



July 22, 2024

New Mexico Oil Conservation Division

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

**Re: Closure Request
PLU Big Sinks 02-25-30 State Battery
Incident Number nAPP2411435836
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 assessment and soil sampling activities performed at the PLU Big Sinks 02-25-30 State Battery (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a release of produced water and crude oil within a lined containment at the Site. Based on field observations, field screening activities, and laboratory analytical results, XTO is submitting this *Closure Request* and requesting closure for Incident Number nAPP2411435836.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 2, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.153052°, -103.849448°) and is associated with oil and gas exploration and production operations on New Mexico State Trust Land managed by the New Mexico State Land Office (NMSLO).

On April 21, 2024, a separator valve failed causing the release of approximately 6 barrels (bbls) of crude oil and 54 bbls of produced water into a lined containment. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids and all released fluids were recovered. XTO reported the release immediately to the New Mexico Oil Conservation Division (NMOCD) via email and submitted a 48-hour advance notice of liner inspection on April 23, 2024. Ensolum personnel conducted the liner inspection on April 25, 2024, and upon inspection, it was determined that the liner was not operating as designed. XTO submitted a Form C-141 Application (Form C-141) on April 26, 2024, and the release was assigned Incident Number nAPP2411435836.

Since the release remained on pad and inside the lined containment area, 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.

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. Potential Site receptors are identified on Figure 1.

XTO Energy, Inc
Closure Request
PLU Big Sinks 02-25-30 State Battery

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well USGS 320856103502801, located approximately 0.52 miles southeast of the Site. The groundwater well has a reported depth to groundwater of 390 feet bgs and a total depth of 482 feet bgs. The most recent depth to groundwater data was collected on January 28, 1998, which slightly exceeds the NMOCD-preference for a depth to water measurement to have been collected within the last 25 years, and the well distance from the Site of 0.52 miles slightly exceeds the NMOCD-preference of utilizing a well within ½ mile of the Site. However, this water well has a historic record, which can be more useful than one data point measured during a given time. The well record for USGS 320856103502801 indicated that depth to groundwater did not fluctuate more than +/- 1.2 feet over a period of 39 years. The groundwater present in the well during those 39 years was deep (390 feet bgs), and the historical record of only minor fluctuation in groundwater elevation suggest it is highly unlikely that depth to water in this area would have risen to less than 100 feet in recent years. In addition, multiple NMOSE permitted wells and USGS wells within 1 mile of the Site indicate depth to groundwater exceeds 100 feet bgs. This includes New Mexico Office of the State Engineer (NMOSE) soil boring C-04757 located 0.98 miles west of the Site, drilled in August of 2023 and resulted in a dry hole; and NMOSE well C-03716 located 0.84 miles north of the Site, installed March of 2014 and includes a most recent depth to groundwater measurement of 425 feet bgs. All well records used to determine depth to groundwater are attached in Appendix A and the well locations are depicted on Figure 1.

The closest continuously flowing or significant watercourse is a freshwater emergent wetland, located approximately 309 feet northeast of the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, significant water course, or wetland. The Site is greater than 1,000 feet from 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).

XTO acknowledges that there are no existing water wells with depth to groundwater data within ½ mile of the Site and the nearest well, USGS 320856103502801 indicates an age of the most recent depth to groundwater measurement exceeds 25 years, both of which NMOCD prefers for regional depth to water estimates. Based on the lack of sensitive receptors at the Site, the Site not being underlain by unstable geology, and nearby depth to groundwater data estimating regional depth to groundwater to be greater than 100 feet bgs in multiple directions of the Site, XTO is requesting NMOCD consider the well distance and date of measurement of USGS 320856103502801 to be credible and requests a variance for the preferred distance to the nearest depth to groundwater data and the preferred age of the most recent groundwater data measurement guidelines.

Based on the results of the Site Characterization and the depth to groundwater investigation mentioned above, 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

XTO Energy, Inc
Closure Request
PLU Big Sinks 02-25-30 State Battery

DELINEATION SOIL SAMPLING ACTIVITIES

Due to the liner inspection results indicating the lined containment was not operating as designed, delineation activities were conducted on May 13, 2024, to evaluate the presence or absence of impacted soil resulting from the release. Ensolum personnel advanced one borehole (BH01) via hand auger at the location of the tear in the liner identified during the liner integrity inspection. Two discrete delineation soil samples were collected from the borehole at depths of approximately 0.5 feet and 1-foot bgs. Additionally, four delineation soil samples (SS01 through SS04) were collected at a depth of 0.5 feet bgs on the surface of the pad, immediately surrounding the lined containment area to confirm the release stayed within the lined containment area. All delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the borehole were documented on a lithologic/soil sampling log, which is included in Appendix B. The borehole was backfilled with the soil removed and XTO repaired the hole in the liner. The borehole and soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the liner inspection and delineation activities and is included in Appendix C.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, 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 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. Laboratory analytical results for delineation soil samples SS01 through SS04 confirm the release stayed within the lined containment walls and confirms lateral definition of the release. Laboratory analytical results for soil sample BH01 collected at 0.5 feet bgs includes a chloride concentration (768 mg/kg) exceeding the reclamation requirement; however, laboratory analytical results for BH01A collected at 1-foot bgs indicates all COC concentrations are within the reclamation requirement and thus confirms vertical definition of the release. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are 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 hole in the liner to assess for the presence or absence of impacted soil resulting from the April 21, 2024 crude oil and produced water release. Two delineation soil samples were collected from the borehole, at depths of approximately 0.5 feet and 1-foot bgs, and four delineation soil samples (SS01 through SS04) were collected at a depth of 0.5 feet bgs around the lined containment. Laboratory analytical results for all delineation soil samples collected indicated all COC concentrations were compliant with the Closure Criteria. The release was contained laterally by the lined containment walls and is delineated vertically through laboratory analytical results from BH01. All release fluids were recovered during initial response activities.

The release remained on the well pad and within the containment area that is currently in operation for oil and gas production purposes. As such, the release area is not expected to be reclaimed until the production equipment within the lined containment is decommissioned and the pad is ready to be

XTO Energy, Inc
Closure Request
PLU Big Sinks 02-25-30 State Battery

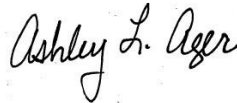
reclaimed. The Reclamation Plan for this release will be carried out as part of the NMSLO-approved Reclamation Plan for the well pad per 19.2.100.67 NMAC.

Based on initial response efforts, depth to groundwater estimated to be greater than 100 feet bgs, and soil sample laboratory analytical results compliant with the Closure Criteria, remedial actions completed at the Site appear to have been protective of human health, the environment, and groundwater. As such, XTO respectfully requests approval of the Closure Criteria variances listed above and closure for Incident Number nAPP2411435836. If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



Meredith Roberts
Staff Geologist



Ashley L. Ager, MS, PG
Principal

cc: Amy Ruth, XTO
Amanda Garcia, XTO
NMSLO






Appendices:

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






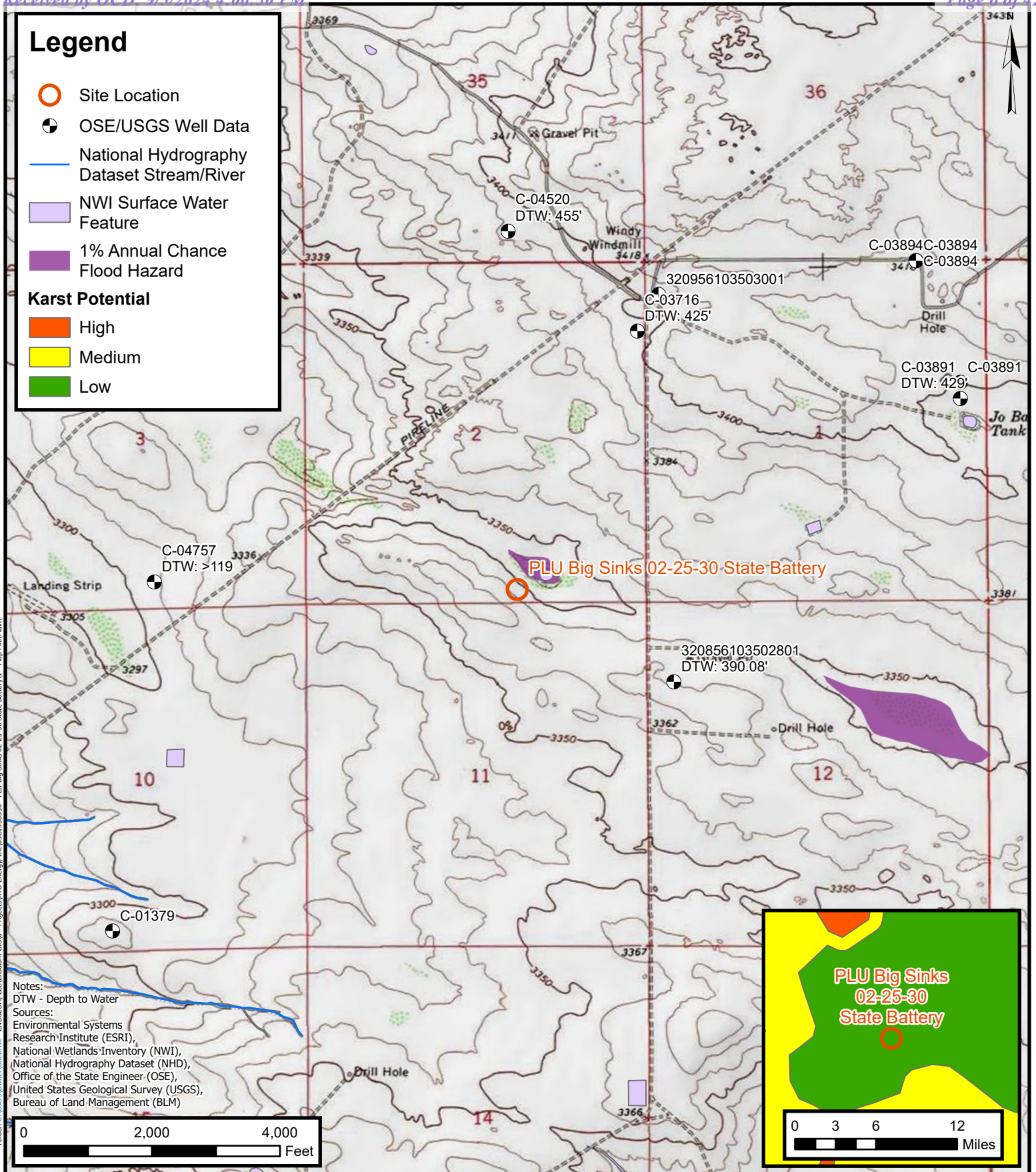
FIGURES

Legend

-  Site Location
-  OSE/USGS Well Data
-  National Hydrography Dataset Stream/River
-  NWI Surface Water Feature
-  1% Annual Chance Flood Hazard

Karst Potential

-  High
-  Medium
-  Low



Site Receptor Map

XTO Energy, Inc
PLU Big Sinks 02-25-30 State Battery
Incident Number: nAPP2411435836
Unit O, Sec 02, T25S, R30E
Eddy County, NM

FIGURE

1

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Lined Containment Area



Delineation Soil Sample Locations

XTO Energy, Inc
 PLU Big Sinks 02-25-30 State Battery
 Incident Number: nAPP2411435836
 Unit O, Sec 02, T25S, R30E
 Eddy County, New Mexico

FIGURE
2



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU Big Sinks 02-25-30 State Battery
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										
BH01	05/13/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	768
BH01A	05/13/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
SS01	05/13/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SS02	05/13/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS03	05/13/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS04	05/13/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0

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

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



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hideNews Bulletins

- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for the Nation

Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 320856103502801

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 320856103502801 25S.30E.12.113211

Eddy County, New Mexico
Latitude 32°08'56", Longitude 103°50'28" NAD27
Land-surface elevation 3,371 feet above NAVD88
The depth of the well is 482 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source (measured)
1959-03-25			D 62610		2978.00	NGVD29	1		Z	
1959-03-25			D 62611		2979.70	NAVD88	1		Z	
1959-03-25			D 72019	391.30			1		Z	
1983-01-31			D 62610		2979.00	NGVD29	1		Z	
1983-01-31			D 62611		2980.70	NAVD88	1		Z	
1983-01-31			D 72019	390.30			1		Z	
1987-10-20			D 62610		2978.89	NGVD29	1		Z	
1987-10-20			D 62611		2980.59	NAVD88	1		Z	
1987-10-20			D 72019	390.41			1		Z	
1992-11-06			D 62610		2978.89	NGVD29	1		S	
1992-11-06			D 62611		2980.59	NAVD88	1		S	
1992-11-06			D 72019	390.41			1		S	
1998-01-28			D 62610		2979.22	NGVD29	1		S	
1998-01-28			D 62611		2980.92	NAVD88	1		S	
1998-01-28			D 72019	390.08			1		S	

Explanation		
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.


[Questions or Comments](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)
Title: Groundwater for USA: Water Levels
URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels>



Page Contact Information: [USGS Water Data Support Team](#)
Page Last Modified: 2024-04-23 12:17:11 EDT
0.44 0.34 nadww02

								Sample Name: C-4757 (BH01)		Date: 8/2/2023	
								Site Name: PLU CVX JV BS #016H			
								Incident Number: NAB1519556419			
								Job Number: 03C1558238			
LITHOLOGIC / SOIL SAMPLING LOG								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.			
						30		Injected water and foaming agent @ 25'.			
						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.			
						80		20% sand.			
						90	SP	90'-115' SAND, medium brown/orange, medium grained, poorly sorted.			
						100					
						110					
							SP-SM	115' SAND with silt, red, medium to fine grained, poorly sorted.			
						120					
						TD		Total Depth @ 119' bgs.			



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

12-16-2010
10:56:24 a.m.

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) C03716				OSE FILE NUMBER(S) C03716				
	WELL OWNER NAME(S) BoPco LP				PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS 3104 EAST GREEN 50.76				CITY STATE ZIP CARLSBAD NM 88220				
	WELL LOCATION (FROM GPS)		DEGREES MINUTES SECONDS LATITUDE 32 09 846 N LONGITUDE 103 50 35 595 W		* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84				
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS West of Buck Jackson Rd, in center of Sub Station									
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION 2	TOWNSHIP 25 <input type="checkbox"/> NORTH <input checked="" type="checkbox"/> SOUTH	RANGE 30 <input checked="" type="checkbox"/> EAST <input type="checkbox"/> WEST		
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT		
	HYDROGRAPHIC SURVEY				MAP NUMBER		TRACT NUMBER		
3. DRILLING INFORMATION	LICENSE NUMBER WD-1229		NAME OF LICENSED DRILLER Richard Carter			NAME OF WELL DRILLING COMPANY Carter Well Drilling			
	DRILLING STARTED 2/5/2014		DRILLING ENDED 3/3/2014		DEPTH OF COMPLETED WELL (FT) Plugged		BORE HOLE DEPTH (FT) 600		
					DEPTH WATER FIRST ENCOUNTERED (FT) 442		STATIC WATER LEVEL IN COMPLETED WELL (FT) 425		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)								
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:								
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:								
	DEPTH (FT) FROM TO		BORE HOLE DIA. (IN)		CASING MATERIAL		CONNECTION TYPE (CASING)		
4. WATER BEARING STRATA	DEPTH (FT) FROM TO		THICKNESS (FT)		FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			YIELD (GPM)	
	442 600		158		Red sandstone			50	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA						TOTAL ESTIMATED WELL YIELD (GPM) 50			

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER C-3716	POD NUMBER	TRN NUMBER 539192	PAGE 1 OF 2
LOCATION 25S, 30E, 02	2-2-4		

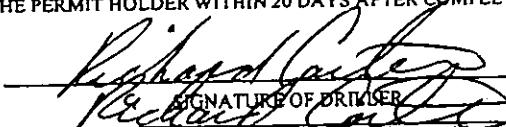
STATE ENGINEER
OFFICE
2714 MAR

5. SEAL AND PUMP	TYPE OF PUMP:		<input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> TURBINE		<input type="checkbox"/> JET <input type="checkbox"/> CYLINDER	<input checked="" type="checkbox"/> NO PUMP - WELL NOT EQUIPPED <input type="checkbox"/> OTHER - SPECIFY:	2
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	425	8 3/4	Cement & water	252	TREMIÉ
		425	600	8 3/4	Silica Sand	73.5	TREMIÉ

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?	
	FROM	TO			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	0	2	2	white Caliche	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	2	4	2	Red Sand	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	4	18	14	white Caliche	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	18	120	102	Red Sand	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	120	168	48	Red Clay	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	168	263	95	Red Sand stone	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	263	266	3	Red Clay	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	266	406	146	Red sandstone	<input type="checkbox"/> YES	<input type="checkbox"/> NO
	406	416	10	Red Clay	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	416	442	26	gray Clay	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	442	600		Red sandstone	<input type="checkbox"/> YES	<input type="checkbox"/> NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input checked="" type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	ADDITIONAL STATEMENTS OR EXPLANATIONS:	

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRIVER	3/10/2014 DATE

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	C-3716	POD NUMBER		TRN NUMBER	539192
LOCATION	25S.30E.02	2-2-4		PAGE 2 OF 2	



APPENDIX B

Photographic Log

**Photographic Log**

XTO Energy, Inc

PLU Big Sinks 02-25-30 State Battery

nAPP2411435836



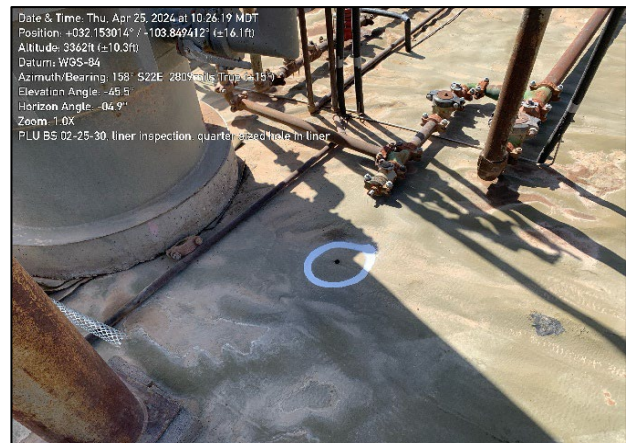
Photograph: 1 Date: 4/21/2024
Description: Release inside of liner extent.
View: Southwest



Photograph: 2 Date: 4/25/2024
Description: Liner inspection activities.
View: West



Photograph: 3 Date: 4/25/2024
Description: Liner inspection activities.
View: Southeast



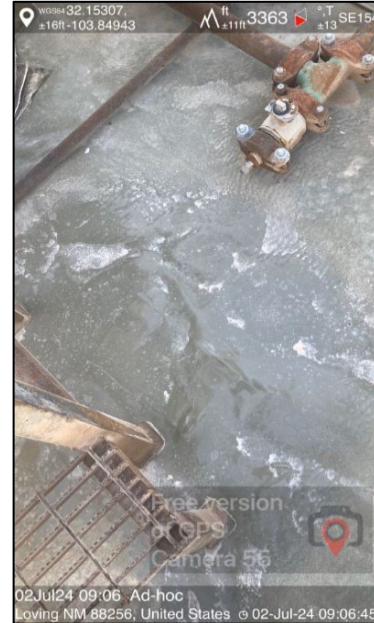
Photograph: 4 Date: 4/25/2024
Description: Hole in liner.
View: Southeast

**Photographic Log**

XTO Energy, Inc
PLU Big Sinks 02-25-30 State Battery
nAPP2411435836



Photograph: 5 Date: 5/13/2024
Description: Delineation activities at BH01.
View: Southeast



Photograph: 6 Date: 7/2/2024
Description: Patched liner.
View: Southeast



APPENDIX C

Lithologic Soil Sampling Logs



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

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

May 21, 2024

BEN BELILL

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: PLU BIG SINKS 02-25-30 STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/14/24 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH 01 0.5'	H242622-01	Soil	13-May-24 11:33	14-May-24 13:40
BH 01A 1'	H242622-02	Soil	13-May-24 12:00	14-May-24 13:40
SS 01 0.5'	H242622-03	Soil	13-May-24 12:05	14-May-24 13:40
SS 02 0.5'	H242622-04	Soil	13-May-24 12:10	14-May-24 13:40
SS 03 0.5'	H242622-05	Soil	13-May-24 12:15	14-May-24 13:40
SS 04 0.5'	H242622-06	Soil	13-May-24 12:20	14-May-24 13:40

05/21/24 - Client changed the project name (see COC). This is the revised report and will replace the one sent on 05/17/24.

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

BH 01 0.5'
H242622-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	768		16.0	mg/kg	4	4051516	HM	15-May-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4051505	MS	15-May-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4051505	MS	15-May-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	96.8 %	71.5-134	4051505	MS	15-May-24	8021B	
---------------------------------------	--------	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4051427	MS	15-May-24	8015B	

Surrogate: 1-Chlorooctane	88.5 %	48.2-134	4051427	MS	15-May-24	8015B	
---------------------------	--------	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane	88.6 %	49.1-148	4051427	MS	15-May-24	8015B	
-------------------------------	--------	----------	---------	----	-----------	-------	--

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

BH 01A 1'
H242622-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	368		16.0	mg/kg	4	4051516	HM	15-May-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4051505	MS	15-May-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4051505	MS	15-May-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			95.9 %		71.5-134	4051505	MS	15-May-24	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			93.4 %		48.2-134	4051427	MS	15-May-24	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			93.3 %		49.1-148	4051427	MS	15-May-24	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

SS 01 0.5'
H242622-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	4051516	HM	15-May-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4051505	MS	15-May-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4051505	MS	15-May-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.1 %		71.5-134	4051505	MS	15-May-24	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			90.7 %		48.2-134	4051427	MS	15-May-24	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			88.8 %		49.1-148	4051427	MS	15-May-24	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

SS 02 0.5'
H242622-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	16.0		16.0	mg/kg	4	4051516	HM	15-May-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4051505	MS	15-May-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4051505	MS	15-May-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.2 %		71.5-134	4051505	MS	15-May-24	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			93.8 %		48.2-134	4051427	MS	15-May-24	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			93.0 %		49.1-148	4051427	MS	15-May-24	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

SS 03 0.5'
H242622-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	4051539	AC	15-May-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4051505	MS	15-May-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4051505	MS	15-May-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.8 %		71.5-134	4051505	MS	15-May-24	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4051427	MS	15-May-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			83.3 %		48.2-134	4051427	MS	15-May-24	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			80.3 %		49.1-148	4051427	MS	15-May-24	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

SS 04 0.5'
H242622-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	4051539	AC	15-May-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4051505	MS	15-May-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4051505	MS	15-May-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4051505	MS	15-May-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	97.3 %	71.5-134	4051505	MS	15-May-24	8021B
---------------------------------------	--------	----------	---------	----	-----------	-------

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4051427	MS	15-May-24	8015B
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4051427	MS	15-May-24	8015B
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4051427	MS	15-May-24	8015B

Surrogate: 1-Chlorooctane	83.4 %	48.2-134	4051427	MS	15-May-24	8015B
---------------------------	--------	----------	---------	----	-----------	-------

Surrogate: 1-Chlorooctadecane	81.5 %	49.1-148	4051427	MS	15-May-24	8015B
-------------------------------	--------	----------	---------	----	-----------	-------

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch 4051516 - 1:4 DI Water**Blank (4051516-BLK1)**

Prepared & Analyzed: 15-May-24

Chloride	ND	16.0	mg/kg						
----------	----	------	-------	--	--	--	--	--	--

LCS (4051516-BS1)

Prepared & Analyzed: 15-May-24

Chloride	400	16.0	mg/kg	400	100	80-120			
----------	-----	------	-------	-----	-----	--------	--	--	--

LCS Dup (4051516-BSD1)

Prepared & Analyzed: 15-May-24

Chloride	448	16.0	mg/kg	400	112	80-120	11.3	20	
----------	-----	------	-------	-----	-----	--------	------	----	--

Batch 4051539 - 1:4 DI Water**Blank (4051539-BLK1)**

Prepared & Analyzed: 15-May-24

Chloride	ND	16.0	mg/kg						
----------	----	------	-------	--	--	--	--	--	--

LCS (4051539-BS1)

Prepared & Analyzed: 15-May-24

Chloride	448	16.0	mg/kg	400	112	80-120			
----------	-----	------	-------	-----	-----	--------	--	--	--

LCS Dup (4051539-BSD1)

Prepared & Analyzed: 15-May-24

Chloride	448	16.0	mg/kg	400	112	80-120	0.00	20	
----------	-----	------	-------	-----	-----	--------	------	----	--

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 4051505 - Volatiles**Blank (4051505-BLK1)**

Prepared & Analyzed: 15-May-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		96.8	71.5-134			

LCS (4051505-BS1)

Prepared & Analyzed: 15-May-24

Benzene	1.91	0.050	mg/kg	2.00		95.4	82.8-130			
Toluene	1.90	0.050	mg/kg	2.00		95.2	86-128			
Ethylbenzene	1.96	0.050	mg/kg	2.00		98.0	85.9-128			
m,p-Xylene	3.82	0.100	mg/kg	4.00		95.4	89-129			
o-Xylene	1.90	0.050	mg/kg	2.00		95.0	86.1-125			
Total Xylenes	5.72	0.150	mg/kg	6.00		95.3	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0501		mg/kg	0.0500		100	71.5-134			

LCS Dup (4051505-BSD1)

Prepared & Analyzed: 15-May-24

Benzene	1.93	0.050	mg/kg	2.00		96.4	82.8-130	0.989	15.8	
Toluene	1.92	0.050	mg/kg	2.00		95.8	86-128	0.595	15.9	
Ethylbenzene	1.96	0.050	mg/kg	2.00		97.8	85.9-128	0.260	16	
m,p-Xylene	3.79	0.100	mg/kg	4.00		94.9	89-129	0.559	16.2	
o-Xylene	1.90	0.050	mg/kg	2.00		95.1	86.1-125	0.159	16.7	
Total Xylenes	5.70	0.150	mg/kg	6.00		95.0	88.2-128	0.319	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0489		mg/kg	0.0500		97.9	71.5-134			

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 or 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 damage 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, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU BIG SINKS 02-25-30 STATE B/
Project Number: 03C1558356
Project Manager: BEN BELILL
Fax To:

Reported:
21-May-24 16:16

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch 4051427 - General Prep - Organics**Blank (4051427-BLK1)**

Prepared: 14-May-24 Analyzed: 15-May-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	44.9		mg/kg	50.0		89.9	48.2-134		
Surrogate: 1-Chlorooctadecane	43.0		mg/kg	50.0		86.0	49.1-148		

LCS (4051427-BS1)

Prepared: 14-May-24 Analyzed: 15-May-24

GRO C6-C10	194	10.0	mg/kg	200		97.0	66.4-123		
DRO >C10-C28	200	10.0	mg/kg	200		100	66.5-118		
Total TPH C6-C28	394	10.0	mg/kg	400		98.6	77.6-123		
Surrogate: 1-Chlorooctane	47.9		mg/kg	50.0		95.8	48.2-134		
Surrogate: 1-Chlorooctadecane	46.4		mg/kg	50.0		92.8	49.1-148		

LCS Dup (4051427-BS1)

Prepared: 14-May-24 Analyzed: 15-May-24

GRO C6-C10	193	10.0	mg/kg	200		96.4	66.4-123	0.609	17.7
DRO >C10-C28	190	10.0	mg/kg	200		94.8	66.5-118	5.50	21
Total TPH C6-C28	382	10.0	mg/kg	400		95.6	77.6-123	3.06	18.5
Surrogate: 1-Chlorooctane	52.7		mg/kg	50.0		105	48.2-134		
Surrogate: 1-Chlorooctadecane	51.2		mg/kg	50.0		102	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 or 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 damage 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

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

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 or 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 damage 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".

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 Bell

Address: 601 N Marientfeld Street, Suite 400

City: Midland State: TX Zip: 79701

Phone #: 989-854-0852 Fax #:

Project #: 0301558354 Project Owner: XTO

Project Name: PUA Big 5mbs 82530 State Battery

Project Location: 32,153052, -103,849448

Sampler Name: Tracy Hillard

BILL TO

P.O. #:

Company: XTO Energy

Attn: Amy Ruth

Address: 314 Greene St

City: Carlsbad

State: NM Zip: 88220

Phone #: 432.661.0571

Fax #:

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		DATE	TIME	SAMPLING				
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			TPH 8015	BTEX 8021	Chloride 4500		
1	BH01	0.5	G	1			X					5-13-24	1133	X	X	X		
2	BH01A	1											1200					
3	SS01	0.5											1205					
4	SS02	0.5											1210					
5	SS03	0.5											1215					
6	SS04	0.5											1220					

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:

Date: 5-14-24 Received By:

Relinquished By:

Date: 5-14-24 Received By:

Delivered By: (Circle One)

Observed Temp.: 33°C

Sample Condition

CHECKED BY: (Initials)

Sampler - UPS - Bus - Other:

Corrected Temp.: °C

Cool Intact

Yes

FORM-006 R-3.2 10/07/21

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

All Results are emailed. Please provide Email address:

BBell@ensolum.com, TMorrissey@ensolum.com, THillard@ensolum.com

REMARKS: * Customer requested Name Change. 40.5/20/24

Cost center: 1081001001

Turnaround Time: Standard ☒ Rush ☐

Thermometer ID #49 #140

Correction Factor: 0.00 5/14/24

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 381118

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 381118
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2411435836
Incident Name	NAPP2411435836 PLU BIG SINKS 02-25-30 STATE BATTERY @ 0
Incident Type	Release Other
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	PLU Big Sinks 02-25-30 State Battery
Date Release Discovered	04/21/2024
Surface Owner	State

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: Normal Operations Valve Crude Oil Released: 6 BBL Recovered: 6 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Normal Operations Valve Produced Water Released: 54 BBL Recovered: 54 BBL Lost: 0 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.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 381118

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	381118
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Initial Response

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

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

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

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

I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 04/26/2024
--	--

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 3

Action 381118

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	381118
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Site Characterization	
<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	U.S. Geological Survey
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 300 and 500 (ft.)
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 300 and 500 (ft.)
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 200 and 300 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<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
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	768
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
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	04/25/2024
On what date will (or did) the final sampling or liner inspection occur	05/13/2024
On what date will (or was) the remediation complete(d)	05/13/2024
What is the estimated surface area (in square feet) that will be reclaimed	3000
What is the estimated volume (in cubic yards) that will be reclaimed	112
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
<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>	

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 4

Action 381118

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 381118
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<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>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	<i>Not answered.</i>
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	<i>Yes</i>
Other Non-listed Remedial Process. Please specify	No impacted soil identified; no soil was removed.
<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: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 09/05/2024
<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>	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 5

Action 381118

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	381118
	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

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 6

Action 381118

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	381118
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	342565
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/13/2024
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	0
What was the total volume (in cubic yards) reclaimed	0
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 hole in the liner to assess for the presence or absence of impacted soil resulting from the April 21, 2024 crude oil and produced water release. Two delineation soil samples were collected from borehole, at depths of approximately 0.5 feet and 1-foot bgs, and four delineation soil samples (SS01 through SS04) were collected at a depth of 0.5 feet bgs around the lined containment. Laboratory analytical results for all delineation soil samples collected indicated all COC concentrations were compliant with the Closure Criteria. The release was contained laterally by the lined containment walls and is delineated vertically through laboratory analytical results from BH01. All release fluids were recovered during initial response activities. The release remained on the well pad and within the containment area that is currently in operation for oil and gas production purposes. As such, the release area is not expected to be reclaimed until the production equipment within the lined containment is decommissioned and the pad is ready to be reclaimed. The Reclamation Plan for this release will default to the NMSLO-approved Reclamation Plan for the well pad per 19.2.100.67 NMAC.

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: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 09/05/2024
--	--

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 7

Action 381118

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 381118
	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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 381118

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	381118
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	9/13/2024