



December 3, 2025

New Mexico Oil Conservation Division

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

**Re: Closure Request
James Ranch Unit #124H
Incident Number NAB1517555063
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Permian Operating LLC (XTO), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities at the James Ranch Unit #124H (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, field screening activities, and soil sample laboratory analytical results, XTO is submitting this *Closure Request*, describing remedial activities that have occurred and requesting no further remediation for Incident Number NAB1517555063.

SITE DESCRIPTION AND RELEASE BACKGROUND

The Site is located in Unit F, Section 17, Township 23 South, Range 31 East, in Eddy County, New Mexico (32.305262°, -103.802716°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On June 7, 2015, a connection on a water transfer pump failed, releasing approximately 11 barrels (bbls) of produced water within a steel lined containment housing multiple large holding tanks and process piping and onto the surface of the pad. An estimated 10 bbls of produced water were released within the lined tank containment and were recovered with a vacuum truck; approximately 1 bbl over-sprayed onto the pad surface between a second tank containment to the east and south of the transfer pump. The former operator reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on June 22, 2015. The release was assigned Remediation Permit (RP) Number 2RP-3066 and Incident Number NAB1517555063.

The release was included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the NMOCD effective November 13, 2018. The purpose of the Compliance Agreement was to ensure that reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018.

XTO Permian Operating LLC
Closure Request
James Ranch Unit #124



On October 19, 2018, XTO submitted a *Closure Request* to the NMOCD documenting assessment, excavation, and soil sampling activities. The *Closure Request* was denied on March 15, 2023, for the following reason:

A release cannot be closed to both the old rules and the current rules. No remediation plan was found for this release per 19.15.26.16 NMAC. This release will need to be closed to the current rules.

On June 13, 2023, XTO submitted a *Closure Request Addendum* characterizing the Site according to the current rule Closure Criteria per the denial. On November 3, 2023, the NMOCD denied the *Closure Request Addendum* for the following reason:

The Closure Report is Denied. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please continue to horizontally delineate sample location SS06 until it meets closure criteria standards.

The below report includes all activities completed and described in the above-mentioned reports and the additional remediation activities completed to address the most recent denial from the NMOCD.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to determine the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented below.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well is United States Geological Survey (USGS) well 321809103481801, located approximately 1,400 feet southwest of the Site. The well has a reported depth to groundwater of 128.64 feet bgs and was most recently measured in January 2013. The well record is provided in Appendix A. All wells used for depth to groundwater determination are depicted on Figure 1.

The closest continuously flowing or significant watercourse to the Site is an unnamed arroyo located approximately 1.5 miles west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

XTO Permian Operating LLC
Closure Request
James Ranch Unit #124



INITIAL EXCAVATION AND SOIL SAMPLING ACTIVITIES

On August 22 through September 4, 2018, LT Environmental, Inc. (LTE) personnel were at the Site to oversee excavation of impacted soil. LTE personnel directed excavation activities based on field screening results to remove impacted soil. Excavation activities were completed south of the tank battery on August 22, 2018. Impacted soil was excavated from the release area to a depth of 1.5 feet bgs. LTE collected five confirmation soil samples (SS01 through SS05) from the excavation extent on August 22 and September 4, 2018. On September 4, 2018, additional soil samples (SS06 through SS10) were collected outside of the excavation extent from a depth of 0.5 feet bgs to confirm lateral delineation of the release. All soil samples were screened for volatile organic compounds (VOCs) using a photoionization detector (PID).

The soil samples were collected and placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, and method of analysis and immediately placed on ice. The soil samples were shipped under strict chain-of-custody procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of the following contaminants of concern (COCs) BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH- oil range organics (ORO) by USEPA Method 8015M/D, and chloride by EPA Method 300.

The final excavation measured approximately 926 square feet in area with a depth of approximately 1.5 feet bgs throughout the excavation. The horizontal extent of the excavation is illustrated on Figure 2. Approximately 58.7 cubic yards of impacted soil were removed using a skidsteer and hydro-excavator. Impacted soil was transported and properly disposed of at the Lea Land Landfill, in Eunice, New Mexico.

Laboratory analytical results indicated that COC concentrations for all final confirmation soil samples were compliant with the Closure Criteria. In addition, laboratory analytical results indicated COC concentrations for all lateral delineation soil samples were compliant with the Closure Criteria. However, chloride concentrations for delineation soil sample SS06 exceeded the reclamation requirement. As such, additional delineation of waste-containing soil identified at the Site was warranted.

REMEDIAL ACTIVITIES IN RESPONSE TO SECOND DENIAL

On October 8, 2025, Ensolum personnel were at the Site to conduct delineation and soil sampling activities. Two delineation soil samples, SS11 and SS12, were collected to confirm lateral delineation of the release extent. One delineation borehole was advanced via hand auger in the vicinity of SS06 to a terminal depth of 4 feet bgs. Discrete soil samples were collected from the delineation borehole at depths ranging from 1-foot to 4 feet bgs, and soil was field screened for VOCs utilizing a calibrated PID and chloride utilizing Hach® chloride QuanTab® test strips. Photographic documentation of the sampling activities is included in Appendix B. The soil sampling activities were conducted immediately following a rain event. Slight pooling in adjacent lined containments and saturation on the pad surface can be seen as a result of this rain event, not resulting from a release. Field screening results and observations for the borehole were logged on a lithologic/soil sampling log, which are included in Appendix C. The delineation soil sample locations were mapped utilizing a handheld global positioning system (GPS) unit and are depicted on Figure 2.

To laterally define the excavation extent, 5-point composite soil samples were collected via hand auger in the vicinity of the excavation extent sidewalls. The 5-point composite soil samples were collected by placing five equivalent aliquots of soil into a resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation sidewall soil samples SW01 and SW02 were collected from the

XTO Permian Operating LLC
Closure Request
James Ranch Unit #124



sidewalls of the excavation at depths ranging from ground surface to 1.5 feet bgs. The excavation extent and confirmation soil sample locations are presented on Figure 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the same COCs described above, however, chloride analysis followed Standard Method SM4500.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the additional delineation soil samples and confirmation sidewall soil samples indicated that all COC concentrations were compliant with the Closure Criteria and reclamation requirement. All soil sample laboratory analytical results are summarized in Table 1, and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Additional soil sampling activities were conducted at the Site to address the November 3, 2023, NMOCD denial in relation to the June 2015 release of produced water. Laboratory analytical results for the additional soil samples indicated that all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements, successfully defining the waste containing soil identified at the location of soil sample SS06. Based on the soil sample analytical results, no further remediation was required. Approximately 4 cubic yards of waste containing soil, over a 200 square foot area, is estimated to be left in place immediately adjacent to the tank battery containment. This soil will be removed following pad abandonment and during reclamation activities.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAB1517555063.

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

Sincerely,
Ensolum, LLC

A handwritten signature in black ink, appearing to read "Tracy Hillard".

Tracy Hillard
Project Engineer

A handwritten signature in black ink, appearing to read "Tacoma Morrissey".

Tacoma Morrissey
Associate Principal

cc: Robert Woodall, XTO
Richard Kotzur, XTO
BLM

XTO Permian Operating LLC
Closure Request
James Ranch Unit #124

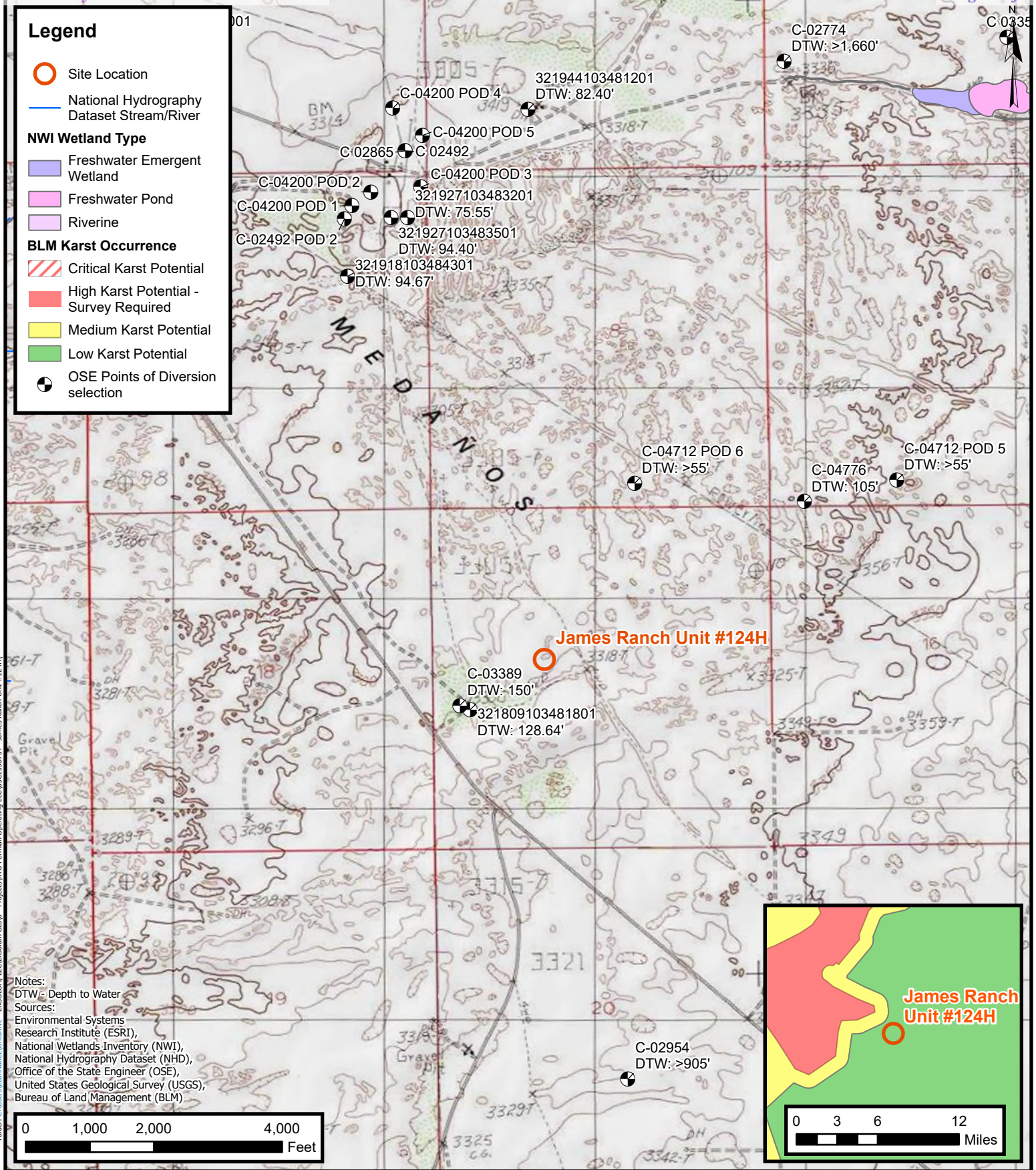


Appendices:

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



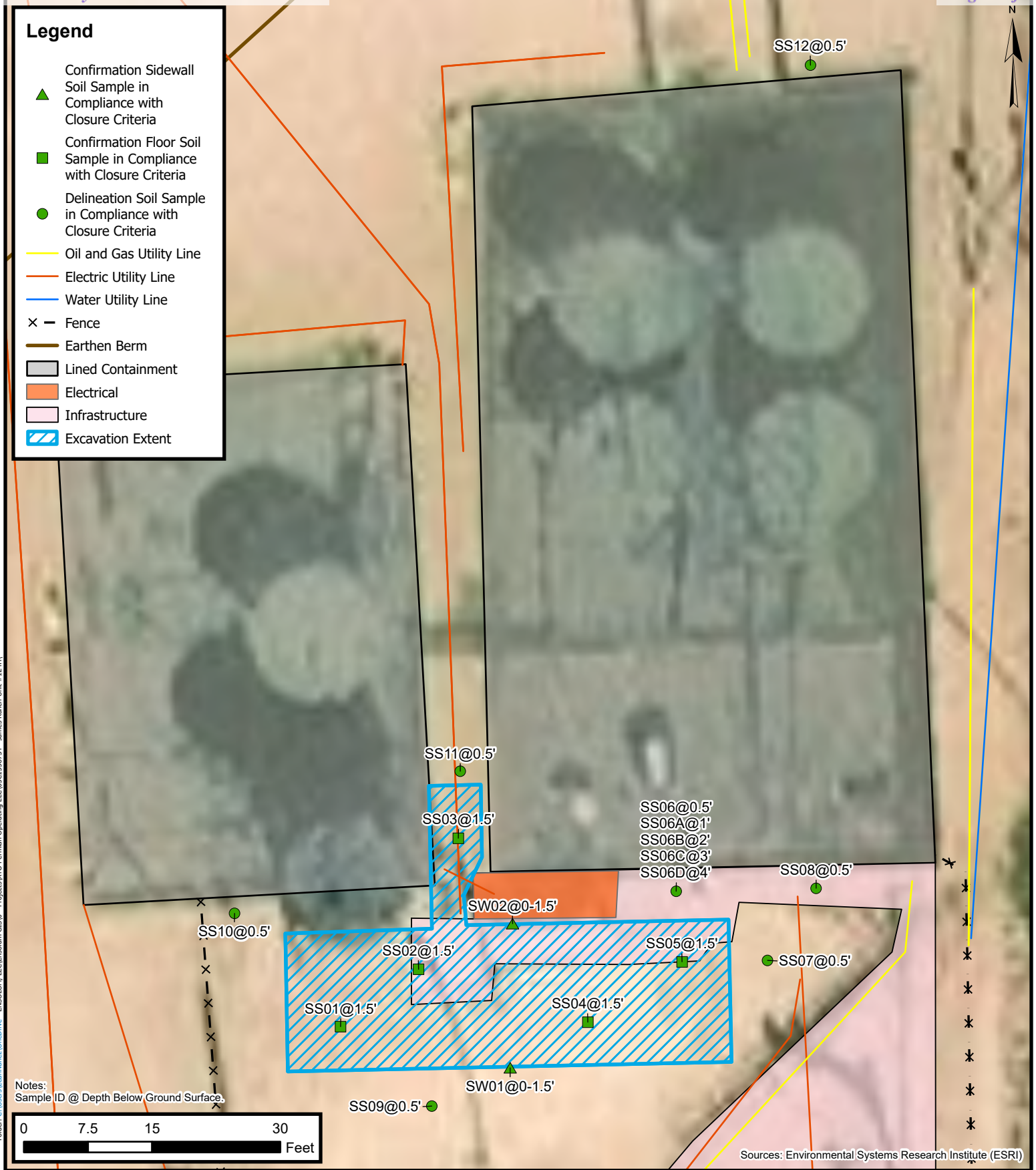
FIGURES



ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

Site Receptor Map
XTO Permian Operating LLC
James Ranch Unit #124H
Incident Number: NAB1517555063
Unit F, Section 17, T 23S, R 31E
Eddy County, New Mexico

FIGURE
1



Soil Sample Locations

XTO Permian Operating LLC
James Ranch Unit #124H
Incident Number: NAB1517555063
Unit F, Section 17, T 23S, R 31E
Eddy County, New Mexico

FIGURE
2



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 James Ranch Unit #124H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Confirmation Soil Samples										
SS01	8/22/2018	1.5	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	69.0
SS02	8/22/2018	1.5	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	88.1
SS03	8/22/2018	1.5	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	19.9
SS04	9/4/2018	1.5	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	121
SS05	9/4/2018	1.5	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	149
SW01	10/8/2025	0-1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SW02	10/8/2025	0-1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
Delineation Soil Samples										
SS06	9/4/2018	0.5	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	1,100
SS06A	10/8/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SS06B	10/8/2025	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS06C	10/8/2025	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS06D	10/8/2025	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SS07	9/4/2018	0.5	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	<14.9	207
SS08	9/4/2018	0.5	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	20.5
SS09	9/4/2018	0.5	<0.00202	<0.00202	<15.0	42.8	<15.0	42.8	42.8	12.1
SS10	9/4/2018	0.5	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.99
SS11	10/8/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SS12	10/8/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112

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



APPENDIX A

Referenced Well Records



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321809103481801

Minimum number of levels = 1

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

USGS 321809103481801 23S.31E.17.31141

Eddy County, New Mexico
Latitude 32°18'11.3", Longitude 103°48'23.4" NAD83
Land-surface elevation 3,326.00 feet above NGVD29
The depth of the well is 354 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-02-04			D62610		3215.16	NGVD29	P	Z			A
1959-02-04			D62611		3216.80	NAVD88	P	Z			A
1959-02-04			D72019	110.84			P	Z			A
1987-10-15			D62610		3214.80	NGVD29	1	Z			A
1987-10-15			D62611		3216.44	NAVD88	1	Z			A
1987-10-15			D72019	111.20			1	Z			A
1992-11-04			D62610		3216.32	NGVD29	1	S			A
1992-11-04			D62611		3217.96	NAVD88	1	S			A
1992-11-04			D72019	109.68			1	S			A
2013-01-16	23:30 UTC	m	62610		3197.36	NGVD29	P	S	USGS	S	A
2013-01-16	23:30 UTC	m	62611		3199.00	NAVD88	P	S	USGS	S	A
2013-01-16	23:30 UTC	m	72019	128.64			P	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined

Section	Code	Description
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

[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: 2025-09-02 16:02:41 EDT
0.37 0.32 nadww02



APPENDIX B

Photographic Log

PHOTOGRAPHIC LOG (September 4, 2018)



Photograph 1: View east of tank battery and excavation.



Photograph 2: View north of tank battery and excavation.



Photographic Log
 XTO Permian Operating LLC
 James Ranch Unit 124H
 NAB1517555063



Photograph: 1 Date: 10/8/2025
 Description: Delineation activities; near SS11
 View: South



Photograph: 2 Date: 10/8/2025
 Description: Delineation activities; near SS12
 View: South



Photograph: 3 Date: 10/8/2025
 Description: Delineation activities; near SS06
 View: East




Photograph: 4 Date: 10/8/2025
 Description: Confirmation sampling; near SW01
 View: Northeast



APPENDIX C

Lithologic Soil Sampling Logs

 ENSOLUM		Sample Name: SS06		Date: 10/8/2025				
		Site Name: James Ranch Unit 124H						
		Incident Number: NAB1517555063						
		Job Number: 03C1558734						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.305251, -103.802618			Logged By: JB		Method: Hand Auger			
			Hole Diameter: 4"		Total Depth: 4'			
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 for chloride is included. M= moist.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	(0-1) CALICHE, tan, fine grained
Drv	<162	2.8	N	SS06	0.5			
				SS06A	1	1		(1-4) SAND, dark red brown, with pale beige inclusions, small-medium gravel, trace clay poorly graded
M	<162	2.0	N	SS06B	2	2		(@2') dark brown, trace pale inclusions
M	<162	2.9	N	SS06C	3	3		(@3') some clay, large gravel
M	<162	2.8	N	SS06D	4	4		(@4') red brown, more clay, little gravel
Total Depth @ 4 feet bgs								



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



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

October 15, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JRU #124 TANK BATTERY - SPILL

Enclosed are the results of analyses for samples received by the laboratory on 10/09/25 13:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/09/2025
Reported: 10/15/2025
Project Name: JRU #124 TANK BATTERY - SPILL
Project Number: 03C1558734
Project Location: 32.304966, -103.8037643

Sampling Date: 10/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SS 12 0.5 (H256314-01)

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	10/10/2025	ND	1.80	90.1	2.00	1.94	
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48	
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73	
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68	
Total BTEx	<0.300	0.300	10/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.9 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 98.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 90.6 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

A handwritten signature in black ink, appearing to read "Celey D. Keene".

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

2

[illegible]



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

October 15, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JRU #124 TANK BATTERY - SPILL

Enclosed are the results of analyses for samples received by the laboratory on 10/09/25 13:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	JRU #124 TANK BATTERY - SPILL	Sampling Condition:	Cool & Intact
Project Number:	03C1558734	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.304966, -103.8037643		

Sample ID: SS06 A 1' (H256316-01)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/10/2025	ND	1.80	90.1	2.00	1.94		
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68		
Total BTX	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.9 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 92.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 84.3 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/09/2025
Reported: 10/15/2025
Project Name: JRU #124 TANK BATTERY - SPILL
Project Number: 03C1558734
Project Location: XTO 32.304966, -103.8037643

Sampling Date: 10/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SS06 B 2' (H256316-02)

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	10/10/2025	ND	1.80	90.1	2.00	1.94		
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68		
Total BTEX	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.3 % 70.4-141

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	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 94.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 85.4 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/09/2025
Reported: 10/15/2025
Project Name: JRU #124 TANK BATTERY - SPILL
Project Number: 03C1558734
Project Location: XTO 32.304966, -103.8037643

Sampling Date: 10/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SS06 C 3' (H256316-03)

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	10/10/2025	ND	1.80	90.1	2.00	1.94		
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68		
Total BTEx	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.9 % 70.4-141

Chloride, SM4500CI-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	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 93.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.5 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/09/2025
Reported: 10/15/2025
Project Name: JRU #124 TANK BATTERY - SPILL
Project Number: 03C1558734
Project Location: XTO 32.304966, -103.8037643

Sampling Date: 10/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SS06 D 4' (H256316-04)

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	10/10/2025	ND	1.80	90.1	2.00	1.94		
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68		
Total BTEx	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.5 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 95.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.7 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC

Project Manager: Tracy Hillard

Address: 3122 National Parks Hwy

City: Carlsbad

State: NM Zip: 88220

Phone #: 575 937 3906

Fax #:

Project #: 03C1556734

Project Owner: XTO

Project Name: JRV # 124 Tank Battery - Spill

Project Location: 32.304966, -103.8037643

Sampler Name: Joshua Boxley

FOR LAB USE ONLY

BILL TO

P.O. #:

Company: XTO Energy Inc

Attn: Cotten Brown Dale Ward

Address: 3104 E Green St

City: Carlsbad

State: NM Zip: 88220

Phone #:

Fax #:

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS REQUEST						
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			ICE / COOL	OTHER :	Chlorides	TPH	BTEX		
HS6316	SS06A	1	G	1																
	SS06B	2	G	1																
	SS06C	3	G	1																
	SS06D	4	G	1																

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

CS - 040240115

UBS

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Delivered By: (Circle One)

Observed Temp.: °C

Corrected Temp.: °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Incident: WAB 1517555063

Cost Center: 080911001

APR: 30-015-36113

Sampler - UPS - Bus - Other:

Observed Temp.: °C

Corrected Temp.: °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Incident: WAB 1517555063

Cost Center: 080911001

APR: 30-015-36113

FORM-006 R 3.2 10/07/21

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



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

October 15, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JRU #124 TANK BATTERY - SPILL

Enclosed are the results of analyses for samples received by the laboratory on 10/09/25 13:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	JRU #124 TANK BATTERY - SPILL	Sampling Condition:	Cool & Intact
Project Number:	03C1558734	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.304966, -103.8037643		

Sample ID: SS 11 0.5 (H256317-01)

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	10/10/2025	ND	1.80	90.1	2.00	1.94		
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68		
Total BTEX	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.4 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	186	93.1	200	0.516	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	187	93.7	200	1.99	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 82.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 80.7 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/09/2025
Reported: 10/15/2025
Project Name: JRU #124 TANK BATTERY - SPILL
Project Number: 03C1558734
Project Location: XTO 32.304966, -103.8037643

Sampling Date: 10/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SW 01 0-1.5 (H256317-02)

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	10/10/2025	ND	1.89	94.6	2.00	2.87		
Toluene*	<0.050	0.050	10/10/2025	ND	1.93	96.4	2.00	3.12		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.92	95.9	2.00	3.53		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	5.91	98.6	6.00	3.87		
Total BTEX	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/10/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	205	103	200	9.27	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	228	114	200	9.83	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 85.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 82.7 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/09/2025
Reported: 10/15/2025
Project Name: JRU #124 TANK BATTERY - SPILL
Project Number: 03C1558734
Project Location: XTO 32.304966, -103.8037643

Sampling Date: 10/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SW 02 0-1.5 (H256317-03)

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	10/10/2025	ND	1.89	94.6	2.00	2.87		
Toluene*	<0.050	0.050	10/10/2025	ND	1.93	96.4	2.00	3.12		
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.92	95.9	2.00	3.53		
Total Xylenes*	<0.150	0.150	10/10/2025	ND	5.91	98.6	6.00	3.87		
Total BTEx	<0.300	0.300	10/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	10/10/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	205	103	200	9.27	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	228	114	200	9.83	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane 90.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 88.1 % 39.9-141

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analytical Report 597097

for
LT Environmental, Inc.

Project Manager: Adrian Baker

JRU 124H Tank Battery

JRU 124H Tank Battery

24-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



24-SEP-18

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **597097**

JRU 124H Tank Battery

Project Address: Carlsbad, NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 597097. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 597097 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 597097****LT Environmental, Inc., Arvada, CO**

JRU 124H Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	08-22-18 14:30	1.5 ft	597097-001
SS02	S	08-22-18 14:50	1.5 ft	597097-002
SS03	S	08-22-18 15:00	1.5 ft	597097-003



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *JRU 124H Tank Battery*

Project ID: *JRU 124H Tank Battery*
Work Order Number(s): *597097*

Report Date: *24-SEP-18*
Date Received: *08/27/2018*

Sample receipt non conformances and comments:

PER CLIENTS EMAIL REQUEST, CORRECTED SAMPLE NAMES 09/24/18 JKR

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3062017 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 597097

LT Environmental, Inc., Arvada, CO

Project Name: JRU 124H Tank Battery



Project Id: JRU 124H Tank Battery
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Mon Aug-27-18 10:00 am
Report Date: 24-SEP-18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	597097-001	597097-002	597097-003			
	<i>Field Id:</i>	SS01	SS02	SS03			
	<i>Depth:</i>	1.5- ft	1.5- ft	1.5- ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Aug-22-18 14:30	Aug-22-18 14:50	Aug-22-18 15:00			
BTEX by EPA 8021B	<i>Extracted:</i>	Aug-31-18 15:00	Aug-31-18 15:00	Aug-31-18 15:00			
	<i>Analyzed:</i>	Aug-31-18 21:59	Aug-31-18 22:19	Aug-31-18 22:39			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200			
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200			
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200			
m,p-Xylenes		<0.00397 0.00397	<0.00401 0.00401	<0.00401 0.00401			
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200			
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200			
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200			
Inorganic Anions by EPA 300	<i>Extracted:</i>	Aug-28-18 14:45	Aug-28-18 14:45	Aug-28-18 14:45			
	<i>Analyzed:</i>	Aug-28-18 19:10	Aug-28-18 19:15	Aug-28-18 19:31			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		69.0 5.00	88.1 5.00	19.9 4.95			
TPH by SW8015 Mod	<i>Extracted:</i>	Aug-27-18 11:00	Aug-27-18 11:00	Aug-27-18 11:00			
	<i>Analyzed:</i>	Aug-27-18 18:59	Aug-27-18 19:19	Aug-27-18 19:39			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<14.9 14.9	<15.0 15.0			
Diesel Range Organics (DRO)		<15.0 15.0	<14.9 14.9	<15.0 15.0			
Oil Range Hydrocarbons (ORO)		<15.0 15.0	<14.9 14.9	<15.0 15.0			
Total TPH		<15.0 15.0	<14.9 14.9	<15.0 15.0			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analytical Results 597097



LT Environmental, Inc., Arvada, CO

JRU 124H Tank Battery

Sample Id: **SS01**
Lab Sample Id: 597097-001

Matrix: Soil
Date Collected: 08.22.18 14.30

Date Received: 08.27.18 10.00
Sample Depth: 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3061513

Date Prep: 08.28.18 14.45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	69.0	5.00	mg/kg	08.28.18 19.10		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3061397

Date Prep: 08.27.18 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.27.18 18.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.27.18 18.59	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.27.18 18.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.27.18 18.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.27.18 18.59	
o-Terphenyl	84-15-1	96	%	70-135	08.27.18 18.59	



Certificate of Analytical Results 597097



LT Environmental, Inc., Arvada, CO

JRU 124H Tank Battery

Sample Id: **SS01**
 Lab Sample Id: 597097-001

Matrix: Soil
 Date Collected: 08.22.18 14.30

Date Received: 08.27.18 10.00
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.31.18 15.00

Basis: Wet Weight

Seq Number: 3062017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.31.18 21.59	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.31.18 21.59	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.31.18 21.59	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.31.18 21.59	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.31.18 21.59	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.31.18 21.59	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.31.18 21.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	08.31.18 21.59		
4-Bromofluorobenzene	460-00-4	94	%	70-130	08.31.18 21.59		



Certificate of Analytical Results 597097



LT Environmental, Inc., Arvada, CO

JRU 124H Tank Battery

Sample Id: **SS02**
Lab Sample Id: 597097-002

Matrix: Soil
Date Collected: 08.22.18 14.50

Date Received: 08.27.18 10.00
Sample Depth: 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3061513

Date Prep: 08.28.18 14.45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	88.1	5.00	mg/kg	08.28.18 19.15		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3061397

Date Prep: 08.27.18 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.27.18 19.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.27.18 19.19	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.27.18 19.19	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.27.18 19.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	08.27.18 19.19	
o-Terphenyl	84-15-1	85	%	70-135	08.27.18 19.19	



Certificate of Analytical Results 597097



LT Environmental, Inc., Arvada, CO

JRU 124H Tank Battery

Sample Id: **SS02**
Lab Sample Id: 597097-002

Matrix: Soil
Date Collected: 08.22.18 14.50

Date Received: 08.27.18 10.00
Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.31.18 15.00

Basis: Wet Weight

Seq Number: 3062017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.31.18 22.19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.31.18 22.19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.31.18 22.19	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.31.18 22.19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.31.18 22.19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.31.18 22.19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.31.18 22.19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	70-130	08.31.18 22.19		
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.31.18 22.19		



Certificate of Analytical Results 597097



LT Environmental, Inc., Arvada, CO

JRU 124H Tank Battery

Sample Id: **SS03**
Lab Sample Id: 597097-003

Matrix: Soil
Date Collected: 08.22.18 15.00

Date Received: 08.27.18 10.00
Sample Depth: 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3061513

Date Prep: 08.28.18 14.45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.9	4.95	mg/kg	08.28.18 19.31		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3061397

Date Prep: 08.27.18 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.27.18 19.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.27.18 19.39	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.27.18 19.39	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.27.18 19.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.27.18 19.39	
o-Terphenyl	84-15-1	91	%	70-135	08.27.18 19.39	



Certificate of Analytical Results 597097

LT Environmental, Inc., Arvada, CO

JRU 124H Tank Battery

Sample Id: **SS03**
 Lab Sample Id: 597097-003

Matrix: Soil
 Date Collected: 08.22.18 15.00

Date Received: 08.27.18 10.00
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.31.18 15.00

Basis: Wet Weight

Seq Number: 3062017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.31.18 22.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.31.18 22.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.31.18 22.39	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.31.18 22.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.31.18 22.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.31.18 22.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.31.18 22.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	70-130	08.31.18 22.39		
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.31.18 22.39		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

JRU 124H Tank Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3061513

MB Sample Id: 7661287-1-BLK

Matrix: Solid

LCS Sample Id: 7661287-1-BKS

Prep Method: E300P

Date Prep: 08.28.18

LCSD Sample Id: 7661287-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	257	103	90-110	0	20	mg/kg	08.28.18 17:25	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3061513

Parent Sample Id: 597133-005

Matrix: Soil

MS Sample Id: 597133-005 S

Prep Method: E300P

Date Prep: 08.28.18

MSD Sample Id: 597133-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	909	248	1120	85	1120	85	90-110	0	20	mg/kg	08.28.18 17:42	X

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3061513

Parent Sample Id: 597167-002

Matrix: Soil

MS Sample Id: 597167-002 S

Prep Method: E300P

Date Prep: 08.28.18

MSD Sample Id: 597167-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	877	248	1090	86	1100	90	90-110	1	20	mg/kg	08.28.18 18:59	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3061397

MB Sample Id: 7661243-1-BLK

Matrix: Solid

LCS Sample Id: 7661243-1-BKS

Prep Method: TX1005P

Date Prep: 08.27.18

LCSD Sample Id: 7661243-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	915	92	1020	102	70-135	11	20	mg/kg	08.27.18 12:35	
Diesel Range Organics (DRO)	<15.0	1000	935	94	1050	105	70-135	12	20	mg/kg	08.27.18 12:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		113		126		70-135	%	08.27.18 12:35
o-Terphenyl	100		100		109		70-135	%	08.27.18 12:35

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

JRU 124H Tank Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3061397

Parent Sample Id: 596931-009

Matrix: Soil

MS Sample Id: 596931-009 S

Prep Method: TX1005P

Date Prep: 08.27.18

MSD Sample Id: 596931-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	888	89	886	89	70-135	0	20	mg/kg	08.27.18 13:35	
Diesel Range Organics (DRO)	<15.0	999	917	92	925	93	70-135	1	20	mg/kg	08.27.18 13:35	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		112		70-135	%	08.27.18 13:35
o-Terphenyl	101		102		70-135	%	08.27.18 13:35

Analytical Method: BTEX by EPA 8021B

Seq Number: 3062017

MB Sample Id: 7661606-1-BLK

Matrix: Solid

LCS Sample Id: 7661606-1-BKS

Prep Method: SW5030B

Date Prep: 08.31.18

LCSD Sample Id: 7661606-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0838	83	0.0877	87	70-130	5	35	mg/kg	08.31.18 19:36	
Toluene	<0.00202	0.101	0.0858	85	0.0890	88	70-130	4	35	mg/kg	08.31.18 19:36	
Ethylbenzene	<0.00202	0.101	0.101	100	0.110	109	70-130	9	35	mg/kg	08.31.18 19:36	
m,p-Xylenes	<0.00403	0.202	0.186	92	0.202	100	70-130	8	35	mg/kg	08.31.18 19:36	
o-Xylene	<0.00202	0.101	0.0889	88	0.0963	95	70-130	8	35	mg/kg	08.31.18 19:36	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		89		89		70-130	%	08.31.18 19:36
4-Bromofluorobenzene	88		91		96		70-130	%	08.31.18 19:36

Analytical Method: BTEX by EPA 8021B

Seq Number: 3062017

Parent Sample Id: 597384-001

Matrix: Soil

MS Sample Id: 597384-001 S

Prep Method: SW5030B

Date Prep: 08.31.18

MSD Sample Id: 597384-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0167	17	0.0417	41	70-130	86	35	mg/kg	08.31.18 20:17	XF
Toluene	<0.00201	0.100	0.0280	28	0.0492	49	70-130	55	35	mg/kg	08.31.18 20:17	XF
Ethylbenzene	<0.00201	0.100	0.0225	23	0.0797	79	70-130	112	35	mg/kg	08.31.18 20:17	XF
m,p-Xylenes	<0.00402	0.201	0.0296	15	0.0981	49	70-130	107	35	mg/kg	08.31.18 20:17	XF
o-Xylene	<0.00201	0.100	0.0164	16	0.0507	50	70-130	102	35	mg/kg	08.31.18 20:17	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		87		70-130	%	08.31.18 20:17
4-Bromofluorobenzene	99		124		70-130	%	08.31.18 20:17

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/27/2018 10:00:00 AM

Work Order #: 597097

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 08/27/2018

Checklist reviewed by:

Jessica Kramer

Date: 08/27/2018

Analytical Report 598199

for
LT Environmental, Inc.

Project Manager: Adrian Baker

JRU-124H Tank Battery

JRU-124 H

24-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)



24-SEP-18

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **598199**

JRU-124H Tank Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 598199. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 598199 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 598199****LT Environmental, Inc., Arvada, CO**

JRU-124H Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS07	S	09-04-18 10:00	6 In	598199-001
SS08	S	09-04-18 09:35	6 In	598199-002
SS06	S	09-04-18 11:00	6 In	598199-003
SS04	S	09-04-18 10:40	1.5 ft	598199-004
SS05	S	09-04-18 12:00	1.5 ft	598199-005
SS09	S	09-04-18 13:25	6 In	598199-006
SS10	S	09-04-18 13:30	6 In	598199-007



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: JRU-124H Tank Battery

Project ID: JRU-124 H
Work Order Number(s): 598199

Report Date: 24-SEP-18
Date Received: 09/06/2018

Sample receipt non conformances and comments:

PER CLIENTS EMAIL REQUEST, CORRECTED SAMPLE NAMES 09/24/18 JKR

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3062607 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 598199

LT Environmental, Inc., Arvada, CO

Project Name: JRU-124H Tank Battery



Project Id: JRU-124 H
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Thu Sep-06-18 12:12 pm
Report Date: 24-SEP-18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	598199-001	598199-002	598199-003	598199-004	598199-005	598199-006
	<i>Field Id:</i>	SS07	SS08	SS06	SS04	SS05	SS09
	<i>Depth:</i>	6- In	6- In	6- In	1.5- ft	1.5- ft	6- In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-04-18 10:00	Sep-04-18 09:35	Sep-04-18 11:00	Sep-04-18 10:40	Sep-04-18 12:00	Sep-04-18 13:25
BTEX by EPA 8021B	<i>Extracted:</i>	Sep-09-18 10:15	Sep-09-18 10:15	Sep-09-18 10:15	Sep-09-18 10:15	Sep-09-18 10:15	Sep-09-18 10:15
	<i>Analyzed:</i>	Sep-09-18 21:07	Sep-09-18 21:29	Sep-09-18 21:50	Sep-09-18 22:10	Sep-09-18 19:22	Sep-09-18 19:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
m,p-Xylenes		<0.00403 0.00403	<0.00403 0.00403	<0.00401 0.00401	<0.00398 0.00398	<0.00402 0.00402	<0.00404 0.00404
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Inorganic Anions by EPA 300	<i>Extracted:</i>	Sep-06-18 17:00	Sep-06-18 17:00	Sep-06-18 17:00	Sep-07-18 17:15	Sep-07-18 17:15	Sep-07-18 17:15
	<i>Analyzed:</i>	Sep-06-18 23:27	Sep-06-18 23:33	Sep-06-18 23:38	Sep-08-18 01:19	Sep-08-18 01:25	Sep-08-18 01:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		207 4.97	20.5 5.00	1100 4.95	121 4.97	149 4.95	12.1 4.95
TPH by SW8015 Mod	<i>Extracted:</i>	Sep-06-18 14:00	Sep-06-18 14:00	Sep-06-18 14:00	Sep-06-18 14:00	Sep-06-18 14:00	Sep-06-18 14:00
	<i>Analyzed:</i>	Sep-06-18 20:34	Sep-06-18 20:54	Sep-06-18 21:14	Sep-06-18 21:33	Sep-06-18 21:53	Sep-06-18 22:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<14.9 14.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0
Diesel Range Organics (DRO)		<14.9 14.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	42.8 15.0
Motor Oil Range Hydrocarbons (MRO)		<14.9 14.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0
Total TPH		<14.9 14.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	42.8 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 598199

LT Environmental, Inc., Arvada, CO

Project Name: JRU-124H Tank Battery



Project Id: JRU-124 H
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Thu Sep-06-18 12:12 pm
Report Date: 24-SEP-18
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	598199-007					
	Field Id:	SS10					
	Depth:	6- In					
	Matrix:	SOIL					
	Sampled:	Sep-04-18 13:30					
BTEX by EPA 8021B	Extracted:	Sep-09-18 10:15					
	Analyzed:	Sep-09-18 18:40					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00401 0.00401					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Inorganic Anions by EPA 300	Extracted:	Sep-07-18 17:15					
	Analyzed:	Sep-08-18 01:56					
	Units/RL:	mg/kg RL					
Chloride		<4.99 4.99					
TPH by SW8015 Mod	Extracted:	Sep-06-18 14:00					
	Analyzed:	Sep-06-18 22:32					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0					
Diesel Range Organics (DRO)		<15.0 15.0					
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0					
Total TPH		<15.0 15.0					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS07**
Lab Sample Id: 598199-001

Matrix: Soil
Date Collected: 09.04.18 10.00

Date Received: 09.06.18 12.12
Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062381

Date Prep: 09.06.18 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	207	4.97	mg/kg	09.06.18 23.27		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	09.06.18 20.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	09.06.18 20.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	09.06.18 20.34	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	09.06.18 20.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	09.06.18 20.34	
o-Terphenyl	84-15-1	94	%	70-135	09.06.18 20.34	



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS07**
Lab Sample Id: 598199-001

Matrix: Soil
Date Collected: 09.04.18 10.00

Date Received: 09.06.18 12.12
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.09.18 21.07	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.09.18 21.07	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.09.18 21.07	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.09.18 21.07	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.09.18 21.07	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.09.18 21.07	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.09.18 21.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.09.18 21.07		
1,4-Difluorobenzene	540-36-3	119	%	70-130	09.09.18 21.07		



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS08**
Lab Sample Id: 598199-002

Matrix: Soil
Date Collected: 09.04.18 09.35

Date Received: 09.06.18 12.12
Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062381

Date Prep: 09.06.18 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.5	5.00	mg/kg	09.06.18 23.33		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.06.18 20.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.06.18 20.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.06.18 20.54	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.06.18 20.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	09.06.18 20.54	
o-Terphenyl	84-15-1	90	%	70-135	09.06.18 20.54	



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS08**

Matrix: Soil

Date Received: 09.06.18 12.12

Lab Sample Id: 598199-002

Date Collected: 09.04.18 09.35

Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.09.18 21.29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.09.18 21.29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.09.18 21.29	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.09.18 21.29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.09.18 21.29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.09.18 21.29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.09.18 21.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.09.18 21.29		
1,4-Difluorobenzene	540-36-3	110	%	70-130	09.09.18 21.29		



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS06**
Lab Sample Id: 598199-003

Matrix: Soil
Date Collected: 09.04.18 11.00

Date Received: 09.06.18 12.12
Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062381

Date Prep: 09.06.18 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1100	4.95	mg/kg	09.06.18 23.38		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.06.18 21.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.06.18 21.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.06.18 21.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.06.18 21.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	09.06.18 21.14	
o-Terphenyl	84-15-1	91	%	70-135	09.06.18 21.14	



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS06**
 Lab Sample Id: 598199-003

Matrix: Soil
 Date Collected: 09.04.18 11.00

Date Received: 09.06.18 12.12
 Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.09.18 21.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.09.18 21.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.09.18 21.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.09.18 21.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.09.18 21.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.09.18 21.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.09.18 21.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.09.18 21.50		
1,4-Difluorobenzene	540-36-3	118	%	70-130	09.09.18 21.50		



Certificate of Analytical Results 598199

LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS04**
 Lab Sample Id: 598199-004

Matrix: Soil
 Date Collected: 09.04.18 10.40

Date Received: 09.06.18 12.12
 Sample Depth: 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062573

Date Prep: 09.07.18 17.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	121	4.97	mg/kg	09.08.18 01.19		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.06.18 21.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.06.18 21.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.06.18 21.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.06.18 21.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	09.06.18 21.33	
o-Terphenyl	84-15-1	93	%	70-135	09.06.18 21.33	



Certificate of Analytical Results 598199

LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS04**
 Lab Sample Id: 598199-004

Matrix: Soil
 Date Collected: 09.04.18 10.40

Date Received: 09.06.18 12.12
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.09.18 22.10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.09.18 22.10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.09.18 22.10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.09.18 22.10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.09.18 22.10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.09.18 22.10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.09.18 22.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.09.18 22.10		
1,4-Difluorobenzene	540-36-3	127	%	70-130	09.09.18 22.10		



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS05**
Lab Sample Id: 598199-005

Matrix: Soil
Date Collected: 09.04.18 12.00

Date Received: 09.06.18 12.12
Sample Depth: 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062573

Date Prep: 09.07.18 17.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	149	4.95	mg/kg	09.08.18 01.25		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.06.18 21.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.06.18 21.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.06.18 21.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.06.18 21.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	09.06.18 21.53	
o-Terphenyl	84-15-1	95	%	70-135	09.06.18 21.53	



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS05**

Matrix: Soil

Date Received: 09.06.18 12.12

Lab Sample Id: 598199-005

Date Collected: 09.04.18 12.00

Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.09.18 19.22	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.09.18 19.22	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.09.18 19.22	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.09.18 19.22	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.09.18 19.22	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.09.18 19.22	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.09.18 19.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	09.09.18 19.22		
1,4-Difluorobenzene	540-36-3	123	%	70-130	09.09.18 19.22		



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS09**
Lab Sample Id: 598199-006

Matrix: Soil
Date Collected: 09.04.18 13.25

Date Received: 09.06.18 12.12
Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062573

Date Prep: 09.07.18 17.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.1	4.95	mg/kg	09.08.18 01.50		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.06.18 22.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	42.8	15.0	mg/kg	09.06.18 22.13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.06.18 22.13	U	1
Total TPH	PHC635	42.8	15.0	mg/kg	09.06.18 22.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	09.06.18 22.13	
o-Terphenyl	84-15-1	96	%	70-135	09.06.18 22.13	



Certificate of Analytical Results 598199



LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS09**
Lab Sample Id: 598199-006

Matrix: Soil
Date Collected: 09.04.18 13.25

Date Received: 09.06.18 12.12
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.09.18 19.01	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.09.18 19.01	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.09.18 19.01	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.09.18 19.01	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.09.18 19.01	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.09.18 19.01	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.09.18 19.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.09.18 19.01		
1,4-Difluorobenzene	540-36-3	123	%	70-130	09.09.18 19.01		



Certificate of Analytical Results 598199

LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS10**
 Lab Sample Id: 598199-007

Matrix: Soil
 Date Collected: 09.04.18 13.30

Date Received: 09.06.18 12.12
 Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: SCM

Analyst: SCM

Seq Number: 3062573

Date Prep: 09.07.18 17.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	09.08.18 01.56	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3062457

Date Prep: 09.06.18 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.06.18 22.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.06.18 22.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.06.18 22.32	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.06.18 22.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	09.06.18 22.32	
o-Terphenyl	84-15-1	94	%	70-135	09.06.18 22.32	



Certificate of Analytical Results 598199

LT Environmental, Inc., Arvada, CO

JRU-124H Tank Battery

Sample Id: **SS10**
 Lab Sample Id: 598199-007

Matrix: Soil
 Date Collected: 09.04.18 13.30

Date Received: 09.06.18 12.12
 Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.09.18 10.15

Basis: Wet Weight

Seq Number: 3062607

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.09.18 18.40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.09.18 18.40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.09.18 18.40	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.09.18 18.40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.09.18 18.40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.09.18 18.40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.09.18 18.40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	128	%	70-130	09.09.18 18.40		
4-Bromofluorobenzene	460-00-4	83	%	70-130	09.09.18 18.40		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

JRU-124H Tank Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3062381

MB Sample Id: 7661805-1-BLK

Matrix: Solid

LCS Sample Id: 7661805-1-BKS

Prep Method: E300P

Date Prep: 09.06.18

LCSD Sample Id: 7661805-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	268	107	273	109	90-110	2	20	mg/kg	09.06.18 21:04	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3062573

MB Sample Id: 7661904-1-BLK

Matrix: Solid

LCS Sample Id: 7661904-1-BKS

Prep Method: E300P

Date Prep: 09.07.18

LCSD Sample Id: 7661904-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	251	100	250	100	90-110	0	20	mg/kg	09.07.18 23:53	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3062381

Parent Sample Id: 598005-003

Matrix: Soil

MS Sample Id: 598005-003 S

Prep Method: E300P

Date Prep: 09.06.18

MSD Sample Id: 598005-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.853	249	261	105	260	104	90-110	0	20	mg/kg	09.06.18 21:20	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3062381

Parent Sample Id: 598005-005

Matrix: Soil

MS Sample Id: 598005-005 S

Prep Method: E300P

Date Prep: 09.06.18

MSD Sample Id: 598005-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.852	248	246	99	252	102	90-110	2	20	mg/kg	09.06.18 22:34	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3062573

Parent Sample Id: 598207-004

Matrix: Soil

MS Sample Id: 598207-004 S

Prep Method: E300P

Date Prep: 09.07.18

MSD Sample Id: 598207-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	699	248	916	88	915	87	90-110	0	20	mg/kg	09.08.18 01:38	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



LT Environmental, Inc.

JRU-124H Tank Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3062573

Parent Sample Id: 598333-010

Matrix: Soil

MS Sample Id: 598333-010 S

Prep Method: E300P

Date Prep: 09.07.18

MSD Sample Id: 598333-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	71.0	250	324	101	322	100	90-110	1	20	mg/kg	09.08.18 00:11	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3062457

MB Sample Id: 7661846-1-BLK

Matrix: Solid

LCS Sample Id: 7661846-1-BKS

Prep Method: TX1005P

Date Prep: 09.06.18

LCSD Sample Id: 7661846-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	901	90	934	93	70-135	4	20	mg/kg	09.06.18 18:17	
Diesel Range Organics (DRO)	<8.13	1000	907	91	932	93	70-135	3	20	mg/kg	09.06.18 18:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		121		125		70-135	%	09.06.18 18:17
o-Terphenyl	97		99		102		70-135	%	09.06.18 18:17

Analytical Method: TPH by SW8015 Mod

Seq Number: 3062457

Parent Sample Id: 598198-001

Matrix: Soil

MS Sample Id: 598198-001 S

Prep Method: TX1005P

Date Prep: 09.06.18

MSD Sample Id: 598198-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	9.40	998	907	90	895	89	70-135	1	20	mg/kg	09.06.18 19:16	
Diesel Range Organics (DRO)	78.2	998	970	89	962	89	70-135	1	20	mg/kg	09.06.18 19:16	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		116		70-135	%	09.06.18 19:16
o-Terphenyl	99		99		70-135	%	09.06.18 19:16

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

JRU-124H Tank Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3062607

MB Sample Id: 7661932-1-BLK

Matrix: Solid

LCS Sample Id: 7661932-1-BKS

Prep Method: SW5030B

Date Prep: 09.09.18

LCSD Sample Id: 7661932-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0727	73	0.102	101	70-130	34	35	mg/kg	09.09.18 14:47	
Toluene	0.000778	0.100	0.0952	95	0.0753	75	70-130	23	35	mg/kg	09.09.18 14:47	
Ethylbenzene	<0.000566	0.100	0.109	109	0.0859	85	70-130	24	35	mg/kg	09.09.18 14:47	
m,p-Xylenes	<0.00102	0.200	0.210	105	0.166	83	70-130	23	35	mg/kg	09.09.18 14:47	
o-Xylene	0.000509	0.100	0.102	102	0.0814	81	70-130	22	35	mg/kg	09.09.18 14:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	120		108		89		70-130	%	09.09.18 14:47
4-Bromofluorobenzene	90		102		85		70-130	%	09.09.18 14:47

Analytical Method: BTEX by EPA 8021B

Seq Number: 3062607

Parent Sample Id: 597744-007

Matrix: Soil

MS Sample Id: 597744-007 S

Prep Method: SW5030B

Date Prep: 09.09.18

MSD Sample Id: 597744-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.163	161	0.149	148	70-130	9	35	mg/kg	09.09.18 15:29	X
Toluene	<0.000459	0.101	0.120	119	0.108	107	70-130	11	35	mg/kg	09.09.18 15:29	
Ethylbenzene	<0.00202	0.101	0.133	132	0.122	121	70-130	9	35	mg/kg	09.09.18 15:29	X
m,p-Xylenes	<0.00102	0.202	0.260	129	0.234	116	70-130	11	35	mg/kg	09.09.18 15:29	
o-Xylene	<0.00202	0.101	0.127	126	0.113	112	70-130	12	35	mg/kg	09.09.18 15:29	

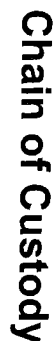
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	80		83		70-130	%	09.09.18 15:29
4-Bromofluorobenzene	85		78		70-130	%	09.09.18 15:29

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



598199

www.xenco.com Page _____ of _____

Project Name:	2KA-124 H 7000 Battery	Turn Around	ANALYSIS REQUEST						Work Order Notes
Project Number:	JRA-124 H	Routine <input checked="" type="checkbox"/>	(X)	(MRO)	(O)				
P.O. Number:	2AP-3066	Rush:							
Sampler's Name:	Fabian Libbarri	Due Date:							

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Revised Date 051418 Rev. 2018.1

ORIGIN ID:MAFA (806) 794-1296
XENCO
XENCO
1211 W. FLORIDA AVE
MIDLAND, TX 79701
UNITED STATES US

SHIP DATE: 05SEP18
ACTWGT: 24.00 LB
CAD: 101813706/NET4040
DIMS: 19x13x16 IN
BILL RECIPIENT

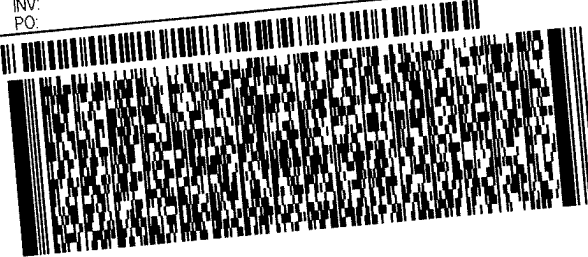
TO XENCO
XENCO
1211 W. FLORIDA AVE

MIDLAND TX 79701

(806) 794-1296
INV:
PO:

REF:

DEPT:



FedEx
Express



J1C2118891801ur

THU - 06 SEP 10:30A
PRIORITY OVERNIGHT

TRK# 7731 4579 1018
0201

41 MAFA

79701
TX-US LBB





XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09/06/2018 12:12:00 PM

Work Order #: 598199

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Date: 09/06/2018

Checklist reviewed by:

Jessica Kramer

Date: 09/06/2018



APPENDIX E

NMOCD Correspondence

From: [Green, Garrett J](#)
To: [Tacoma Morrissey](#); [Ben Belill](#); [Ashley Ager](#)
Cc: [Pennington, Shelby G](#); [Collins, Melanie](#)
Subject: FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 197200
Date: Wednesday, March 15, 2023 9:37:38 AM

[**EXTERNAL EMAIL **]

2RP-3066 JRU 124H released on 6/7/15

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, March 15, 2023 7:35 AM
To: Green, Garrett J <garrett.green@exxonmobil.com>
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 197200

External Email - Think Before You Click

To whom it may concern (c/o Garrett Green for XTO PERMIAN OPERATING LLC.),

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nAB1517555063, for the following reasons:

- **A release cannot be closed to both the old rules and the current rules. No remediation plan was found for this release per 19.15.26.16 NMAC. This release will need to be closed to the current rules. 2RP-3066 closed. Refer to incident #NAB1517555063 in all future communication. Submit a complete report through the OCD Permitting website by 6/15/2023.**

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 197200.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

Thank you,
Brittany Hall
Projects Environmental Specialist - A
505-517-5333
Brittany.Hall@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Tracy Hillard

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Monday, November 6, 2023 8:30 AM
To: Lambert, Tommee L
Cc: Ashley Ager; Ben Belill; Tacoma Morrissey; Green, Garrett J
Subject: FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 227056

[**EXTERNAL EMAIL**]

Denial of 6/7/15 JRU 124H TB. Closure was submitted 6/13/23.

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Friday, November 3, 2023 4:14 PM
To: Collins, Melanie <melanie.collins@exxonmobil.com>
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 227056

External Email - Think Before You Click

To whom it may concern (c/o Melanie Collins for XTO ENERGY, INC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1517555063, for the following reasons:

- **The Closure Report is Denied. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please continue to horizontally delineate sample location SS06 until it meets closure criteria standards.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 227056.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Robert Hamlet

575-748-1283

Robert.Hamlet@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 531477

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1517555063
Incident Name	NAB1517555063 JAMES RANCH UNIT #124H @ 30-015-38113
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-38113] JAMES RANCH UNIT #124H

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	JAMES RANCH UNIT #124H
Date Release Discovered	06/07/2015
Surface Owner	Federal

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: Equipment Failure Pump Produced Water Released: 11 BBL Recovered: 10 BBL Lost: 1 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.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 531477

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

Initial Response

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

The source of the release has been stopped	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: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/03/2025
--	---

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 3

Action 531477

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Greater than 1000 (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 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 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)	1100
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	42.8
GRO+DRO (EPA SW-846 Method 8015M)	42.8
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	08/22/2018
On what date will (or did) the final sampling or liner inspection occur	10/08/2025
On what date will (or was) the remediation complete(d)	10/08/2025
What is the estimated surface area (in square feet) that will be reclaimed	926
What is the estimated volume (in cubic yards) that will be reclaimed	58.7
What is the estimated surface area (in square feet) that will be remediated	926
What is the estimated volume (in cubic yards) that will be remediated	58.7

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.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 531477

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112342028 LEA LAND LANDFILL
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.
<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: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/03/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 5

Action 531477

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 6

Action 531477

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	511337
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/08/2025
What was the (estimated) number of samples that were to be gathered	12
What was the sampling surface area in square feet	18000

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	927
What was the total volume (cubic yards) remediated	58.7
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	927
What was the total volume (in cubic yards) reclaimed	58.7
Summarize any additional remediation activities not included by answers (above)	Additional soil sampling activities were conducted at the Site to address the November 3, 2023 NMOCD denial in relation to the June 2015 release of produced water. Laboratory analytical results for the additional soil samples indicated that all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements, successfully defining the area of soil sample SS06. Approximately 4 cubic yards of waste containing soil, over a 200 square foot area, is estimated to be left in place immediately adjacent to the tank battery containment. This soil will be removed following pad abandonment and during reclamation activities. Based on the soil sample analytical results, no further remediation was required.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/03/2025
--	---

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

General Information
Phone: (505) 629-6116

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

State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

QUESTIONS, Page 7

Action 531477

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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

CONDITIONS

Action 531477

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 531477
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #nAB1517555063 JAMES RANCH UNIT #124H, thank you. This Remediation Closure Report is approved.	12/29/2025