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	NRM2003448627
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.153746 Longitude -103.998802
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Corral Canyon Expansion	Site Type Well Location
Date Release Discovered 11/25/2019	API# *(if applicable)* 30-015-42928 (Corral Canyon Fed Com 16H)

Unit Letter	Section	Township	Range	County
P	5	25S	29E	EDDY

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 0.06	Volume Recovered (bbls) 0.0
☐ Produced Water	Volume Released (bbls) 0.0	Volume Recovered (bbls) 0.0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Fluid built up in a low place in the line and was then released thru the flare stack starting a small fire. The fire went out on its own when it hit the ground. Remediation of de minimis staining around the flare was completed by hand digging and impacted soil was taken to an approved disposal facility.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003448627
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? YES – An unauthorized release of volume that results in a fire or is the result of a fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
YES, by Amy Ruth : Mike Bratcher; Rob Hamlet; Victoria Venegas; "Griswold, Jim, EMNRD"; blm_nm_cfo_spill@blm.gov; Crisha Morgan : on 11/25/2019 at 12:19 PM by email.

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:

There were no fluids released to be contained via the use of berms or dikes, absorbent pads, or other containment devices. There were no fluids released to be removed and managed.

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: Adrian Baker Title: SH&E Coordinator

Signature: Date: 12/9/2019

email: adrian_baker@xtoenergy.com Telephone: 432-236-3808

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003448627
District RP	
Facility ID	
Application ID	

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?	50-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ 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)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ 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?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ 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
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003448627
District RP	
Facility ID	
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 Supervisor

Signature: Date: 11/09/2020

email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NRM2003448627
District RP	
Facility ID	
Application ID	

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: 11/09/2020

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Chad Hensley Date: 02/23/2021

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: Chad Hensley Date: 02/23/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

November 10, 2020

New Mexico Oil Conservation Division
District 2
811 South First Street
Artesia, New Mexico 88210

RE: Closure Request
Corral Canyon Expansion
Incident Number NRM2003448627
Eddy County, New Mexico

To Whom It May Concern:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Corral Canyon Expansion (Site) in Unit P, Section 5, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1) in response to the August 20, 2020 denial of closure by the New Mexico Oil Conservation Division (NMOCD). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a fire and release of crude oil at the Site to support the initial closure request. Based on field observations, field screening results, and laboratory analytical results following soil sampling events, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NRM2003448627.

RELEASE BACKGROUND

On November 25, 2019, fluid built up in a low point in the line, causing the release of approximately 0.06 barrels (bbls) of crude oil through the flare stack which resulted in a small fire. The fire extinguished itself and there were no freestanding fluids to recover. De minimis soil staining was removed by hand shoveling. XTO reported the release and requested closure on a Release Notification and Corrective Action Form C-141 (Form C-141) on December 9, 2019. The release was assigned Incident Number NRM2003448627.

The NMOCD denied the Closure Request for Incident Number NRM2003448627 for the following reason:

- *This release is considered a major release, as it resulted in a fire, and will need to comply with 19.15.29.8, 19.15.29.9, 19.15.29.10, 19.15.29.11, 19.15.29.12, and 19.15.29.13 NMAC.*

On November 13, 2019, an additional flare release and fire occurred at the same location as the above described November 25, 2019 flare release. The November 13, 2019 release was assigned

Incident Number NCE2002754520. A Closure Request was submitted on May 11, 2020 and was approved by the NMOCD on June 26,2020. The below soil sampling activities were completed in response to Incident Number NCE2002754520 but are applicable to Incident Number NRM2003448627, since the releases occurred in the same location and soil sampling activities were completed after the date of both flare releases.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) Well C 04324, located approximately 368 feet south of the Site. The closest groundwater well has a reported depth to groundwater of approximately 65 feet bgs and a total depth of 69 feet bgs. The closest continuously flowing water or significant watercourse to the Site is an intermittent riverine, located approximately 962 feet southwest 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 (medium potential karst designation area). The Site receptors are identified on Figure 1.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 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; and
- Chloride: 10,000 mg/kg

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On April 27, 2020, LTE personnel inspected the Site to evaluate the release area based on information provided on the Form C-141 and visual observations. LTE personnel collected three preliminary soil samples (SS01 through SS03) within the release area from a depth of approximately 0.5 feet bgs to assess for the presence or absence of soil impacts at the ground

surface. Soil was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The preliminary soil sample locations were mapped utilizing a handheld Global Positing System (GPS) unit and are depicted on Figure 2. Photographic documentation of the release was conducted, and a photographic log of the Site is included in Attachment 1.

Preliminary 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 at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH- GRO,TPH-DRO, TPH-oil range organics (ORO) following EPA Method 8015M/D, and chloride following EPA Method 300.0.

Based on laboratory analytical results for the preliminary soil samples, visual observations, and field screening results, excavation activities did not appear warranted; however, additional site assessment activities were scheduled to further confirm the absence of impacted soil.

On April 30, 2020, LTE personnel returned to the Site to oversee additional soil assessment activities. Three potholes (PH01 through PH03) were advanced via track-mounted backhoe, to a depth of approximately 2 feet bgs at the SS01 through SS03 preliminary soil sample locations. Soil samples were collected at depths of approximately 1-foot bgs (PH01 through PH03) and 2 feet bgs (PH01A through PH03A) at each pothole location. Soil from the three potholes was field screened utilizing a PID and Hach® chloride QuanTab® test strips. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil samples were collected, handled, and analyzed as described above at Xenco in Carlsbad, New Mexico. The delineation soil sample locations are depicted on Figure 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS01 through SS03 collected at a depth of approximately 0.5 feet bgs, and in delineation soil samples collected from potholes PH01 through PH03 at depths ranging from 1 foot and 2 feet bgs. Laboratory analytical results are depicted on Figures 2 and 3 and summarized in Table 1. The laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Preliminary soil samples SS01 through SS03 and delineation soil samples PH01/PH01A through PH03/PH03A were collected from within the release area from depths ranging from 0.5 feet to 2 feet bgs to assess for the presence or absence of soil impacts as a result of the November 25,

2019, release. Laboratory analytical results for all soil samples indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, field screening of soil indicated volatile aromatic hydrocarbons and chloride concentrations were not elevated and petroleum hydrocarbon odors were not identified within the release area.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria, no impacted soil was identified, and no soil excavation was required as a result of the crude oil fire. XTO requests NFA for Incident Number NRM2003448627.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Kalei Jennings
Project Environmental Scientist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
United States Bureau of Land Management – New Mexico
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Photographic Logs
Attachment 2	Lithologic/Soil Sampling Logs
Attachment 3	Laboratory Analytical Reports

FIGURES

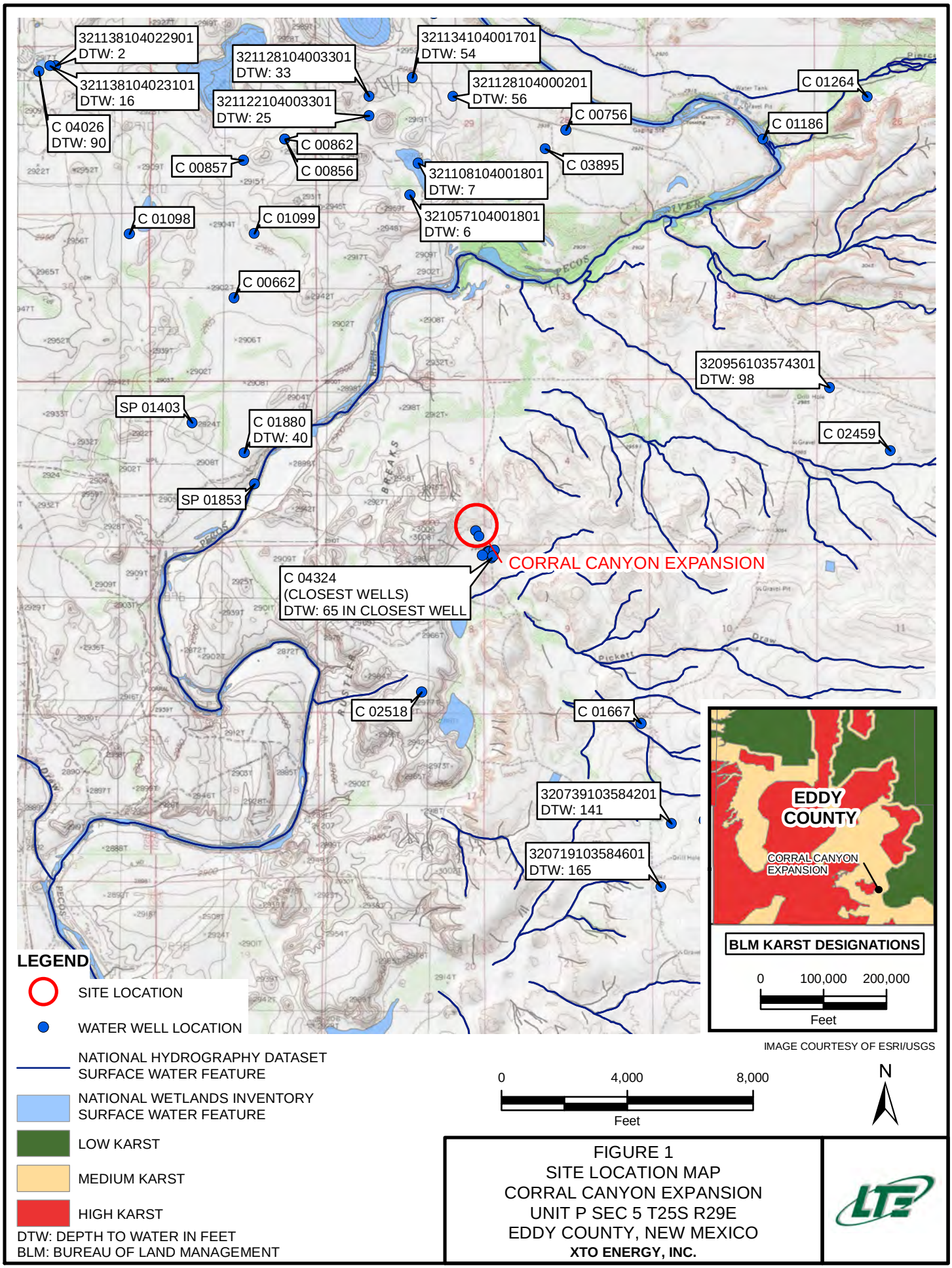
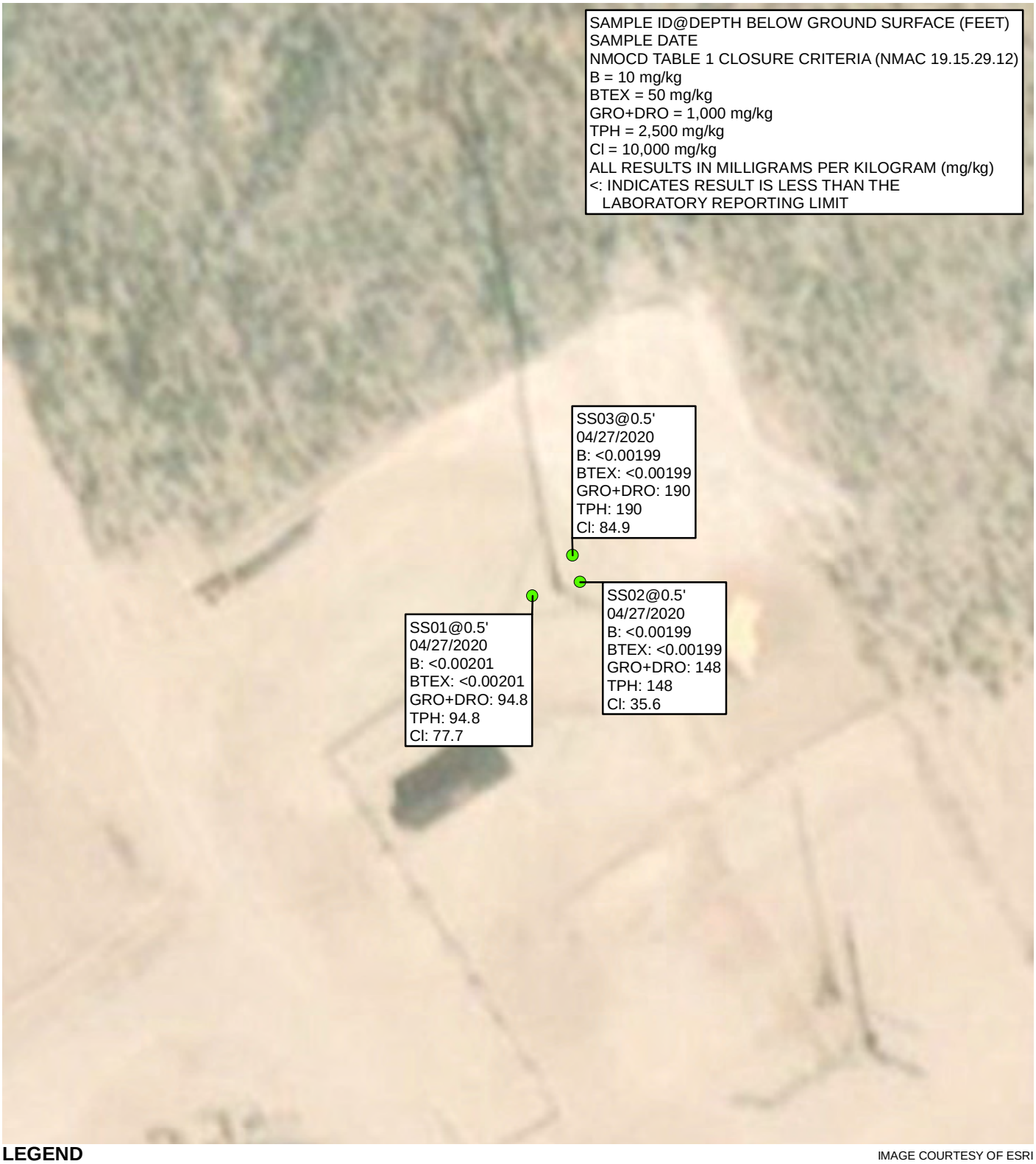


FIGURE 1
SITE LOCATION MAP
CORRAL CANYON EXPANSION
UNIT P SEC 5 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GISMXD\012920053_CORRAL CANYON EXPANSION\012920053_FIG01_SL_2020.mxd



LEGEND

IMAGE COURTESY OF ESRI

PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

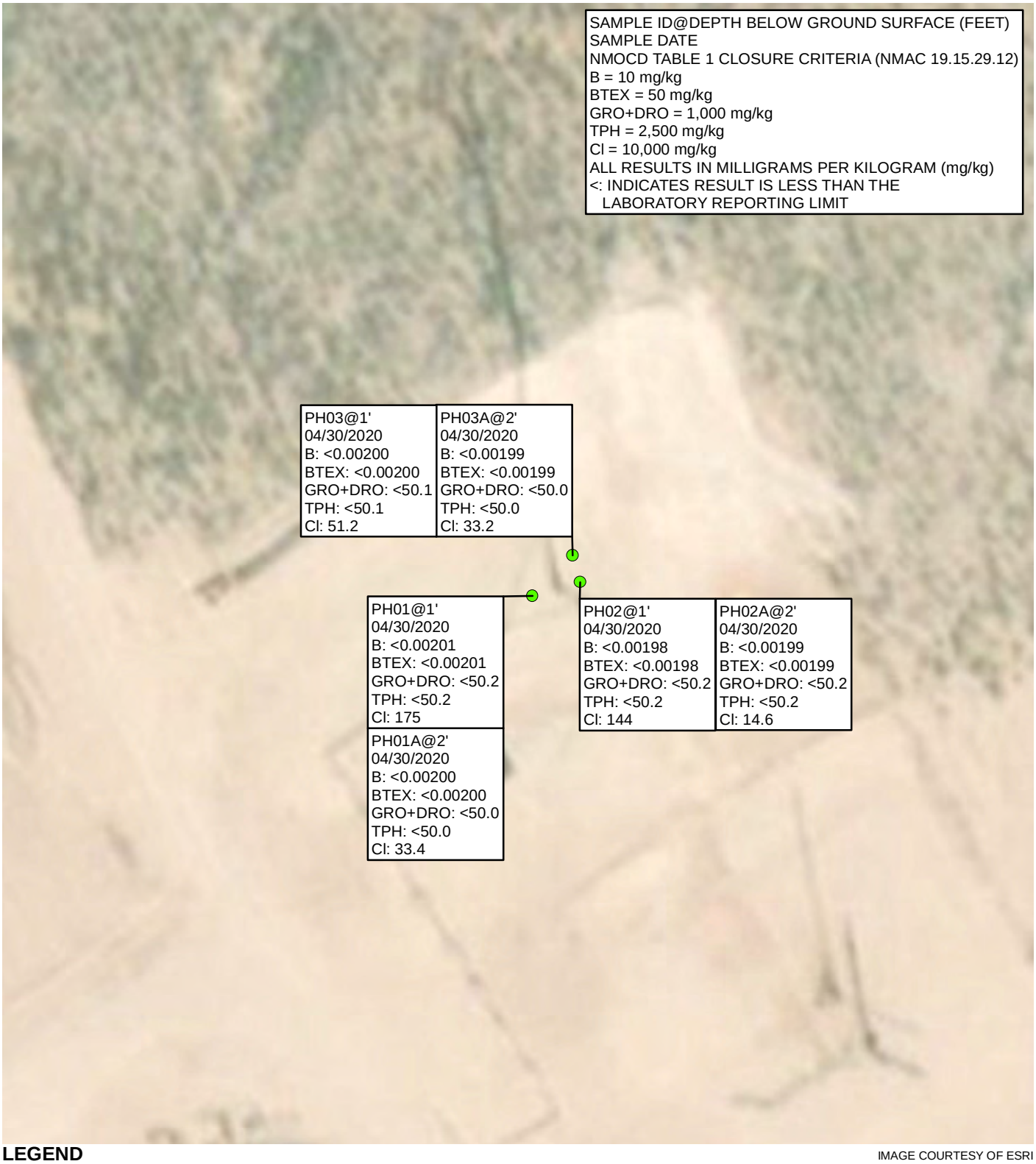
B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NRM2003448627

0 50 100
Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
CORRAL CANYON EXPANSION
UNIT P SEC 5 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920053_CORRAL CANYON EXPANSION\012920053_FIG02_PRELIMINARY_2020.mxd



LEGEND

IMAGE COURTESY OF ESRI

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

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: INCIDENT NUMBER NRM2003448627

0 50 100
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
CORRAL CANYON EXPANSION
UNIT P SEC 5 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920053_CORRAL CANYON EXPANSION\012920053_FIG03_DELINEATION_2020.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

CORRAL CANYON EXPANSION
INCIDENT NUMBER NRM2003448627
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)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**
SS01	0.5	04/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	94.8	<50.0	94.8	94.8	77.7
SS02	0.5	04/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	148	<50.2	148	148	35.6
SS03	0.5	04/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	190	<50.2	190	190	84.9
PH01	1	04/30/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	175
PH01A	2	04/30/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	33.4
PH02	1	04/30/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	144
PH02A	2	04/30/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	14.6
PH03	1	04/30/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	51.2
PH03A	2	04/30/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	33.2

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

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

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ATTACHMENT 1: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of preliminary samples SS02 and SS03 facing southeast.

Photograph 2: View of preliminary sample SS01 facing northeast.

ATTACHMENT 2: LITHOLOGIC SOIL SAMPLE LOGS

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

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BH or PH Name: PH 1 SS01A-B	Date: 4-30-20
Site Name: The Corral Carlsbad Expansion	
RP or Incident Number:	
LTE Job Number: 01790053	
Logged By: Travis Cusey	Method: Excavator
Hole Diameter: N/A	Total Depth: 1'-2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.153746, -103.998802
Field Screening: Chloride, PID CL/PID
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	319.2	0.0	N	SS01A	1'	0		
						1		CHCL Trace Sand tan/white
M	184.8	0.4	N	SS01B	2'	2		CHCL tan/Brown SP-SC
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

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BH or PH Name: PH02 SS02A-B	Date: 4-30-20
Site Name: The Corral Canyon Expansion	
RP or Incident Number:	
LTE Job Number: 01920053	
Logged By: Travis Lusby	Method: Excavator
Lat/Long: 32.158746 -103.944802	Field Screening: Chloride, PID CL/PID
Hole Diameter: N/A	Total Depth: 1'-2'

Comments:

LITHOLOGIC / SOIL SAMPLING LOG

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	252	0.2	N	SS02A	1'	0 1		CHCE Trace Sand tan/white
D	~~184.6~~ 2124	0.2	N	SS02B	2'	2 3		CHCE tan/Brown SP-SC
						4 5 6 7 8 9 10 11 12		

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

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Compliance · Engineering · Remediation

BH or PH Name: PH03 SS03 A-B	Date: 4-30-20
Site Name: The Curry / Curry Enterprises	
RP or Incident Number:	
LTE Job Number: 01292005 3	
Logged By: Travis / Cody	Method: Excavator
Lat/Long: 32.153746, -103.994402	Field Screening: Chloride, PID CL / PID
Hole Diameter: N/A	Total Depth: 1'-2'

Comments:

LITHOLOGIC / SOIL SAMPLING LOG

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<124	0.1	N	SS03A	1'	1		CLYCL Trace of Sand Tan/White
D	<124	0.0	N	SS03B	2'	2		CLYCL Tan/Brown SP-SC

0 3 4 5 6 7 8 9 10 11 12

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 659884

for

LT Environmental, Inc.

Project Manager: Kalei Jennings

Corral Canyon Expansion

012920053

04.28.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04.28.2020

Project Manager: **Kalei Jennings**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **659884**
Corral Canyon Expansion
Project Address:

Kalei Jennings:

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) 659884. 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. 659884 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,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	04.27.2020 12:08	0.5 ft	659884-001
SS02	S	04.27.2020 13:00	0.5 ft	659884-002
SS03	S	04.27.2020 13:20	0.5 ft	659884-003

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Corral Canyon Expansion

Project ID: *012920053*
Work Order Number(s): *659884*

Report Date: *04.28.2020*
Date Received: *04.27.2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 659884

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon Expansion

Project Id: 012920053
Contact: Kalei Jennings
Project Location:

Date Received in Lab: Mon 04.27.2020 15:42
Report Date: 04.28.2020 12:02
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	659884-001		659884-002		659884-003					
	Field Id:	SS01		SS02		SS03					
	Depth:	0.5- ft		0.5- ft		0.5- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	04.27.2020 12:08		04.27.2020 13:00		04.27.2020 13:20					
BTEX by EPA 8021B	***Extracted:***	04.27.2020 17:40		04.27.2020 17:40		04.27.2020 17:40					
	Analyzed:	04.28.2020 00:31		04.28.2020 00:53		04.28.2020 01:14					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199				
Toluene		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199				
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199				
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398	<0.00398	0.00398				
o-Xylene		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199				
Total Xylenes		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199				
Total BTEX		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	04.27.2020 17:04		04.27.2020 17:04		04.27.2020 17:04					
	Analyzed:	04.27.2020 17:32		04.27.2020 17:37		04.27.2020 17:43					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		77.7	50.2	35.6	9.94	84.9	50.1				
TPH by SW8015 Mod	***Extracted:***	04.27.2020 17:00		04.27.2020 17:00		04.27.2020 17:00					
	Analyzed:	04.27.2020 19:04		04.27.2020 19:24		04.27.2020 19:44					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.2	50.2	<50.2	50.2				
Diesel Range Organics (DRO)		94.8	50.0	148	50.2	190	50.2				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.2	50.2	<50.2	50.2				
Total GRO-DRO		94.8	50.0	148	50.2	190	50.2				
Total TPH		94.8	50.0	148	50.2	190	50.2				

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Certificate of Analytical Results 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.27.2020 15:42
Lab Sample Id:	659884-001	Date Collected:	04.27.2020 12:08	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.27.2020 17:04	Basis:	Wet Weight
Seq Number:	3124306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**77.7**	50.2	mg/kg	04.27.2020 17:32		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.27.2020 17:00	Basis:	Wet Weight
Seq Number:	3124321				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.27.2020 19:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	**94.8**	50.0	mg/kg	04.27.2020 19:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.27.2020 19:04	U	1
Total GRO-DRO	PHC628	**94.8**	50.0	mg/kg	04.27.2020 19:04		1
Total TPH	PHC635	**94.8**	50.0	mg/kg	04.27.2020 19:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	04.27.2020 19:04	
o-Terphenyl	84-15-1	113	%	70-135	04.27.2020 19:04	

Certificate of Analytical Results 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.27.2020 15:42
Lab Sample Id:	659884-001	Date Collected:	04.27.2020 12:08	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.27.2020 17:40	Basis:	Wet Weight
Seq Number:	3124302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.28.2020 00:31	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.28.2020 00:31	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.28.2020 00:31	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.28.2020 00:31	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.28.2020 00:31	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.28.2020 00:31	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.28.2020 00:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.28.2020 00:31	
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.28.2020 00:31	

Certificate of Analytical Results 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.27.2020 15:42
Lab Sample Id:	659884-002	Date Collected:	04.27.2020 13:00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.27.2020 17:04	Basis:	Wet Weight
Seq Number:	3124306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.6**	9.94	mg/kg	04.27.2020 17:37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.27.2020 17:00	Basis:	Wet Weight
Seq Number:	3124321				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.27.2020 19:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	**148**	50.2	mg/kg	04.27.2020 19:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.27.2020 19:24	U	1
Total GRO-DRO	PHC628	**148**	50.2	mg/kg	04.27.2020 19:24		1
Total TPH	PHC635	**148**	50.2	mg/kg	04.27.2020 19:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.27.2020 19:24	
o-Terphenyl	84-15-1	111	%	70-135	04.27.2020 19:24	

Certificate of Analytical Results 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.27.2020 15:42
Lab Sample Id:	659884-002	Date Collected:	04.27.2020 13:00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.27.2020 17:40	Basis:	Wet Weight
Seq Number:	3124302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.28.2020 00:53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.28.2020 00:53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.28.2020 00:53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.28.2020 00:53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.28.2020 00:53	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.28.2020 00:53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.28.2020 00:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	116	%	70-130	04.28.2020 00:53	
4-Bromofluorobenzene	460-00-4	105	%	70-130	04.28.2020 00:53	

Certificate of Analytical Results 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.27.2020 15:42
Lab Sample Id:	659884-003	Date Collected:	04.27.2020 13:20	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.27.2020 17:04	Basis:	Wet Weight
Seq Number:	3124306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**84.9**	50.1	mg/kg	04.27.2020 17:43		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.27.2020 17:00	Basis:	Wet Weight
Seq Number:	3124321				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.27.2020 19:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	**190**	50.2	mg/kg	04.27.2020 19:44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.27.2020 19:44	U	1
Total GRO-DRO	PHC628	**190**	50.2	mg/kg	04.27.2020 19:44		1
Total TPH	PHC635	**190**	50.2	mg/kg	04.27.2020 19:44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	04.27.2020 19:44	
o-Terphenyl	84-15-1	111	%	70-135	04.27.2020 19:44	

Certificate of Analytical Results 659884

LT Environmental, Inc., Arvada, CO

Corral Canyon Expansion

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.27.2020 15:42
Lab Sample Id:	659884-003	Date Collected:	04.27.2020 13:20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.27.2020 17:40	Basis:	Wet Weight
Seq Number:	3124302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.28.2020 01:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.28.2020 01:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.28.2020 01:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.28.2020 01:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.28.2020 01:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.28.2020 01:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.28.2020 01:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	04.28.2020 01:14	
1,4-Difluorobenzene	540-36-3	115	%	70-130	04.28.2020 01:14	

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. **ND** Not Detected.

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

QC Summary 659884

LT Environmental, Inc.

Corral Canyon Expansion

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124306 — Matrix: Solid — Date Prep: 04.27.2020
MB Sample Id: 7702149-1-BLK — LCS Sample Id: 7702149-1-BKS — LCSD Sample Id: 7702149-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	250	100	250	100	90-110	0	20	mg/kg	04.27.2020 16:26	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124306 — Matrix: Soil — Date Prep: 04.27.2020
Parent Sample Id: 659876-001 — MS Sample Id: 659876-001 S — MSD Sample Id: 659876-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1230	201	1410	90	1420	95	90-110	1	20	mg/kg	04.27.2020 16:43	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124306 — Matrix: Soil — Date Prep: 04.27.2020
Parent Sample Id: 659890-002 — MS Sample Id: 659890-002 S — MSD Sample Id: 659890-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	330	199	548	110	548	110	90-110	0	20	mg/kg	04.27.2020 17:59	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124321 — Matrix: Solid — Date Prep: 04.27.2020
MB Sample Id: 7702167-1-BLK — LCS Sample Id: 7702167-1-BKS — LCSD Sample Id: 7702167-1-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)	<50.0	1000	858	86	967	97	70-135	12	35	mg/kg	04.27.2020 13:00	
Diesel Range Organics (DRO)	<50.0	1000	958	96	1090	109	70-135	13	35	mg/kg	04.27.2020 13:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		127		132		70-135	%	04.27.2020 13:00
o-Terphenyl	131		127		122		70-135	%	04.27.2020 13:00

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124321 — Matrix: Solid — Date Prep: 04.27.2020
MB Sample Id: 7702167-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.27.2020 12:40	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 659884

LT Environmental, Inc.

Corral Canyon Expansion

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3124321 Matrix: Soil Date Prep: 04.27.2020
Parent Sample Id: 659819-001 MS Sample Id: 659819-001 S MSD Sample Id: 659819-001 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)	<50.3	1010	935	93	935	94	70-135	0	35	mg/kg	04.27.2020 14:01	
Diesel Range Organics (DRO)	<50.3	1010	1060	105	1060	106	70-135	0	35	mg/kg	04.27.2020 14:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		114		70-135	%	04.27.2020 14:01
o-Terphenyl	115		114		70-135	%	04.27.2020 14:01

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124302 Matrix: Solid Date Prep: 04.27.2020
MB Sample Id: 7702139-1-BLK LCS Sample Id: 7702139-1-BKS LCSD Sample Id: 7702139-1-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	0.114	114	0.123	123	70-130	8	35	mg/kg	04.27.2020 22:02	
Toluene	<0.00200	0.100	0.101	101	0.112	112	70-130	10	35	mg/kg	04.27.2020 22:02	
Ethylbenzene	<0.00200	0.100	0.0950	95	0.104	104	71-129	9	35	mg/kg	04.27.2020 22:02	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.201	101	70-135	8	35	mg/kg	04.27.2020 22:02	
o-Xylene	<0.00200	0.100	0.0953	95	0.105	105	71-133	10	35	mg/kg	04.27.2020 22:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		108		111		70-130	%	04.27.2020 22:02
4-Bromofluorobenzene	106		96		97		70-130	%	04.27.2020 22:02

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124302 Matrix: Soil Date Prep: 04.27.2020
Parent Sample Id: 659820-011 MS Sample Id: 659820-011 S MSD Sample Id: 659820-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.130	130	0.129	129	70-130	1	35	mg/kg	04.27.2020 22:44	
Toluene	<0.00200	0.0998	0.114	114	0.114	114	70-130	0	35	mg/kg	04.27.2020 22:44	
Ethylbenzene	<0.00200	0.0998	0.107	107	0.106	106	71-129	1	35	mg/kg	04.27.2020 22:44	
m,p-Xylenes	<0.00399	0.200	0.207	104	0.205	103	70-135	1	35	mg/kg	04.27.2020 22:44	
o-Xylene	<0.00200	0.0998	0.107	107	0.105	105	71-133	2	35	mg/kg	04.27.2020 22:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		109		70-130	%	04.27.2020 22:44
4-Bromofluorobenzene	98		100		70-130	%	04.27.2020 22:44

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference 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

Chain of Custody

Work Order No: 659884

XENCO LABORATORIES
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)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com Page _____ of _____

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	atrejo@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Corral Canyon Expansion	Turn Around	
Project Number:	012920053	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Armando Trejo	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	1.6	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	4/27/2020	1208	.5'	1	X	X	X
SS02	S	4/27/2020	1300	.5'	1	X	X	X
SS03	S	4/27/2020	1320	.5'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	d by: (Signature)	Date/Time	by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3		4/27/20 1542	4		
5			6		

Revised Date 051418 Rev. 2018.1

Certificate of Analysis Summary 660344

LT Environmental, Inc., Arvada, CO

Project Name: The Corral Canyon Expansion

Project Id: 012920053
Contact: Tacoma Morrissey
Project Location:

Date Received in Lab: Thu 04.30.2020 17:13
Report Date: 05.06.2020 07:48
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	660344-001		660344-002		660344-003		660344-004		660344-005		660344-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020 09:23		04.30.2020 09:25		04.30.2020 09:33		04.30.2020 09:38		04.30.2020 09:43		04.30.2020 09:45	
BTEX by EPA 8021B	***Extracted:***	05.01.2020 11:30		05.01.2020 11:30		05.01.2020 11:30		04.30.2020 17:30		04.30.2020 17:30		04.30.2020 17:30	
	Analyzed:	05.01.2020 13:27		05.01.2020 13:48		05.01.2020 14:10		05.01.2020 03:10		05.01.2020 03:31		05.01.2020 03:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00402	0.00402	<0.00400	0.00400	<0.00397	0.00397	<0.00398	0.00398	<0.00399	0.00399	<0.00398	0.00398
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Chloride by EPA 300	***Extracted:***	04.30.2020 17:48		04.30.2020 17:48		04.30.2020 17:48		04.30.2020 17:48		05.01.2020 07:59		05.01.2020 07:59	
	Analyzed:	04.30.2020 22:48		04.30.2020 22:53		04.30.2020 22:59		04.30.2020 23:05		05.01.2020 08:49		05.01.2020 09:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		175	10.0	33.4	9.90	141	9.88	14.6	9.92	51.2	9.92	33.2	9.98
TPH by SW8015 Mod	***Extracted:***	04.30.2020 17:30		04.30.2020 17:30		04.30.2020 17:30		04.30.2020 17:30		04.30.2020 17:30		04.30.2020 17:30	
	Analyzed:	04.30.2020 19:18		04.30.2020 19:18		04.30.2020 20:19		04.30.2020 20:40		04.30.2020 21:00		04.30.2020 21:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0
Diesel Range Organics (DRO)		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0
Total GRO-DRO		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0
Total TPH		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Analytical Report 660344

for

LT Environmental, Inc.

Project Manager: Tacoma Morrissey

The Corral Canyon Expansion

012920053

05.06.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

05.06.2020

Project Manager: **Tacoma Morrissey**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **660344**
The Corral Canyon Expansion
Project Address:

Tacoma Morrissey:

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) 660344. 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. 660344 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,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	04.30.2020 09:23	1 ft	660344-001
PH01A	S	04.30.2020 09:25	2 ft	660344-002
PH02	S	04.30.2020 09:33	1 ft	660344-003
PH02A	S	04.30.2020 09:38	2 ft	660344-004
PH03	S	04.30.2020 09:43	1 ft	660344-005
PH03A	S	04.30.2020 09:45	2 ft	660344-006

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: The Corral Canyon Expansion

Project ID: *012920053*
Work Order Number(s): *660344*

Report Date: *05.06.2020*
Date Received: *04.30.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-001	Date Collected:	04.30.2020 09:23	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:48	Basis:	Wet Weight
Seq Number:	3124742				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**175**	10.0	mg/kg	04.30.2020 22:48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124745				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.30.2020 19:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.30.2020 19:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.30.2020 19:18	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.30.2020 19:18	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.30.2020 19:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.30.2020 19:18	
o-Terphenyl	84-15-1	105	%	70-135	04.30.2020 19:18	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-001	Date Collected:	04.30.2020 09:23	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.01.2020 11:30	Basis:	Wet Weight
Seq Number:	3124843				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.01.2020 13:27	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.01.2020 13:27	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.01.2020 13:27	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.01.2020 13:27	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.01.2020 13:27	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.01.2020 13:27	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.01.2020 13:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.01.2020 13:27	
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.01.2020 13:27	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-002	Date Collected:	04.30.2020 09:25	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:48	Basis:	Wet Weight
Seq Number:	3124742				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.4**	9.90	mg/kg	04.30.2020 22:53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124749				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.30.2020 19:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.30.2020 19:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.30.2020 19:18	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.30.2020 19:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.30.2020 19:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	04.30.2020 19:18	
o-Terphenyl	84-15-1	118	%	70-135	04.30.2020 19:18	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-002	Date Collected:	04.30.2020 09:25	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.01.2020 11:30	Basis:	Wet Weight
Seq Number:	3124843				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.01.2020 13:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.01.2020 13:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.01.2020 13:48	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.01.2020 13:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.01.2020 13:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.01.2020 13:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.01.2020 13:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.01.2020 13:48	
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.01.2020 13:48	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-003	Date Collected:	04.30.2020 09:33	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:48	Basis:	Wet Weight
Seq Number:	3124742				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**141**	9.88	mg/kg	04.30.2020 22:59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124749				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.30.2020 20:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.30.2020 20:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.30.2020 20:19	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.30.2020 20:19	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.30.2020 20:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.30.2020 20:19	
o-Terphenyl	84-15-1	110	%	70-135	04.30.2020 20:19	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-003	Date Collected:	04.30.2020 09:33	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.01.2020 11:30	Basis:	Wet Weight
Seq Number:	3124843				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.01.2020 14:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.01.2020 14:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.01.2020 14:10	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.01.2020 14:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.01.2020 14:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.01.2020 14:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.01.2020 14:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	05.01.2020 14:10	
1,4-Difluorobenzene	540-36-3	117	%	70-130	05.01.2020 14:10	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-004	Date Collected:	04.30.2020 09:38	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:48	Basis:	Wet Weight
Seq Number:	3124742				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.6**	9.92	mg/kg	04.30.2020 23:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124749				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.30.2020 20:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.30.2020 20:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.30.2020 20:40	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.30.2020 20:40	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.30.2020 20:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	04.30.2020 20:40	
o-Terphenyl	84-15-1	96	%	70-135	04.30.2020 20:40	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-004	Date Collected:	04.30.2020 09:38	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124718				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.01.2020 03:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.01.2020 03:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.01.2020 03:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.01.2020 03:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.01.2020 03:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.01.2020 03:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.01.2020 03:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	05.01.2020 03:10	
4-Bromofluorobenzene	460-00-4	111	%	70-130	05.01.2020 03:10	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-005	Date Collected:	04.30.2020 09:43	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.01.2020 07:59	Basis:	Wet Weight
Seq Number:	3124857				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**51.2**	9.92	mg/kg	05.01.2020 08:49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124749				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.30.2020 21:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.30.2020 21:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.30.2020 21:00	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.30.2020 21:00	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.30.2020 21:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	04.30.2020 21:00	
o-Terphenyl	84-15-1	92	%	70-135	04.30.2020 21:00	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-005	Date Collected:	04.30.2020 09:43	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124718				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.01.2020 03:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.01.2020 03:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.01.2020 03:31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.01.2020 03:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.01.2020 03:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.01.2020 03:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.01.2020 03:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.01.2020 03:31	
4-Bromofluorobenzene	460-00-4	108	%	70-130	05.01.2020 03:31	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-006	Date Collected:	04.30.2020 09:45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.01.2020 07:59	Basis:	Wet Weight
Seq Number:	3124857				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.2**	9.98	mg/kg	05.01.2020 09:06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124749				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.30.2020 21:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.30.2020 21:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.30.2020 21:21	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.30.2020 21:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.30.2020 21:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	04.30.2020 21:21	
o-Terphenyl	84-15-1	99	%	70-135	04.30.2020 21:21	

Certificate of Analytical Results 660344

LT Environmental, Inc., Arvada, CO

The Corral Canyon Expansion

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	04.30.2020 17:13
Lab Sample Id:	660344-006	Date Collected:	04.30.2020 09:45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.30.2020 17:30	Basis:	Wet Weight
Seq Number:	3124718				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.01.2020 03:52	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.01.2020 03:52	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.01.2020 03:52	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.01.2020 03:52	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.01.2020 03:52	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.01.2020 03:52	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.01.2020 03:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.01.2020 03:52	
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.01.2020 03:52	

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. **ND** Not Detected.

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

QC Summary 660344

LT Environmental, Inc.

The Corral Canyon Expansion

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124742 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702475-1-BLK — LCS Sample Id: 7702475-1-BKS — LCSD Sample Id: 7702475-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	257	103	90-110	0	20	mg/kg	04.30.2020 20:20	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124857 — Matrix: Solid — Date Prep: 05.01.2020
MB Sample Id: 7702477-1-BLK — LCS Sample Id: 7702477-1-BKS — LCSD Sample Id: 7702477-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	260	104	90-110	0	20	mg/kg	05.01.2020 08:37	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124742 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660346-001 — MS Sample Id: 660346-001 S — MSD Sample Id: 660346-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	189	200	393	102	391	101	90-110	1	20	mg/kg	04.30.2020 20:37	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124742 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660346-011 — MS Sample Id: 660346-011 S — MSD Sample Id: 660346-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	105	200	317	106	308	102	90-110	3	20	mg/kg	04.30.2020 21:57	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124857 — Matrix: Soil — Date Prep: 05.01.2020
Parent Sample Id: 660344-005 — MS Sample Id: 660344-005 S — MSD Sample Id: 660344-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	51.2	199	258	104	263	106	90-110	2	20	mg/kg	05.01.2020 08:54	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124857 — Matrix: Soil — Date Prep: 05.01.2020
Parent Sample Id: 660345-009 — MS Sample Id: 660345-009 S — MSD Sample Id: 660345-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.0	199	221	105	228	109	90-110	3	20	mg/kg	05.01.2020 10:14	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 660344

LT Environmental, Inc.

The Corral Canyon Expansion

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124745 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702485-1-BLK — LCS Sample Id: 7702485-1-BKS — LCSD Sample Id: 7702485-1-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)	<50.0	1000	1090	109	857	86	70-135	24	35	mg/kg	04.30.2020 12:30	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	961	96	70-135	15	35	mg/kg	04.30.2020 12:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		127		111		70-135	%	04.30.2020 12:30
o-Terphenyl	101		120		108		70-135	%	04.30.2020 12:30

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124749 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702481-1-BLK — LCS Sample Id: 7702481-1-BKS — LCSD Sample Id: 7702481-1-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)	<50.0	1000	951	95	839	84	70-135	13	35	mg/kg	04.30.2020 12:30	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	921	92	70-135	15	35	mg/kg	04.30.2020 12:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		123		120		70-135	%	04.30.2020 12:30
o-Terphenyl	109		122		106		70-135	%	04.30.2020 12:30

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124745 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702485-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.30.2020 12:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124749 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702481-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.30.2020 12:10	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 660344

LT Environmental, Inc.

The Corral Canyon Expansion

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124745 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660344-001 — MS Sample Id: 660344-001 S — MSD Sample Id: 660344-001 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)	<50.3	1010	916	91	928	93	70-135	1	35	mg/kg	04.30.2020 19:38	
Diesel Range Organics (DRO)	<50.3	1010	1020	101	1040	104	70-135	2	35	mg/kg	04.30.2020 19:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		118		70-135	%	04.30.2020 19:38
o-Terphenyl	115		118		70-135	%	04.30.2020 19:38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124749 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660344-002 — MS Sample Id: 660344-002 S — MSD Sample Id: 660344-002 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)	<49.8	995	888	89	888	89	70-135	0	35	mg/kg	04.30.2020 19:38	
Diesel Range Organics (DRO)	<49.8	995	1000	101	1000	100	70-135	0	35	mg/kg	04.30.2020 19:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		109		70-135	%	04.30.2020 19:38
o-Terphenyl	115		114		70-135	%	04.30.2020 19:38

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124718 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702473-1-BLK — LCS Sample Id: 7702473-1-BKS — LCSD Sample Id: 7702473-1-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	0.0978	98	0.106	106	70-130	8	35	mg/kg	04.30.2020 18:36	
Toluene	<0.00200	0.100	0.0899	90	0.0974	97	70-130	8	35	mg/kg	04.30.2020 18:36	
Ethylbenzene	<0.00200	0.100	0.0829	83	0.0909	91	71-129	9	35	mg/kg	04.30.2020 18:36	
m,p-Xylenes	<0.00400	0.200	0.164	82	0.178	89	70-135	8	35	mg/kg	04.30.2020 18:36	
o-Xylene	<0.00200	0.100	0.0880	88	0.0951	95	71-133	8	35	mg/kg	04.30.2020 18:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		110		108		70-130	%	04.30.2020 18:36
4-Bromofluorobenzene	102		101		97		70-130	%	04.30.2020 18:36

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 660344

LT Environmental, Inc.

The Corral Canyon Expansion

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124843 — Matrix: Solid — Date Prep: 05.01.2020
MB Sample Id: 7702532-1-BLK — LCS Sample Id: 7702532-1-BKS — LCSD Sample Id: 7702532-1-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	0.108	108	0.113	113	70-130	5	35	mg/kg	05.01.2020 11:40	
Toluene	<0.00200	0.100	0.0998	100	0.109	109	70-130	9	35	mg/kg	05.01.2020 11:40	
Ethylbenzene	<0.00200	0.100	0.0942	94	0.101	101	71-129	7	35	mg/kg	05.01.2020 11:40	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.200	100	70-135	8	35	mg/kg	05.01.2020 11:40	
o-Xylene	<0.00200	0.100	0.0955	96	0.103	103	71-133	8	35	mg/kg	05.01.2020 11:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		108		107		70-130	%	05.01.2020 11:40
4-Bromofluorobenzene	107		99		101		70-130	%	05.01.2020 11:40

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124718 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660346-003 — MS Sample Id: 660346-003 S — MSD Sample Id: 660346-003 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	0.105	104	0.104	104	70-130	1	35	mg/kg	04.30.2020 19:19	
Toluene	<0.00202	0.101	0.0947	94	0.0956	96	70-130	1	35	mg/kg	04.30.2020 19:19	
Ethylbenzene	<0.00202	0.101	0.0865	86	0.0868	87	71-129	0	35	mg/kg	04.30.2020 19:19	
m,p-Xylenes	<0.00403	0.202	0.166	82	0.168	84	70-135	1	35	mg/kg	04.30.2020 19:19	
o-Xylene	<0.00202	0.101	0.0836	83	0.0843	84	71-133	1	35	mg/kg	04.30.2020 19:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		70-130	%	04.30.2020 19:19
4-Bromofluorobenzene	100		107		70-130	%	04.30.2020 19:19

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124843 — Matrix: Soil — Date Prep: 05.01.2020
Parent Sample Id: 660344-001 — MS Sample Id: 660344-001 S — MSD Sample Id: 660344-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.117	117	0.0952	95	70-130	21	35	mg/kg	05.01.2020 17:01	
Toluene	<0.00200	0.100	0.105	105	0.0864	86	70-130	19	35	mg/kg	05.01.2020 17:01	
Ethylbenzene	<0.00200	0.100	0.0986	99	0.0812	81	71-129	19	35	mg/kg	05.01.2020 17:01	
m,p-Xylenes	<0.00401	0.200	0.191	96	0.159	80	70-135	18	35	mg/kg	05.01.2020 17:01	
o-Xylene	<0.00200	0.100	0.0999	100	0.0817	82	71-133	20	35	mg/kg	05.01.2020 17:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		111		70-130	%	05.01.2020 17:01
4-Bromofluorobenzene	100		103		70-130	%	05.01.2020 17:01

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

Chain of Custody

Work Order No: 6660344

XENCO LABORATORIES
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)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A St. Bldg 1, Unit 222	Address:	3104 E Greene St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	(432) 704-5178 Email:		tmorrissey@ltenv.com tcasey@ltenv.com ab

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project: NM
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	The Corral Canyon Expansion	Turn Around	
Project Number:	01292005 3	Routine	☑
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.8	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	6	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
SS01A	S	4/30/20	0923	1'	1	X	X	X
SS01B			0925	2'	1	X	X	X
SS02A			0933	1'	1	X	X	X
SS02B			0938	2'	1	X	X	X
SS03A			0943	1'	1	X	X	X
SS03B			0945	2'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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 Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Travis Scott		4/30/20 1713	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04.30.2020 05.13.00 PM

Work Order #: 660344

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

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?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#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**	Samples received in bulk containers
#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: Elizabeth McClellan Date: 04.30.2020

Checklist reviewed by: Jessica Kramer Date: 05.01.2020

Jessica Kramer

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 11278

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707	5380	11278	C-141

OCD Reviewer	Condition
chensley	None