## Photographic Log

XTO Energy, Inc

PLU CVX JV BS 013H

Incident Number: nAPP2428842762



Photograph 5 Date: 10/31/2024  
Description: Site assessment on ROW.  
View: Northeast



Photograph 6 Date: 11/27/2024  
Description: Vertical delineations on ROW.  
View: South



Photograph 7 Date: 11/27/2024  
Description: Vertical delineations on ROW.  
View: South



Photograph 8 Date: 11/27/2024  
Description: Vertical delineations on ROW.  
View: South





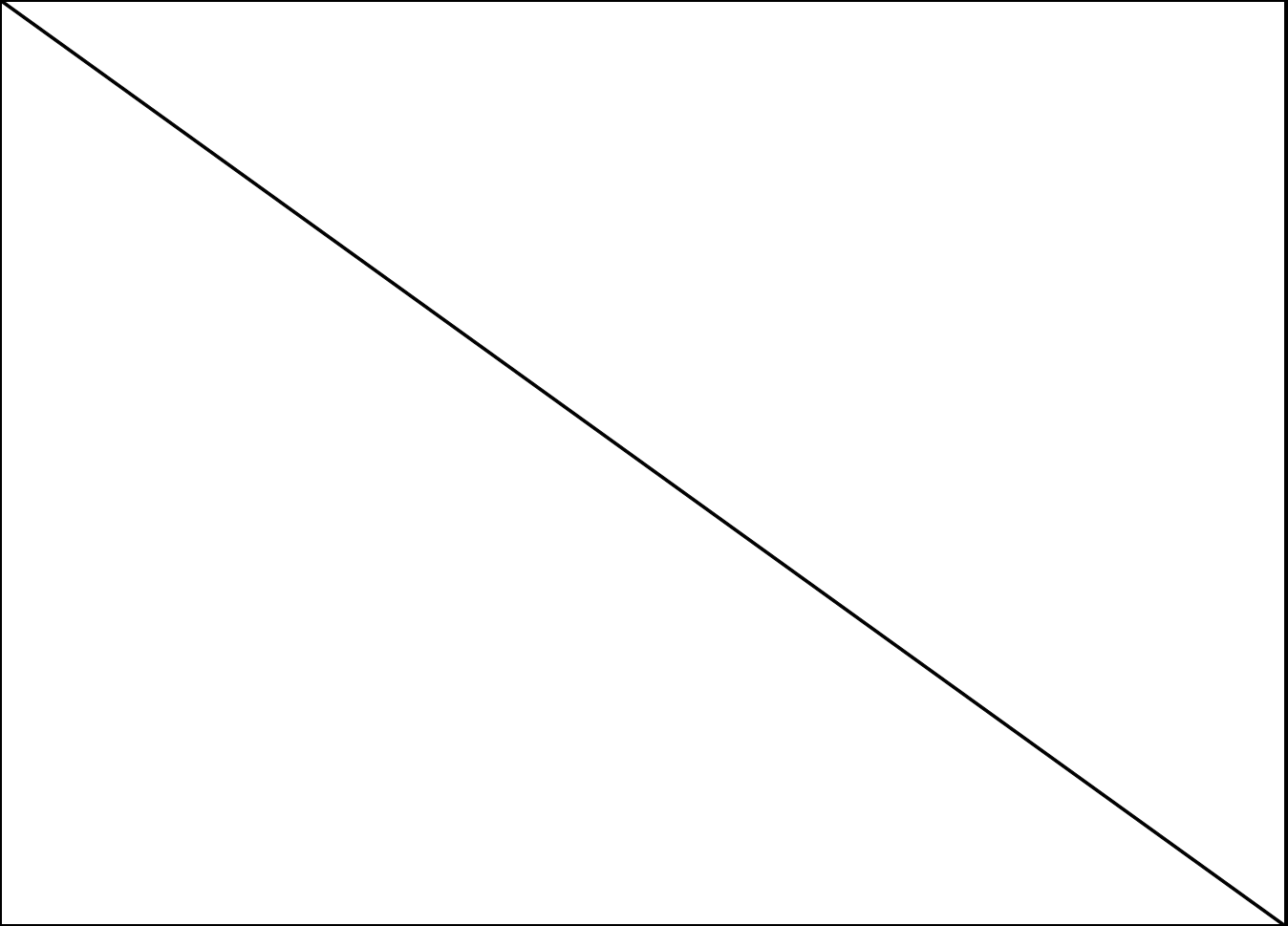


## APPENDIX C


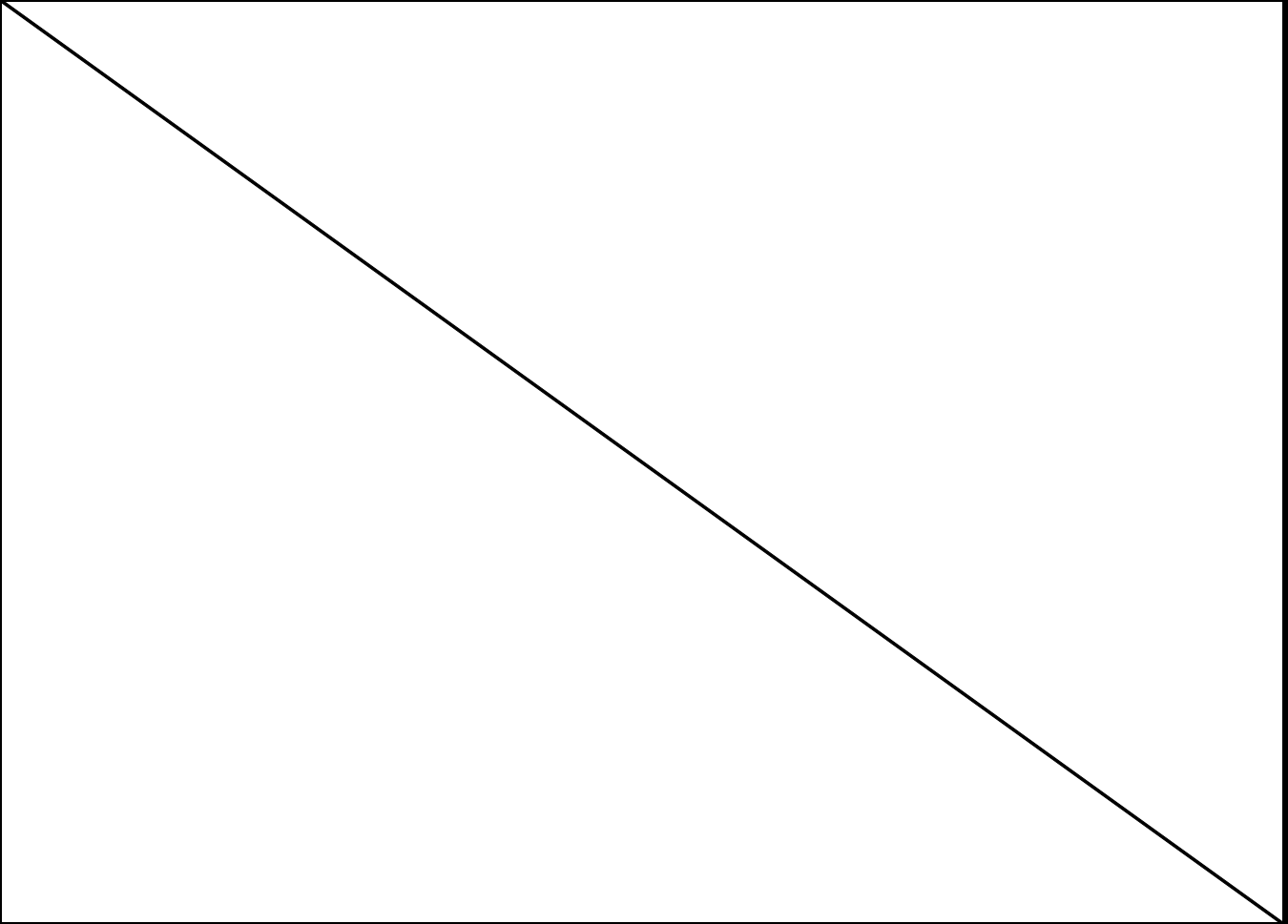
### Lithologic Soil Sampling Logs

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								Sample Name: BH01 (SS01)		Date: 11/27/24	
								Site Name: PLU CVX JV BS 013H			
								Incident Number: nAPP2428842762			
								Job Number: 03C1558572			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: MS		Method: Hand Auger	
Coordinates: 32.181725, -103.83361								Hole Diameter: 3"		Total Depth: 1'	
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. 40% 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	2,654	0.2	N	BH01	1	0 1	SP	(0-1') SAND, brownish, with caliche, non cohesive, non plastic.			
Refusal @ 1 foot bgs											
<div style="position: relative; width: 100%; height: 100%;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div>											

								Sample Name: BH02 (SS02)		Date: 11/27/24	
								Site Name: PLU CVX JV BS 013H			
								Incident Number: nAPP2428842762			
								Job Number: 03C1558572			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: MS		Method: Hand Auger	
Coordinates: 32.181862, -103.833681								Hole Diameter: 3"		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. 40% correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
						0	SP				
D	<162	0.2	N	BH02	1	1					
D	162	0.0	N			2		(0-2') SAND, brownish red, non plastic, non cohesive.			
Total Depth: 2 foot bgs											
											



								Sample Name: BH03 (SS03)		Date: 11/27/24					
								Site Name: PLU CVX JV BS 013H							
								Incident Number: nAPP2428842762							
								Job Number: 03C1558572							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: MS		Method: Hand Auger					
Coordinates: 32.182041, -103.833624								Hole Diameter: 3"		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. 40% correction factors included.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
						0	SP								
D	<162	0.1	N	BH03	1	1									
D	<162	0.2	N			2		(0-2') SAND, brownish, with caliche, non plastic, non cohesive.							
Total Depth: 2 feet bgs															
															



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

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

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November 05, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU CVX JV BS 013H

Enclosed are the results of analyses for samples received by the laboratory on 11/01/24 12:00.

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 fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 04 (H246679-01)**

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	11/02/2024	ND	2.05	103	2.00	1.09	
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 05 (H246679-02)**

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	11/02/2024	ND	2.05	103	2.00	1.09	
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 06 (H246679-03)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEX	<0.300	0.300	11/02/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 07 (H246679-04)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEX	<0.300	0.300	11/02/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 08 (H246679-05)**

BTX 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	11/02/2024	ND	2.05	103	2.00	1.09	
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78	
Total BTX	<0.300	0.300	11/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 09 (H246679-06)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEX	<0.300	0.300	11/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 10 (H246679-07)**

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	11/02/2024	ND	2.05	103	2.00	1.09	
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78	
Total BTEX	<0.300	0.300	11/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 11 (H246679-08)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEX	<0.300	0.300	11/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 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 "Celey D. Keene".

---

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		BILL TO		ANALYSIS REQUEST																							
Project manager: Ben Belill		P.O. #:		<div style="display: flex; justify-content: space-around;"> <div>CHLORIDES</div> <div>TPH</div> <div>BTEX</div> </div>																							
Address: 3122 National Parks Hwy		Company: XTO Energy																									
City: Carlsbad State: NM ZIP: 88220		Attn: Colton Brown																									
Phone #: 989-854-0852		Address: 3104 E Greene st.																									
Project #: 03C1558572		City: Carlsbad																									
Project Name: PLU CVX JV BS 013H		State: NM Zip: 88220																									
Project Location: 32.18173, -103.83361		Phone #:																									
Sampler Name: Uriel Santillana		Fax #:																									
FOR LAB USE ONLY		MATRIX		PRESERV.		SAMPLING																					
Lab I.D.	Sample I.D.	(GIRAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME													
H246679	5504	G	1			X					X		10/31/24	1000	X	X	X										
2	5505													1010													
3	5506													1015													
4	5507													1020													
5	5508													1025													
6	5509													1200													
7	5510													1135													
8	5511													1130													
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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.																											
Relinquished By: <i>U. Santillana</i>		Date: 11-1-24 Time: 1200		Received By: <i>Amara Datta</i>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #: <i>bbelill@ensolum.com tmmorrissey@ensolum.com kthomason@ensolum.com usantillana@ensolum.com</i>																			
Relinquished By:		Date:		Received By:		REMARKS: Cost center: 1081011001 Incident ID: NAPP2428842762																					
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C Corrected Temp. °C <i>5.7</i> <i>5.1</i>		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		CHECKED BY: (Initials) <i>U.S.</i>		Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition <input type="checkbox"/> Rush <input checked="" type="checkbox"/> 48hr <input checked="" type="checkbox"/> Thermometer ID #140 Correction Factor <i>-0.6</i>																			

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



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

---

November 05, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU CVX JV BS 013H

Enclosed are the results of analyses for samples received by the laboratory on 11/01/24 12:00.

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: 11/01/2024  
 Reported: 11/05/2024  
 Project Name: PLU CVX JV BS 013H  
 Project Number: 03C1558572  
 Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SS 01 (H246680-01)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEX	<0.300	0.300	11/02/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8480	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	25.6	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 02 (H246680-02)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEX	<0.300	0.300	11/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4640	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 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: 11/01/2024  
Reported: 11/05/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 10/31/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SS 03 (H246680-03)**

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	11/02/2024	ND	2.05	103	2.00	1.09		
Toluene*	<0.050	0.050	11/02/2024	ND	2.18	109	2.00	5.34		
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.27	114	2.00	7.31		
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.68	111	6.00	6.78		
Total BTEx	<0.300	0.300	11/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4000	16.0	11/02/2024	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	11/02/2024	ND	212	106	200	3.53	
DRO >C10-C28*	67.5	10.0	11/02/2024	ND	228	114	200	1.45	
EXT DRO >C28-C36	12.6	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

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\*=Accredited Analyte

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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 cursive script, appearing to read "C. D. Keene", written in black ink.

---

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

Page 6 of 6

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December 04, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU CVX JV BS 013H

Enclosed are the results of analyses for samples received by the laboratory on 12/02/24 11:30.

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: 12/02/2024  
 Reported: 12/04/2024  
 Project Name: PLU CVX JV BS 013H  
 Project Number: 03C1558572  
 Project Location: XTO 32.18173-103.83361

Sampling Date: 11/27/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BH01 1' (H247299-01)**

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	12/02/2024	ND	2.21	111	2.00	5.42		
Toluene*	<0.050	0.050	12/02/2024	ND	2.28	114	2.00	4.01		
Ethylbenzene*	<0.050	0.050	12/02/2024	ND	2.23	111	2.00	4.04		
Total Xylenes*	<0.150	0.150	12/02/2024	ND	6.97	116	6.00	3.18		
Total BTEX	<0.300	0.300	12/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	1420	16.0	12/03/2024	ND	416	104	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	12/03/2024	ND	184	91.9	200	2.40	
DRO >C10-C28*	<10.0	10.0	12/03/2024	ND	170	85.2	200	2.83	
EXT DRO >C28-C36	<10.0	10.0	12/03/2024	ND					

Surrogate: 1-Chlorooctane 92.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 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: 12/02/2024  
Reported: 12/04/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 11/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: BH02 1' (H247299-02)**

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	12/02/2024	ND	2.21	111	2.00	5.42	
Toluene*	<0.050	0.050	12/02/2024	ND	2.28	114	2.00	4.01	
Ethylbenzene*	<0.050	0.050	12/02/2024	ND	2.23	111	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/02/2024	ND	6.97	116	6.00	3.18	
Total BTEX	<0.300	0.300	12/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	32.0	16.0	12/03/2024	ND	416	104	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	12/03/2024	ND	184	91.9	200	2.40	
DRO >C10-C28*	<10.0	10.0	12/03/2024	ND	170	85.2	200	2.83	
EXT DRO >C28-C36	<10.0	10.0	12/03/2024	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 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: 12/02/2024  
Reported: 12/04/2024  
Project Name: PLU CVX JV BS 013H  
Project Number: 03C1558572  
Project Location: XTO 32.18173-103.83361

Sampling Date: 11/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: BH03 1' (H247299-03)**

BTX 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	12/03/2024	ND	2.21	111	2.00	5.42	
Toluene*	<0.050	0.050	12/03/2024	ND	2.28	114	2.00	4.01	
Ethylbenzene*	<0.050	0.050	12/03/2024	ND	2.23	111	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/03/2024	ND	6.97	116	6.00	3.18	
Total BTX	<0.300	0.300	12/03/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	64.0	16.0	12/03/2024	ND	416	104	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	12/03/2024	ND	184	91.9	200	2.40	
DRO >C10-C28*	<10.0	10.0	12/03/2024	ND	170	85.2	200	2.83	
EXT DRO >C28-C36	<10.0	10.0	12/03/2024	ND					

Surrogate: 1-Chlorooctane 91.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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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

---

Cardinal Laboratories

\*=Accredited Analyte

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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



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																			
Project Manager: <u>Ben Belli</u>				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Company: <u>XTO Energy</u></p> <p>Attn: <u>Colton Brown</u></p> <p>Address: <u>3104 E. Greens</u></p> <p>City: <u>Carlsbad</u></p> <p>State: <u>NM</u> Zip: <u>88220</u></p> <p>Phone #: <u>575-988-2340</u></p> <p>Fax #:</p> </div> <div style="width: 65%;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>DATE</p> <p>TIME</p> </div> <div style="width: 35%;"> <p><u>BTEX</u></p> <p><u>TPH</u></p> <p><u>Chlorides</u></p> </div> <div style="width: 35%;"></div> </div> </div> </div>																			
Address: 3122 National Parks Hwy				Company:																							
City: Carlsbad State: NM Zip: 88220				Attn:																							
Phone #: 984-854-0852 Fax #:				Address:																							
Project #: 0361558572 Project Owner:				City:																							
Project Name: <u>PLUCLVX JV85013H</u>				State: NM Zip: 88220																							
Project Location: <u>32.18173, -103.83361</u>				Phone #: 575-988-2340																							
Sampler Name: <u>Mario SARKIS</u>				Fax #:																							
FOR LAB USE ONLY																											
Lab I.D.	Sample I.D.	Depth (feet)	(GRAB OR (C)OMP. # CONTAINERS	MATRIX				PRESERV.	SAMPLING																		
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :															
<u>H247299</u>																											
1	BH01	1	G1			✓				✓			11/27/24	1018	✓	✓	✓										
2	BH02	1	G1			✓				✓				1023	✓	✓	✓										
	<del>BH02 MS</del>	2	<del>G1</del>			✓				✓				1025													
3	BH03	1	G1			✓				✓				1028	✓	✓	✓										
	<del>BH03 MS</del>	2	<del>G1</del>			✓				✓				1030													

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>[Signature]</u>		Date: <u>12-2-24</u>	Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>1130</u>		Time: <u>1130</u>		All Results are emailed. Please provide Email address:		
Relinquished By:		Date:	Received By:		REMARKS: <u>incident: NAPP2428842762</u>	
Time:		Time:		Cost Center: <u>1081011001</u>		
Delivered By: (Circle One)		Observed Temp. °C <u>2.5</u>	Sample Condition	CHECKED BY: (Initials)	Turnaround Time: <u>Standard</u> <input type="checkbox"/> <u>Rush</u> <input checked="" type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C <u>1.9</u>	<input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	<u>[Signature]</u>	Bacteria (only) Sample Condition	
					Cool Intact Observed Temp. °C	
					<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C	
					Thermometer ID <u>#113</u> <u>#140</u> <u>48-hf</u>	
					Correction Factor <u>-0.5°C</u> <u>12/2/24</u>	

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

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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 416443

**QUESTIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416443
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2428842762
Incident Name	NAPP2428842762 PLU CVX JV BS 013H @ 30-015-39018
Incident Type	Release Other
Incident Status	Remediation Plan Received
Incident Well	[30-015-39018] POKER LAKE UNIT CVX JV BS #005H

**Location of Release Source***Please answer all the questions in this group.*

Site Name	PLU CVX JV BS 013H
Date Release Discovered	10/11/2024
Surface Owner	Federal

**Incident Details***Please answer all the questions in this group.*

Incident Type	Release Other
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	Cause: Corrosion   Flow Line - Production   Crude Oil   Released: 2 BBL   Recovered: 0 BBL   Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Produced Water   Released: 10 BBL   Recovered: 0 BBL   Lost: 10 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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)	Not answered.

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Action 416443

**QUESTIONS (continued)**

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**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>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.</i>	

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

*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: 01/02/2025
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QUESTIONS, Page 3

Action 416443

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  416443
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Site Characterization</b>	
<i>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.</i>	
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 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	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 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	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

<b>Remediation Plan</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>	
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
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	8780
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	80.1
GRO+DRO (EPA SW-846 Method 8015M)	67.5
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<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>	
On what estimated date will the remediation commence	10/11/2024
On what date will (or did) the final sampling or liner inspection occur	03/03/2025
On what date will (or was) the remediation complete(d)	03/03/2025
What is the estimated surface area (in square feet) that will be reclaimed	1750
What is the estimated volume (in cubic yards) that will be reclaimed	130
What is the estimated surface area (in square feet) that will be remediated	1750
What is the estimated volume (in cubic yards) that will be remediated	130
<i>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.</i>	
<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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QUESTIONS, Page 4

Action 416443

**QUESTIONS (continued)**

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	Action Number:  416443
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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: 01/02/2025
<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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QUESTIONS, Page 5

Action 416443

QUESTIONS (continued)

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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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Action 416443

**QUESTIONS (continued)**

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	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	405368
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/27/2024
What was the (estimated) number of samples that were to be gathered	18
What was the sampling surface area in square feet	3600

**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	No
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CONDITIONS

Action 416443

**CONDITIONS**

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	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	Remediation plan is approved with the following conditions; 1. Excavated soils must have its disposition at an OCD approved facility and manifest included within the final remediation closure report. 2. Prior to backfilling the open excavation per 19.15.29.12D (2) NMAC, XTO must collect a minimum of one five-point composite from the media being used as backfill to verify that it meets non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. This is especially important for the material being used within the top 4 feet from the ground surface. 3. XTO has 90-days (April 15, 2025) to submit to OCD its appropriate or final remediation closure report.	1/15/2025