



May 10, 2019

Mr. Bradford Billings
New Mexico Oil Conservation Division
1220 South St. Francis Drive, #3
Santa Fe, New Mexico 87505

**RE: Closure Request
Poker Lake Unit Ross Ranch 33-25-30 USA Battery
Remediation Permit Number 2RP-4669
Eddy County, New Mexico**

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing excavation of impacted soil and confirmation soil sampling activities at the Poker Lake Unit Ross Ranch 33-25-30 USA Battery (Site) in Unit D, Section 33, Township 25 South, Range 30 East in Eddy County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after a produced water release at the Site.

On March 8, 2018, a produced water flow line within the lined process equipment containment developed a corrosion hole. Approximately 10 barrels (bbls) of produced water were released within the impermeable lined containment and approximately 3 gallons of produced water misted onto the caliche pad west of the containment. A vacuum truck was dispatched to the Site to recover the free-standing fluid within the lined containment; approximately 10 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on March 21, 2018, and was assigned Remediation Permit (RP) Number 2RP-4669 (Attachment 1).

The release is 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 is 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. The release is categorized as a Tier III site in the Compliance Agreement, meaning remediation of the release began prior to August 14, 2018, the effective date of 19.15.29 NMAC, however remediation was ongoing. Based on the excavation activities and results of the soil sampling events, XTO is submitting this closure report and requesting no further action for this release event.



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BACKGROUND

According to Section 12 of 19.15.29 NMAC, LTE applied the closure criteria in accordance with NMOCD Table 1, *Closure Criteria for Soils Impacted by a Release*. Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well is New Mexico Office of the State Engineer (OSE) Pod Number POD-1, revised to C-3832-POD 2, located approximately 605 feet north of the Site, with a depth to groundwater of approximately 277 feet bgs. The total depth of the water well is approximately 805 feet bgs. The water well is approximately 1-foot lower in elevation than the Site. Water well C-3832-POD 2 is within 1,000 feet of the Site. The well was originally permitted as an exploratory well (POD 1) to be plugged within 10 days. An application to utilize the exploratory well for use in exploration and development resulted in renumbering the well to POD 2. Although a well log was provided, the conditions granted under the permit indicate no water can be diverted from the well unless a permit to use water is acquired. Therefore, XTO does not consider the well a freshwater well. The closest continuously flowing water or significant watercourse to the Site is wash located approximately 2,820 feet north-northwest 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 located in a low karst area. Based on these criteria, the following NMOCD Table 1 closure criteria were applied: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 1,000 mg/kg total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO); 2,500 mg/kg TPH; and 20,000 mg/kg chloride.

EXCAVATION SOIL SAMPLING

On April 26, 2019, an LTE scientist was on-site to oversee excavation of impacted soil in the misted release area west of the containment, as indicated by visual surface staining and the documented release area. To delineate impacts to soil and direct excavation activities, LTE screened soil using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. Impacted soil was excavated from the release area to a depth of 1.5 feet bgs. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite soil samples were collected by depositing five aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The soil samples were placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were shipped to Xenco Laboratories (Xenco) in Midland, Texas, at 4 degrees Celsius (°C) under strict chain-of-custody procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-oil range





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organics (ORO) by EPA Method 8015 Modified, and chloride by EPA Method 300.0. The excavation soil sample locations and depths are presented on Figure 2.

The excavation measured approximately 240 square feet in area and was completed to a depth of 1.5 feet bgs. Composite soil sample FS01 was collected from the floor of the excavation from a depth of 1.5 feet bgs. Composite soil samples SW01 and SW02 were collected from the sidewalls of the excavation from depths ranging from 0 feet to 1.5 feet bgs. The excavation soil sample locations and the horizontal extent of the excavation is presented on Figure 2. A total of approximately 15 cubic yards of impacted soil were removed from the excavation. The impacted soil will be transported and properly disposed of at Lea Land landfill facility in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated that the excavation floor and sidewall samples collected from the final excavation extent were compliant with the NMOCD Table 1 closure criteria for BTEX, GRO/DRO, TPH, and chloride. Based on the laboratory analytical results, no further excavation was required. Laboratory analytical results are presented on Figure 2 and summarized in Table 1, and the laboratory analytical report is included in Attachment 2.

CONCLUSIONS

The majority of the release was contained within the impermeable lined containment and was recovered during initial release response activities. Impacted soil was excavated from the misted release area west of the containment. Laboratory analytical results for the confirmation soil samples collected from the final excavation extent indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for this release. Upon approval of the no further action request, XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. An updated NMOCD Form C-141 is included as Attachment 1. A photographic log of the Site is included as Attachment 3.





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If you have any questions or comments, please do not hesitate to contact Ashley Ager at (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink that reads "Ashley L. Ager".

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Jim Amos, U.S. Bureau of Land Management
Crystal Weaver, U.S. Bureau of Land Management
Mike Bratcher, NMOCD
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

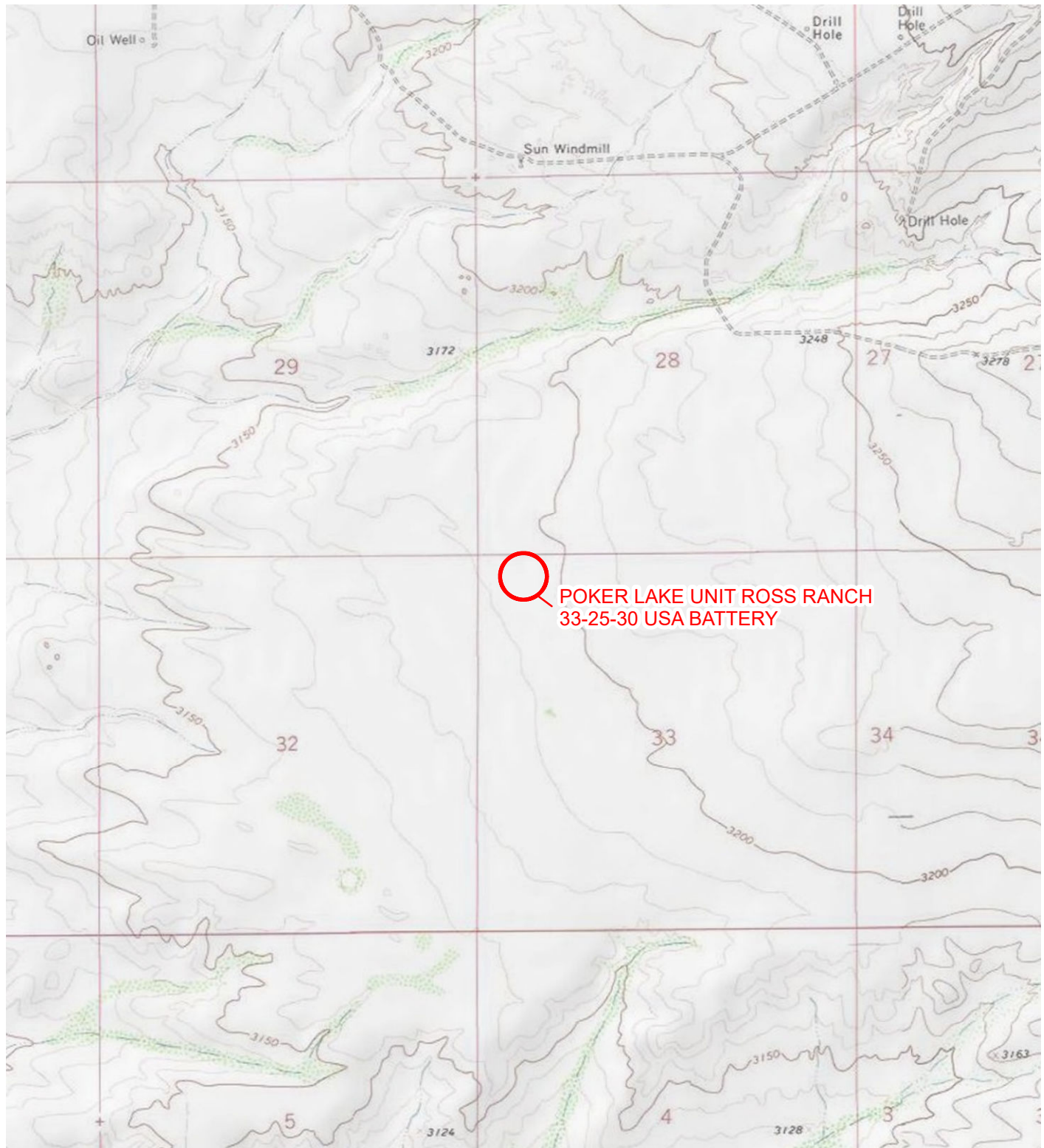
Attachments:

Figure 1 Site Location Map
Figure 2 Excavation Soil Sample Locations
Table 1 Soil Analytical Results
Attachment 1 Initial/Final NMOCD Form C-141 (2RP-4669)
Attachment 2 Laboratory Analytical Reports
Attachment 3 Photographic Log



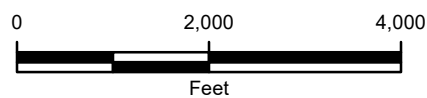
FIGURES



**LEGEND**

○ SITE LOCATION

IMAGE COURTESY OF ESRI/USGS



NOTE: REMEDIATION
PERMIT NUMBER
2RP-4669

FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT ROSS RANCH 33-25-30 USA BATTERY
UNIT D SEC 33 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 SAMPLE DATE
 NMOCD TABLE 1 CLOSURE CRITERIA (NMAC 19.15.29.12)
 B = 10 mg/kg
 BTEX = 50 mg/kg
 GRO+DRO = 1,000 mg/kg
 TPH = 2,500 mg/kg
 Cl = 20,000 mg/kg
 ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)
 <: INDICATES RESULT IS LESS THAN THE
 LABORATORY REPORTING LIMIT
 NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
 REGULATORY STANDARD

SW01@0-1.5'
 04/26/2019
 B: <0.00199
 BTEX: <0.00199
 GRO+DRO: 30.3
 TPH: 30.3
 Cl: 83.4

SW02@0-1.5'
 04/26/2019
 B: <0.00201
 BTEX: <0.00201
 GRO+DRO: <15.0
 TPH: <15.0
 Cl: 184

FS01@1.5'
 04/26/2019
 B: <0.00199
 BTEX: <0.00199
 GRO+DRO: 15.0
 TPH: 15.0
 Cl: 115

LEGEND



RELEASE LOCATION



EXCAVATION SOIL SAMPLE IN COMPLIANCE
 WITH APPLICABLE STANDARDS



GAS LINE



EXCAVATION EXTENT

B: BENZENE

BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE,
 AND TOTAL XYLENES

GRO – GASOLINE RANGE ORGANICS

DRO – DIESEL RANGE ORGANICS

TPH – TOTAL PETROLEUM HYDROCARBONS

Cl - CHLORIDE

NMAC – NEW MEXICO

ADMINISTRATIVE CODE

NMOCD – NEW MEXICO OIL CONSERVATION DIVISION

NOTE: REMEDIATION PERMIT

NUMBER 2RP-4669

IMAGE COURTESY OF GOOGLE EARTH 2017

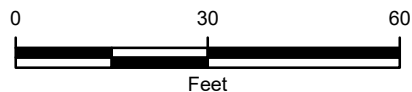


FIGURE 2
 EXCAVATION SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT
 ROSS RANCH 33-25-30 USA BATTERY
 UNIT D SEC 33 T25S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



TABLES



TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT ROSS RANCH 33-25-30 USA BATTERY
REMEDIATION PERMIT NUMBER 2RP-4669
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
FS01	1.5	4/26/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	15.0	<14.9	15.0	15.0	115
SW01	0 - 1.5	4/26/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	30.3	<15.0	30.3	30.3	83.4
SW02	0 - 1.5	4/26/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	184
NMOC Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

MRO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOC - New Mexico Oil Conservation Division

mg/kg - milligrams per kilogram

< - indicates result is below laboratory reporting limits

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

NE - not established

TPH - total petroleum hydrocarbons



ATTACHMENT 1: INITIAL/FINAL NMOC FORM C-141 (2RP-4669)



District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION

ARTESTA DISTRICT

Form C-141
Revised August 8, 2011

MAR 21 2018

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

NAB1808241369 (BOPCO)

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy	Contact: Kyle Littrell
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 432-221-7331
Facility Name: PLU Ross Ranch 33-25-30 USA Battery (API for well Poker Lake Unit CVX JV RR #007H)	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-40762
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	33	25S	30E	330	North	680	West	Eddy

Latitude 32.092806° Longitude -103.892550°

NATURE OF RELEASE



Type of Release Produced water	Volume of Release 10.1 BBL	Volume Recovered 10 BBL
Source of Release Steel water line	Date and Hour of Occurrence 3/8/2018	Date and Hour of Discovery 3/8/2018, 7:30 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Release was due to corrosion on 4" steel water line. The section of line was replaced.

Describe Area Affected and Cleanup Action Taken.*
Fluid was released into impervious lined containment. Approximately 3 gallons of water misted the pad outside the containment. Vac truck recovered all fluid within containment. An environmental contractor has been retained to assist with the remediation effort.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Kyle Littrell	Approved by Environmental Specialist: 	
Title: EHS Coordinator	Approval Date: 3/23/18	Expiration Date: N/A
E-mail Address: Kyle.Littrell@xtocenergy.com	Conditions of Approval: see attached	Attached <input checked="" type="checkbox"/> 40762
Date: 3/21/2018 Phone: 432-221-7331		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	2RP-4669
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #:
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.092806 Longitude -103.892550
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU Ross Ranch 33-25-30 USA Battery	Site Type Exploration and Production
Date Release Discovered 3/8/2018	API# (if applicable) 30-015-40762 (API for well Poker Lake Unit CVX JV RR #007H)

Unit Letter	Section	Township	Range	County
D	33	25S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: BLM)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 10.1	Volume Recovered (bbls) 10
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Release was due to corrosion on 4" steel water line. The section of line was replaced. Fluid was released into impervious lined containment. Approximately 3 gallons of water misted the pad outside of the containment. A vacuum truck recovered all the fluid within the containment.

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Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

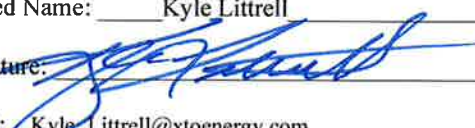
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why: N/A

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

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.

Printed Name: Kyle Littrell Title: SH&E Supervisor
 Signature:  Date: 5/10/2019
 email: Kyle.Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

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State of New Mexico

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Site Assessment/Characterization

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?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141

State of New Mexico

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Application ID	

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.

Printed Name: Kyle Littrell Title: SH&E SupervisorSignature:  Date: 5/10/2019email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331**OCD Only**

Received by: _____ Date: _____

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Closure

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 (electronic submittals in .pdf format are preferred) 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.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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.

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 5/10/2019

email: Kyle.Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS



Analytical Report 622953

for
LT Environmental, Inc.

Project Manager: Ashley Ager

PLU RR 33-25-30

03-MAY-19

Collected By: Client



1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)

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

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

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

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)



03-MAY-19

Project Manager: **Ashley Ager**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **622953**

PLU RR 33-25-30

Project Address: Delaware Basin

Ashley Ager:

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) 622953. 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. 622953 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 622953****LT Environmental, Inc., Arvada, CO**

PLU RR 33-25-30

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	04-26-19 12:50	1.5 ft	622953-001
SW01	S	04-26-19 13:00	0 - 1.5 ft	622953-002
SW02	S	04-26-19 13:05	0 - 1.5 ft	622953-003



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU RR 33-25-30*

Project ID:

Work Order Number(s): 622953

Report Date: 03-MAY-19

Date Received: 05/02/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3087778 BTEX by EPA 8021B

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



Certificate of Analysis Summary 622953

LT Environmental, Inc., Arvada, CO

Project Name: PLU RR 33-25-30



Project Id:

Contact: Ashley Ager

Project Location: Delaware Basin

Date Received in Lab: Thu May-02-19 11:05 am

Report Date: 03-MAY-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	622953-001	622953-002	622953-003			
	<i>Field Id:</i>	FS01	SW01	SW02			
	<i>Depth:</i>	1.5- ft	0-1.5 ft	0-1.5 ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Apr-26-19 12:50	Apr-26-19 13:00	Apr-26-19 13:05			
BTEX by EPA 8021B	<i>Extracted:</i>	May-02-19 14:00	May-02-19 14:00	May-02-19 14:00			
	<i>Analyzed:</i>	May-03-19 00:57	May-03-19 01:16	May-03-19 01:35			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00201 0.00201			
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00201 0.00201			
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00201 0.00201			
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00402 0.00402			
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00201 0.00201			
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00201 0.00201			
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00201 0.00201			
Chloride by EPA 300	<i>Extracted:</i>	May-02-19 14:45	May-02-19 14:45	May-02-19 14:45			
	<i>Analyzed:</i>	May-02-19 15:46	May-02-19 15:52	May-02-19 15:57			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		115 5.02	83.4 4.96	184 4.98			
TPH by SW8015 Mod	<i>Extracted:</i>	May-02-19 12:00	May-02-19 12:00	May-02-19 12:00			
	<i>Analyzed:</i>	May-02-19 16:08	May-02-19 16:28	May-02-19 16:48			
	<i>Units/RL:</i>	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			
Diesel Range Organics (DRO)		15.0 14.9	30.3 15.0	<15.0 15.0			
Motor Oil Range Hydrocarbons (MRO)		<14.9 14.9	<15.0 15.0	<15.0 15.0			
Total TPH		15.0 14.9	30.3 15.0	<15.0 15.0			
Total GRO-DRO		15.0 14.9	30.3 15.0	<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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analytical Results 622953



LT Environmental, Inc., Arvada, CO

PLU RR 33-25-30

Sample Id: **FS01**
 Lab Sample Id: 622953-001

Matrix: Soil
 Date Collected: 04.26.19 12.50

Date Received: 05.02.19 11.05
 Sample Depth: 1.5 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: SPC

Seq Number: 3087814

Date Prep: 05.02.19 14.45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	115	5.02	mg/kg	05.02.19 15.46		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3087797

Date Prep: 05.02.19 12.00

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	05.02.19 16.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	15.0	14.9	mg/kg	05.02.19 16.08		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	05.02.19 16.08	U	1
Total TPH	PHC635	15.0	14.9	mg/kg	05.02.19 16.08		1
Total GRO-DRO	PHC628	15.0	14.9	mg/kg	05.02.19 16.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.02.19 16.08	
o-Terphenyl	84-15-1	105	%	70-135	05.02.19 16.08	



Certificate of Analytical Results 622953

LT Environmental, Inc., Arvada, CO

PLU RR 33-25-30

Sample Id: **FS01**
 Lab Sample Id: 622953-001

Matrix: Soil
 Date Collected: 04.26.19 12.50

Date Received: 05.02.19 11.05
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 05.02.19 14.00

Basis: Wet Weight

Seq Number: 3087778

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.03.19 00.57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.03.19 00.57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.03.19 00.57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.03.19 00.57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.03.19 00.57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.03.19 00.57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.03.19 00.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.03.19 00.57		
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.03.19 00.57		



Certificate of Analytical Results 622953



LT Environmental, Inc., Arvada, CO

PLU RR 33-25-30

Sample Id: **SW01**
 Lab Sample Id: 622953-002

Matrix: Soil
 Date Collected: 04.26.19 13.00

Date Received: 05.02.19 11.05
 Sample Depth: 0 - 1.5 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: SPC

Seq Number: 3087814

Date Prep: 05.02.19 14.45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.4	4.96	mg/kg	05.02.19 15.52		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3087797

Date Prep: 05.02.19 12.00

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	05.02.19 16.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	30.3	15.0	mg/kg	05.02.19 16.28		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.02.19 16.28	U	1
Total TPH	PHC635	30.3	15.0	mg/kg	05.02.19 16.28		1
Total GRO-DRO	PHC628	30.3	15.0	mg/kg	05.02.19 16.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.02.19 16.28	
o-Terphenyl	84-15-1	104	%	70-135	05.02.19 16.28	



Certificate of Analytical Results 622953

LT Environmental, Inc., Arvada, CO

PLU RR 33-25-30

Sample Id: **SW01**
 Lab Sample Id: 622953-002

Matrix: Soil
 Date Collected: 04.26.19 13.00

Date Received: 05.02.19 11.05
 Sample Depth: 0 - 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 05.02.19 14.00

Basis: Wet Weight

Seq Number: 3087778

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.03.19 01.16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.03.19 01.16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.03.19 01.16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.03.19 01.16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.03.19 01.16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.03.19 01.16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.03.19 01.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.03.19 01.16		
1,4-Difluorobenzene	540-36-3	99	%	70-130	05.03.19 01.16		



Certificate of Analytical Results 622953



LT Environmental, Inc., Arvada, CO

PLU RR 33-25-30

Sample Id: **SW02**
Lab Sample Id: 622953-003

Matrix: Soil
Date Collected: 04.26.19 13.05

Date Received: 05.02.19 11.05
Sample Depth: 0 - 1.5 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: SPC

Seq Number: 3087814

Date Prep: 05.02.19 14.45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	184	4.98	mg/kg	05.02.19 15.57		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3087797

Date Prep: 05.02.19 12.00

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	05.02.19 16.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.02.19 16.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.02.19 16.48	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.02.19 16.48	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.02.19 16.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.02.19 16.48	
o-Terphenyl	84-15-1	102	%	70-135	05.02.19 16.48	



Certificate of Analytical Results 622953

LT Environmental, Inc., Arvada, CO

PLU RR 33-25-30

Sample Id: **SW02**
Lab Sample Id: 622953-003

Matrix: Soil
Date Collected: 04.26.19 13.05

Date Received: 05.02.19 11.05
Sample Depth: 0 - 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 05.02.19 14.00

Basis: Wet Weight

Seq Number: 3087778

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.03.19 01.35	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.03.19 01.35	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.03.19 01.35	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.03.19 01.35	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.03.19 01.35	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.03.19 01.35	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.03.19 01.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.03.19 01.35		
1,4-Difluorobenzene	540-36-3	92	%	70-130	05.03.19 01.35		



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.

PLU RR 33-25-30

Analytical Method: Chloride by EPA 300

Seq Number: 3087814

MB Sample Id: 7677036-1-BLK

Matrix: Solid

LCS Sample Id: 7677036-1-BKS

Prep Method: E300P

Date Prep: 05.02.19

LCSD Sample Id: 7677036-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	241	96	242	97	90-110	0	20	mg/kg	05.02.19 11:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3087814

Parent Sample Id: 622952-001

Matrix: Soil

MS Sample Id: 622952-001 S

Prep Method: E300P

Date Prep: 05.02.19

MSD Sample Id: 622952-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	233	252	504	108	508	109	90-110	1	20	mg/kg	05.02.19 15:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3087814

Parent Sample Id: 622954-004

Matrix: Soil

MS Sample Id: 622954-004 S

Prep Method: E300P

Date Prep: 05.02.19

MSD Sample Id: 622954-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1830	250	1980	60	1990	64	90-110	1	20	mg/kg	05.02.19 16:33	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3087797

MB Sample Id: 7677065-1-BLK

Matrix: Solid

LCS Sample Id: 7677065-1-BKS

Prep Method: TX1005P

Date Prep: 05.02.19

LCSD Sample Id: 7677065-1-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	977	98	997	100	70-135	2	20	mg/kg	05.02.19 13:27	
Diesel Range Organics (DRO)	<8.13	1000	989	99	1020	102	70-135	3	20	mg/kg	05.02.19 13:27	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		125		130		70-135	%	05.02.19 13:27
o-Terphenyl	103		108		106		70-135	%	05.02.19 13:27

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.

PLU RR 33-25-30

Analytical Method: TPH by SW8015 Mod

Seq Number: 3087797

Parent Sample Id: 622952-001

Matrix: Soil

MS Sample Id: 622952-001 S

Prep Method: TX1005P

Date Prep: 05.02.19

MSD Sample Id: 622952-001 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)	3140	999	984	0	1010	0	70-135	3	20	mg/kg	05.02.19 14:28	X
Diesel Range Organics (DRO)	9120	999	1010	0	1040	0	70-135	3	20	mg/kg	05.02.19 14:28	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		125		70-135	%	05.02.19 14:28
o-Terphenyl	104		101		70-135	%	05.02.19 14:28

Analytical Method: BTEX by EPA 8021B

Seq Number: 3087778

MB Sample Id: 7677039-1-BLK

Matrix: Solid

LCS Sample Id: 7677039-1-BKS

Prep Method: SW5030B

Date Prep: 05.02.19

LCSD Sample Id: 7677039-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000388	0.101	0.109	108	0.103	103	70-130	6	35	mg/kg	05.02.19 23:04	
Toluene	<0.000459	0.101	0.103	102	0.0957	96	70-130	7	35	mg/kg	05.02.19 23:04	
Ethylbenzene	<0.000569	0.101	0.108	107	0.0990	99	70-130	9	35	mg/kg	05.02.19 23:04	
m,p-Xylenes	<0.00102	0.202	0.225	111	0.208	104	70-130	8	35	mg/kg	05.02.19 23:04	
o-Xylene	<0.000347	0.101	0.110	109	0.104	104	70-130	6	35	mg/kg	05.02.19 23:04	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		100		102		70-130	%	05.02.19 23:04
4-Bromofluorobenzene	84		92		100		70-130	%	05.02.19 23:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3087778

Parent Sample Id: 622953-001

Matrix: Soil

MS Sample Id: 622953-001 S

Prep Method: SW5030B

Date Prep: 05.02.19

MSD Sample Id: 622953-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.104	104	0.0985	99	70-130	5	35	mg/kg	05.02.19 23:42	
Toluene	0.000488	0.0998	0.0962	96	0.0903	90	70-130	6	35	mg/kg	05.02.19 23:42	
Ethylbenzene	<0.000564	0.0998	0.0979	98	0.0912	91	70-130	7	35	mg/kg	05.02.19 23:42	
m,p-Xylenes	<0.00101	0.200	0.203	102	0.189	94	70-130	7	35	mg/kg	05.02.19 23:42	
o-Xylene	0.000359	0.0998	0.100	100	0.0935	93	70-130	7	35	mg/kg	05.02.19 23:42	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	05.02.19 23:42
4-Bromofluorobenzene	100		102		70-130	%	05.02.19 23:42

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



Chain of Custody

Work Order N

10752

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland TX (432-704-5440) El Paso TX (915) 585 3443 Lubbock TX (806) 704 4306

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Page 1 of 1

Project Manager:		Ashley Ager	Bill to: (if different)	Kyle Littré
Company Name:		LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:		3300 North A Street	Address:	
City, State ZIP:		Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:		432.704.5178	Email:	aaager@ltenv.com rmcacfee@ltenv.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible]

SAMPLE RECEIPT		Temp Blank:		Wet Ice:	
Yes	No	Yes	No	Yes	No
Temperature (°C):		Thermom Blank			
Received Intact:					
Cooler Custody Seals:		Correction Factor:			
Sample Custody Seals:		Total Containers:			

of Containers

A 8015)

PA 0=8021)

(EPA 300.0)

TAT starts the day received by the lab. if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP)	BTEX (EP)	Chloride	Sample Comments									
FS01	S	04/26/19	1250	1-5'	1	X	X	X										
SW01			1300	0-1.5'	1	X	X	X										
SW02	↑	↑	1305	0-1.5'	↑	X	X	X										
Composite																		
↑																		

Total 200.7 / 6010	200.8 / 6020:	
8RCRA	13PPM	Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010: 8RCRA		Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
Circle Method(s) and Metal(s) to be analyzed		1631 / 245.1 / 7470 / 7471 : Hg

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.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Paula M. [Signature]</i>	<i>[Signature]</i>	04-20-17 16:23	<i>[Signature]</i>	<i>[Signature]</i>	5/22/19
					16:5

ORIGIN ID:CAOA (281) 240-4200
SAMPLE CUSTODY
XENCO LABORATORIES NM
1089 N CANAL ST
CARLSBAD, NM 88220
UNITED STATES US

SHIP DATE: 01MAY19
ACTWTG: 56.00 LB
CAD: 114488676/INET14100
DIMS: 24x14x14 IN
BILL SENDER

TO SAMPLE RECEIVING

3600 S COUNTY ROAD 1276

MIDLAND TX 79706

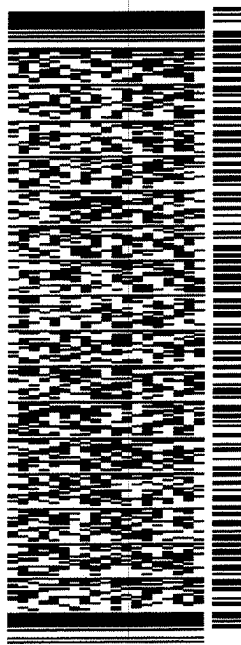
(432) 704-5440

REF:

PO:

DEPT:

565J1/D66C/23AD



TRK# 7751 1156 8166
0201

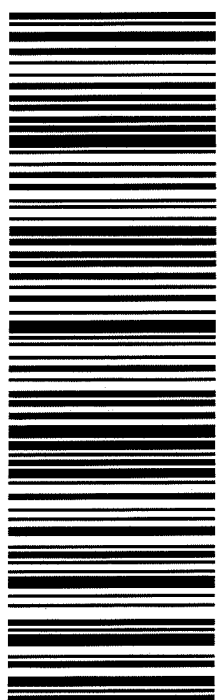
THU - 02 MAY HOLD
PRIORITY OVERNIGHT

HLD

41 MAFA

TX-US

LBB 79706



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



Client: LT Environmental, Inc.

Date/ Time Received: 05/02/2019 11:05:00 AM

Work Order #: 622953

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)?	.3
#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: 05/02/2019

Checklist reviewed by:

Jessica Kramer


Date: 05/02/2019

ATTACHMENT 3: PHOTOGRAPHIC LOG






North facing view of release area and processing equipment prior to excavation activities.

Project: 012917041	XTO Energy, Inc. Poker Lake Unit Ross Ranch 33-25-30 USA Battery	 <i>Advancing Opportunity</i>
April 13, 2018	Photographic Log	




East facing view of the open excavation.

Project: 012917041	XTO Energy, Inc. Poker Lake Unit Ross Ranch 33-25-30 USA Battery	 Advancing Opportunity
April 23, 2018	Photographic Log	



South facing view of the final excavation extent after a rain event.

Project: 012919041	XTO Energy, Inc. Poker Lake Unit Ross Ranch 33-25-30 USA Battery	 Advancing Opportunity
April 26, 2019	Photographic Log	

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

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

CONDITIONS

Action 194336

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 194336
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	3/7/2023