



November 18, 2024

New Mexico Energy Minerals and Natural Resources Department

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

**Re: Deferral Request
JRU DI 11 BATTERY
Incident Number NAPP2424034618
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Deferral Request* to document assessment, delineation, excavation, and soil sampling activities at the JRU DI 11 Battery (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 release of produced water. Based on field observations and soil sample laboratory analytical results, XTO is submitting this *Deferral Request*, describing Site assessment, delineation, and excavation activities that have occurred and requesting deferral of final remediation for Incident Number NAPP2424034618 until the Site is reconstructed, and/or the well pad is abandoned.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 17, Township 22 South, Range 30 East, in Eddy County, New Mexico (32.390588°, -103.899426°) and is associated with oil and gas exploration and production operations on State Trust Land (Lease number E0-6292-0008) managed by the New Mexico State Land Office (SLO).

On August 18, 2024, internal corrosion at the "T" joint of a produced water pipeline resulted in the release of approximately 8.20 barrels (bbls) of produced water onto the surface of the well pad and around active production equipment and process piping. A vacuum truck was immediately dispatched to the Site and recovered approximately 3 bbls of released fluids. XTO submitted a Release Notification Form C-141 (Form C-141) on August 27, 2024. The release was assigned Incident Number NAPP2424034618.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be between 50 feet below ground surface (bgs) and 100 feet bgs based on a United States Geological Survey well (USGS 322252103541401) located approximately 0.71 miles southwest of the Site. The well has a documented depth to water of 72.96 feet

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bgs and a total depth of 129 feet bgs. The Well Record and Log is included in Appendix A. All wells used to evaluate depth to groundwater are presented on Figure 1.

The closest continuously flowing or significant watercourse to the Site is a seasonal riverine, located approximately 1,449 feet southeast 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 underlain by unstable geology (high potential karst designation area). Potential Site receptors are identified on Figure 1.

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

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

CULTURAL PROPERTIES PROTECTION

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

BIOLOGICAL COMPLIANCE AND REPORTING

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

- The Site is not located within an area of possible threatened, endangered, and sensitive wildlife and plant species.
- The Site is underlain by unstable geology (high karst potential) as mentioned in the Site Characterization.
- The soil type is classified as Reeves-Gypsum land complex according to the Web Soil Survey. Gypsum soils are considered sensitive soils by the SLO definition. The release occurred on pad surface limiting contact with potential sensitive soils and was found to have occurred on the pad caliche.

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On October 16 2024, Ensolium personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Delineation soil samples (SS01 through SS03) were collected at a depth 0.5 feet bgs surrounding the excavation to define the edge of the release. The delineation soil samples were field screened for volatile organic compounds (VOCs) and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Photographic documentation was collected and a photographic log is included in Appendix B.

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In addition, Ensolum personnel oversaw delineation activities. Delineation potholes (PH01/PH01A, and PH02/PH02A) were advanced via backhoe to assess the vertical extent of the release. The delineation potholes were advanced to a maximum depth of 3 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 0.5 feet to 3 feet bgs and field screened for VOCs and chloride. Field screening results and observations from the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

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

Laboratory analytical results from delineation soil samples SS01 through SS03 indicated all COC concentrations were compliant with the Closure Criteria and successfully defined the lateral extent of the release. Laboratory analytical results from delineation soil samples PH01 and PH02, collected at 0.5 feet bgs indicated the chloride concentrations exceeded the Closure Criteria. Laboratory analytical results of the terminal depth, PH01A and PH02A collected at 3 feet bgs, indicated all COC concentrations were compliant with the Closure Criteria and successfully defined the vertical extent of the release. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results, excavation of impacted soil appeared warranted.

EXCAVATION ACTIVITIES

On October 18 and 21, 2024, Ensolum personnel returned to the Site to oversee excavation activities. Chloride-impacted soil was excavated to the maximum extent possible (MEP) with a hydrovac and backhoe. XTO safety policy restricts soil disturbing activities within a 2-foot radius of any active production equipment. Following the removal of impacted soil, 5-point composite confirmation soil samples were collected every 200 square feet from the floor of the excavation (FS01 through FS12) at a depth of 3 feet or 4 feet bgs and every 200 feet from the sidewalls of the excavation (SW01 through SW06) at depths ranging from ground surface to 4 feet bgs. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation soil samples were handled and analyzed in the same manner as described above. All floor and sidewall excavation confirmation soil sample locations are depicted on Figure 3.

The final excavation extent measured approximately 2,150 square feet. A total of approximately 240 cubic yards of impacted soil was removed during excavation activities and was properly disposed of at the R360 Landfill Facility in Hobbs, New Mexico.

LABORATORY ANALYTICAL RESULTS

The excavation confirmation samples were in compliance with Closure Criteria, except for sidewall soil samples SW01 and SW02 (chloride: 9,800 mg/kg and 11,200 mg/kg respectively). Laboratory analytical results are summarized on Table 1, and the complete laboratory analytical reports are included in Appendix D.

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DEFERRAL REQUEST

Due to active production equipment and process piping present in the area, the remaining impacted soil along the sidewall was not removed, and XTO is requesting deferral of final remediation. The estimated area of remaining impacted soil measures an area of 1,050 square feet, and a total of approximately 115 cubic yards of impacted soil remains in place, assuming a depth of 3 feet bgs based on laboratory analytical results from delineation soil samples. The impacted soil is limited to the area beneath active production equipment and surface piping where remediation would require major facility deconstruction. The release extent has been vertically delineated by soil samples PH01A and PH02A collected at 3 feet bgs. The release extent has been laterally delineated by delineation soil samples SS01 through SS03 and excavation sidewall soil samples SW03 through SW06. The proposed deferral area and all delineation and excavation soil samples used to define the deferral area are depicted on Figure 4.

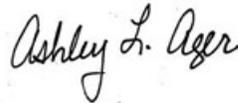
XTO does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Based on the presence of active production equipment and process piping within the release area and the complete lateral and vertical definition of impacted soil remaining in place, XTO requests deferral of final remediation for Incident Number NAPP2424034618 until final reclamation of the well pad or major construction, whichever comes first.

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

Sincerely,
Ensolum, LLC



Tacoma Morrissey, MS
Associate Principal



Ashley L. Ager, MS, PG
Principal

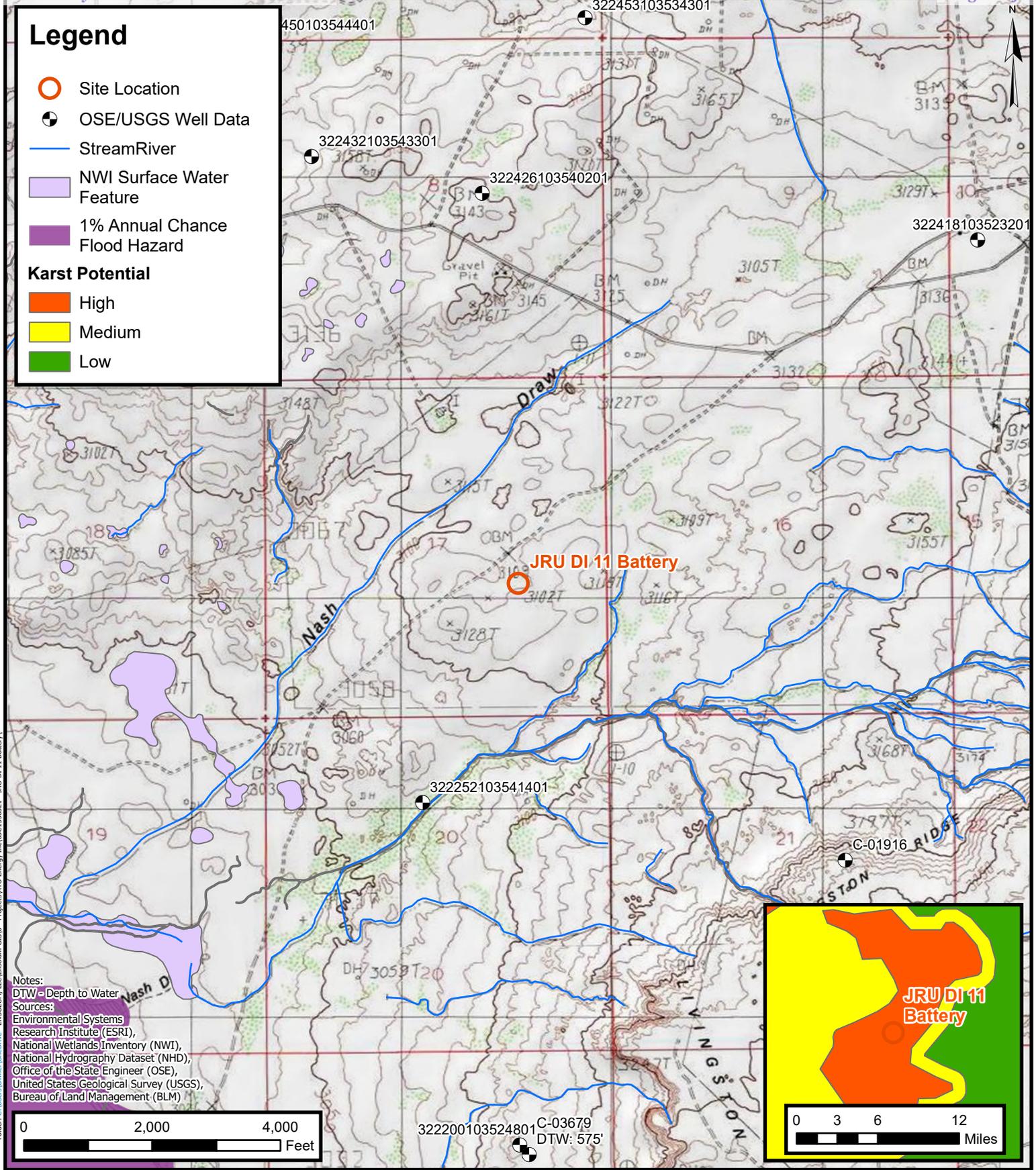
cc: Colton Brown, XTO
Kaylan Dirkx, XTO
SLO

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Figure 4 Deferral Area Map
- Table 1 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Lithologic / Soil Sampling Logs
- Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



Folder: C:\Users\Owner\OneDrive - ENSOLUM, LLC\Projects\XTO Energy, Inc.\OC\159821 - JRU DI 11 Battery

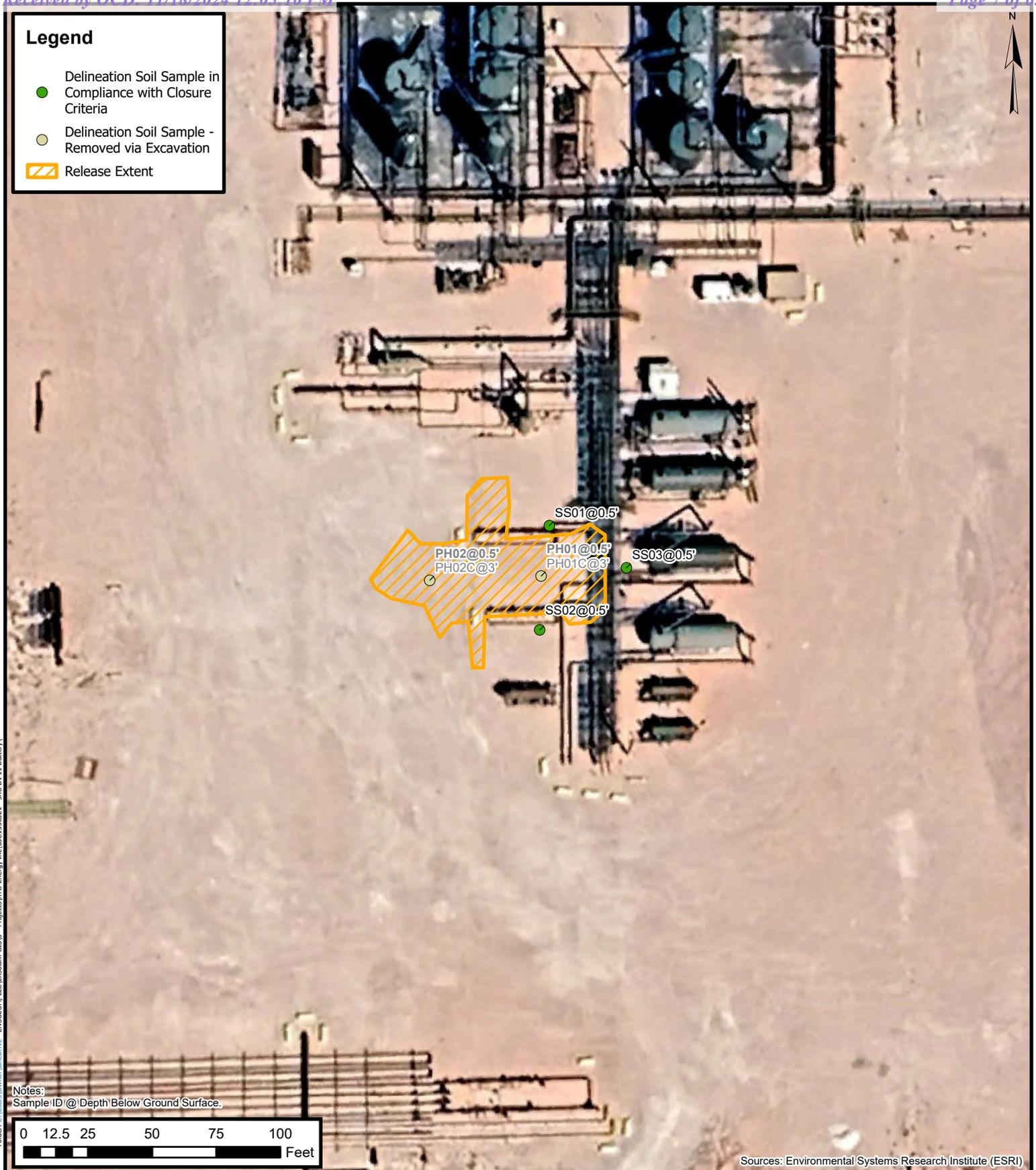


Site Receptor Map
 XTO Energy Inc.
 JRU DI 11 Battery
 Incident Number: NAPP2424034618
 Unit J, Sec 17, T22S, R30E
 Eddy County, New Mexico

FIGURE
 1

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample - Removed via Excavation
- Release Extent



Notes:
 Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)



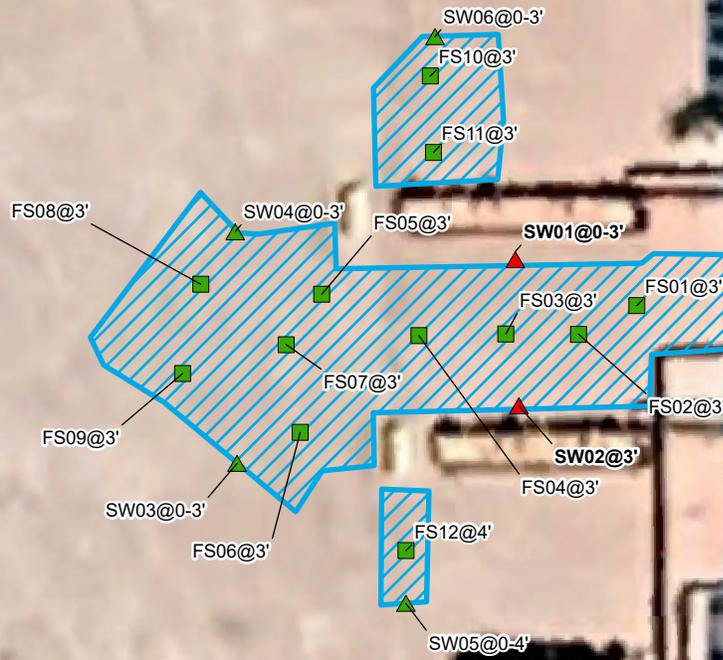
Delineation Soil Sample Locations

XTO Energy Inc.
 JRU DI 11 Battery
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 Unit J, Sec 17, T22S, R30E
 Eddy County, New Mexico

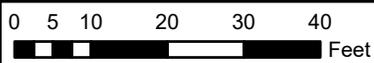
FIGURE
2

Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- Excavation Sidewall Sample with Concentrations Exceeding Closure Criteria
- ▲
- Excavation Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable closure criteria.



Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

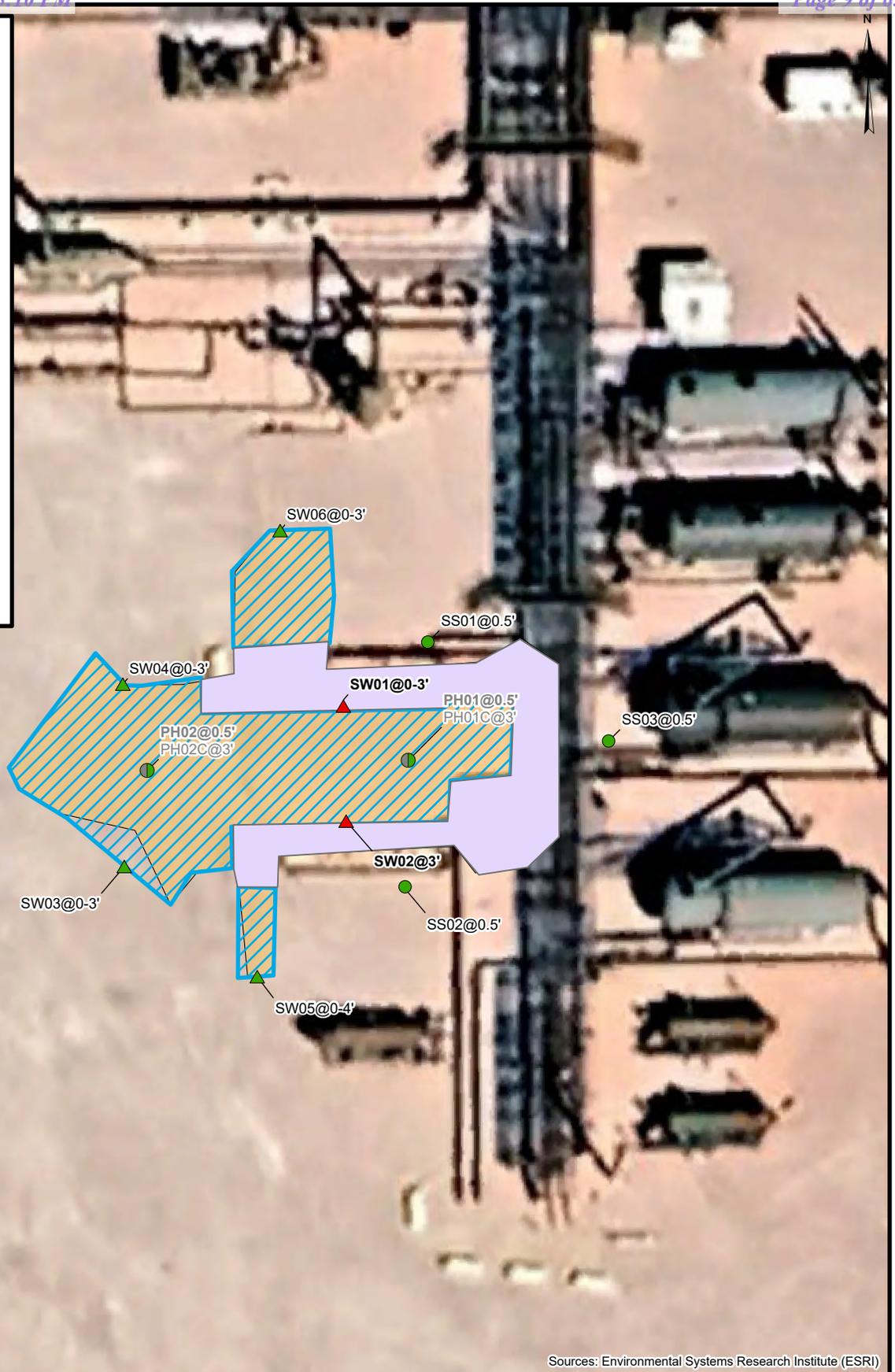
XTO Energy Inc.
 JRU DI 11 Battery
 Incident Number: NAPP2424034618
 Unit J, Sec 17, T22S, R30E
 Eddy County, New Mexico

FIGURE

3

Legend

- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample with Concentrations Exceeding Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- Delineation Soil Sample in Compliance with Closure Criteria
- Deferral Area
- Release Extent
- Excavation Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable closure criteria.



Sources: Environmental Systems Research Institute (ESRI)



Deferral Area Map

XTO Energy Inc.
 JRU DI 11 Battery
 Incident Number: NAPP2424034618
 Unit J, Sec 17, T22S, R30E
 Eddy County, New Mexico

FIGURE
4



TABLES

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 JRU DI 11 Battery / Incident Number nAPP2424034618
 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	NE	100	600
Delineation Soil Samples										
SS01	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
SS02	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS03	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
PH01	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	8,660
PH01C	10/16/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
PH02	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,600
PH02C	10/16/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
Confirmation Soil Samples										
FS01	10/18/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS02	10/18/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS03	10/18/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS04	10/18/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS05	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS06	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS07	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS08	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS09	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS10	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
FS11	10/21/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
FS12	10/21/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
JRU DI 11 Battery / Incident Number nAPP2424034618
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	NE	100	600
SW01	10/21/2024	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	9,800
SW02	10/21/2024	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	11,200
SW03	10/21/2024	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW04	10/21/2024	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW05	10/21/2024	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW06	10/21/2024	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160

Notes:

- bgs: below ground surface
- mg/kg: milligrams per kilogram
- NMOCD: New Mexico Oil Conservation Division
- BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
- Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.
- GRO: Gasoline Range Organics
- DRO: Diesel Range Organics
- ORO: Oil Range Organics
- TPH: Total Petroleum Hydrocarbon
- NMAC: New Mexico Administrative Code
- Grey text indicates soil sample removed during excavation activities



APPENDIX A

Referenced Well Records



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access)

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hide News Bulletins

- 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

site_no list =

- 322252103541401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 322252103541401 22S.30E.20.12310

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°22'52", Longitude 103°54'14" NAD27

Land-surface elevation 3,065 feet above NAVD88

The depth of the well is 129 feet below land surface.

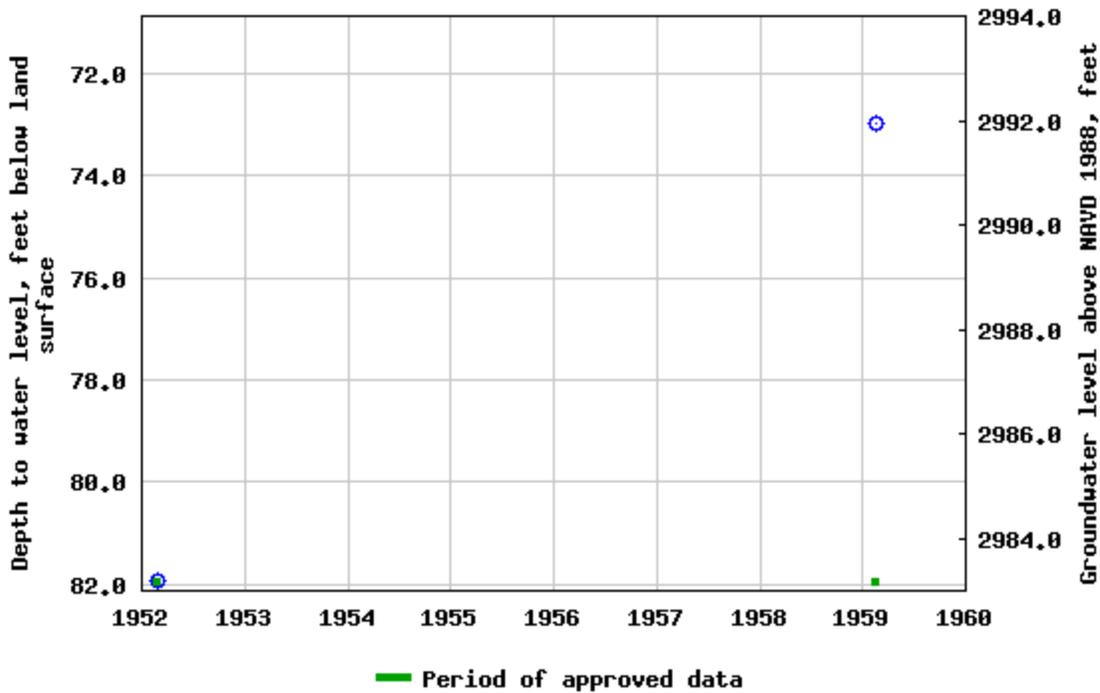
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

USGS 322252103541401 22S,30E,20,12310



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[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: 2024-11-17 15:59:23 EST

0.68 0.49 nadww01



APPENDIX B

Photographic Log

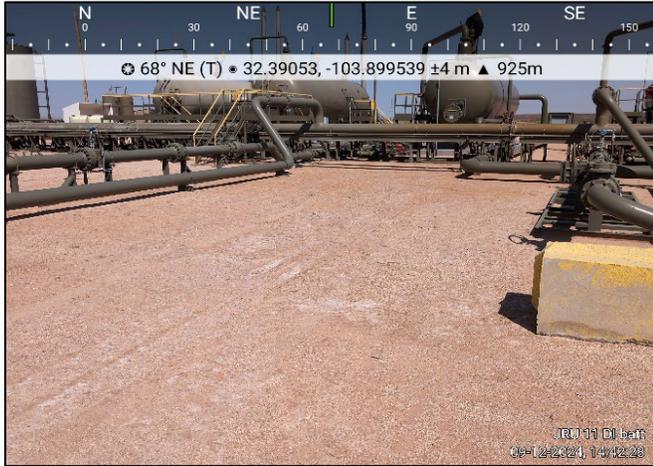


Photographic Log

XTO Energy Inc.

JRU DI 11 Battery

Incident number NAPP2424034618



Photograph: 1 Date: 9/12/2024
Description: Site assessment activities.
View: Northeast

Photograph: 2 Date: 10/21/2024
Description: Final excavation extent
View: North



Photograph: 3 Date: 10/21/2024
Description: Final excavation extent.
View: Northeast

Photograph: 4 Date: 10/29/2024
Description: Excavation backfilled.
View: East



APPENDIX C

Lithologic Soil Sampling Logs

							Sample Name: PH01		Date: 10/16/2024	
							Site Name: JRU DI 11 Battery			
							Incident Number: nAPP2424034618			
							Job Number: 03C1558521			
LITHOLOGIC / SOIL SAMPLING LOG							Logged By: JD		Method: Backhoe	
Coordinates: 32.390549, -103.899366							Hole Diameter: 1.5'		Total Depth: 3'	
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 added to all chloride calculations.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions		
M	9296	0.0	N	PH01	0.5	0	CCHE	0-1', CALICHE, moist, tan, very silty, brown staining, no odor, unconsolidated fill. 0.5', no stain.		
M	6260	0.0	N	PH01A	1	1	SP	1'-3', SAND, moist, brown, poorly graded, fine grained, no stain, no odor.		
M	5308	0.0	N	PH01B	2	2				
M	<168	0.0	N	PH01C	3	3				
							TD	Total depth at 3 feet bgs.		
						4				
						5				
						6				
						7				
						8				
						9				
						10				
						11				
						12				

					Sample Name: PH02		Date: 10/16/2024		
					Site Name: JRU DI 11 Battery				
					Incident Number: nAPP2424034618				
					Job Number: 03C1558521				
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: JD		Method: Backhoe		
Coordinates: 32.390545, -103.899505					Hole Diameter: 1.5'		Total Depth: 3'		
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 added to all chloride calculations.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
M	6207	0.0	N	PH02	0.5	0	CCHE	0-1', CALICHE, moist, tan, very silty, brown staining, no odor, unconsolidated fill. 0.5', no stain.	
M	6207	0.0	N	PH02A	1	1	SP	1'-3', SAND, moist, brown, poorly graded, fine grained, no stain, no odor.	
M	5308	0.0	N	PH02B	2	2			
M	<168	0.0	N	PH02C	3	3	TD	Total depth at 3 feet bgs.	
						4			
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



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

October 18, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JRU DI 11 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/17/24 14:06.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" at the beginning.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SS 01 .5 (H246353-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/17/2024	ND	2.15	107	2.00	0.387	
Toluene*	0.095	0.050	10/17/2024	ND	2.12	106	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09	
Total BTEX	<0.300	0.300	10/17/2024	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	272	16.0	10/18/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SS 02 .5 (H246353-02)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/17/2024	ND	2.15	107	2.00	0.387		
Toluene*	<0.050	0.050	10/17/2024	ND	2.12	106	2.00	2.21		
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66		
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09		
Total BTEX	<0.300	0.300	10/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	10/18/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20		
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22		
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND						

Surrogate: 1-Chlorooctane 84.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SS 03 .5 (H246353-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/17/2024	ND	2.15	107	2.00	0.387	
Toluene*	<0.050	0.050	10/17/2024	ND	2.12	106	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09	
Total BTEX	<0.300	0.300	10/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	10/18/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: PH 01 .5 (H246353-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/17/2024	ND	2.15	107	2.00	0.387	
Toluene*	<0.050	0.050	10/17/2024	ND	2.12	106	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09	
Total BTEX	<0.300	0.300	10/17/2024	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	8660	16.0	10/18/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: PH 01C 3 (H246353-05)

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	10/17/2024	ND	2.15	107	2.00	0.387		
Toluene*	<0.050	0.050	10/17/2024	ND	2.12	106	2.00	2.21		
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66		
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09		
Total BTEX	<0.300	0.300	10/17/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/18/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20		
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22		
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND						

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: PH 02 .5 (H246353-06)

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	10/17/2024	ND	2.15	107	2.00	0.387	
Toluene*	<0.050	0.050	10/17/2024	ND	2.12	106	2.00	2.21	
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66	
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09	
Total BTEX	<0.300	0.300	10/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	10/18/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/17/2024	Sampling Date:	10/16/2024
Reported:	10/18/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.390588,-103.899426		

Sample ID: PH 02C 3 (H246353-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/17/2024	ND	2.15	107	2.00	0.387		
Toluene*	<0.050	0.050	10/17/2024	ND	2.12	106	2.00	2.21		
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.15	108	2.00	4.66		
Total Xylenes*	<0.150	0.150	10/17/2024	ND	6.38	106	6.00	5.09		
Total BTEX	<0.300	0.300	10/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/18/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	223	112	200	2.20		
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	217	108	200	2.22		
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND						

Surrogate: 1-Chlorooctane 94.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC
Project Manager: Ben Belli
Address: 3122 National Parks Hwy
City: Carlsbad
Phone #: 989-854-0852
Project #: 03C1558521
Project Name: JRU DI 11 Battery
Project Location: 32.390588, -103.899426
Sampler Name: Jesse Dorman

State: NM **zip:** 88220
Attn: Colton Brown
Address: 3104 E. Green St.
City: Carlsbad
State: NM **zip:** 88220

P.O. #:
Company: XTO Energy Inc.
Address: 3104 E. Green St.
City: Carlsbad
State: NM **zip:** 88220

FOR LAB USE ONLY

Matrix: GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER:
Preserv: ACID/BASE, ICE/COOL, OTHER:
Sampling: BTEX, TPH, CHLORIDE

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTEX	TPH	CHLORIDE
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:					
1400553	5501	4.5	6	1						10/16/24	1035				
	5502	5	6	1						10/16/24	1350				
	5503	5	6	1						10/16/24	1035				
	Ph01	3	6	1						10/16/24	1104				
	Ph02	3	6	1						10/16/24	1130				
	Ph03	3	6	1						10/16/24	1200				

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Relinquished By: [Signature] **Date:** 10/17/24
Received By: [Signature] **Date:** 10/17/24
Relinquished By: [Signature] **Date:** 10/17/24
Received By: [Signature]

Delivered By: (Circle One) **Observed Temp. °C:** 8.4
Sampler - UPS - Bus - Other: **Corrected Temp. °C:** 9.8
Sample Condition: Cool Intact
Checked By: [Signature] **Thermostat Time:** Standard Rush
Thermometer ID: #443 **Correction Factor:** 0.5°C
Bacteria (only) Sample Condition: Cool Intact
Cost Center: 2147571001 Incident ID: nAPP2424034618
Remarks: All Results are emailed. Please provide Email address: Bbelli@ensolum.com, Tmorrisey@ensolum.com, khomason@ensolum.com



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

October 22, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JRU DI 11 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/21/24 12:10.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/21/2024	Sampling Date:	10/18/2024
Reported:	10/22/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 01 3' (H246403-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/21/2024	ND	1.97	98.6	2.00	6.76	
Toluene*	<0.050	0.050	10/21/2024	ND	2.06	103	2.00	7.09	
Ethylbenzene*	<0.050	0.050	10/21/2024	ND	2.13	107	2.00	6.66	
Total Xylenes*	<0.150	0.150	10/21/2024	ND	6.38	106	6.00	6.94	
Total BTEX	<0.300	0.300	10/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/22/2024	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	236	118	200	10.9	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	241	120	200	16.7	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/21/2024	Sampling Date:	10/18/2024
Reported:	10/22/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 02 3' (H246403-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/21/2024	ND	1.97	98.6	2.00	6.76	
Toluene*	<0.050	0.050	10/21/2024	ND	2.06	103	2.00	7.09	
Ethylbenzene*	<0.050	0.050	10/21/2024	ND	2.13	107	2.00	6.66	
Total Xylenes*	<0.150	0.150	10/21/2024	ND	6.38	106	6.00	6.94	
Total BTEX	<0.300	0.300	10/21/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/22/2024	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	236	118	200	10.9	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	241	120	200	16.7	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/21/2024	Sampling Date:	10/18/2024
Reported:	10/22/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 03 3' (H246403-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/21/2024	ND	1.97	98.6	2.00	6.76	
Toluene*	<0.050	0.050	10/21/2024	ND	2.06	103	2.00	7.09	
Ethylbenzene*	<0.050	0.050	10/21/2024	ND	2.13	107	2.00	6.66	
Total Xylenes*	<0.150	0.150	10/21/2024	ND	6.38	106	6.00	6.94	
Total BTEX	<0.300	0.300	10/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/22/2024	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	236	118	200	10.9	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	241	120	200	16.7	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/21/2024	Sampling Date:	10/18/2024
Reported:	10/22/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 04 3' (H246403-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/21/2024	ND	1.97	98.6	2.00	6.76	
Toluene*	<0.050	0.050	10/21/2024	ND	2.06	103	2.00	7.09	
Ethylbenzene*	<0.050	0.050	10/21/2024	ND	2.13	107	2.00	6.66	
Total Xylenes*	<0.150	0.150	10/21/2024	ND	6.38	106	6.00	6.94	
Total BTEX	<0.300	0.300	10/21/2024	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	48.0	16.0	10/22/2024	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	236	118	200	10.9	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	241	120	200	16.7	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- 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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC
 Project Manager: Ben Bellill
 Address: 3122 National Parks Hwy
 City: Carlsbad State: NM Zip: 88220
 Phone #: 989-854-0852 Fax #:
 Project #: 03C1558521 Project Owner: XTO
 Project Name: JRU DI 11 Battery
 Project Location: 32.390588, -103.899426
 Sampler Name: Jesse Dorman
 P.O. #:
 Company: XTO Energy Inc.
 Attn: Colton Brown
 Address: 3104 E. Green St.
 City: Carlsbad
 State: NM Zip: 88220
 Phone #:
 Fax #:

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTEX	TPH	CHLORIDE
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H044403	F501	3'									10/18/24	1205			
	F502											1210			
	F503											1215			
	F504											1220			
	SD														

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Relinquished By: *[Signature]* Date: 10-21-24
 Received By: *[Signature]* Date: 10-21-24
 Time:
 Verbal Result: Yes No Add'l Phone #:
 All Results are emailed. Please provide Email address: BBellill@ensolum.com TMorrissey@ensolum.com, kthomason@ensolum.com
 REMARKS: Cost Center: 2147571001 Incident ID: nAPP2424034618

Delivered By: (Circle One) Observed Temp.: °C 4.3
 Sampler - UPS - Bus - Other: Corrected Temp.: °C 3.7
 Sample Condition: Cool Intact Yes No
 Checked By: (Initials) *[Signature]*
 Turndown Time: Standard Rush
 Thermometer ID #115 2/14
 Correction Factor: 0.00
 Bacteria (only) Sample Condition: Cool Intact Yes No
 Corrected Temp.: °C



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

October 23, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JRU DI 11 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/22/24 13:30.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 05 3' (H246430-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 97.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 06 3' (H246430-02)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45		
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41		
Total BTEX	<0.300	0.300	10/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/23/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37		
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00		
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND						

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 07 3' (H246430-03)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45		
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41		
Total BTEX	<0.300	0.300	10/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/23/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37		
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00		
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND						

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 08 3' (H246430-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45		
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41		
Total BTEX	<0.300	0.300	10/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/23/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37		
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00		
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND						

Surrogate: 1-Chlorooctane 95.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 09 3' (H246430-05)

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	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 96.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.8 % 49.1-148

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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 10 3' (H246430-06)

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	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 96.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 11 3' (H246430-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45		
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41		
Total BTEX	<0.300	0.300	10/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	10/23/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37		
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00		
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND						

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: FS 12 4' (H246430-08)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45		
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41		
Total BTEX	<0.300	0.300	10/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/23/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37		
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00		
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND						

Surrogate: 1-Chlorooctane 93.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.5 % 49.1-148

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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SW 01 0-3' (H246430-09)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9800	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 92.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SW 02 0-3' (H246430-10)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 88.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SW 03 0-3' (H246430-11)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SW 04 0-3' (H246430-12)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/23/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/23/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SW 05 0-4' (H246430-13)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/23/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/23/2024	ND					

Surrogate: 1-Chlorooctane 97.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	10/22/2024	Sampling Date:	10/21/2024
Reported:	10/23/2024	Sampling Type:	Soil
Project Name:	JRU DI 11 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558521	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.390588,-103.899426		

Sample ID: SW 06 0-3' (H246430-14)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	7.45	
Toluene*	<0.050	0.050	10/22/2024	ND	2.03	102	2.00	5.60	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.04	102	2.00	4.93	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.04	101	6.00	5.41	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/23/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2024	ND	218	109	200	3.37	
DRO >C10-C28*	<10.0	10.0	10/23/2024	ND	211	105	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	10/23/2024	ND					

Surrogate: 1-Chlorooctane 95.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.9 % 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

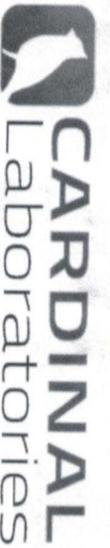
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Celey D. Keene

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		BILL TO		ANALYSIS REQUEST								
Project Manager: Ben Belli		P.O. #:										
Address: 3122 National Parks Hwy		Company: XTO Energy Inc.										
City: Carlsbad		Attn: Colton Brown										
Phone #: 989-854-0852		Address: 3104 E. Green St.										
Project #: 03C1558521		City: Carlsbad										
Project Name: JRU DI 11 Battery		State: NM Zip: 88220										
Project Location: 32.390588, -103.899426		Phone #:										
Sampler Name: Jesse Dorman		Fax #:										
FOR LAB USE ONLY												
Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	BTEX	TPH	CHLORIDE
HB44430	FS95	3'	C	1	GROUNDWATER	ICE / COOL		10/21/21	1403			
	FS06				WASTEWATER				1405			
	FS07				SOIL				1408			
	FS08				OIL				1410			
	FS09				SLUDGE				1415			
	FS10				OTHER :				1420			
	FS11				ACID/BASE:				1425			
	FS12				ICE / COOL				1430			
	SW01	0-3'			OTHER :				1440			
	SW02								1445			

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Relinquished By: *[Signature]* Date: 11-22-24 Received By: *[Signature]* Date: 11-22-24

Delivered By: (Circle One) Observed Temp. °C: 0.3 Corrected Temp. °C: -0.3

Sampler - UPS - Bus - Other: Sample Condition Cool Intact Bacteria (only) Sample Condition Cool Intact 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



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		ANALYSIS REQUEST	
Project Manager: Ben Bellill		P.O. #:			
Address: 3122 National Parks Hwy		Company: XTO Energy Inc.			
City: Carlsbad		Attn: Colton Brown			
State: NM Zip: 88220		Address: 3104 E. Green St.			
Phone #: 989-854-0852		City: Carlsbad			
Fax #: Project #:		State: NM Zip: 88220			
Project Name: JRU DI 11 Battery		Phone #:			
Project Location: 32.390588, -103.899426		Fax #:			
Sampler Name: Jesse Dorman					

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTEX	TPH	CHLORIDE
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H246430	5V03	0-3	↓	1							10/21/11	1450	/	/	/
	5W04	0-4	↓	1							1455	1505	/	/	/
	5W05	0-4	↓	1							1505	1525	/	/	/
	5W06	0-3	↓	1							1525		/	/	/
	4D														

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Relinquished By: *[Signature]* Date: 10-22-24 Received By: *[Signature]* Date: 10-22-24

Relinquished By: *[Signature]* Date: 10-22-24 Received By: *[Signature]* Date: 10-22-24

Time: 1:33 PM

Delivered By: (Circle One) Observed Temp.: °C 0.3 Corrected Temp.: °C 0.3

Sampler - UPS - Bus - Other: Cool Intact Yes No

Sample Condition: Cool Intact Yes No

Checked By: *[Signature]*

Turnaround Time: Standard Rush Bacteria (only) Sample Condition Observed Temp. °C Corrected Temp. °C

Thermometer ID: #113 #140 #141 #142 #143 #144 #145 #146 #147 #148 #149 #150 #151 #152 #153 #154 #155 #156 #157 #158 #159 #160

Correction Factor: -0.1°C

Remarks: 2147571001 Incident ID: nAPP2424034618

Cost Center: *[Blank]*

Verbal Result: Yes No Add'l Phone #: *[Blank]*

All Results are emailed. Please provide Email address: BBellill@ensolum.com TMorrissey@ensolum.com khomason@ensolum.com

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

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

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Phone: (505) 629-6116

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

QUESTIONS

Action 404325

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2424034618
Incident Name	NAPP2424034618 JRU DI 11 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	JRU DI 11 Battery
Date Release Discovered	08/18/2024
Surface Owner	State

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Pipeline (Any) Produced Water Released: 8 BBL Recovered: 3 BBL Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 404325

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

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	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

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	<i>Not answered.</i>

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

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

I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 08/27/2024
----------------------------------------------------	----------------------------------------------------------------------------------------------------------

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QUESTIONS, Page 3

Action 404325

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

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	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 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 ½ and 1 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
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
<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)	11200
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

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	10/18/2024
On what date will (or did) the final sampling or liner inspection occur	10/21/2024
On what date will (or was) the remediation complete(d)	10/21/2024
What is the estimated surface area (in square feet) that will be reclaimed	1050
What is the estimated volume (in cubic yards) that will be reclaimed	115
What is the estimated surface area (in square feet) that will be remediated	2150
What is the estimated volume (in cubic yards) that will be remediated	240

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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1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 4

Action 404325

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

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.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	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)	Not answered.

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: 11/18/2024
----------------------------------------------------	----------------------------------------------------------------------------------

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

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

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Phone: (505) 629-6116

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

QUESTIONS, Page 5

Action 404325

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Deferral Requests Only	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	process piping, production equipment, pipe/equipment supports. Removing would result in undermining active piping and production equipment causing an additional release of fluids.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1050
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	115
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	JAMES RANCH UNIT DI 11 [fAPP2123053374]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<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: Ashley McAfee Email: ashley.a.mcafee@exxonmobil.com Date: 11/18/2024

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

General Information
Phone: (505) 629-6116

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

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

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Action 404325

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	393579
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/21/2024
What was the (estimated) number of samples that were to be gathered	20
What was the sampling surface area in square feet	4000

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 404325

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 404325
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	Deferral approved. Deferral of SW01 and SW02 is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time.	12/11/2024