May 3, 2019

Mr. Mike Bratcher
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Closure Request
Poker Lake Unit #428H Battery
Remediation Permit Number 2RP-5246
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing soil sampling activities at the Poker Lake Unit #428H Battery (Site) in Unit C, Section 34, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling activities was to assess impacts to soil after 1.17 barrels (bbls) of crude oil were released after a fire ignited at the base of the on-site flare stack.

On February 3, 2019, a fire occurred as a result of the gas scrubber pump malfunctioning. Oil was sent to the flare stack and ignited a small fire. The fire extinguished itself, and there were no injuries or damage to equipment. The scrubber pump was repaired, and the facility was returned to operation. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via electronic mail within 24 hours on a Release Notification and Corrective Action Form C-141 on February 13, 2019, and was assigned Remediation Permit (RP) Number 2RP-5246 (Attachment 1). Based on the results of the soil sampling events, XTO is submitting this closure report and requesting no further action for this release event.

BACKGROUND

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 greater than 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well is C 02110, located approximately 1.62 miles northeast of the Site, with a depth to groundwater of 400 feet bgs and a total depth of 600 feet bgs. The nearest continuously flowing water or significant watercourse to the Site is an unnamed dry wash located approximately 530 feet northwest of the Site. A closer drainage feature is evident north of the Site on aerial imagery that is not denoted with a blue line on the United States Geological Survey (USGS) topographic map or by the New Mexico Office of the State Engineer (NMOSE). Review of historical aerial imagery

suggests the drainage formed as a result of runoff into an old two-track that is no longer used from well pad and pipeline construction. The drainage can be eliminated by installing stormwater controls at the pipeline adjacent to the well pad. As such, XTO and LTE do not consider the drainage a significant watercourse. 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 in a low karst area. Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride. A closure criteria of 600 mg/kg chloride was applied to the undeveloped pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

SOIL SAMPLING

On March 6, 2019, an LTE scientist collected four preliminary soil samples (SS01 through SS04) within the release area to assess the lateral extent of soil impacts. The soil sample locations, depicted on Figure 2, were selected based on information provided on the initial Form C-141 and visual surface staining. To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, the soil samples were collected from each sample location at approximately 0.5 feet bgs. The soil samples were screened for volatile aromatic hydrocarbons and chlorides using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

On April 10, 2019, LTE personnel returned to the Site to assess the vertical extent of impacted soil in the release area. Boreholes were advanced by hand auger to a depth of 2 feet bgs at preliminary soil sample location SS01, and to a depth of 1 foot bgs at preliminary soil sample locations SS02 through SS04. The soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas. All boreholes were backfilled with the soil removed from the boreholes; no soil was removed from the Site for disposal. The soil sample locations are depicted on Figure 2, and soil sampling logs are included in Attachment 2.

ANALYTICAL RESULTS

Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria in preliminary soil samples SS01 through SS04

collected at 0.5 feet bgs and subsequent borehole soil samples SS01A through SS04A collected at 1 foot to 2 feet bgs. Based on the laboratory analytical results, no soil excavation was required. Laboratory analytical results are presented on Figure 2 and summarized in Table 1, and the complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Soil samples SS01 through SS04 and SS01A through SS04A were collected within the release area to determine if any impacted soil remained in place as a result of the release. Laboratory analytical results for all soil samples indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria include the criteria for 600 mg/kg for chloride in the top four feet off pad. Although sample analytical data indicate no further action is required, XTO will install a stormwater control at the pipeline drainage adjacent to the well pad. XTO requests no further action for this release. An updated NMOCD Form C-141 is included as Attachment 1. A photographic log of the Site is included as Attachment 4.

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

Sincerely,
LT ENVIRONMENTAL, INC.

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
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-5246)
Attachment 2	Soil Sampling Logs
Attachment 3	Laboratory Analytical Reports
Attachment 4	Photographic Log

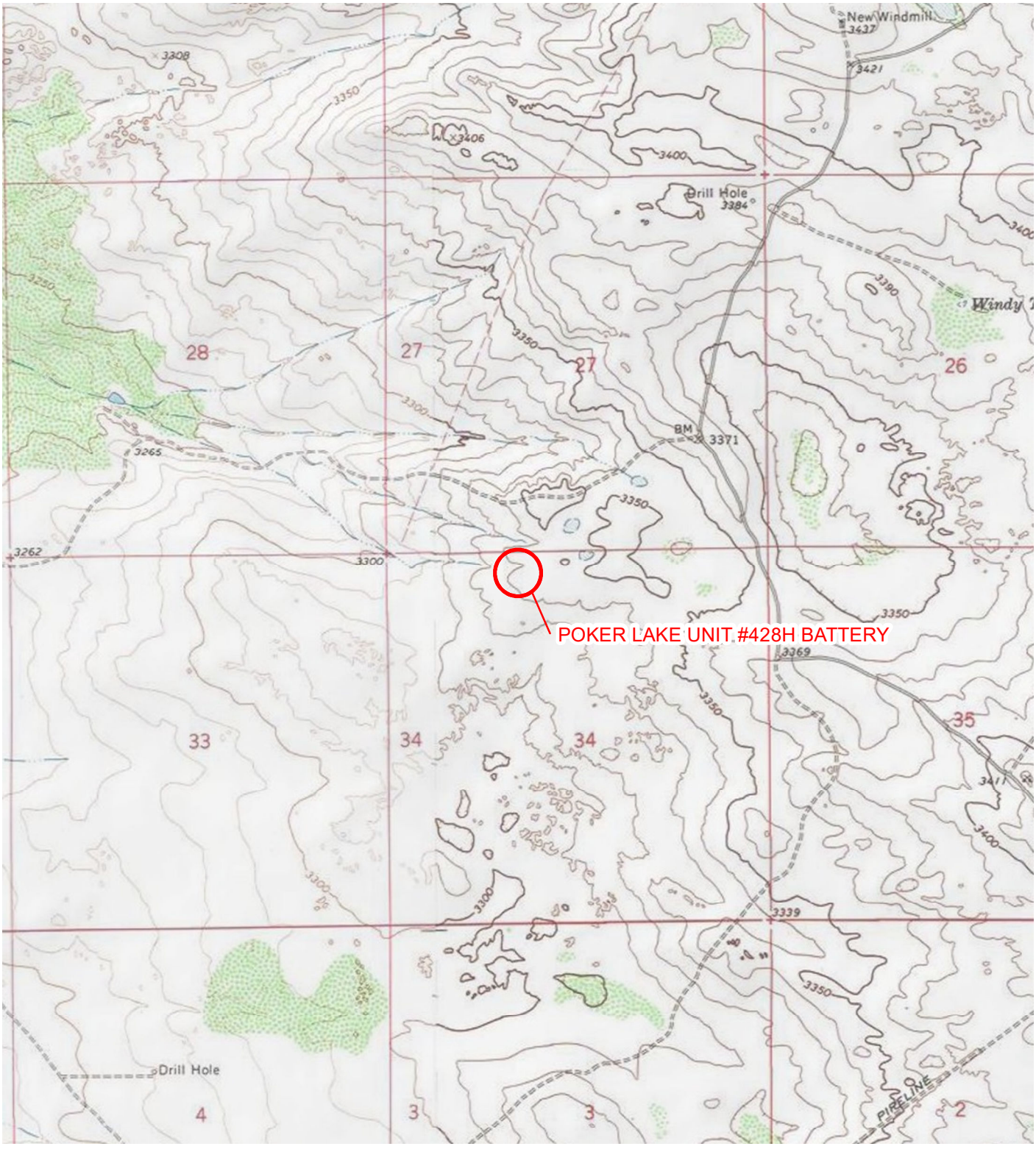


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

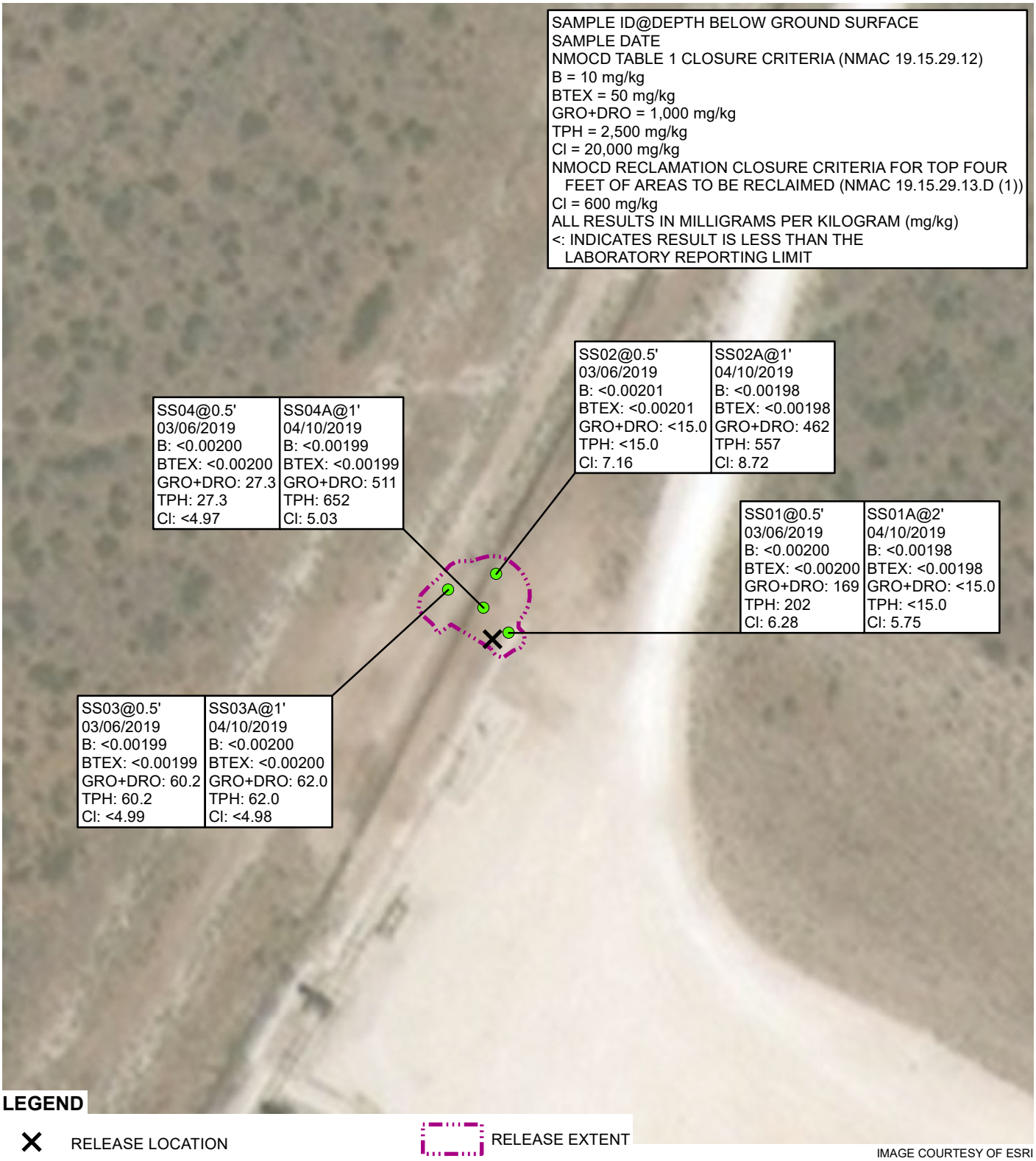
N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-5246

FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT #428H BATTERY
UNIT C SEC 34 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919034_PLU #428H BATTERY\012919034_FIG01_SL_2019_2RP-5246.mxd



LEGEND

RELEASE LOCATION

RELEASE EXTENT

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE STANDARDS

IMAGE COURTESY OF ESRI

0 60 120

Feet

N

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-5246

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
POKER LAKE UNIT #428H BATTERY
UNIT C SEC 34 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919034_PLU #428H BATTERY\012919034_FIG02_DELIN_2019_5246.mxd

TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT #428H BATTERY
REMEDIATION PERMIT NUMBER 2RP-5246
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	03/06/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	169	33.0	169	202	6.28*
SS02	0.5	03/06/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	7.16*
SS03	0.5	03/06/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	60.2	<15.0	60.2	60.2	<4.99*
SS04	0.5	03/06/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	27.3	<15.0	27.3	27.3	<4.97*
SS01A	2	04/10/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	5.75*
SS02A	1	04/10/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	462	95.4	462	557	8.72*
SS03A	1	04/10/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	62.0	<15.0	62.0	62.0	<4.98*
SS04A	1	04/10/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	511	141	511	652	5.03*
NMOCD 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
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits
Bold - indicates result exceeds the applicable regulatory standard
* - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kgTable 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018 NMAC - New Mexico Administrative Code

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	NAB1904944479
District RP	2 2RP-5246
Facility ID	
Application ID	pAB1904944028

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)* NAB1904944479
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.180466° Longitude -103.871557°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Poker Lake Unit #428H Battery	Site Type Bulk Storage and Separation Facility
Date Release Discovered 2/3/2019	API# *(if applicable)* 30-015-41246

Unit Letter	Section	Township	Range	County
C	34	24S	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)

☒ Crude Oil	Volume Released (bbls) 1.17	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) 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

Fire: A fire and release of fluid occurred from the flare stack. The vapor recovery unit loaded up due to the scrubber pump malfunction. Oil and gas were sent out to the flare. The oil ignited and started a small fire near the base of the flare. The fire burned a few wooden skids and bushes before extinguishing itself. There were no injuries and no damage to equipment. The scrubber pump was repaired and the facility was returned to operation. An environmental contractor has been retained to assist with remediation efforts.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1904944479
District RP	2 2RP-5246
Facility ID	
Application ID	pAB1904944028

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? An unauthorized release of a 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)?
Notice provided by Bryan Foust to Mike Bratcher, Rob Hamlet, and Jim Griswold (NMOCD), Jim Amos and Deborah McKinney (BLM) on 2/4/2019 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:
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 Coordinator

Signature: Kyle Littrell Date: 2-13-19

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

OCD Only

Received by: Amalia Barrameda Date: 2/18/2019

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5246
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?	>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.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5246
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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 Coordinator

Signature: Date: 5/03/2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5246
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 Coordinator

Signature: Date: 5/03/2019

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: SOIL SMAPLE LOGS

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: SS01	Date: 04/10/19
Project Name: PLU - 428	RP Number: 2RP-5246
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	<128	2.9	N		0	1'	S	silty sand MG Brown
dry	<128	3.8	N		1	2'	S	silty sand trace Caliche MG Brown
					2			
					3			
					4			
					5			Hand Auger Refusal
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: SS02	Date: 04/10/19
Project Name: PLU - 428	RP Number: 2RP - 5246
Logged By: Robert M.	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	<128	3.7	N		0–1	1'	S	Silty sand MG Brown
					2–12			Hand Auger Refusal

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
SS03	04/10/19
Project Name:	**RP Number:**
PLU 428	2RP-5246
Logged By: Robert M.	**Method:** Hand Auger
Lat/Long:	**Field Screening:**
Hole Diameter: 3"	**Total Depth:** 1'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	2128	15.5	N		0–1	1'	S	silty sand Brown MG

0
1
2
3
4
5
6
7
8
9
10
11
12

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
SS04	04/10/19
Project Name:	**RP Number:**
PLU -428	2RP - 5246

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Robert M.	Hand Auger
Lat/Long: / **Field Screening:**	**Hole Diameter:** / **Total Depth:**
	3" / 1'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	428	7.8	N		0 – 1	1'	S	Silty Sand Brown MG
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 617312

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU-248

012919034

18-MAR-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
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-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)
Xenco-Lakeland: Florida (E84098)

18-MAR-19

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

Reference: XENCO Report No(s): **617312**
PLU-248
Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 617312. 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. 617312 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,

Kalei Stout
Midland Laboratory Director

Sample Cross Reference 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	03-06-19 12:40	0.5	617312-001
SS02	S	03-06-19 12:45	0.5	617312-002
SS03	S	03-06-19 12:50	0.5	617312-003
SS04	S	03-06-19 13:05	0.5	617312-004

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3082424 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 617310-006 SD,617312-003.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 617312

LT Environmental, Inc., Arvada, CO

Project Name: PLU-248

Project Id: 012919034
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Tue Mar-12-19 12:05 pm
Report Date: 18-MAR-19
Project Manager: Kalei Stout

Analysis Requested													
	Lab Id:	617312-001		617312-002		617312-003		617312-004					
	Field Id:	SS01		SS02		SS03		SS04					
	Depth:	0.5-		0.5-		0.5-		0.5-					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Mar-06-19 12:40		Mar-06-19 12:45		Mar-06-19 12:50		Mar-06-19 13:05					
BTEX by EPA 8021B	***Extracted:***	Mar-15-19 15:00		Mar-15-19 15:00		Mar-15-19 15:00		Mar-15-19 15:00					
	Analyzed:	Mar-16-19 19:41		Mar-16-19 20:00		Mar-16-19 20:19		Mar-16-19 20:38					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00399	0.00399	<0.00402	0.00402	<0.00398	0.00398	<0.00401	0.00401				
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	Mar-13-19 10:00		Mar-13-19 15:40		Mar-13-19 10:00		Mar-13-19 10:00					
	Analyzed:	Mar-13-19 15:52		Mar-13-19 18:46		Mar-13-19 16:24		Mar-13-19 16:34					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		6.28	4.99	7.16	5.02	<4.99	4.99	<4.97	4.97				
TPH by SW8015 Mod	***Extracted:***	Mar-12-19 13:00		Mar-12-19 13:00		Mar-12-19 13:00		Mar-15-19 10:00					
	Analyzed:	Mar-12-19 19:32		Mar-12-19 19:52		Mar-12-19 20:12		Mar-15-19 23:58					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		169	15.0	<15.0	15.0	60.2	15.0	27.3	15.0				
Motor Oil Range Hydrocarbons (MRO)		33.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Total TPH		202	15.0	<15.0	15.0	60.2	15.0	27.3	15.0				

Kalei Stout
Midland Laboratory Director

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-001	Date Collected:	03.06.19 12.40	Sample Depth:	0.5

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.13.19 10.00	Basis:	Wet Weight
Seq Number:	3082058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.28**	4.99	mg/kg	03.13.19 15.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.12.19 13.00	Basis:	Wet Weight
Seq Number:	3081984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.12.19 19.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	**169**	15.0	mg/kg	03.12.19 19.32		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**33.0**	15.0	mg/kg	03.12.19 19.32		1
Total TPH	PHC635	**202**	15.0	mg/kg	03.12.19 19.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	03.12.19 19.32	
o-Terphenyl	84-15-1	112	%	70-135	03.12.19 19.32	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-001	Date Collected:	03.06.19 12.40	Sample Depth:	0.5
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	03.15.19 15.00	Basis:	Wet Weight
Seq Number:	3082424				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.16.19 19.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.16.19 19.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.16.19 19.41	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.16.19 19.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.16.19 19.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.16.19 19.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.16.19 19.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	03.16.19 19.41	
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.16.19 19.41	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-002	Date Collected:	03.06.19 12.45	Sample Depth:	0.5

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.13.19 15.40	Basis:	Wet Weight
Seq Number:	3082059				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.16**	5.02	mg/kg	03.13.19 18.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.12.19 13.00	Basis:	Wet Weight
Seq Number:	3081984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.12.19 19.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	03.12.19 19.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	03.12.19 19.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	03.12.19 19.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	03.12.19 19.52	
o-Terphenyl	84-15-1	104	%	70-135	03.12.19 19.52	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-002	Date Collected:	03.06.19 12.45	Sample Depth:	0.5
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	03.15.19 15.00	Basis:	Wet Weight
Seq Number:	3082424				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.16.19 20.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.16.19 20.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.16.19 20.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.16.19 20.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.16.19 20.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.16.19 20.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.16.19 20.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.16.19 20.00	
4-Bromofluorobenzene	460-00-4	119	%	70-130	03.16.19 20.00	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-003	Date Collected:	03.06.19 12.50	Sample Depth:	0.5

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.13.19 10.00	Basis:	Wet Weight
Seq Number:	3082058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	03.13.19 16.24	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.12.19 13.00	Basis:	Wet Weight
Seq Number:	3081984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.12.19 20.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	**60.2**	15.0	mg/kg	03.12.19 20.12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	03.12.19 20.12	U	1
Total TPH	PHC635	**60.2**	15.0	mg/kg	03.12.19 20.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.12.19 20.12	
o-Terphenyl	84-15-1	93	%	70-135	03.12.19 20.12	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-003	Date Collected:	03.06.19 12.50	Sample Depth:	0.5
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	03.15.19 15.00	Basis:	Wet Weight
Seq Number:	3082424				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.16.19 20.19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.16.19 20.19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.16.19 20.19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.16.19 20.19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.16.19 20.19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.16.19 20.19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.16.19 20.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	134	%	70-130	03.16.19 20.19	**
1,4-Difluorobenzene	540-36-3	103	%	70-130	03.16.19 20.19	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-004	Date Collected:	03.06.19 13.05	Sample Depth:	0.5

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.13.19 10.00	Basis:	Wet Weight
Seq Number:	3082058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	03.13.19 16.34	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.15.19 10.00	Basis:	Wet Weight
Seq Number:	3082335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.15.19 23.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	**27.3**	15.0	mg/kg	03.15.19 23.58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	03.15.19 23.58	U	1
Total TPH	PHC635	**27.3**	15.0	mg/kg	03.15.19 23.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	03.15.19 23.58	
o-Terphenyl	84-15-1	102	%	70-135	03.15.19 23.58	

Certificate of Analytical Results 617312

LT Environmental, Inc., Arvada, CO

PLU-248

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	03.12.19 12.05
Lab Sample Id:	617312-004	Date Collected:	03.06.19 13.05	Sample Depth:	0.5
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	03.15.19 15.00	Basis:	Wet Weight
Seq Number:	3082424				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.16.19 20.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.16.19 20.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.16.19 20.38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.16.19 20.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.16.19 20.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.16.19 20.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.16.19 20.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.16.19 20.38	
4-Bromofluorobenzene	460-00-4	114	%	70-130	03.16.19 20.38	

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

QC Summary 617312

LT Environmental, Inc.

PLU-248

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3082058 Matrix: Solid Date Prep: 03.13.19
MB Sample Id: 7673476-1-BLK LCS Sample Id: 7673476-1-BKS LCSD Sample Id: 7673476-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	0.883	250	266	106	272	109	90-110	2	20	mg/kg	03.13.19 12:08	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3082059 Matrix: Solid Date Prep: 03.13.19
MB Sample Id: 7673513-1-BLK LCS Sample Id: 7673513-1-BKS LCSD Sample Id: 7673513-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.21	250	257	103	261	104	90-110	2	20	mg/kg	03.13.19 18:33	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3082058 Matrix: Soil Date Prep: 03.13.19
Parent Sample Id: 617310-004 MS Sample Id: 617310-004 S MSD Sample Id: 617310-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.64	249	269	107	270	107	90-110	0	20	mg/kg	03.13.19 12:40	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3082058 Matrix: Soil Date Prep: 03.13.19
Parent Sample Id: 617311-007 MS Sample Id: 617311-007 S MSD Sample Id: 617311-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.01	249	269	108	269	108	90-110	0	20	mg/kg	03.13.19 15:09	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3082059 Matrix: Soil Date Prep: 03.13.19
Parent Sample Id: 617312-002 MS Sample Id: 617312-002 S MSD Sample Id: 617312-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.16	251	258	100	256	99	90-110	1	20	mg/kg	03.13.19 18:52	

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 617312

LT Environmental, Inc.

PLU-248

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3082059 Matrix: Soil Date Prep: 03.13.19
Parent Sample Id: 617489-001 MS Sample Id: 617489-001 S MSD Sample Id: 617489-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.08	252	281	111	289	114	90-110	3	20	mg/kg	03.13.19 20:23	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3081984 Matrix: Solid Date Prep: 03.12.19
MB Sample Id: 7673482-1-BLK LCS Sample Id: 7673482-1-BKS LCSD Sample Id: 7673482-1-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	1010	101	1010	101	70-135	0	20	mg/kg	03.12.19 11:57	
Diesel Range Organics (DRO)	<8.13	1000	1020	102	1040	104	70-135	2	20	mg/kg	03.12.19 11:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		119		121		70-135	%	03.12.19 11:57
o-Terphenyl	95		107		113		70-135	%	03.12.19 11:57

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3082335 Matrix: Solid Date Prep: 03.15.19
MB Sample Id: 7673699-1-BLK LCS Sample Id: 7673699-1-BKS LCSD Sample Id: 7673699-1-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	1030	103	1100	110	70-135	7	20	mg/kg	03.15.19 15:51	
Diesel Range Organics (DRO)	<8.13	1000	1020	102	1090	109	70-135	7	20	mg/kg	03.15.19 15:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		117		129		70-135	%	03.15.19 15:51
o-Terphenyl	91		98		113		70-135	%	03.15.19 15:51

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3081984 Matrix: Soil Date Prep: 03.12.19
Parent Sample Id: 617268-001 MS Sample Id: 617268-001 S MSD Sample Id: 617268-001 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)	<8.00	1000	1020	102	1020	102	70-135	0	20	mg/kg	03.12.19 12:56	
Diesel Range Organics (DRO)	<8.13	1000	1030	103	1040	104	70-135	1	20	mg/kg	03.12.19 12:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		115		70-135	%	03.12.19 12:56
o-Terphenyl	98		99		70-135	%	03.12.19 12:56

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 617312

LT Environmental, Inc.

PLU-248

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3082335 Matrix: Soil Date Prep: 03.15.19
Parent Sample Id: 617507-001 MS Sample Id: 617507-001 S MSD Sample Id: 617507-001 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)	<7.99	998	1020	102	908	91	70-135	12	20	mg/kg	03.15.19 16:48	
Diesel Range Organics (DRO)	<8.11	998	1040	104	917	92	70-135	13	20	mg/kg	03.15.19 16:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		104		70-135	%	03.15.19 16:48
o-Terphenyl	102		88		70-135	%	03.15.19 16:48

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3082424 Matrix: Solid Date Prep: 03.15.19
MB Sample Id: 7673758-1-BLK LCS Sample Id: 7673758-1-BKS LCSD Sample Id: 7673758-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0994	0.101	102	0.0952	95	70-130	6	35	mg/kg	03.16.19 13:25	
Toluene	<0.000453	0.0994	0.106	107	0.102	102	70-130	4	35	mg/kg	03.16.19 13:25	
Ethylbenzene	<0.000561	0.0994	0.0959	96	0.0930	93	70-130	3	35	mg/kg	03.16.19 13:25	
m,p-Xylenes	<0.00101	0.199	0.184	92	0.179	90	70-130	3	35	mg/kg	03.16.19 13:25	
o-Xylene	<0.000342	0.0994	0.0956	96	0.0925	93	70-130	3	35	mg/kg	03.16.19 13:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		104		101		70-130	%	03.16.19 13:25
4-Bromofluorobenzene	104		104		102		70-130	%	03.16.19 13:25

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3082424 Matrix: Soil Date Prep: 03.15.19
Parent Sample Id: 617310-006 MS Sample Id: 617310-006 S MSD Sample Id: 617310-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000461	0.100	0.0909	90	0.0436	43	70-130	70	35	mg/kg	03.16.19 14:03	XF
Toluene	0.00121	0.100	0.0952	94	0.0621	61	70-130	42	35	mg/kg	03.16.19 14:03	XF
Ethylbenzene	<0.000565	0.100	0.0895	90	0.0729	73	70-130	20	35	mg/kg	03.16.19 14:03	
m,p-Xylenes	<0.00101	0.200	0.171	86	0.148	74	70-130	14	35	mg/kg	03.16.19 14:03	
o-Xylene	0.000441	0.100	0.0887	88	0.0736	73	70-130	19	35	mg/kg	03.16.19 14:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		124		70-130	%	03.16.19 14:03
4-Bromofluorobenzene	107		216	**	70-130	%	03.16.19 14:03

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: 617312

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 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrel
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:	rmcafee@ltenv.com

Work Order Comments

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

Project Name:	PLV - 248	Turn Around	
Project Number:	012919034	Routine	☑
P.O. Number:	2RP - 5246	Rush:	
Sampler's Name:	Robert M.	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.3 0.2	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes ~~No~~ N/A	Correction Factor:	-0.1
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Work Order Notes / Sample Comments
SS01	S	03/06/19	1240	0.5	1	X	X	X	discrete
SS02	S	03/06/19	1245	0.5	1	X	X	X	
SS03	S	03/06/19	1250	0.5	1	X	X	X	
SS04	S	03/06/19	1305	0.5	1	X	X	X	

ANALYSIS REQUEST

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

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
1	Robert McAfee	Taylor Kay	3/8/19 @ 1400	2 Taylor Kay	Bell	3/12/19 1205
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Final 1.000

Page 18 of 20

ORIGIN ID:CAOA (575) 887-6245
XENCO
PAC N MAIL
910 W PIERCE ST
CARLSBAD, NM 88220
UNITED STATES US

SHIP DATE: 11MAR19
ACTWGT: 38.00 LB
CAD: 101813706/INET4100
DIMS: 26x14x15 IN
BILL RECIPIENT

TO HOLD FOR XENCO
FEDEX EXPRESS SHIP CENTER
FEDEX SHIP CENTER
3600 COUNTY RD 1276 S
MIDLAND TX 79711
(806) 794-1296
INV:
PO:
REF:
DEPT:

565J1/46D3/23AD

J191019010701uv

FedEx Express

TRK# 0201 7746 7464 9154

TUE - 12 MAR HOLD
STANDARD OVERNIGHT
HLD

41 MAFA

MAFA
LBB
TX-US

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.

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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 ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 03/12/2019 12:05:00 PM

Work Order #: 617312

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 03/12/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 03/12/2019

Jessica Kramer

Analytical Report 620939

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 428

15-APR-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
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-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)
Xenco-Lakeland: Florida (E84098)

15-APR-19

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

Reference: XENCO Report No(s): **620939**
PLU 428
Project Address: ---

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 620939. 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. 620939 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,

Kalei Stout
Midland Laboratory Director

Sample Cross Reference 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01A	S	04-10-19 11:55	2 ft	620939-001
SS02A	S	04-10-19 13:05	1 ft	620939-002
SS03A	S	04-10-19 11:45	1 ft	620939-003
SS04A	S	04-10-19 13:00	1 ft	620939-004

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3085717 BTEX by EPA 8021B

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

Certificate of Analysis Summary 620939

LT Environmental, Inc., Arvada, CO

Project Name: PLU 428

Project Id: ---
Contact: Adrian Baker
Project Location: ---

Date Received in Lab: Fri Apr-12-19 10:52 am
Report Date: 15-APR-19
Project Manager: Kalei Stout

Analysis Requested													
	Lab Id:	620939-001		620939-002		620939-003		620939-004					
	Field Id:	SS01A		SS02A		SS03A		SS04A					
	Depth:	2- ft		1- ft		1- ft		1- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Apr-10-19 11:55		Apr-10-19 13:05		Apr-10-19 11:45		Apr-10-19 13:00					
BTEX by EPA 8021B	***Extracted:***	Apr-14-19 16:07		Apr-14-19 16:07		Apr-14-19 16:07		Apr-14-19 16:07					
	Analyzed:	Apr-15-19 01:58		Apr-15-19 02:17		Apr-15-19 02:35		Apr-15-19 02:54					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199				
Toluene		<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199				
Ethylbenzene		<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199				
m,p-Xylenes		<0.00397	0.00397	<0.00396	0.00396	<0.00399	0.00399	<0.00398	0.00398				
o-Xylene		<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199				
Total Xylenes		<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199				
Total BTEX		<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	Apr-12-19 17:00		Apr-12-19 17:00		Apr-12-19 17:00		Apr-12-19 17:00					
	Analyzed:	Apr-14-19 19:30		Apr-14-19 19:37		Apr-14-19 19:45		Apr-14-19 19:52					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		5.75	4.99	8.72	4.98	<4.98	4.98	5.03	4.97				
TPH by SW8015 Mod	***Extracted:***	Apr-13-19 09:00		Apr-13-19 09:00		Apr-13-19 09:00		Apr-13-19 09:00					
	Analyzed:	Apr-13-19 16:23		Apr-13-19 16:42		Apr-13-19 17:02		Apr-13-19 17:21					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	462	15.0	62.0	15.0	511	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	95.4	15.0	<15.0	15.0	141	15.0				
Total TPH		<15.0	15.0	557	15.0	62.0	15.0	652	15.0				
Total GRO-DRO		<15.0	15.0	462	15.0	62.0	15.0	511	15.0				

Kalei Stout
Midland Laboratory Director

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS01A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-001	Date Collected:	04.10.19 11.55	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.12.19 17.00	Basis:	Wet Weight
Seq Number:	3085667				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.75**	4.99	mg/kg	04.14.19 19.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.13.19 09.00	Basis:	Wet Weight
Seq Number:	3085698				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.13.19 16.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	04.13.19 16.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	04.13.19 16.23	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	04.13.19 16.23	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	04.13.19 16.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.13.19 16.23	
o-Terphenyl	84-15-1	104	%	70-135	04.13.19 16.23	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS01A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-001	Date Collected:	04.10.19 11.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.14.19 16.07	Basis:	Wet Weight
Seq Number:	3085717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.15.19 01.58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.15.19 01.58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.15.19 01.58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.15.19 01.58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.15.19 01.58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.15.19 01.58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.15.19 01.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	04.15.19 01.58	
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.15.19 01.58	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS02A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-002	Date Collected:	04.10.19 13.05	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.12.19 17.00	Basis:	Wet Weight
Seq Number:	3085667				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.72**	4.98	mg/kg	04.14.19 19.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.13.19 09.00	Basis:	Wet Weight
Seq Number:	3085698				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.13.19 16.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	**462**	15.0	mg/kg	04.13.19 16.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**95.4**	15.0	mg/kg	04.13.19 16.42		1
Total TPH	PHC635	**557**	15.0	mg/kg	04.13.19 16.42		1
Total GRO-DRO	PHC628	**462**	15.0	mg/kg	04.13.19 16.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.13.19 16.42	
o-Terphenyl	84-15-1	114	%	70-135	04.13.19 16.42	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS02A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-002	Date Collected:	04.10.19 13.05	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.14.19 16.07	Basis:	Wet Weight
Seq Number:	3085717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.15.19 02.17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.15.19 02.17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.15.19 02.17	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.15.19 02.17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.15.19 02.17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.15.19 02.17	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.15.19 02.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	04.15.19 02.17	
4-Bromofluorobenzene	460-00-4	115	%	70-130	04.15.19 02.17	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-003	Date Collected:	04.10.19 11.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.12.19 17.00	Basis:	Wet Weight
Seq Number:	3085667				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	04.14.19 19.45	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.13.19 09.00	Basis:	Wet Weight
Seq Number:	3085698				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.13.19 17.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	**62.0**	15.0	mg/kg	04.13.19 17.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	04.13.19 17.02	U	1
Total TPH	PHC635	**62.0**	15.0	mg/kg	04.13.19 17.02		1
Total GRO-DRO	PHC628	**62.0**	15.0	mg/kg	04.13.19 17.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.13.19 17.02	
o-Terphenyl	84-15-1	102	%	70-135	04.13.19 17.02	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-003	Date Collected:	04.10.19 11.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.14.19 16.07	Basis:	Wet Weight
Seq Number:	3085717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.15.19 02.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.15.19 02.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.15.19 02.35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.15.19 02.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.15.19 02.35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.15.19 02.35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.15.19 02.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	04.15.19 02.35	
1,4-Difluorobenzene	540-36-3	105	%	70-130	04.15.19 02.35	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS04A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-004	Date Collected:	04.10.19 13.00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.12.19 17.00	Basis:	Wet Weight
Seq Number:	3085667				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.03**	4.97	mg/kg	04.14.19 19.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.13.19 09.00	Basis:	Wet Weight
Seq Number:	3085698				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.13.19 17.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	**511**	15.0	mg/kg	04.13.19 17.21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**141**	15.0	mg/kg	04.13.19 17.21		1
Total TPH	PHC635	**652**	15.0	mg/kg	04.13.19 17.21		1
Total GRO-DRO	PHC628	**511**	15.0	mg/kg	04.13.19 17.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	04.13.19 17.21	
o-Terphenyl	84-15-1	116	%	70-135	04.13.19 17.21	

Certificate of Analytical Results 620939

LT Environmental, Inc., Arvada, CO

PLU 428

Sample Id:	**SS04A**	Matrix:	Soil	Date Received:	04.12.19 10.52
Lab Sample Id:	620939-004	Date Collected:	04.10.19 13.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.14.19 16.07	Basis:	Wet Weight
Seq Number:	3085717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.15.19 02.54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.15.19 02.54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.15.19 02.54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.15.19 02.54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.15.19 02.54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.15.19 02.54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.15.19 02.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	04.15.19 02.54	
1,4-Difluorobenzene	540-36-3	105	%	70-130	04.15.19 02.54	

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

QC Summary 620939

LT Environmental, Inc.

PLU 428

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3085667 Matrix: Solid Date Prep: 04.12.19
MB Sample Id: 7675689-1-BLK LCS Sample Id: 7675689-1-BKS LCSD Sample Id: 7675689-1-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	259	104	264	106	90-110	2	20	mg/kg	04.14.19 17:56	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3085667 Matrix: Soil Date Prep: 04.12.19
Parent Sample Id: 620943-004 MS Sample Id: 620943-004 S MSD Sample Id: 620943-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	32.9	249	291	104	294	105	90-110	1	20	mg/kg	04.14.19 20:14	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3085667 Matrix: Soil Date Prep: 04.12.19
Parent Sample Id: 620944-002 MS Sample Id: 620944-002 S MSD Sample Id: 620944-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.18	252	282	111	250	98	90-110	12	20	mg/kg	04.14.19 18:18	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3085698 Matrix: Solid Date Prep: 04.13.19
MB Sample Id: 7675750-1-BLK LCS Sample Id: 7675750-1-BKS LCSD Sample Id: 7675750-1-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	928	93	966	97	70-135	4	20	mg/kg	04.13.19 10:34	
Diesel Range Organics (DRO)	<8.13	1000	965	97	987	99	70-135	2	20	mg/kg	04.13.19 10:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		123		124		70-135	%	04.13.19 10:34
o-Terphenyl	107		120		119		70-135	%	04.13.19 10:34

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 620939

LT Environmental, Inc.

PLU 428

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3085698 Matrix: Soil Date Prep: 04.13.19
Parent Sample Id: 620782-001 MS Sample Id: 620782-001 S MSD Sample Id: 620782-001 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)	<7.99	999	1010	101	1040	104	70-135	3	20	mg/kg	04.13.19 11:32	
Diesel Range Organics (DRO)	124	999	1220	110	1240	112	70-135	2	20	mg/kg	04.13.19 11:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		128		70-135	%	04.13.19 11:32
o-Terphenyl	116		119		70-135	%	04.13.19 11:32

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3085717 Matrix: Solid Date Prep: 04.14.19
MB Sample Id: 7675773-1-BLK LCS Sample Id: 7675773-1-BKS LCSD Sample Id: 7675773-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.100	101	0.0939	94	70-130	6	35	mg/kg	04.14.19 18:06	
Toluene	<0.00198	0.0992	0.0996	100	0.0951	95	70-130	5	35	mg/kg	04.14.19 18:06	
Ethylbenzene	<0.00198	0.0992	0.105	106	0.0997	100	70-130	5	35	mg/kg	04.14.19 18:06	
m,p-Xylenes	<0.00101	0.198	0.210	106	0.201	101	70-130	4	35	mg/kg	04.14.19 18:06	
o-Xylene	<0.00198	0.0992	0.105	106	0.102	102	70-130	3	35	mg/kg	04.14.19 18:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		96		96		70-130	%	04.14.19 18:06
4-Bromofluorobenzene	105		106		106		70-130	%	04.14.19 18:06

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3085717 Matrix: Soil Date Prep: 04.14.19
Parent Sample Id: 620919-001 MS Sample Id: 620919-001 S MSD Sample Id: 620919-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0550	55	0.0570	57	70-130	4	35	mg/kg	04.14.19 18:44	X
Toluene	<0.00199	0.0996	0.0675	68	0.0710	71	70-130	5	35	mg/kg	04.14.19 18:44	X
Ethylbenzene	<0.00199	0.0996	0.0663	67	0.0699	70	70-130	5	35	mg/kg	04.14.19 18:44	X
m,p-Xylenes	0.00273	0.199	0.141	69	0.149	73	70-130	6	35	mg/kg	04.14.19 18:44	X
o-Xylene	<0.00199	0.0996	0.0722	72	0.0772	77	70-130	7	35	mg/kg	04.14.19 18:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		88		70-130	%	04.14.19 18:44
4-Bromofluorobenzene	123		128		70-130	%	04.14.19 18:44

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: 620939

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 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrel
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:	rmcafee@Ltenv.com

Work Order Comments

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

Project Name:	PLU 428	Turn Around	
Project Number:		Routine	☐
P.O. Number:	2RP-5246	Rush:	5 day
Sampler's Name:	Robert M.	Due Date:	04/15/19

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.2 / 0.1	Thermometer ID	IR
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
SS01A	S	04/10/19	1155	2'	1	X	X	X	discrete
SS02A			1305	1'		X	X	X	
SS03A			1145	1'		X	X	X	
SS04A			1300	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
1	Robert Mafee	Taylor Day	4/10/19 @ 1545			
2				Taylor Day	BAM	4/12/19 1052
3						
4						
5						
6						

Revised Date 051418 Rev. 2018.1

77495114590

Final 1.000

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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 ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04/12/2019 10:52:00 AM

Work Order #: 620939

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.1
#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: 04/12/2019

Brianna Teel

Checklist reviewed by: Kalei Stout Date: 04/12/2019

Kalei Stout

Western view of release area during delineation activities.

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March 6, 2019	Photographic Log	

Southern view of release area during delineation activities.

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March 6, 2019	Photographic Log	