ENSOLUM

March 3, 2025

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

Re: Closure Request
Shanghai
Incident Number nAPP2434453289
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, delineation, and soil sampling activities at the Shanghai (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a produced water release within a lined containment due to equipment failure. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this *Closure Request*, describing assessment and delineation activities that have occurred and requesting no further action and remediation closure approval for Incident Number nAPP2434453289.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit F, Section 22, Township 25 South, Range 29 East in Eddy County, New Mexico (32.118675°, -103.974825°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On December 2, 2024, failure of a produced water pump resulted in the release of 100 barrels (bbls) of produced water into a lined containment. A vacuum truck was dispatched to the Site to recover free-standing fluid, and all released fluid was recovered. The pump was repaired and returned to service. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Notification of Release (NOR) and an Initial C-141 Application (C-141) on December 9, 2024. The release was assigned Incident Number nAPP2434453289.

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 between 51 feet and 100 feet below ground surface (bgs) based on the nearest groundwater well data. All nearby United State Geological Survey (USGS) and New Mexico Office of the State Engineer (NMOSE) wells indicate depth to groundwater is greater than 100 feet bgs. The nearest depth to groundwater data is USGS well 320719103584601 located 0.29 miles northwest

of the Site with a recorded depth to groundwater of 165.05 feet bgs most recently measured on January 14, 1977. After pedestrian survey and investigation, the well is unable to be gauged for a more recent depth to groundwater measurement. However, 0.6 miles to the north of the Site, USGS well 320739103584201 was gauged with an oil/water interface probe on October 9, 2024 and had a depth to groundwater measurement of 141.98 feet bgs. East of the USGS well, a livestock well permitted by the NMOSE is documented to exist approximately 0.66 miles north of the Site and depth to water is documented at 60 feet bgs. In addition, 1.2 miles to the southeast of the Site, a soil boring drilled in July 2021 for regional depth to groundwater determination (C-4558) was drilled to a total depth of 109 feet bgs with no water encountered after 72 hours. Based on the regional depth to groundwater data, a variance request of the NMOCD preference of depth to groundwater data be within 25 years and 0.5 miles of the Site was submitted on February 21, 2025. The NMOCD approved the Variance for depth to groundwater for 51 feet to 100 feet bgs on February 27, 2025. All referenced well logs and the NMOCD variance approval are included in Appendix A. All depth to groundwater well are depicted on Figure 1.

The closest continuously flowing or significant watercourse is a dry wash located 1,450 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Based on the results of the Site Characterization, and approval of the Variance request, 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: 10,000 mg/kg

LINER INTEGRITY INSPECTION ACTIVITIES

After a review of the C-141, internal documents, and initial release photographs, it was confirmed the release occurred within the lined containment. The lined containment was cleaned of all debris, power washed and a 48-hour advance notice of the liner inspection was submitted to the NMOCD on December 11, 2024. On December 18, 2024, the lined containment was inspected by XTO personnel and was determined to contain a tear.

DELINEATION SOIL SAMPLING ACTIVITIES

Beginning on January 3, 2025, Ensolum personnel were at the Site to oversee delineation activities. One borehole, BH01, was advanced via hand auger and core drill to a depth of 8-feet bgs in the location of the tear in the liner. Four delineation boreholes, SS01 through SS04, were advanced via core drill around the lined containment to a maximum depth of 8 feet bgs to assess the lateral extent of the release. Due to competent formation, core drill refusal was reached at depths ranging from 3 feet bgs to 8 feet bgs. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Field screening results and observations of the soil samples from the boreholes were logged on a lithologic/soil sampling logs, which are included in Appendix B. The delineation soil sample locations

were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Appendix C.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500.

LABORATORY ANALYTICAL RESULTS

Delineation soil samples, SS01 through SS04 collected from a depths ranging from 0.5 feet bgs to a maximum depth of 8 feet bgs indicated all COCs were in compliance with Site Closure Criteria and reclamation requirement, successfully defining the lateral extent of the release. Laboratory analytical results for delineation soil samples BH01 through BH01D, collected at depths ranging from 0.5 feet to 8 feet bgs, indicated all COCs were in compliance with Site Closure Criteria. In addition, delineation soil sample BH01D collected at 8 feet bgs indicated all COCs were compliant with the most stringent Closure Criteria successfully defining the vertical extent of the release. Laboratory analytical results are summarized in Table 1 and the laboratory analytical reports are included in Appendix D.

CLOSURE REQUEST

Liner integrity inspection and delineation activities were conducted at the Site to address the December 2, 2024, release of produced water. Laboratory analytical results for the delineation soil samples, collected in the liner tear and surrounding the lined containment, indicated that all COC concentrations were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. XTO has patched the tear in the liner following completion of delineation activities. An estimated 9,044 cubic yards of waste-containing soil remains below the 61,050 square foot lined containment, assuming it encompasses the entire area below the lined containment. The waste-containing soil will be addressed at pad abandonment.

Delineation of potential impacts at this Site determined no soil that exceeded Site Closure Criteria was located below the lined containment. Depth to groundwater has been estimated to be between 51 feet and 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number nAPP2434453289.

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

Sincerely,
Ensolum, LLC

Kim Thomason
Senior Technician

Tacoma Morrissey
Associate Principal

cc: Dale Woodall, XTO
Kaylan Dirkx, XTO
BLM

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 Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation

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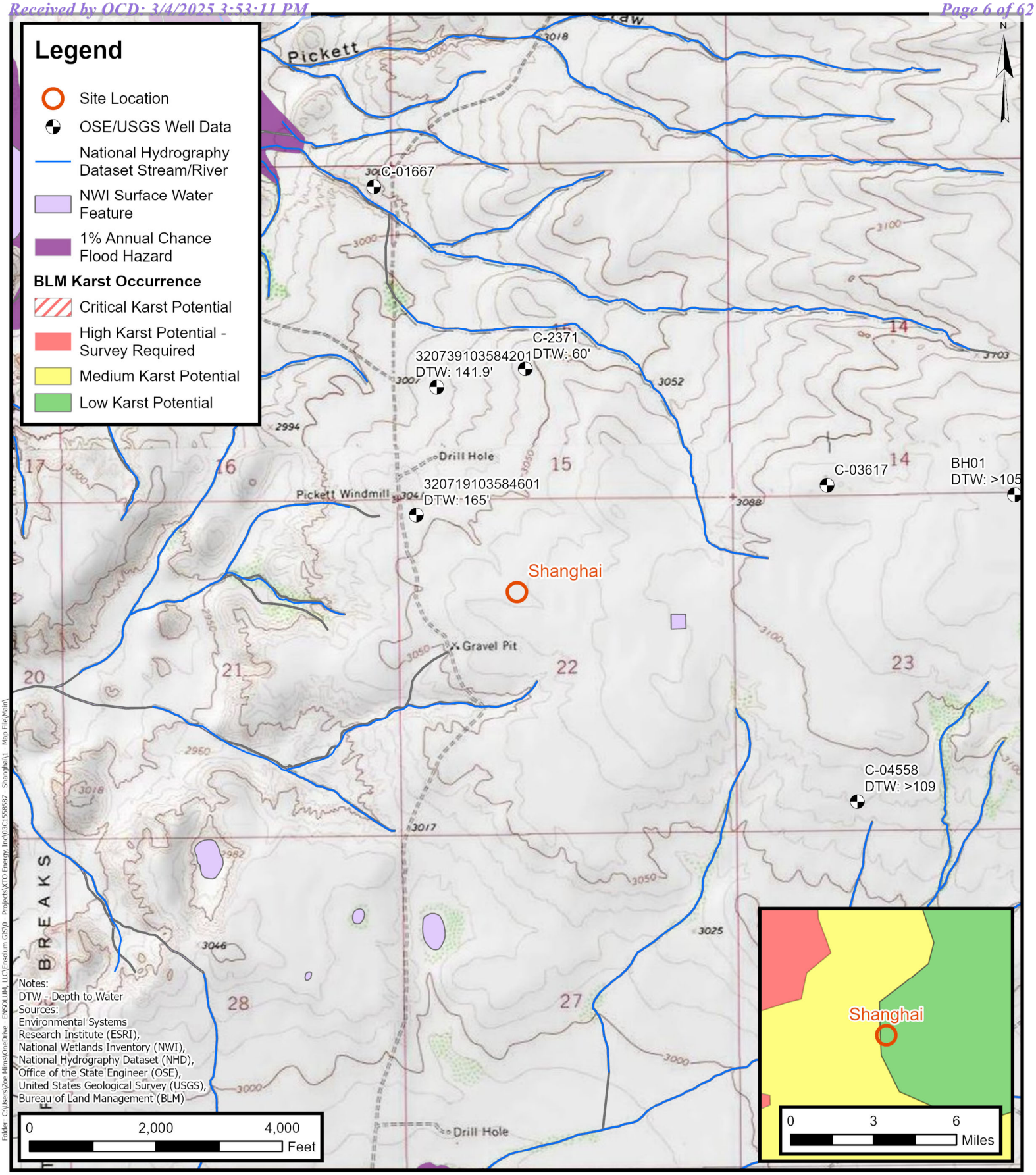
FIGURES



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Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
Shanghai
Incident Number: nAPP2434453289
Unit F, Sec. 22, T 25S, R 29E
Eddy County, New Mexico

FIGURE 1

Folder: C:\Users\Zoe Mims\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558587 - Shanghai\1 - Map File\Main\

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Delineation Soil Sample Locations

XTO Energy, Inc
Shanghai
Incident Number: nAPP2434453289
Unit F, Sec. 22, T 25S, R 29E
Eddy County, New Mexico

FIGURE 2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Shanghai
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**	**10,000**
Delineation Soil Samples										
SS01	01/15/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS01A	01/15/2025	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS02	01/15/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS02A	01/15/2025	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
SS03	01/16/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
SS03A	01/16/2025	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SS04	01/16/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
SS04A	01/16/2025	8	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH01	01/03/2025	0.5	<0.050	<0.300	<10.0	22.6	<10.0	22.6	22.6	6,240
BH01A	01/03/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,240
BH01B	01/03/2025	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,400
BH01C	01/15/2025	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,080
BH01D	01/15/2025	8	<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 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

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APPENDIX A

Referenced Well Records

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320719103584601

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320719103584601 25S.29E.16.44444

Eddy County, New Mexico
Latitude 32°07'19", Longitude 103°58'46" NAD27
Land-surface elevation 3,042 feet above NAVD88
The depth of the well is 200 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) 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 of measurement	? Water-level approval status
1958-08-19		D	62610		2870.28	NGVD29	1	Z			A
1958-08-19		D	62611		2871.86	NAVD88	1	Z			A
1958-08-19		D	72019	170.14			1	Z			A
1958-10-23		D	62610		2869.62	NGVD29	1	Z			A
1958-10-23		D	62611		2871.20	NAVD88	1	Z			A
1958-10-23		D	72019	170.80			1	Z			A
1975-12-09		D	62610		2875.47	NGVD29	1	S			A
1975-12-09		D	62611		2877.05	NAVD88	1	S			A
1975-12-09		D	72019	164.95			1	S			A
1976-01-16		D	62610		2873.30	NGVD29	1	S			A
1976-01-16		D	62611		2874.88	NAVD88	1	S			A
1976-01-16		D	72019	167.12			1	S			A
1977-01-14		D	62610		2875.37	NGVD29	1	S			A
1977-01-14		D	62611		2876.95	NAVD88	1	S			A
1977-01-14		D	72019	165.05			1	S			A

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

Section	Code	Description
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions or Comments
Help
Data Tips
Explanation of terms
Subscribe for system changes

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: 2024-12-11 13:50:50 EST
0.32 0.23 nadww01

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- 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 New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320739103584201

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320739103584201 25S.29E.15.31134

Eddy County, New Mexico
Latitude 32°07'39", Longitude 103°58'42" NAD27
Land-surface elevation 3,017 feet above NAVD88
The depth of the well is 192 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) 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 measur
1983-02-01		D	62610		2875.02	NGVD29	1	Z		
1983-02-01		D	62611		2876.60	NAVD88	1	Z		
1983-02-01		D	72019	140.40			1	Z		
1987-10-20		D	62610		2875.09	NGVD29	1	Z		
1987-10-20		D	62611		2876.67	NAVD88	1	Z		
1987-10-20		D	72019	140.33			1	Z		
1992-11-06		D	62610		2874.61	NGVD29	1	S		
1992-11-06		D	62611		2876.19	NAVD88	1	S		
1992-11-06		D	72019	140.81			1	S		
1998-01-29		D	62610		2874.52	NGVD29	1	S		
1998-01-29		D	62611		2876.10	NAVD88	1	S		
1998-01-29		D	72019	140.90			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
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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2024-06-10 14:25:55 EDT
0.28 0.25 nadww01

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WATER LEVEL AND PRODUCT THICKNESS FORM

Project No.: 03C1558519 Page 1 of 1
Date: 10/9/24
By: David McInnis

WELL	TOC ELEVATION	TIME	PRODUCT LEVEL (feet below top of casing)	WATER LEVEL (feet below top of casing)	PRODUCT THICKNESS	CORRECTED ELEVATION	COMMENTS
USGS 320739103584201		1430	NA	141.98'	NA		

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DII AUG 17 2021 PM 0:21

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4558

WELL OWNER NAME(S)	PHONE (OPTIONAL)
XTO Energy (Kyle Littrell)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6401 Holiday Hill Dr.	Midland	TX	79707

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	6	33.90	N
	LONGITUDE	103	57	27.03	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

SE SW Sec. 23 T25S R29E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
07/21/2021	07/21/2021	temporary well material	109	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	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)
0	109	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4558	POD NO. 1	TRN NO. 699798	
LOCATION 25S-29E-23 343		WELL TAG ID NO.	PAGE 1 OF 2

OSE DIT AUG 17 2021 PM3:21

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	5	5	Calichem moderate consolidation, Off White	Y ✓ N	
5	23	18	Sand, poorly graded, some silt, Light Brown	Y ✓ N	
23	39	16	Sand, Fine-medium grain, poorly graded, some gravel, Light Brown	Y ✓ N	
39	44	5	Sand, Fine-medium grain, poorly graded, some gravel and clay, Light Brown	Y ✓ N	
44	65	21	Sand, Fine-medium grain, poorly graded, Light Brown	Y ✓ N	
65	70	5	Clay Sand, poorly graded, Light Brown, moist	Y ✓ N	
70	108	28	Sand, Fine-medium grain, poorly graded, Light Brown	Y ✓ N	
108	109	1	Sandstone, poorly sorted, interbedded with clay , moist	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Carmelo Trevino, Cameron Pruitt

6. 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 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 08/16/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4558	POD NO. 1	TRN NO. 699798	
LOCATION 25S-29E-23 343		WELL TAG ID NO.	PAGE 2 OF 2

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

465299
TM 194253

'95 MAR 16 AM 11 10
STATE ENGINEER OFFICE
SANTA FE NEW MEXICO

Section 1. GENERAL INFORMATION

(A) Owner of well Johnny Reid Owner's Well No. 2
Street or Post Office Address 245 E. London Rd.
City and State Loving, N.M. 88256

Well was drilled under Permit No. C-2371 and is located in the:

a. NE ¼ SW ¼ ¼ ¼ of Section 15 Township 25S Range 29E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in Eddy County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Campbell Drilling License No. WD-1259

Address 10 W. Blevins Rd. Artesia, N.M. 88210

Drilling Began 1-12-95 Completed 1-24-95 Type tools cable Size of hole 10 1/2 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 200 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
162	200	638	Conglomerated rock or sand	20 GPM +

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
7	23		1 1/2	200		collar	140	200

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
			none		

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received 02-01-95

Quad _____ FWL _____ FSL _____

File No. C-2371 Use Stock Location No. 25.29.15.32131

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	Top Soil
3	42	39	Gravel Rock & very little shale
42	161	119	Sandstone (solid)
161	200	39	Conglomerated rock & some sand (water bearing)

Section 7. REMARKS AND ADDITIONAL INFORMATION

STATE ENGINEER OFFICE
ROSWELL NEW MEXICO
'95 FEB 1 AM 11 45

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Mike Campbell
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1 and Section 5 need be completed.

Outlook

RE: [EXTERNAL] XTO - Variance Request - Shanghai - nAPP2434453289

From Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Date Thu 2/27/2025 3:47 PM
To Brown, Colton S <colton.s.brown@exxonmobil.com>
Cc Dirkx, Kaylan <kaylan.dirkx@exxonmobil.com>; robert.d.woodall@exxonmobil.com <robert.d.woodall@exxonmobil.com>; ashley.a.mcafee@exxonmobil.com <ashley.a.mcafee@exxonmobil.com>; Tacoma Morrissey <tmorrissey@ensolum.com>; Ben Belill <bbelill@ensolum.com>; Tracy Hillard <thillard@ensolum.com>

[**EXTERNAL EMAIL**]

Good Afternoon Colton,

The variance request for depth to groundwater determination is approved for 51 feet- 100 feet. Due to well number 02371 showing depth to water at 60' (.6 mi north of the incident location), a variance request for greater than 100' can not be approved.

Please let me know if you have any questions,
Thanks,
Scott

Scott Rodgers ● Environmental Specialist – Adv.
Environmental Bureau
EMNRD - Oil Conservation Division
5200 Oakland NE, Suite B | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, February 24, 2025 7:10 AM
To: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] XTO - Variance Request - Shanghai - nAPP2434453289

From: Brown, Colton S <colton.s.brown@exxonmobil.com>
Sent: Friday, February 21, 2025 11:44 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Dirkx, Kaylan <kaylan.dirkx@exxonmobil.com>; Woodall, Robert D <robert.d.woodall@exxonmobil.com>; Mcafee, Ashley A <ashley.a.mcafee@exxonmobil.com>; Tacoma Morrissey <tmorrissey@ensolum.com>; Ben Belill

<bbelill@ensolum.com>; Tracy Hillard <thillard@ensolum.com>
Subject: [EXTERNAL] XTO - Variance Request - Shanghai - nAPP2434453289

XTO is requesting a variance of the depth to ground water determination recommendations for a recent spill at Shanghai (Site)– Incident Number nAPP2434453289 (32.118675, -103.974825). On December 2, 2024, failure of a produced water pump resulted in the release of 100 barrels (bbls) of produced water into a lined containment. A vacuum truck was dispatched to the Site to recover free-standing fluid, and all released fluid was recovered. XTO has vertically and laterally delineated the release per NMAC 19.15.29.

Attached is depth to groundwater documentation from the area surrounding the lined containment. All nearby USGS and NMOSE wells indicate depth to groundwater is greater than 100 feet bgs. The nearest depth to groundwater data is USGS well 320719103584601 located 0.29 miles northwest of the lined containment with a recorded depth to groundwater of 165.05 feet bgs most recently measured on January 14, 1977. After pedestrian survey and investigation, the well is unable to be gauged for a more recent depth to groundwater measurement. However, 0.6 miles to the north of the lined containment, USGS well 320739103584201 was gauged with an oil/water interface probe on October 9, 2024 and had a depth to groundwater measurement of 141.98 feet bgs. In addition, 1.2 miles to the southeast of the Site, a soil boring drilled in July 2021 for regional depth to groundwater determination (C-4558) was drilled to a total depth of 109 feet bgs with no water encountered after 72 hours. All referenced well logs are attached in Appendix A and depicted on Figure 1.

According to the Site Characterization, completed in accordance to 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), the Site is 1,423 feet south from a seasonal dry wash, though a desktop review of the dry wash determined it to be discontinuous and not classified as a significant watercourse. The closest significant watercourse is a dry wash located 4,108 feet to the southeast. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). All potential Site receptors are identified on Figure 1.
Based on the presented additional depth to groundwater data provided - data within the last 4 months and located 0.6 miles from the Site- and a lack of nearby sensitive receptors, XTO requests a Variance of the NMOCD preference to have depth to water data be within 0.5 miles of the Site. XTO request approval the application of Closure Criteria reflective of groundwater depths of greater than 100 feet bgs, as demonstrated by the regional depth to groundwater data.

Thank you,

Colton Brown
Spill Coordinator

ExxonMobil Upstream Company
3104 E. Greene St.
Carlsbad, NM 88220
Cell Phone: 575-988-2390
colton.s.brown@exxonmobil.com

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: BH01	Date: 01/15/2025
	Site Name: Shanghai	
	Incident Number: nAPP2434453289	
	Job Number: 03C1558587	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: US	Method: Core drill
Coordinates: 32.118579, -103.975802	Hole Diameter: 2"	Total Depth: 8'

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. A 40% correction factor is included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	8,607	0.0	N	BH01	0.5		CCHE	CALICHE, tan w/silt, sand and gravel. No stain or odor.
D	8,607	0.0	N	BH01A	1	1		
D	8,607	0.7	N	BH01B	2	2		
W	5,886	1.8	N	BH01C	3	3		No odor.
M	1,713	3.4	N		4	4	CCHE	CALICHE, coarse grain sand, poorly graded, w/silt, tan. No stain or odor.
W	1,505	3.2	N		5	5	CCHE	CALICHE, medium grain tan sand, poorly graded w/silt. No stain or odor.
M	840	2.7	N		6	6		
W	515	1.6	N		7	7	CCHE	CALICHE, coarse grain tan sand, w/silt, poorly graded. No stain or odor.
W	<164.2	2.9	N	BH01D	8	8	SP	SAND, find brown sand, poorly graded, w/little silt, non-cohesive. No stain or odor.

Total depth at 8' bgs.

ENSOLUM

	Sample Name: SS01	Date: 01/15/2025
	Site Name: Shanghai	
	Incident Number: nAPP2434453289	
	Job Number: 03C1558587	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: US	Method: Core drill
Coordinates: 32.118458, -103.975779	Hole Diameter: 2"	Total Depth: 8'

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. A 40% correction factor is included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	162.4	2.6	N	SS01	0.5	0	CCHE	CALICHE, poorly graded tan sand, fine to medium grain, w/silt. No stain or odor.
M	<162	3.7	N		1	1		
M	<162	2.2	N		2	2		
M	<162	2.5	N	SS01A	3	3		

Total depth @ 3' bgs. - Refusal

ENSOLUM

	Sample Name: SS02	Date: 01/15/2025
	Site Name: Shanghai	
	Incident Number: nAPP2434453289	
	Job Number: 03C1558587	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: US	Method: Core drill
Coordinates: 32.118805, -103.975315	Hole Diameter: 2"	Total Depth: 8'

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. A 40% correction factor is included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<162	0.7	N	SS02	0.5	0	CCHE	CALICHE, poorly graded tan sand, w/silt, fine to medium grain. No stain or odor.
M	<162	1.8	N		1	1		
W	<162	0.0	N		2	2	SP	SAND, tan sand w/silt, fine grain, poorly graded. No stain or odor.
M	<162	0.0	N		3	3		
M	<162	1.2	N		4	4		
W	<162	1.2	N		5	5	SW	SAND, well graded tan sand, w/silt, fine to coarse grain. No stain or odor.
W	<162	3.2	N		6	6	SP	SAND, tan sand, poorly graded, fine grain, w/ silt. No stain or odor.
W	<162	3.2	N	SS02A	7	7		

Total depth at 7' bgs. - Refusal

ENSOLUM

	Sample Name: SS03	Date: 01/16/2025
	Site Name: Shanghai	
	Incident Number: nAPP2434453289	
	Job Number: 03C1558587	
LITHOLOGIC / SOIL SAMPLING LOG	JDB	Method: Core drill
Coordinates: 32.119136, -103.975925	Hole Diameter: 2"	Total Depth: 5'

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. A 40% correction factor is included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	196	1.7	N	SS03	0.5	0	CCHE	CALICHE, poorly graded sand, w/gravel and and some silt, medium grain, trace clay. No stain or odor.
D	196	1.6	N		1	1	SP-SM	SAND, poorly graded, medium grain with silt, light brown. No stain or odor.
D	<162	1.8	N		2	2		
D	<162	0	N		3	3		
D	<162	1.2	N		4	4		
D	<162	1.2	N	SS03A	5	5		

Total depth at 5' bgs. - Refusal

ENSOLUM

Sample Name: SS04	Date: 01/16/2025	
Site Name: Shanghai		
Incident Number: nAPP2434453289		
Job Number: 03C1558587		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Core drill
Coordinates: 32.118867, -103.976430	Hole Diameter: 2"	Total Depth: 8'

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. A 40% correction factor is included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<162	0.3	N	SS04	0.5	0	CCHE	CALICHE, poorly graded sand, some silt, medium grain, pale beige, trace clay. No stain or odor.
D	196	0.3	N		1	1	SP-SM	SAND, poorly graded, medium grain with silt, No stain or odor.
D	<162	1	N		2	2		
D	<162	0.6	N		3	3		
D	<162	0.6	N		4	4		
D	<162	0.5	N		5	5	SM	SAND, poorly graded light brown, w/silt, trace clay medium grain. No stain or odor.
D	<162	0.6	N		6	6		
D	<162	0.6	N	SS02A	7	7		
D	<162	0.8	N	SS04A	8	8		
								Total depth at 8' bgs.

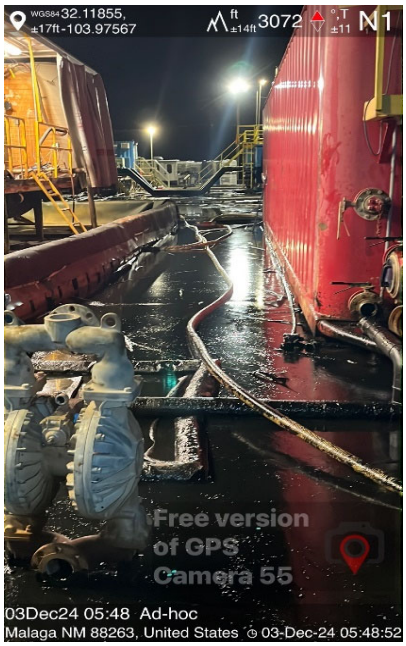
ENSOLUM

APPENDIX C

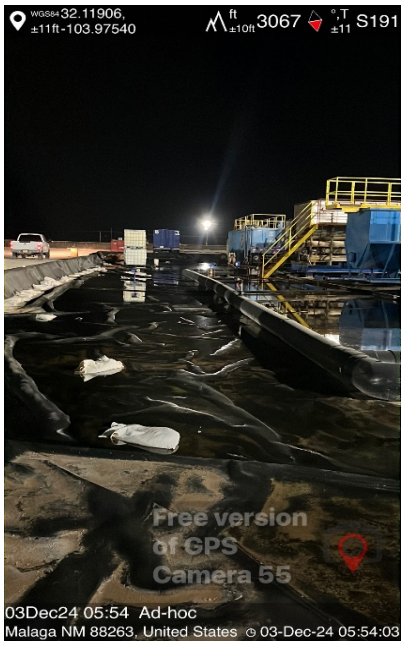
Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc
Shanghai
nAPP2434453289



Photograph: 1 Date: 12/3/2024
Description: Release in containment
View: North



Photograph: 2 Date: 12/3/2024
Description: Release in containment
View: South

Photograph: 3 Date: 12/18/2024
Description: Liner Inspection Activities
View: Northeast

Photograph: 4 Date: 12/18/2024
Description: Tear observed in the liner
View: Direct

ENSOLUM

Photographic Log
XTO Energy, Inc
Shanghai
nAPP2434453289

Photograph: 1 Date: 01/03/2025
Description: Delineation activities
View: Northwest

Photograph: 2 Date: 01/16/2025
Description: Patched Liner
View: Direct

Photograph: 3 Date: 01/16/2025
Description: Delineation activities
View: South

Photograph: 4 Date: 01/16/2025
Description: Delineation activities
View: Southeast

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

January 08, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SHANGHAI

Enclosed are the results of analyses for samples received by the laboratory on 01/06/25 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.

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/06/2025	Sampling Date:	01/03/2025
Reported:	01/08/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	32.118675, -103.974825		

Sample ID: BH 01 .5' (H250029-01)

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	01/06/2025	ND	1.94	97.2	2.00	10.3	QR-03
Toluene*	<0.050	0.050	01/06/2025	ND	1.99	99.3	2.00	8.09	QR-03
Ethylbenzene*	<0.050	0.050	01/06/2025	ND	2.01	100	2.00	8.05	QR-03
Total Xylenes*	<0.150	0.150	01/06/2025	ND	6.04	101	6.00	6.18	QR-03
Total BTEX	<0.300	0.300	01/06/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *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	**6240**	16.0	01/06/2025	ND	448	112	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	01/06/2025	ND	199	99.4	200	2.18	
DRO >C10-C28*	**22.6**	10.0	01/06/2025	ND	179	89.4	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	01/06/2025	ND					

Surrogate: 1-Chlorooctane *81.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/06/2025	Sampling Date:	01/03/2025
Reported:	01/08/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	32.118675, -103.974825		

Sample ID: BH 01A 1' (H250029-02)

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	01/06/2025	ND	1.94	97.2	2.00	10.3	
Toluene*	<0.050	0.050	01/06/2025	ND	1.99	99.3	2.00	8.09	
Ethylbenzene*	<0.050	0.050	01/06/2025	ND	2.01	100	2.00	8.05	
Total Xylenes*	<0.150	0.150	01/06/2025	ND	6.04	101	6.00	6.18	
Total BTEX	<0.300	0.300	01/06/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *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	**6240**	16.0	01/06/2025	ND	448	112	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	01/06/2025	ND	199	99.4	200	2.18	
DRO >C10-C28*	<10.0	10.0	01/06/2025	ND	179	89.4	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	01/06/2025	ND					

Surrogate: 1-Chlorooctane *83.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/06/2025	Sampling Date:	01/03/2025
Reported:	01/08/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	32.118675, -103.974825		

Sample ID: BH 01B 2' (H250029-03)

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	01/06/2025	ND	1.94	97.2	2.00	10.3	
Toluene*	<0.050	0.050	01/06/2025	ND	1.99	99.3	2.00	8.09	
Ethylbenzene*	<0.050	0.050	01/06/2025	ND	2.01	100	2.00	8.05	
Total Xylenes*	<0.150	0.150	01/06/2025	ND	6.04	101	6.00	6.18	
Total BTEX	<0.300	0.300	01/06/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *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	**6400**	16.0	01/06/2025	ND	448	112	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	01/06/2025	ND	199	99.4	200	2.18	
DRO >C10-C28*	<10.0	10.0	01/06/2025	ND	179	89.4	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	01/06/2025	ND					

Surrogate: 1-Chlorooctane *85.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tracy Hillard	**P.O. #:**
Address: 3122 National Parks Hwy	**Company:** XTO Energy Inc.
City: Carlsbad **State:** NM **Zip:** 88220	**Attn:** Colton Brown
Phone #: 575-937-3906 **Fax #:**	**Address:** 3104 E. Green St.
Project #: 03C1558587 **Project Owner:** XTO	**City:** Carlsbad
Project Name: Shanghai	**State:** NM **Zip:** 88220
Project Location: 32.118675,-103.974825	**Phone #:**
Sampler Name: Jesse Dorman	**Fax #:**

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	CHLORIDE
H250077																		
1	BH01	.5'	G	1			X					X		11/3/25	910	✓	✓	✓
2	BH01A	1													915			
3	BH01B	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	919	↓	↓	↓
		17																

Relinquished By:	**Date:** 11-6-25	**Received By:**	
	Time: 1130		
Relinquished By:	**Date:**	**Received By:**	
	Time:		

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

All Results are emailed. Please provide Email address: Thillard@ensolum.com
BBelilll@ensolum.com TMorrissey@ensolum.com, kthomason@ensolum.com

REMARKS: Cost Center: Incident ID: nAPP2434453289
GFC Code 48604405

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.0 / Corrected Temp. °C 2.4	**Sample Condition** Cool: ☑Yes ☐No Intact: ☑Yes ☐No	**CHECKED BY: (Initials)**

Turnaround Time: Standard ☐ Rush ☑ 48hr

Bacteria (only) Sample Condition Cool: Yes ☐ No ☐ Intact: Yes ☐ No ☐ **Observed Temp. °C**

Thermometer ID #140 / #113 Correction Factor -0.6°C

Corrected Temp. °C

TR 11/6/25

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

January 17, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SHANGHAI

Enclosed are the results of analyses for samples received by the laboratory on 01/16/25 13:39.

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.

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/16/2025	Sampling Date:	01/15/2025
Reported:	01/17/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.118675, -103.974825		

Sample ID: BH 01C 3' (H250262-01)

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	01/17/2025	ND	2.11	106	2.00	3.04	
Toluene*	<0.050	0.050	01/17/2025	ND	2.13	107	2.00	2.68	
Ethylbenzene*	<0.050	0.050	01/17/2025	ND	2.18	109	2.00	5.74	
Total Xylenes*	<0.150	0.150	01/17/2025	ND	6.47	108	6.00	6.99	
Total BTEX	<0.300	0.300	01/17/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**6080**	16.0	01/17/2025	ND	416	104	400	3.77	QM-07

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	01/17/2025	ND	184	92.1	200	0.0934	
DRO >C10-C28*	<10.0	10.0	01/17/2025	ND	184	92.1	200	1.58	
EXT DRO >C28-C36	<10.0	10.0	01/17/2025	ND					

Surrogate: 1-Chlorooctane *87.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/16/2025	Sampling Date:	01/15/2025
Reported:	01/17/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.118675, -103.974825		

Sample ID: BH 01D 8' (H250262-02)

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	01/17/2025	ND	2.11	106	2.00	3.04	
Toluene*	<0.050	0.050	01/17/2025	ND	2.13	107	2.00	2.68	
Ethylbenzene*	<0.050	0.050	01/17/2025	ND	2.18	109	2.00	5.74	
Total Xylenes*	<0.150	0.150	01/17/2025	ND	6.47	108	6.00	6.99	
Total BTEX	<0.300	0.300	01/17/2025	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	**64.0**	16.0	01/17/2025	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	01/17/2025	ND	184	92.1	200	0.0934	
DRO >C10-C28*	<10.0	10.0	01/17/2025	ND	184	92.1	200	1.58	
EXT DRO >C28-C36	<10.0	10.0	01/17/2025	ND					

Surrogate: 1-Chlorooctane *86.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/16/2025	Sampling Date:	01/15/2025
Reported:	01/17/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 01 0.5' (H250262-03)

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	01/17/2025	ND	2.11	106	2.00	3.04	
Toluene*	<0.050	0.050	01/17/2025	ND	2.13	107	2.00	2.68	
Ethylbenzene*	<0.050	0.050	01/17/2025	ND	2.18	109	2.00	5.74	
Total Xylenes*	<0.150	0.150	01/17/2025	ND	6.47	108	6.00	6.99	
Total BTEX	<0.300	0.300	01/17/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	01/17/2025	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	01/17/2025	ND	184	92.1	200	0.0934	
DRO >C10-C28*	<10.0	10.0	01/17/2025	ND	184	92.1	200	1.58	
EXT DRO >C28-C36	<10.0	10.0	01/17/2025	ND					

Surrogate: 1-Chlorooctane *89.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/16/2025	Sampling Date:	01/15/2025
Reported:	01/17/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 01A 3' (H250262-04)

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	01/17/2025	ND	2.11	106	2.00	3.04	
Toluene*	<0.050	0.050	01/17/2025	ND	2.13	107	2.00	2.68	
Ethylbenzene*	<0.050	0.050	01/17/2025	ND	2.18	109	2.00	5.74	
Total Xylenes*	<0.150	0.150	01/17/2025	ND	6.47	108	6.00	6.99	
Total BTEX	<0.300	0.300	01/17/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**48.0**	16.0	01/17/2025	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	01/17/2025	ND	184	92.1	200	0.0934	
DRO >C10-C28*	<10.0	10.0	01/17/2025	ND	184	92.1	200	1.58	
EXT DRO >C28-C36	<10.0	10.0	01/17/2025	ND					

Surrogate: 1-Chlorooctane *95.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/16/2025	Sampling Date:	01/15/2025
Reported:	01/17/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 02 0.5' (H250262-05)

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	01/17/2025	ND	2.11	106	2.00	3.04	
Toluene*	<0.050	0.050	01/17/2025	ND	2.13	107	2.00	2.68	
Ethylbenzene*	<0.050	0.050	01/17/2025	ND	2.18	109	2.00	5.74	
Total Xylenes*	<0.150	0.150	01/17/2025	ND	6.47	108	6.00	6.99	
Total BTEX	<0.300	0.300	01/17/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *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	01/17/2025	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	01/17/2025	ND	192	96.0	200	4.66	
DRO >C10-C28*	<10.0	10.0	01/17/2025	ND	175	87.5	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	01/17/2025	ND					

Surrogate: 1-Chlorooctane *83.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/16/2025	Sampling Date:	01/15/2025
Reported:	01/17/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 02A 7' (H250262-06)

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	01/17/2025	ND	2.11	106	2.00	3.04	
Toluene*	<0.050	0.050	01/17/2025	ND	2.13	107	2.00	2.68	
Ethylbenzene*	<0.050	0.050	01/17/2025	ND	2.18	109	2.00	5.74	
Total Xylenes*	<0.150	0.150	01/17/2025	ND	6.47	108	6.00	6.99	
Total BTEX	<0.300	0.300	01/17/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**192**	16.0	01/17/2025	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	01/17/2025	ND	192	96.0	200	4.66	
DRO >C10-C28*	<10.0	10.0	01/17/2025	ND	175	87.5	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	01/17/2025	ND					

Surrogate: 1-Chlorooctane *73.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

Celey D. Keene, Lab Director/Quality Manager

1-1

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tracy Hillard	**P.O. #:**
Address: 601 N Marienfeld Street, Suite 400	**Company:** XTO Energy, Inc
City: Midland **State:** TX **Zip:** 79701	**Attn:** Colton Brown
Phone #: 575-937-3906 **Fax #:**	**Address:** 3104 E Greene St
Project #: 03C1558587 **Project Owner:** XTO Energy	**City:** Carlsbad
Project Name: Shanghai	**State:** NM **Zip:** 88220
Project Location: 32.118675,-103.974825	**Phone #:**
Sampler Name: Uriel Santillana	**Fax #:**

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH 8015	BTEX 8021	Chloride 4500
H250262																		
1	BH01C	3'	G	1			X					X		1/15/25	1146	X	X	X
2	BH01D	8'	G	1			X					X			1350			
3	SS01	0.5'													1413			
4	SS01A	3'													1445			
5	SS02	0.5'													1512			
6	SS02A	7'													1625			

Relinquished By:	**Date:** 1.16.25	**Received By:**	**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**
	Time: 1339		**All Results are emailed. Please provide Email address:** usantillana@ensolum.com, [redacted], TMorrissey@ensolum.com, THillard@ensolum.com, kthomason@ensolum.com
Relinquished By:	**Date:**	**Received By:**	**REMARKS:** Incident Number: nAPP2434453289
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.9 Corrected Temp. °C 1.3	**Sample Condition** Cool: ☐ Yes ☑ No Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)** AP	**Turnaround Time:** Standard ☐ Rush 24 hr **Thermometer ID** #113 #140 **Correction Factor** -0.5°C -0.6° **Bacteria (only) Sample Condition** ☒ Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No **Observed Temp. °C** **Corrected Temp. °C**

FORM-006 R 3.2 10/07/21

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

ATV 1-16-25

CARDINAL Laboratories

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

January 24, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SHANGHAI

Enclosed are the results of analyses for samples received by the laboratory on 01/20/25 12:06.

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.

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/20/2025	Sampling Date:	01/16/2025
Reported:	01/24/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 03 0.5' (H250319-01)

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	01/22/2025	ND	1.93	96.7	2.00	0.188	
Toluene*	<0.050	0.050	01/22/2025	ND	2.03	101	2.00	0.408	
Ethylbenzene*	<0.050	0.050	01/22/2025	ND	1.95	97.5	2.00	0.799	
Total Xylenes*	<0.150	0.150	01/22/2025	ND	5.75	95.9	6.00	1.13	
Total BTEX	<0.300	0.300	01/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.8 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	01/22/2025	ND	400	100	400	3.92	

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	01/21/2025	ND	209	104	200	2.05	
DRO >C10-C28*	<10.0	10.0	01/21/2025	ND	199	99.7	200	2.06	
EXT DRO >C28-C36	<10.0	10.0	01/21/2025	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/20/2025	Sampling Date:	01/16/2025
Reported:	01/24/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 03 A 5' (H250319-02)

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	01/22/2025	ND	1.93	96.7	2.00	0.188	
Toluene*	<0.050	0.050	01/22/2025	ND	2.03	101	2.00	0.408	
Ethylbenzene*	<0.050	0.050	01/22/2025	ND	1.95	97.5	2.00	0.799	
Total Xylenes*	<0.150	0.150	01/22/2025	ND	5.75	95.9	6.00	1.13	
Total BTEX	<0.300	0.300	01/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	01/22/2025	ND	400	100	400	3.92	

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	01/21/2025	ND	209	104	200	2.05	
DRO >C10-C28*	<10.0	10.0	01/21/2025	ND	199	99.7	200	2.06	
EXT DRO >C28-C36	<10.0	10.0	01/21/2025	ND					

Surrogate: 1-Chlorooctane *94.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/20/2025	Sampling Date:	01/16/2025
Reported:	01/24/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 04 0.5' (H250319-03)

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	01/22/2025	ND	1.93	96.7	2.00	0.188	
Toluene*	<0.050	0.050	01/22/2025	ND	2.03	101	2.00	0.408	
Ethylbenzene*	<0.050	0.050	01/22/2025	ND	1.95	97.5	2.00	0.799	
Total Xylenes*	<0.150	0.150	01/22/2025	ND	5.75	95.9	6.00	1.13	
Total BTEX	<0.300	0.300	01/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KV

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	01/22/2025	ND	400	100	400	3.92	

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	01/22/2025	ND	209	104	200	2.05	
DRO >C10-C28*	<10.0	10.0	01/22/2025	ND	199	99.7	200	2.06	
EXT DRO >C28-C36	<10.0	10.0	01/22/2025	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *107 %* *49.1-148*

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Analytical Results For:

ENSOLUM
TRACY HILLARD
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	01/20/2025	Sampling Date:	01/16/2025
Reported:	01/24/2025	Sampling Type:	Soil
Project Name:	SHANGHAI	Sampling Condition:	Cool & Intact
Project Number:	03C1558587	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.118675, -103.974825		

Sample ID: SS 04 A 8' (H250319-04)

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	01/22/2025	ND	1.93	96.7	2.00	0.188	
Toluene*	<0.050	0.050	01/22/2025	ND	2.03	101	2.00	0.408	
Ethylbenzene*	<0.050	0.050	01/22/2025	ND	1.95	97.5	2.00	0.799	
Total Xylenes*	<0.150	0.150	01/22/2025	ND	5.75	95.9	6.00	1.13	
Total BTEX	<0.300	0.300	01/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.6 %* *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	**96.0**	16.0	01/22/2025	ND	416	104	400	7.41	

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	01/22/2025	ND	209	104	200	2.05	
DRO >C10-C28*	<10.0	10.0	01/22/2025	ND	199	99.7	200	2.06	
EXT DRO >C28-C36	<10.0	10.0	01/22/2025	ND					

Surrogate: 1-Chlorooctane *94.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.7 %* *49.1-148*

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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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tracy Hillard	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc
City: Carlsbad State: NM Zip: 88220	Attn: Colton Brown
Phone #: 575 937 3906 Fax #:	Address: 3104 E Green St
Project #: 03C1558587 Project Owner: XTO	City: Carlsbad
Project Name: Shanghai	State: NM Zip: 88220
Project Location: 32.118675, -103.974825	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides	TPH	BTEX
H250319																		
1	SS03	0.5'	G	1			X					X		1.16.25	1130	X	X	X
2	SS03A	5'		1										↓	1240			
3	SS04	0.5'		1										↓	1335			
4	SS04A	8'	G	1			X					X		1.16.25	1520	X	X	X

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 consequental 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: 1-20-25	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1206		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	THillard @ensolum.com, TMorrissey@ensolum.com, KThomason@ensolum.com
	Time:		REMARKS: Incident: nAPP2434453289
			Cost Center:

Delivered By: (Circle One)	Observed Temp. °C 1.0	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐ (5 day)
Sampler - UPS - Bus - Other:	Corrected Temp. °C 0.4			Thermometer ID: #140 Correction Factor: -0.6c

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† 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

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2434453289**
Incident Name	**NAPP2434453289 SHANGHAI [FVV2103456039] @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SHANGHAI [fVV2103456039]
Date Release Discovered	12/02/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Pump | Produced Water | Released: 100 BBL | Recovered: 100 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)	email notification sent on 12/03/2024

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 12/09/2024

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
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 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 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 ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1000 (ft.) and ½ (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	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	6400
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	22.6
GRO+DRO (EPA SW-846 Method 8015M)	22.6
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	12/02/2024
On what date will (or did) the final sampling or liner inspection occur	01/16/2025
On what date will (or was) the remediation complete(d)	01/16/2025
What is the estimated surface area (in square feet) that will be reclaimed	61050
What is the estimated volume (in cubic yards) that will be reclaimed	9044
What is the estimated surface area (in square feet) that will be remediated	61050
What is the estimated volume (in cubic yards) that will be remediated	0
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*Not answered.*
(Ex Situ) Excavation and **on-site** 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)	Yes
Other Non-listed Remedial Process. Please specify	No impacted soil located
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Ashley Mcafee Email: ashley.a.mcafee@exxonmobil.com Date: 03/04/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**418818**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**01/17/2025**
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	61050
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	61050
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Liner integrity inspection and delineation activities were conducted at the Site to address the December 2, 2024, release of produced water. Laboratory analytical results for the delineation soil samples, collected in the liner tear and surrounding the lined containment, indicated that all COC concentrations were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. XTO has patched the tear in the liner following completion of delineation activities. An estimated 9,044 cubic yards of waste-containing soil remains below the 61,050 square foot lined containment, assuming it encompasses the entire area below the lined containment. The waste-containing soil will be addressed at pad abandonment.
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: Ashley Mcafee Email: ashley.a.mcafee@exxonmobil.com Date: 03/04/2025

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 438867

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 438867
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.	3/28/2025