LT Environmental, Inc.
3300 North A Street, Building 1, #103
Midland, Texas 79705
T 432.704.5178 / F 432.704.5179

April 18, 2018

Ms. Crystal Weaver
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Closure Request
PLU PC 3 Water Line
Remediation Permit Number 2RP-2980
Eddy County, New Mexico

Dear Ms. Weaver;

LT Environmental, Inc. (LTE) is pleased to present to XTO Energy, Inc. (XTO) the following letter report detailing the soil sampling activities at the PLU PC 3 water line release location (Site) in Section 3, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the investigation was to assess impacts to soil after a water line developed a small hole and caused the release of approximately 34 barrels (bbls) of produced water on April 21, 2015. The release impacted approximately 3,000 square feet of the pipeline right-of-way. Free-standing liquid was removed with a vacuum truck; approximately 5 bbls of produced water were recovered. The release was reported to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on April 29, 2015 and was assigned Remediation Permit Number (RP) 2RP-2980 (Attachment 1). Although the impact occurred while the well was operated by the previous operator, XTO is the current operator and is committed to addressing any releases that remain unresolved. The sampling was conducted to assess current site conditions. Based on the results of the sampling event as described herein, XTO is requesting no further action for this release.

BACKGROUND

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 and known aquifer properties. The nearest permitted water well is C 03716, located approximately 1.6 miles northeast of the Site, with a depth to groundwater of 425 feet bgs and a total depth of 600 feet bgs. The Site is greater than 1,000 feet from a water source and greater than 200 feet from a private domestic water source. The closest surface water to the Site is an arroyo located approximately 2,960 feet west of the Site. Based on these criteria, the NMOCD site ranking for remediation action levels is 0, and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on standard practice in this region, LTE proposes a site-specific chloride action level of 600 mg/kg or within 10 percent [%] of the background concentrations.

SOIL SAMPLING

Soil sample locations were based on visual inspection of the Site and the Form C-141 information. Based on the description of the affected area, the release occurred 150 feet south of the well location along the pipeline right-of-way and flowed southwest. LTE collected five soil samples on February 13, 2018, as depicted on Figure 2. No visual or olfactory evidence of the release was observed and a release was not evident in historical aerial photographs. LTE made an effort to collect representative samples around the

reported release source and areas potentially affected by the release based on site topography, drainages, and depressions.

To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, samples were collected from each location at roughly 0.5 feet bgs by hand auger. The soil samples were collected directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures via FedEx to Xenco Laboratories in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by USEPA Method 8015, and chloride by USEPA Method 300.

ANALYTICAL RESULTS

Laboratory analytical results for the five soil samples indicated BTEX and TPH concentrations were below laboratory reporting limits. Chloride concentrations ranged from below the laboratory reporting limit in soil sample SS05 to 401 mg/kg in soil sample SS01. Laboratory analytical results are presented on Figure 2 and in Table 1, and the complete laboratory analytical report is included as Attachment 2.

CONCLUSIONS

Laboratory analytical results for soil samples collected at the former release source and in the downgradient direction of surface flow (southwest) indicate impact to soil, as defined by concentrations of BTEX, TPH, and chloride, do not exceed NMOCD site-specific standards. Initial response efforts and natural degradation have remediated this Site, and XTO requests no further action for this release. For the non-developed area on federal land impacted by the release, XTO will re-seed the area with Bureau of Land Management seed mix #2 via drill or broadcast method.

LTE appreciates the opportunity to provide this report to XTO. If you have any questions or comments, do not hesitate to contact Adrian Baker at (432) 887-1255 or abaker@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Adrian Baker
Project Geologist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Mike Bratcher, NMOCD
Jim Amos, BLM
Shelly Tucker, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Site Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141
Attachment 2	Laboratory Analytical Report

FIGURES

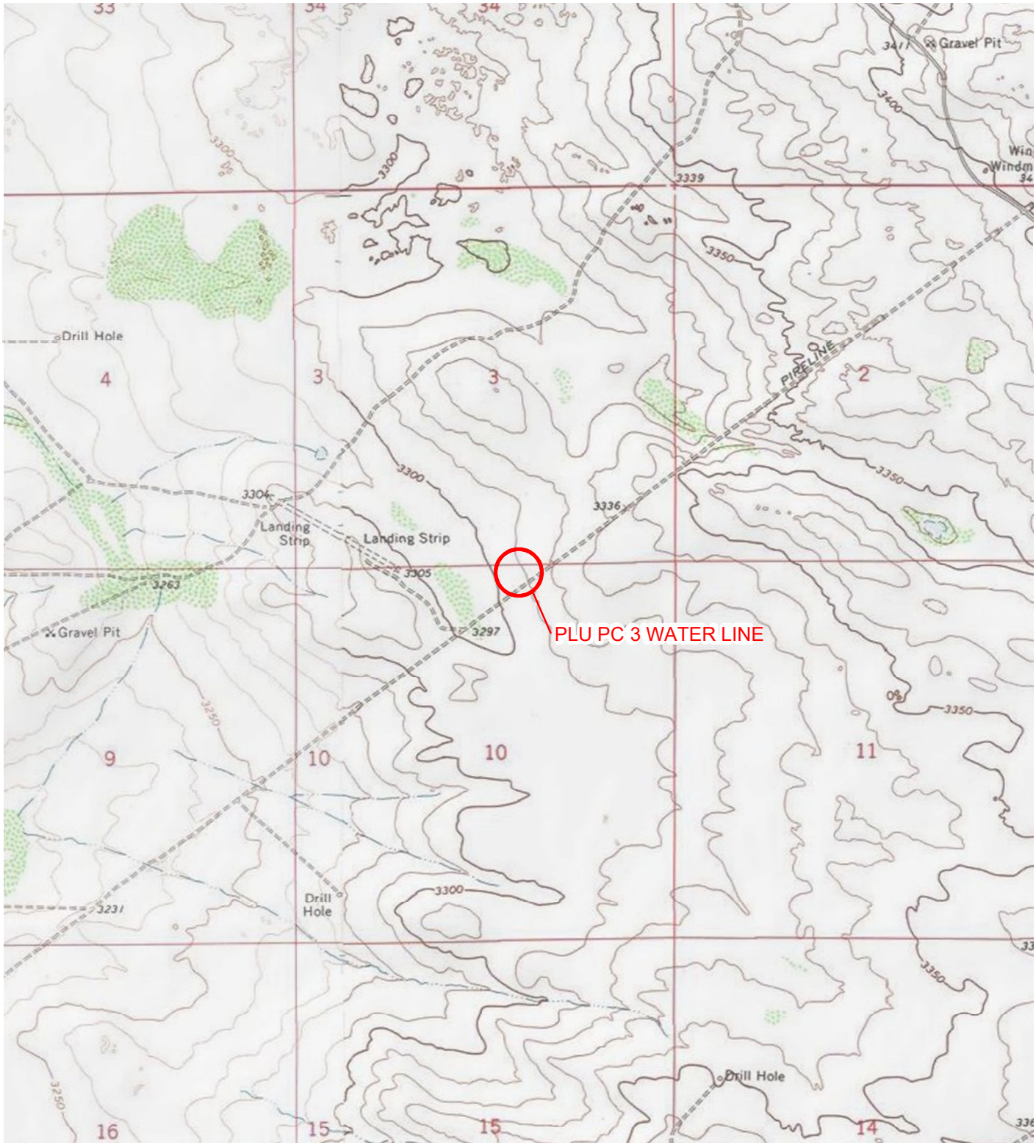

IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-2980

FIGURE 1
SITE LOCATION MAP
PLU PC 3 WATER LINE
NWNE SEC 3 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918080_PLU PC-3 SWD\012918080_FIG01_SL_2018_2RP-2980.mxd

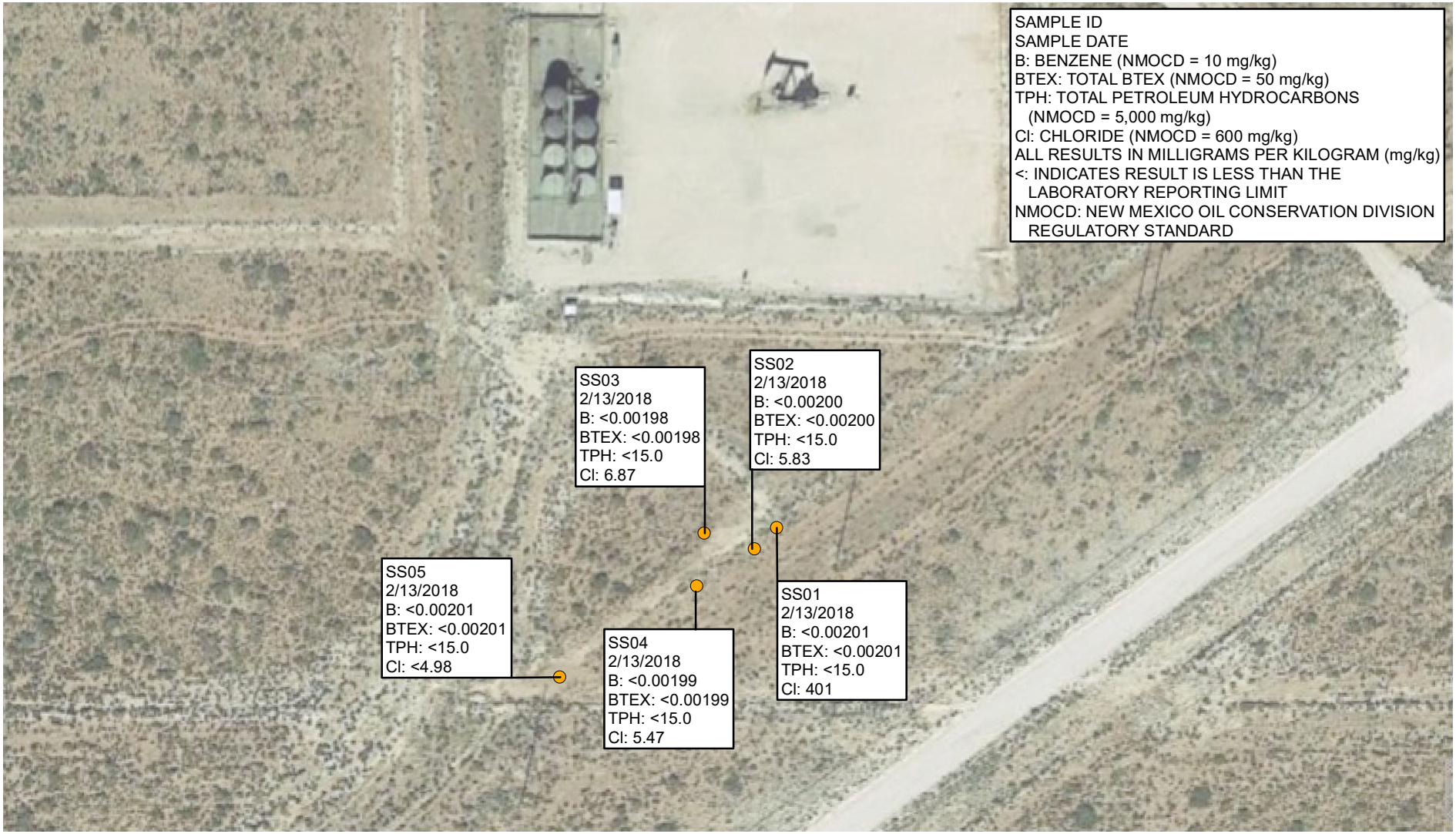

IMAGE COURTESY OF GOOGLE EARTH 2017

LEGEND

- SOIL SAMPLE

0 100 200
Feet

N

NOTE: REMEDIATION PERMIT NUMBER 2RP-2980

FIGURE 2
SOIL SAMPLE LOCATIONS
PLU PC 3 WATER LINE
NWNE SEC 3 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918080_PLU PC-3 SWD\012918080_FIG02_SITE_2018_2RP-2980.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS
PLU PC 3 WATER LINE 2RP-2980
EDDY COUNTY, NEW MEXICO
XTO ENERGY INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylben-zene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 Gasoline Range Organics (mg/kg)	C10-C28 Diesel Range Organics (mg/kg)	C28-C40 Motor Oil Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	2/13/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	401
SS02	0.5	2/13/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	5.83
SS03	0.5	2/13/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	6.87
SS04	0.5	2/13/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	5.47
SS05	0.5	2/13/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<4.98
NMOCD Remediation Action Level			10	NE	NE	NE	50	NE	NE	NE	5,000	600

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
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits

ATTACHMENT 1

INITIAL/FINAL NMOCD FORM C-141

Advancing Opportunity

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

State of New Mexico
Energy Minerals and Natural Resources

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

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 29 2015
RECEIVED

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1512436764

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P. 260737	Contact: Bradley Blevins
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: PLU PC 3 Water Line; release is located 150' south of PLU-CVX-JV-BS 16H	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-40581

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	3	25S	30E					Eddy

Latitude: N 32.152221° **Longitude:** W 103.867119°

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 34 bbls	Volume Recovered: 5 bbls
Source of Release: Line developed a small hole releasing fluid to ground surface	Date and Hour of Occurrence: 4/21/15 @ 9:46 am	Date and Hour of Discovery: 4/21/15 @ 9:46 am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher, OCD; Jim Amos, BLM via email	
By Whom? Bradley Blevins	Date and Hour: 4/21/15 @ 2:59 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse: Not Applicable	

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.*
Line developed a small hole releasing fluid to ground surface, the fluid ran to the SW along ROW.

Describe Area Affected and Cleanup Action Taken.*
The release impacted approximately 3,000 sq. ft. of ROW. Vacuum truck recovered 5 bbls of fluid. The area will be remediated in accordance with the NMOCD and BLM remediation guidelines.

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

Signature: Bradley Bl	OIL CONSERVATION DIVISION
Printed Name: Bradley Blevins	Approved by Environmental Specialist:
Title: Assistant Remediation Foreman	Approval Date: 5/4/15 Expiration Date: N/A
E-mail Address: bblevins@basspet.com	Conditions of Approval: Attached ☐
Date: 4-29-15 Phone: 432-214-3704	Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 6/4/15

* Attach Additional Sheets If Necessary

2RP-2980

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

nAB1512436764

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company XTO Energy	Contact: Kyle Littrell
Address 3104 E Greene Street, Carlsbad, NM 88220	Telephone No: 432-221-7331
Facility Name: PLU PC 3 Water Line, release is located 150' south of PLU-CVX-JV-BS 16H	Facility Type: Exploration and Production

Surface Owner Federal	Mineral Owner: Federal	API No. 30-015-40581

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	3	25S	30E					Eddy

Latitude 32.152221 **Longitude** -103.867119 NAD83

NATURE OF RELEASE

Type of Release produced water	Volume of Release 34 bbl	Volume Recovered 5 bbls
Source of Release: Line developed a small hole releasing fluid to ground surface	Date and Hour of Occurrence 4/21/15 @ 9:46 am	Date and Hour of Discovery 4/21/15 @ 9:46 am.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher, OCD; Jim Amos, BLM via email	
By Whom? Brad Blevins	Date and Hour: 4/21/15 @ 2:59 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse: Not Applicable	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Line developed a small hole releasing fluid to ground surface, the fluid ran to the SW along ROW.

Describe Area Affected and Cleanup Action Taken.*
The release impacted approximately 3,000 sq. ft. of ROW. Vacuum truck recovered 5 bbls of fluid. The area will be cleaned up in accordance with the NMOCD and BLM remediation guidelines.

LTE collected five soil samples from on February 13, 2018. Laboratory analytical results for the five soil samples indicated BTEX, TPH, and chloride were below the NMOCD remediation action levels for this site. XTO requests no further action for the release. For the non-developed area on federal land impacted by the release, XTO will re-seed the area with Bureau of Land Management seed mix #2 via drill or broadcast method.

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

Signature: K Littrell

Printed Name: Kyle Littrell

Title: SH&E Coordinator

E-mail Address: Kyle_Littrell@xtoenergy.com

Date: 4/20/18 Phone: 432-221-7331

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Bradford Billings

Approval Date: 03/19/2020 Expiration Date:

Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary

ATTACHMENT 2

LABORATORY ANALYTICAL REPORT

Advancing Opportunity

Analytical Report 576504

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU PC 3 Water Line

22-FEB-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

22-FEB-18

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

Reference: XENCO Report No(s): **576504**
PLU PC 3 Water Line
Project Address: NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 576504. 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. 576504 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
Odessa Laboratory Director

Sample Cross Reference 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	02-13-18 14:50	6 In	576504-001
SS02	S	02-13-18 14:55	6 In	576504-002
SS03	S	02-13-18 15:00	6 In	576504-003
SS04	S	02-13-18 15:05	6 In	576504-004
SS05	S	02-13-18 15:10	6 In	576504-005

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3041794 Inorganic Anions by EPA 300
Lab Sample ID 576506-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 576504-001, -002, -003, -004, -005.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3041820 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 576504

LT Environmental, Inc., Arvada, CO

Project Name: PLU PC 3 Water Line

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Wed Feb-14-18 06:00 pm
Report Date: 22-FEB-18
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	576504-001		576504-002		576504-003		576504-004		576504-005	
	Field Id:	SS01		SS02		SS03		SS04		SS05	
	Depth:	6- In		6- In		6- In		6- In		6- In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-18 14:50		Feb-13-18 14:55		Feb-13-18 15:00		Feb-13-18 15:05		Feb-13-18 15:10	
BTEX by EPA 8021B	***Extracted:***	Feb-16-18 16:00		Feb-16-18 16:00		Feb-16-18 16:00		Feb-16-18 16:00		Feb-16-18 16:00	
	Analyzed:	Feb-17-18 05:29		Feb-17-18 05:48		Feb-17-18 06:07		Feb-17-18 06:25		Feb-17-18 06:43	
	Units/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	<0.00201	0.00201
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401	<0.00397	0.00397	<0.00398	0.00398	<0.00402	0.00402
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00201	0.00201
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00201	0.00201
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00201	0.00201
Inorganic Anions by EPA 300	***Extracted:***	Feb-21-18 12:00		Feb-21-18 12:00		Feb-21-18 12:00		Feb-21-18 12:00		Feb-21-18 12:00	
	Analyzed:	Feb-21-18 22:28		Feb-21-18 22:43		Feb-21-18 22:50		Feb-21-18 22:57		Feb-21-18 23:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		401	4.95	5.83	4.90	6.87	4.89	5.47	4.89	<4.98	4.98
TPH by SW8015 Mod	***Extracted:***	Feb-18-18 11:00		Feb-18-18 11:00		Feb-18-18 11:00		Feb-18-18 11:00		Feb-18-18 11:00	
	Analyzed:	Feb-18-18 19:53		Feb-18-18 20:15		Feb-18-18 20:35		Feb-18-18 20:58		Feb-18-18 21:18	
	Units/RL:	mg/kg	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	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Jessica Kramer
Odessa Laboratory Director

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-001	Date Collected:	02.13.18 14.50	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 12.00	Basis:	Wet Weight
Seq Number:	3041794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**401**	4.95	mg/kg	02.21.18 22.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.18.18 11.00	Basis:	Wet Weight
Seq Number:	3041595				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.18.18 19.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.18.18 19.53	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.18.18 19.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.18.18 19.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.18.18 19.53	
o-Terphenyl	84-15-1	95	%	70-135	02.18.18 19.53	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-001	Date Collected:	02.13.18 14.50	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.16.18 16.00	Basis:	Wet Weight
Seq Number:	3041820				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.18 05.29	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.18 05.29	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.18 05.29	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.18 05.29	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.18 05.29	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.18 05.29	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.18 05.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	80	%	80-120	02.17.18 05.29	
4-Bromofluorobenzene	460-00-4	110	%	80-120	02.17.18 05.29	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-002	Date Collected:	02.13.18 14.55	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 12.00	Basis:	Wet Weight
Seq Number:	3041794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.83**	4.90	mg/kg	02.21.18 22.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.18.18 11.00	Basis:	Wet Weight
Seq Number:	3041595				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.18.18 20.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.18.18 20.15	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.18.18 20.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.18.18 20.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	02.18.18 20.15	
o-Terphenyl	84-15-1	90	%	70-135	02.18.18 20.15	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-002	Date Collected:	02.13.18 14.55	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.16.18 16.00	Basis:	Wet Weight
Seq Number:	3041820				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.17.18 05.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.17.18 05.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.17.18 05.48	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.17.18 05.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.17.18 05.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.17.18 05.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.17.18 05.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	80-120	02.17.18 05.48	
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.17.18 05.48	

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-003	Date Collected:	02.13.18 15.00	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 12.00	Basis:	Wet Weight
Seq Number:	3041794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.87**	4.89	mg/kg	02.21.18 22.50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.18.18 11.00	Basis:	Wet Weight
Seq Number:	3041595				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.18.18 20.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.18.18 20.35	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.18.18 20.35	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.18.18 20.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.18.18 20.35	
o-Terphenyl	84-15-1	86	%	70-135	02.18.18 20.35	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-003	Date Collected:	02.13.18 15.00	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.16.18 16.00	Basis:	Wet Weight
Seq Number:	3041820				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.17.18 06.07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.17.18 06.07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.17.18 06.07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.17.18 06.07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.17.18 06.07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.17.18 06.07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.17.18 06.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	80-120	02.17.18 06.07	
4-Bromofluorobenzene	460-00-4	109	%	80-120	02.17.18 06.07	

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-004	Date Collected:	02.13.18 15.05	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 12.00	Basis:	Wet Weight
Seq Number:	3041794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.47**	4.89	mg/kg	02.21.18 22.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.18.18 11.00	Basis:	Wet Weight
Seq Number:	3041595				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.18.18 20.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.18.18 20.58	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.18.18 20.58	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.18.18 20.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.18.18 20.58	
o-Terphenyl	84-15-1	88	%	70-135	02.18.18 20.58	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-004	Date Collected:	02.13.18 15.05	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.16.18 16.00	Basis:	Wet Weight
Seq Number:	3041820				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.17.18 06.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.17.18 06.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.17.18 06.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.17.18 06.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.17.18 06.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.17.18 06.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.17.18 06.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	80-120	02.17.18 06.25	
4-Bromofluorobenzene	460-00-4	107	%	80-120	02.17.18 06.25	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-005	Date Collected:	02.13.18 15.10	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	AMB	Date Prep:	02.21.18 12.00	Basis:	Wet Weight
Seq Number:	3041794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	02.21.18 23.05	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.18.18 11.00	Basis:	Wet Weight
Seq Number:	3041595				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.18.18 21.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.18.18 21.18	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.18.18 21.18	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.18.18 21.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.18.18 21.18	
o-Terphenyl	84-15-1	91	%	70-135	02.18.18 21.18	

Certificate of Analytical Results 576504

LT Environmental, Inc., Arvada, CO

PLU PC 3 Water Line

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	02.14.18 18.00
Lab Sample Id:	576504-005	Date Collected:	02.13.18 15.10	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.16.18 16.00	Basis:	Wet Weight
Seq Number:	3041820				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.18 06.43	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.18 06.43	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.18 06.43	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.18 06.43	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.18 06.43	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.18 06.43	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.18 06.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	80-120	02.17.18 06.43	
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.17.18 06.43	

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

+ NELAC certification not offered for this compound.

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

QC Summary 576504

LT Environmental, Inc.

PLU PC 3 Water Line

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3041794 Matrix: Solid Date Prep: 02.21.18
MB Sample Id: 7639565-1-BLK LCS Sample Id: 7639565-1-BKS LCSD Sample Id: 7639565-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	250	100	90-110	0	20	mg/kg	02.21.18 22:13	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3041794 Matrix: Soil Date Prep: 02.21.18
Parent Sample Id: 576504-001 MS Sample Id: 576504-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	401	248	609	84	90-110	mg/kg	02.21.18 22:35	X

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3041794 Matrix: Soil Date Prep: 02.21.18
Parent Sample Id: 576506-001 MS Sample Id: 576506-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	2150	1250	3260	89	90-110	mg/kg	02.22.18 00:11	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3041595 Matrix: Solid Date Prep: 02.18.18
MB Sample Id: 7639459-1-BLK LCS Sample Id: 7639459-1-BKS LCSD Sample Id: 7639459-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	865	87	995	100	70-135	14	35	mg/kg	02.18.18 14:23	
Diesel Range Organics (DRO)	<15.0	1000	812	81	930	93	70-135	14	35	mg/kg	02.18.18 14:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		96		101		70-135	%	02.18.18 14:23
o-Terphenyl	103		91		101		70-135	%	02.18.18 14:23

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

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

QC Summary 576504

LT Environmental, Inc.

PLU PC 3 Water Line

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3041595 Matrix: Soil Date Prep: 02.18.18
Parent Sample Id: 576501-002 MS Sample Id: 576501-002 S MSD Sample Id: 576501-002 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)	<15.0	998	1020	102	992	99	70-135	3	35	mg/kg	02.18.18 15:48	
Diesel Range Organics (DRO)	<15.0	998	919	92	846	85	70-135	8	35	mg/kg	02.18.18 15:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		104		70-135	%	02.18.18 15:48
o-Terphenyl	108		97		70-135	%	02.18.18 15:48

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3041820 Matrix: Solid Date Prep: 02.16.18
MB Sample Id: 7639388-1-BLK LCS Sample Id: 7639388-1-BKS LCSD Sample Id: 7639388-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0861	85	0.0895	89	70-130	4	35	mg/kg	02.17.18 01:54	
Toluene	<0.00202	0.101	0.0866	86	0.0857	85	70-130	1	35	mg/kg	02.17.18 01:54	
Ethylbenzene	<0.00202	0.101	0.0896	89	0.0886	88	71-129	1	35	mg/kg	02.17.18 01:54	
m,p-Xylenes	<0.00403	0.202	0.174	86	0.173	86	70-135	1	35	mg/kg	02.17.18 01:54	
o-Xylene	<0.00202	0.101	0.0893	88	0.0891	88	71-133	0	35	mg/kg	02.17.18 01:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		90		91		80-120	%	02.17.18 01:54
4-Bromofluorobenzene	110		114		114		80-120	%	02.17.18 01:54

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3041820 Matrix: Soil Date Prep: 02.16.18
Parent Sample Id: 576502-002 MS Sample Id: 576502-002 S MSD Sample Id: 576502-002 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	0.0799	80	0.0780	79	70-130	2	35	mg/kg	02.17.18 02:31	
Toluene	<0.00199	0.0996	0.0804	81	0.0774	78	70-130	4	35	mg/kg	02.17.18 02:31	
Ethylbenzene	<0.00199	0.0996	0.0806	81	0.0781	79	71-129	3	35	mg/kg	02.17.18 02:31	
m,p-Xylenes	<0.00398	0.199	0.156	78	0.151	76	70-135	3	35	mg/kg	02.17.18 02:31	
o-Xylene	<0.00199	0.0996	0.0800	80	0.0772	78	71-133	4	35	mg/kg	02.17.18 02:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		82		80-120	%	02.17.18 02:31
4-Bromofluorobenzene	120		115		80-120	%	02.17.18 02:31

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

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

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Xenco Quote #
Xenco Job # 576504

Client / Reporting Information

Company Name / Branch: LTE / Permian
Company Address: 3300 N. A Street Bldg 1 Suite 103 Midland TX 79705
Email: Abaker@ltenv.com
Phone No: 432-704-5178
Project Contact: Adrian Baker
Samplers's Name: Aaron Williamson

Project Information

Project Name/Number: PLU PC 3 Water Line
Project Location: NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-2980 (API 30-015-40581)

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Btex EPA Method 8021	TPH EPA Method 8015	Chloride EPA Method 300.1
1	SS01	6"	2-13-18	14:50	S	1								X	X	X	X
2	SS02	↓	↓	14:55	↓	↓								↓	↓	↓	↓
3	SS03			15:00													
4	SS04			15:05													
5	SS05			15:10													
6																	
7																	
8																	
9																	
10																	

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

Field Comments

Temp: 3.9 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.7

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY
- [x] STANDARD TAT

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [x] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

Sampler Danny Burns
API: 30-015-40581
2RP-2980

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		2-14-18	1	2	2-14-18 10:00	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time: 2/14/18 18:00	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. Thermo. Corr. Factor

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/14/2018 06:00:00 PM

Work Order #: 576504

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.7
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Connie Hernandez Date: 02/15/2018

Checklist reviewed by: Jessica Kramer Date: 02/15/2018