LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 103
Midland, Texas 79705
432.704.5178

December 13, 2018

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

RE: Closure Request
Poker Lake Unit CVX-JV-RR #005H Battery
Remediation Permit Number 2RP-2934 and 2RP-3048
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following letter report detailing the excavation of impacted soil and confirmation soil sampling activities at the Poker Lake Unit (PLU) CVX-JV-RR #005H Battery (Site) in Unit Letter P, Section 32, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impacts to soil after two separate events caused the release of produced water onto the well pad.

On March 30, 2015, a pipe connection on the HP 2-phase vessel was discovered to be leaking. The leak caused a release of approximately 21 barrels (bbls) of produced water inside the lined containment around the process equipment. Due to a tear in the containment floor in the northwest corner, the produced water escaped the containment and impacted an area of caliche well pad measuring approximately 700 square feet. Approximately 2 bbls of free-standing fluid were recovered. The former operator reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on April 2, 2015 and was assigned RP Number 2RP-2934 (Attachment 1).

On June 4, 2015, a release of produced water from a water transfer pump was discovered. The air eliminator failed and caused produced water to be released to the ground within the earthen containment. Approximately 10 bbls of produced water were released. The spill impacted approximately 375 square feet of caliche pad within the bermed area. The former operator reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 on June 10, 2015 and was assigned Remediation Permit Number (RP) 2RP-3048 (Attachment 1).

Although both releases occurred while the facility was operated by the previous operator, XTO is the current operator and is committed to addressing any releases that remain unresolved. Since the two releases described above occurred at the same production facility, the sampling and excavation activities were completed to address and close both releases simultaneously. Both releases are included in the *Compliance Agreement for Remediation for Historical Releases*

(Compliance Agreement) between XTO and the NMOCD effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with 19.15.29 of the New Mexico Administrative Code (NMAC) dated August 14, 2018. The releases are categorized as Tier II sites in the Compliance Agreement, meaning remediation of the releases began prior to August 14, 2018, the effective date of 19.15.29 NMAC, but closure reports are pending. Based on the results of the confirmation soil sampling events conducted after impacted soil was removed, XTO is submitting this closure report and requesting no further action for these release events.

BACKGROUND

According to 19.15.29.12 NMAC, LTE applied Table 1, the Closure Criteria for Soils Impacted by a Release. Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well is C03581, located approximately 0.94 miles south of the Site, with a depth to groundwater of 320 feet bgs and a total depth of 800 feet bgs. The elevation of the water well is 75 feet below the elevation of the Site. 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 a dry wash located approximately 1,960 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. Based on these criteria, the following remediation action levels 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.

SOIL SAMPLING

On March 20, 2018, an LTE scientist collected five preliminary soil samples to assess the lateral extent of impacted soil in the north release area (2RP-2934). The soil sample locations were selected based on information provided on the initial Form C-141s and field observations (Figure 2). To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, the soil samples, SS01 through SS05, were collected at approximately 0.67 feet bgs. Additionally, On March 20, 2018, three soil samples (SS01 @0.5' through SS03 @0.5') were collected to assess potential impacts to soil surrounding the southern end of the containment (2RP- 3048; Figure 2).

The soil samples were screened for volatile aromatic hydrocarbons using a photo-ionization detector (PID) equipped with a 10.6 electron volt lamp. The soil samples were placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and

immediately placed on ice. The samples were shipped to Hall Analytical Laboratory (Hall) in Albuquerque, New Mexico, at 4 degrees Celsius (°C) under strict chain-of-custody procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) by EPA Method 8015 Modified, and chloride by EPA Method 300.

Soil samples were collected prior to the Compliance Agreement and the August 14, 2018 NMOCD modification to 19.15.29 NMAC, which affected the remediation action level for chloride. At the time of sampling, XTO proceeded with remediation based on laboratory analytical results for preliminary soil samples SS01 through SS03, SS05, and SS01 @0.5' indicating chloride concentrations exceeded 600 mg/kg chloride, which was the standard applied to all sites at that time. No soil samples exceeded the BTEX or TPH site-specific remediation action levels. The laboratory analytical results are depicted on Figure 2 and summarized in Table 1.

EXCAVATION ACTIVITIES

On July 31, 2018 and August 1, 2018, LTE personnel returned to the Site to oversee excavation of impacted soil. To delineate hydrocarbon and chloride impacts to soil and direct excavation activities, LTE screened soil samples using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. LTE observed surficial soil staining outside and west-southwest of the process equipment berm. The excavation measured approximately 13,400 square feet and was completed to depths ranging from 1 foot bgs to 9 feet bgs, with the center of the excavation being the deepest.

Upon completion of excavation activities, LTE collected confirmation soil samples from the final lateral and vertical extents of the excavation as illustrated on Figure 2. Excavation of the impacted soil was conducted prior to the Compliance Agreement and the August 14, 2018 NMOCD modification to 19.15.29; however, because a closure report had not been submitted, these releases were included in Tier II of the Compliance Agreement. Excavation confirmation samples were collected as discrete samples instead of composite samples. Because the area of impacted soil could be visually discerned and the location of the release was well documented, LTE applied a judgmental sampling protocol, selecting sample locations based on visual observation to represent the floor and sidewalls of the excavation. The sampling protocol complied with *Guidance on Choosing a Sampling Design for Environmental Data Collection for Use in Developing a Quality Assurance Project Plan*, EPA QA/G-5S, December 2002. The confirmation soil samples were collected and handled as previously described and submitted to Hall or Xenco Laboratories in Midland, Texas.

Approximately 2,200 cubic yards of impacted soil were removed from the excavation. The impacted soil removed from the excavation was transported and properly disposed of at the Lea Land Landfill and the R360 Landfill located in Eunice, New Mexico, and Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated preliminary soil samples SS01 through SS03, SS01@05', and SW04 exceeded the applicable NMOCD chloride remediation action level at the time the excavation was conducted (600 mg/kg). Impacted soil was excavated from the release area and subsequent excavation floor and sidewall soil samples were compliant with the previous and current NMOCD remediation action levels. The laboratory analytical results are presented in Table 1 and the complete laboratory analytical reports are attached.

CONCLUSIONS

Laboratory analytical results for final confirmation soil samples indicate that BTEX, TPH, and chloride concentrations are compliant with NMOCD remediation action levels. XTO requests no further action for release numbers 2RP-2934 and 2RP-3048. Upon approval of this request, XTO will backfill and recontour the excavations. An updated NMOCD Form C-141 for each release is included in Attachment 1.

If you have any questions or comments, please 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
Ryan Mann, State Land Office

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-2934 and 2RP-3048)
Attachment 2	Laboratory Analytical Reports
Attachment 3	Photo Log

FIGURES

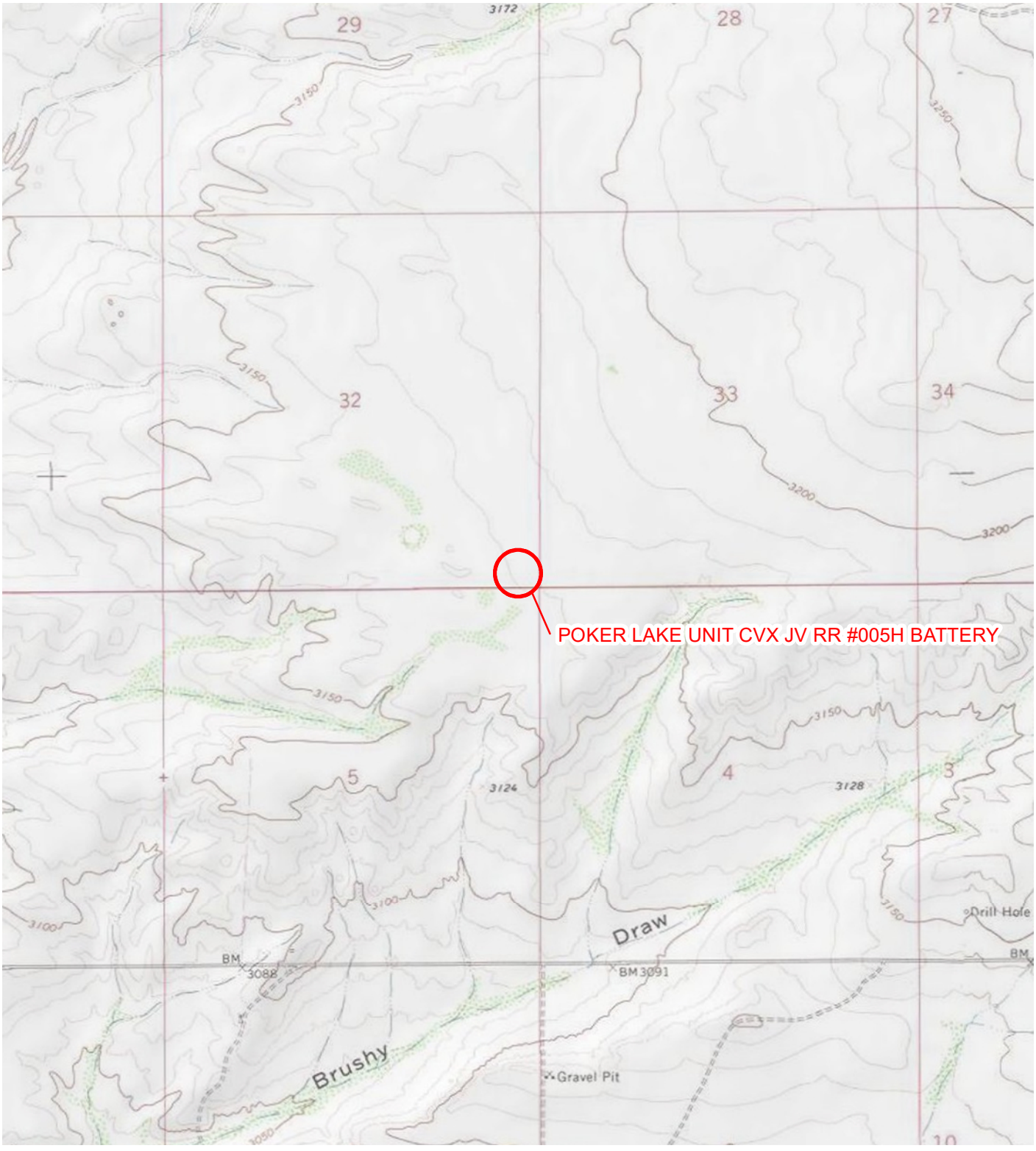

IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT
NUMBERS 2RP-2934 & 2RP-3048

FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT CVX JV RR #005H BATTERY
UNIT P SEC 32 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918088_PLU-CVX-RR #005H_2RP-2934\012918088_FIG01_SL_2018_2934_3048.mxd

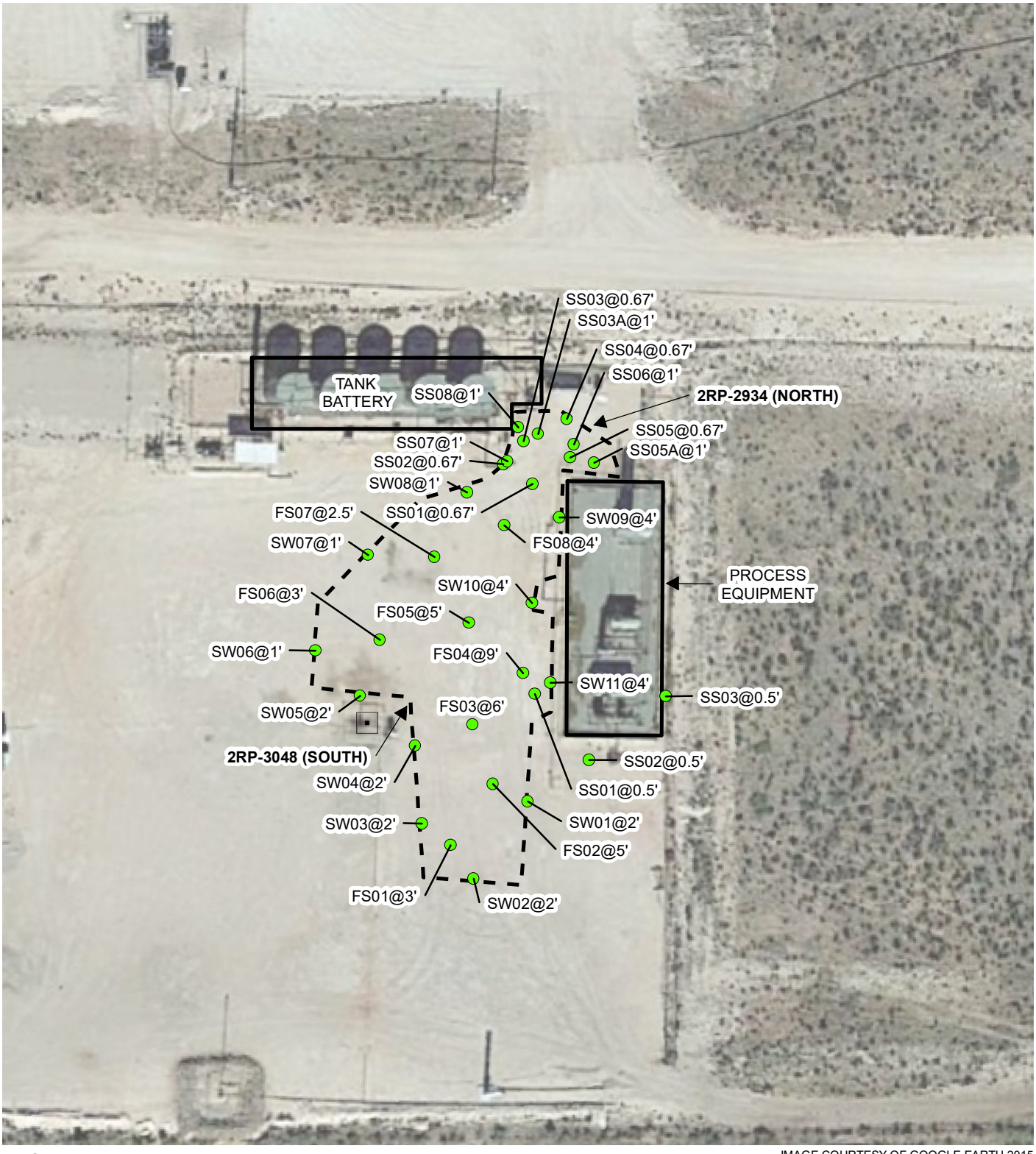

IMAGE COURTESY OF GOOGLE EARTH 2015

LEGEND

- FINAL CONFIRMATION SOIL SAMPLE
- EXCAVATION EXTENT

0 60 120

Feet

N

FIGURE 2
SOIL SAMPLE LOCATIONS
POKER LAKE UNIT CVX JV RR #005H BATTERY
UNIT P SEC 32 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

NOTE: REMEDIATION PERMIT
NUMBER 2RP-2934 & 2RP-3048

P:\XTO Energy\GIS\MXD\012918088_PLU-CVX-RR #005H_2RP-2934\012918088_FIG02_SITE_2018_2934_3048_COMBINE.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS
POKER LAKE UNIT CVX JV RR #005H BATTERY
REMEDIATION PERMIT NUMBERS 2RP-2934 AND 2RP-3048
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 Gasoline Range Organics (mg/kg)	C10-C28 Diesel Range Organics (mg/kg)	C28-C40 Motor Oil Range Organics (mg/kg)	Gasoline and Diesel Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.67	3/20/2018	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<8.9	<44	<8.9	<44	2,500
SS02	0.67	3/20/2018	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.9	<49	<9.9	<49	670
SS03	0.67	3/20/2018	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.6	<48	<9.6	<48	1,300
SS03A	1	8/1/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	165
SS04	0.67	3/20/2018	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	21	<49	21	21	430
SS05	0.67	3/20/2018	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.9	<50	<9.9	<50	2,100
SS05A	1	8/1/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	253
*SS01 @0.5'	0.5	3/20/2018	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.8	<49	<9.8	<49	2,400
*SS02 @0.5'	0.5	3/20/2018	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	19	65	19	84	370
*SS03 @0.5'	0.5	3/20/2018	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	52	61	52	110	350
FS01	3	7/31/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	47.1
FS02	5	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	240
FS03	6	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	364
FS04	9	7/31/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	142
FS05	5	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	169
FS06	3	7/31/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	255
FS07	2.5	7/31/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	392
FS08	4	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	221
SW01	2	7/31/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	68.2
SW02	2	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	297
SW03	2	7/31/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	70.4
SW04	2	7/31/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	266
SW05	2	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	91.0	<15.0	91.0	91.0	1,030
SW06	1	7/31/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	352
SW07	1	7/31/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	<14.9	407
SW08	1	7/31/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	370
SW09	4	7/31/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	311
SW10	4	7/31/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	2,230
SW11	4	7/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	389
SS06	1	8/1/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	118
SS07	1	8/1/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	155
SS08	1	8/1/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	270
NMOCD Remediation Action Levels			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
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits
Bold - indicates result exceeds the applicable regulatory standard
* On laboratory analytical report for 2RP-3048 as SS01, SS02, and SS03. Depth was added to sample name for clarity. Initial laboratory reports were split between the different remediation permit numbers before it was determined that the releases overprinted one another.

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-2934 AND 2RP-3048)

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 02 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

nAB1509233521

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P. 260737	Contact: Tony Savoie
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: PLU-CVX-JV-RR #005H Tank Battery	Facility Type: Exploration and Production

Surface Owner: State of NM	Mineral Owner: State of NM	API No. 30-015-37938

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	32	25S	30E	175	South	400	East	Eddy

Latitude N 32.079615 **Longitude** W 103.895804

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release:21 bbls	Volume Recovered: 2 bbls
Source of Release: Pipe connection on HP-2 phase vessel	Date and Hour of Occurrence: 3/30/15 time unknown	Date and Hour of Discovery: 3/30/15 at approximately 4:00 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom? Tony Savoie	Date and Hour: 3/31/15 at 7:55 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The vessel was by-passed upon discovery and the fitting was replaced.

Describe Area Affected and Cleanup Action Taken.*
The spill happened inside the 0-perm containment around the process equipment. Due to a tear in the containment floor in the very North West corner, the PW escaped the containment and impacted an area measuring approximately 700 sq.ft. The free standing fluid was recovered. The stained area was left as is pending the final remediation.

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: Tony Savoie

Printed Name: Tony Savoie

Title: Waste Management and Remediation Specialist

E-mail Address: tasavoie@basspet.com

Date: 4/2/15 Phone: 432-556-8730

* Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By

Approval Date: 4/3/15 Expiration Date:

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 5/3/15

2RP-2934

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 12 2015
RECEIVED

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-14
Revised August 8, 201

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

Release Notification and Corrective Action

nAB1516728054 — 2RP-3048

OPERATOR

☒ Initial Report ☐ Final Repo

Name of Company: BOPCO, L.P.	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Poker Lake Unit CVX JV RR #005H Battery	Facility Type: Exploration and Production

Surface Owner: State of New Mexico	Mineral Owner: State of New Mexico	API No. 30-015-37938

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	32	25S	30E	175	South	400	East	Eddy

Latitude 32.07988° **Longitude** -103.89590°

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 10 bbls	Volume Recovered None
Source of Release Water Transfer Pump	Date and Hour of Occurrence Date and Time Unknown	Date and Hour of Discovery 6/4/2015 approx. 11:30 am
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.*
Air eliminator failed and caused water to be released to ground within earthen containment. Air eliminator was repaired.

Describe Area Affected and Cleanup Action Taken.*
Leak affected approximately 375 square feet of caliche pad within bermed area. Impacted area will be delineated and addressed. Water transfer pumps will be placed in zero-permeability containment.

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:

Printed Name: Amy Ruth

Title: Assistant Remediation Foreman

E-mail Address: ACRuth@basspet.com

Date: 6/10/2015 Phone: 432-661-0571

Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Signed By

Approved by Environmental Specialist:

Approval Date: 6/15/15 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 7/7/15

District I
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-2934
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.0790615 Longitude -103.895804
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU-CVX-JV-RR #005H Tank Battery	Site Type Exploration and Production
Date Release Discovered March 30, 2015	API# *(if applicable)* 30-015-37938

Unit Letter	Section	Township	Range	County
P	32	25S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 21	Volume Recovered (bbls) 2
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The spill happened inside the 0-perm containment around the process equipment. Due to a tear in the containment floor in the very North West comer, the PW escaped the containment and impacted an area measuring approximately 700 sq.ft. The free standing fluid was recovered. The stained area was left as is pending the final remediation.

The vessel was by-passed upon discovery and the fitting was replaced.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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:

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: Date: December 4, 2018

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	
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	
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: December 4, 2018

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	
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

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Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: December 4, 2018

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:

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432) 221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-3048
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 2.07988 Longitude -103.8959
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU-CVX-JV-RR #005H Tank Battery	Site Type Exploration and Production
Date Release Discovered March 30, 2015	API# *(if applicable)* 30-015-37938

Unit Letter	Section	Township	Range	County
P	32	25S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 10	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Air eliminator failed and caused water to be released to the ground within the bermed area. Leak affected approximately 375 square feet of caliche pad within bermed area. Impacted area will be delineated and addressed. Water transfer pumps will be placed in zero-permeability containment.

Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
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Application ID	

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Oil Conservation Division

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Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: December 4, 2018

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

OCD Only

Received by: Date:

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Closure Approved by: Date:

Printed Name: Title:

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 594721

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU CVX JV RR 005H

10-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-17-16), 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 (T104704400-18-15)
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)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

10-AUG-18

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

Reference: XENCO Report No(s): **594721**
PLU CVX JV RR 005H
Project Address: NM 2RP2934 2RP3048

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) 594721. 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. 594721 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	07-31-18 10:00	2 ft	594721-001
SW02	S	07-31-18 10:05	2 ft	594721-002
SW03	S	07-31-18 10:10	2 ft	594721-003
FS01	S	07-31-18 10:15	3 ft	594721-004
FS02	S	07-31-18 10:20	5 ft	594721-005
SW04	S	07-31-18 13:25	2 ft	594721-006
SW05	S	07-31-18 13:30	2 ft	594721-007
SW06	S	07-31-18 13:35	1 ft	594721-008
SW07	S	07-31-18 13:40	1 ft	594721-009
FS03	S	07-31-18 14:45	6 ft	594721-010
FS04	S	07-31-18 14:50	9 ft	594721-011
FS05	S	07-31-18 14:55	5 ft	594721-012
FS06	S	07-31-18 15:00	3 ft	594721-013
FS07	S	07-31-18 15:05	2.5 ft	594721-014
FS08	S	07-31-18 15:10	4 ft	594721-015
SW08	S	07-31-18 15:15	1 ft	594721-016
SW09	S	07-31-18 15:20	4 ft	594721-017
SW10	S	07-31-18 15:30	4 ft	594721-018
SW11	S	07-31-18 15:35	4 ft	594721-019
SS07	S	08-01-18 16:30	1 ft	594721-020
SS06	S	08-01-18 16:35	1 ft	594721-021
SS05A	S	08-01-18 16:40	1 ft	594721-022
SS03A	S	08-01-18 16:45	1 ft	594721-023
SS08	S	08-01-18 16:50	1 ft	594721-024

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU CVX JV RR 005H

Project ID:
Work Order Number(s): *594721*

Report Date: *10-AUG-18*
Date Received: *08/06/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3059418 BTEX by EPA 8021B

Lab Sample ID 594721-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, m,p-Xylenes recovered below QC limits in the Matrix Spike. Toluene, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 594721-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

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

Batch: LBA-3059525 BTEX by EPA 8021B

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

Certificate of Analysis Summary 594721

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV RR 005H

Project Id:

Contact: Adrian Baker

Project Location: NM 2RP2934 2RP3048

Date Received in Lab: Mon Aug-06-18 10:00 am

Report Date: 10-AUG-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	594721-001		594721-002		594721-003		594721-004		594721-005		594721-006	
	Field Id:	SW01		SW02		SW03		FS01		FS02		SW04	
	Depth:	2- ft		2- ft		2- ft		3- ft		5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-31-18 10:00		Jul-31-18 10:05		Jul-31-18 10:10		Jul-31-18 10:15		Jul-31-18 10:20		Jul-31-18 13:25	
BTEX by EPA 8021B	Extracted:	Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00	
	Analyzed:	Aug-08-18 23:04		Aug-08-18 23:24		Aug-08-18 23:44		Aug-09-18 00:05		Aug-09-18 00:26		Aug-09-18 00:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00402	0.00402	<0.00399	0.00399	<0.00398	0.00398	<0.00403	0.00403	<0.00401	0.00401	<0.00397	0.00397
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Inorganic Anions by EPA 300	Extracted:	Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45	
	Analyzed:	Aug-07-18 19:26		Aug-07-18 19:46		Aug-07-18 19:53		Aug-08-18 12:01		Aug-07-18 20:06		Aug-07-18 20:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		68.2	5.00	297	4.95	70.4	4.96	47.1	4.96	240	50.0	266	49.8
TPH by SW8015 Mod	Extracted:	Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00	
	Analyzed:	Aug-06-18 19:00		Aug-06-18 19:59		Aug-06-18 20:18		Aug-06-18 20:37		Aug-06-18 20:57		Aug-06-18 21:16	
	Units/RL:	mg/kg	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	<14.9	14.9	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0

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Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 594721

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV RR 005H

Project Id:

Contact: Adrian Baker

Project Location: NM 2RP2934 2RP3048

Date Received in Lab: Mon Aug-06-18 10:00 am

Report Date: 10-AUG-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	594721-007		594721-008		594721-009		594721-010		594721-011		594721-012	
	Field Id:	SW05		SW06		SW07		FS03		FS04		FS05	
	Depth:	2- ft		1- ft		1- ft		6- ft		9- ft		5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-31-18 13:30		Jul-31-18 13:35		Jul-31-18 13:40		Jul-31-18 14:45		Jul-31-18 14:50		Jul-31-18 14:55	
BTEX by EPA 8021B	***Extracted:***	Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00	
	Analyzed:	Aug-09-18 01:08		Aug-09-18 01:29		Aug-09-18 01:50		Aug-09-18 02:11		Aug-09-18 03:13		Aug-09-18 03:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00404	0.00404	<0.00398	0.00398	<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45	
	Analyzed:	Aug-07-18 20:33		Aug-07-18 20:40		Aug-07-18 20:47		Aug-07-18 20:53		Aug-07-18 21:00		Aug-07-18 21:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1030	25.0	352	25.0	407	4.98	364	49.5	142	4.97	169	49.6
TPH by SW8015 Mod	***Extracted:***	Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00	
	Analyzed:	Aug-06-18 21:36		Aug-06-18 21:56		Aug-06-18 22:15		Aug-06-18 22:35		Aug-06-18 23:33		Aug-06-18 23:53	
	Units/RL:	mg/kg	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	<14.9	14.9	<14.9	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		91.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		91.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Certificate of Analysis Summary 594721

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV RR 005H

Project Id:

Contact: Adrian Baker

Project Location: NM 2RP2934 2RP3048

Date Received in Lab: Mon Aug-06-18 10:00 am

Report Date: 10-AUG-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	594721-013		594721-014		594721-015		594721-016		594721-017		594721-018	
	Field Id:	FS06		FS07		FS08		SW08		SW09		SW10	
	Depth:	3- ft		2.5- ft		4- ft		1- ft		4- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-31-18 15:00		Jul-31-18 15:05		Jul-31-18 15:10		Jul-31-18 15:15		Jul-31-18 15:20		Jul-31-18 15:30	
BTEX by EPA 8021B	***Extracted:***	Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-08-18 17:00		Aug-09-18 09:00	
	Analyzed:	Aug-09-18 10:34		Aug-09-18 08:10		Aug-09-18 08:31		Aug-09-18 08:51		Aug-09-18 09:12		Aug-09-18 15:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00199	0.00199
Toluene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00199	0.00199
Ethylbenzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00199	0.00199
m,p-Xylenes		<0.00398	0.00398	<0.00402	0.00402	<0.00399	0.00399	<0.00397	0.00397	<0.00402	0.00402	<0.00398	0.00398
o-Xylene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00199	0.00199
Total Xylenes		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00199	0.00199
Total BTEX		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45		Aug-07-18 12:45	
	Analyzed:	Aug-07-18 21:27		Aug-07-18 21:47		Aug-07-18 21:53		Aug-07-18 22:00		Aug-07-18 22:07		Aug-07-18 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		255	50.0	392	4.99	221	49.6	370	49.5	311	49.5	2230	25.0
TPH by SW8015 Mod	***Extracted:***	Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 12:00	
	Analyzed:	Aug-07-18 00:12		Aug-07-18 00:32		Aug-07-18 00:51		Aug-07-18 01:11		Aug-07-18 01:31		Aug-07-18 01:51	
	Units/RL:	mg/kg	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	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Certificate of Analysis Summary 594721

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV RR 005H

Project Id:

Contact: Adrian Baker

Project Location: NM 2RP2934 2RP3048

Date Received in Lab: Mon Aug-06-18 10:00 am

Report Date: 10-AUG-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	594721-019		594721-020		594721-021		594721-022		594721-023		594721-024	
	Field Id:	SW11		SS07		SS06		SS05A		SS03A		SS08	
	Depth:	4- ft		1- ft		1- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-31-18 15:35		Aug-01-18 16:30		Aug-01-18 16:35		Aug-01-18 16:40		Aug-01-18 16:45		Aug-01-18 16:50	
BTEX by EPA 8021B	***Extracted:***	Aug-09-18 09:00		Aug-09-18 09:00		Aug-09-18 09:00		Aug-09-18 09:00		Aug-09-18 09:00		Aug-09-18 09:00	
	Analyzed:	Aug-09-18 14:24		Aug-09-18 14:03		Aug-09-18 14:45		Aug-09-18 15:26		Aug-09-18 15:47		Aug-09-18 16:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00402	0.00402	<0.00403	0.00403	<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Aug-07-18 12:45		Aug-07-18 12:45		Aug-08-18 08:30		Aug-08-18 08:30		Aug-08-18 08:30		Aug-08-18 08:30	
	Analyzed:	Aug-07-18 22:20		Aug-07-18 22:27		Aug-08-18 08:54		Aug-08-18 09:14		Aug-08-18 09:21		Aug-08-18 09:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		389	49.5	155	49.7	118	4.95	253	49.5	165	25.0	270	50.0
TPH by SW8015 Mod	***Extracted:***	Aug-06-18 12:00		Aug-06-18 12:00		Aug-06-18 11:00		Aug-06-18 11:00		Aug-06-18 11:00		Aug-06-18 11:00	
	Analyzed:	Aug-07-18 02:11		Aug-07-18 02:30		Aug-06-18 15:44		Aug-06-18 16:04		Aug-06-18 16:24		Aug-06-18 16:43	
	Units/RL:	mg/kg	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	<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	<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	<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	<15.0	15.0

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Jessica Kramer
Project Assistant

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Certificate of Analytical Results 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-001	Date Collected:	07.31.18 10.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**68.2**	5.00	mg/kg	08.07.18 19.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 19.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 19.00	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 19.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 19.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.06.18 19.00	
o-Terphenyl	84-15-1	94	%	70-135	08.06.18 19.00	

Certificate of Analytical Results 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-001	Date Collected:	07.31.18 10.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.08.18 23.04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.08.18 23.04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.08.18 23.04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.08.18 23.04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.08.18 23.04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.08.18 23.04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.08.18 23.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.08.18 23.04	
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.08.18 23.04	

Certificate of Analytical Results 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-002	Date Collected:	07.31.18 10.05	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**297**	4.95	mg/kg	08.07.18 19.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 19.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 19.59	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 19.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 19.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.06.18 19.59	
o-Terphenyl	84-15-1	92	%	70-135	08.06.18 19.59	

Certificate of Analytical Results 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-002	Date Collected:	07.31.18 10.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.08.18 23.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.08.18 23.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.08.18 23.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.08.18 23.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.08.18 23.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.08.18 23.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.08.18 23.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	08.08.18 23.24	
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.08.18 23.24	

Certificate of Analytical Results 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-003	Date Collected:	07.31.18 10.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.4**	4.96	mg/kg	08.07.18 19.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 20.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 20.18	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 20.18	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 20.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.06.18 20.18	
o-Terphenyl	84-15-1	93	%	70-135	08.06.18 20.18	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-003	Date Collected:	07.31.18 10.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.08.18 23.44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.08.18 23.44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.08.18 23.44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.08.18 23.44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.08.18 23.44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.08.18 23.44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.08.18 23.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.08.18 23.44	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.08.18 23.44	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-004	Date Collected:	07.31.18 10.15	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.1**	4.96	mg/kg	08.08.18 12.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 20.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 20.37	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 20.37	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 20.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.06.18 20.37	
o-Terphenyl	84-15-1	94	%	70-135	08.06.18 20.37	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-004	Date Collected:	07.31.18 10.15	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.09.18 00.05	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.09.18 00.05	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.09.18 00.05	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.09.18 00.05	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.09.18 00.05	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.09.18 00.05	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.09.18 00.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.09.18 00.05	
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.09.18 00.05	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-005	Date Collected:	07.31.18 10.20	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**240**	50.0	mg/kg	08.07.18 20.06		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.06.18 20.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.06.18 20.57	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.06.18 20.57	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.06.18 20.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.06.18 20.57	
o-Terphenyl	84-15-1	92	%	70-135	08.06.18 20.57	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-005	Date Collected:	07.31.18 10.20	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 00.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 00.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 00.26	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.09.18 00.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 00.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 00.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 00.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.09.18 00.26	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.09.18 00.26	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-006	Date Collected:	07.31.18 13.25	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**266**	49.8	mg/kg	08.07.18 20.27		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 21.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 21.16	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 21.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 21.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.06.18 21.16	
o-Terphenyl	84-15-1	93	%	70-135	08.06.18 21.16	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-006	Date Collected:	07.31.18 13.25	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.09.18 00.46	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.09.18 00.46	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.09.18 00.46	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.09.18 00.46	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.09.18 00.46	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.09.18 00.46	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.09.18 00.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	08.09.18 00.46	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.09.18 00.46	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-007	Date Collected:	07.31.18 13.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1030**	25.0	mg/kg	08.07.18 20.33		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 21.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	**91.0**	15.0	mg/kg	08.06.18 21.36		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 21.36	U	1
Total TPH	PHC635	**91.0**	15.0	mg/kg	08.06.18 21.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.06.18 21.36	
o-Terphenyl	84-15-1	95	%	70-135	08.06.18 21.36	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-007	Date Collected:	07.31.18 13.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 01.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 01.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 01.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.09.18 01.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 01.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 01.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 01.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.09.18 01.08	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.09.18 01.08	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-008	Date Collected:	07.31.18 13.35	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**352**	25.0	mg/kg	08.07.18 20.40		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 21.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 21.56	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 21.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 21.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.06.18 21.56	
o-Terphenyl	84-15-1	91	%	70-135	08.06.18 21.56	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-008	Date Collected:	07.31.18 13.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.09.18 01.29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.09.18 01.29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.09.18 01.29	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.09.18 01.29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.09.18 01.29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.09.18 01.29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.09.18 01.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.09.18 01.29	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.09.18 01.29	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-009	Date Collected:	07.31.18 13.40	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**407**	4.98	mg/kg	08.07.18 20.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.06.18 22.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.06.18 22.15	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.06.18 22.15	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.06.18 22.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.06.18 22.15	
o-Terphenyl	84-15-1	90	%	70-135	08.06.18 22.15	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-009	Date Collected:	07.31.18 13.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.09.18 01.50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.09.18 01.50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.09.18 01.50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.09.18 01.50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.09.18 01.50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.09.18 01.50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.09.18 01.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.09.18 01.50	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.09.18 01.50	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-010	Date Collected:	07.31.18 14.45	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**364**	49.5	mg/kg	08.07.18 20.53		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.06.18 22.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.06.18 22.35	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.06.18 22.35	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.06.18 22.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.06.18 22.35	
o-Terphenyl	84-15-1	90	%	70-135	08.06.18 22.35	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-010	Date Collected:	07.31.18 14.45	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 02.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 02.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 02.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.09.18 02.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 02.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 02.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 02.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	08.09.18 02.11	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.09.18 02.11	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-011	Date Collected:	07.31.18 14.50	Sample Depth:	9 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	4.97	mg/kg	08.07.18 21.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 23.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 23.33	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 23.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 23.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.06.18 23.33	
o-Terphenyl	84-15-1	93	%	70-135	08.06.18 23.33	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-011	Date Collected:	07.31.18 14.50	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.09.18 03.13	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.09.18 03.13	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.09.18 03.13	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.09.18 03.13	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.09.18 03.13	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.09.18 03.13	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.09.18 03.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.09.18 03.13	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.09.18 03.13	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-012	Date Collected:	07.31.18 14.55	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**169**	49.6	mg/kg	08.07.18 21.20		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 23.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 23.53	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 23.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 23.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.06.18 23.53	
o-Terphenyl	84-15-1	91	%	70-135	08.06.18 23.53	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-012	Date Collected:	07.31.18 14.55	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 03.33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 03.33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 03.33	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.09.18 03.33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 03.33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 03.33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 03.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.09.18 03.33	
4-Bromofluorobenzene	460-00-4	119	%	70-130	08.09.18 03.33	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-013	Date Collected:	07.31.18 15.00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**255**	50.0	mg/kg	08.07.18 21.27		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 00.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 00.12	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 00.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 00.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.07.18 00.12	
o-Terphenyl	84-15-1	91	%	70-135	08.07.18 00.12	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-013	Date Collected:	07.31.18 15.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.09.18 10.34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.09.18 10.34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.09.18 10.34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.09.18 10.34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.09.18 10.34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.09.18 10.34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.09.18 10.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.09.18 10.34	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.09.18 10.34	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-014	Date Collected:	07.31.18 15.05	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**392**	4.99	mg/kg	08.07.18 21.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 00.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 00.32	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 00.32	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 00.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.07.18 00.32	
o-Terphenyl	84-15-1	92	%	70-135	08.07.18 00.32	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-014	Date Collected:	07.31.18 15.05	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.09.18 08.10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.09.18 08.10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.09.18 08.10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.09.18 08.10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.09.18 08.10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.09.18 08.10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.09.18 08.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.09.18 08.10	
1,4-Difluorobenzene	540-36-3	113	%	70-130	08.09.18 08.10	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-015	Date Collected:	07.31.18 15.10	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**221**	49.6	mg/kg	08.07.18 21.53		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.07.18 00.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.07.18 00.51	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.07.18 00.51	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.07.18 00.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.07.18 00.51	
o-Terphenyl	84-15-1	91	%	70-135	08.07.18 00.51	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-015	Date Collected:	07.31.18 15.10	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 08.31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 08.31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 08.31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.09.18 08.31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 08.31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 08.31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 08.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.09.18 08.31	
1,4-Difluorobenzene	540-36-3	111	%	70-130	08.09.18 08.31	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-016	Date Collected:	07.31.18 15.15	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**370**	49.5	mg/kg	08.07.18 22.00		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 01.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 01.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 01.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 01.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.07.18 01.11	
o-Terphenyl	84-15-1	92	%	70-135	08.07.18 01.11	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-016	Date Collected:	07.31.18 15.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.09.18 08.51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.09.18 08.51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.09.18 08.51	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.09.18 08.51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.09.18 08.51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.09.18 08.51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.09.18 08.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.09.18 08.51	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.09.18 08.51	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-017	Date Collected:	07.31.18 15.20	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**311**	49.5	mg/kg	08.07.18 22.07		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 01.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 01.31	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 01.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 01.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.07.18 01.31	
o-Terphenyl	84-15-1	91	%	70-135	08.07.18 01.31	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-017	Date Collected:	07.31.18 15.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.08.18 17.00	Basis:	Wet Weight
Seq Number:	3059418				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.09.18 09.12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.09.18 09.12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.09.18 09.12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.09.18 09.12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.09.18 09.12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.09.18 09.12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.09.18 09.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.09.18 09.12	
1,4-Difluorobenzene	540-36-3	111	%	70-130	08.09.18 09.12	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW10**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-018	Date Collected:	07.31.18 15.30	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2230**	25.0	mg/kg	08.07.18 22.13		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 01.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 01.51	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 01.51	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 01.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	08.07.18 01.51	
o-Terphenyl	84-15-1	89	%	70-135	08.07.18 01.51	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW10**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-018	Date Collected:	07.31.18 15.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.09.18 15.05	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.09.18 15.05	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.09.18 15.05	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.09.18 15.05	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.09.18 15.05	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.09.18 15.05	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.09.18 15.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.09.18 15.05	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.09.18 15.05	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW11**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-019	Date Collected:	07.31.18 15.35	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**389**	49.5	mg/kg	08.07.18 22.20		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 02.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 02.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 02.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 02.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.07.18 02.11	
o-Terphenyl	84-15-1	89	%	70-135	08.07.18 02.11	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-019	Date Collected:	07.31.18 15.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 14.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 14.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 14.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.09.18 14.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 14.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 14.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 14.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	71	%	70-130	08.09.18 14.24	
1,4-Difluorobenzene	540-36-3	115	%	70-130	08.09.18 14.24	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS07**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-020	Date Collected:	08.01.18 16.30	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.07.18 12.45	Basis:	Wet Weight
Seq Number:	3059287				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**155**	49.7	mg/kg	08.07.18 22.27		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 12.00	Basis:	Wet Weight
Seq Number:	3059065				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 02.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 02.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 02.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 02.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.07.18 02.30	
o-Terphenyl	84-15-1	93	%	70-135	08.07.18 02.30	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS07**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-020	Date Collected:	08.01.18 16.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.09.18 14.03	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.09.18 14.03	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.09.18 14.03	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.09.18 14.03	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.09.18 14.03	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.09.18 14.03	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.09.18 14.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.09.18 14.03	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.09.18 14.03	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-021	Date Collected:	08.01.18 16.35	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.08.18 08.30	Basis:	Wet Weight
Seq Number:	3059413				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**118**	4.95	mg/kg	08.08.18 08.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 11.00	Basis:	Wet Weight
Seq Number:	3059063				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 15.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 15.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 15.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 15.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.06.18 15.44	
o-Terphenyl	84-15-1	93	%	70-135	08.06.18 15.44	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-021	Date Collected:	08.01.18 16.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.09.18 14.45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.09.18 14.45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.09.18 14.45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.09.18 14.45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.09.18 14.45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.09.18 14.45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.09.18 14.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.09.18 14.45	
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.09.18 14.45	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS05A**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-022	Date Collected:	08.01.18 16.40	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.08.18 08.30	Basis:	Wet Weight
Seq Number:	3059413				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**253**	49.5	mg/kg	08.08.18 09.14		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 11.00	Basis:	Wet Weight
Seq Number:	3059063				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 16.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 16.04	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 16.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	08.06.18 16.04	
o-Terphenyl	84-15-1	87	%	70-135	08.06.18 16.04	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS05A**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-022	Date Collected:	08.01.18 16.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 15.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 15.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 15.26	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.09.18 15.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 15.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 15.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 15.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.09.18 15.26	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.09.18 15.26	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-023	Date Collected:	08.01.18 16.45	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.08.18 08.30	Basis:	Wet Weight
Seq Number:	3059413				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**165**	25.0	mg/kg	08.08.18 09.21		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 11.00	Basis:	Wet Weight
Seq Number:	3059063				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 16.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 16.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 16.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.06.18 16.24	
o-Terphenyl	84-15-1	90	%	70-135	08.06.18 16.24	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-023	Date Collected:	08.01.18 16.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.09.18 15.47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.09.18 15.47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.09.18 15.47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.09.18 15.47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.09.18 15.47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.09.18 15.47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.09.18 15.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.09.18 15.47	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.09.18 15.47	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS08**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-024	Date Collected:	08.01.18 16.50	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.08.18 08.30	Basis:	Wet Weight
Seq Number:	3059413				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**270**	50.0	mg/kg	08.08.18 09.27		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.06.18 11.00	Basis:	Wet Weight
Seq Number:	3059063				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.06.18 16.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.06.18 16.43	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.06.18 16.43	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.06.18 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	08.06.18 16.43	
o-Terphenyl	84-15-1	87	%	70-135	08.06.18 16.43	

Certificate of Analytical Results 594721

LT Environmental, Inc., Arvada, CO

PLU CVX JV RR 005H

Sample Id:	**SS08**	Matrix:	Soil	Date Received:	08.06.18 10.00
Lab Sample Id:	594721-024	Date Collected:	08.01.18 16.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 16.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 16.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 16.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.09.18 16.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 16.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 16.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 16.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.09.18 16.08	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.09.18 16.08	

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 594721

LT Environmental, Inc.

PLU CVX JV RR 005H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059287 — Matrix: Solid — Date Prep: 08.07.18
MB Sample Id: 7659965-1-BLK — LCS Sample Id: 7659965-1-BKS — LCSD Sample Id: 7659965-1-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	248	99	261	104	90-110	5	20	mg/kg	08.07.18 19:13	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059413 — Matrix: Solid — Date Prep: 08.08.18
MB Sample Id: 7659966-1-BLK — LCS Sample Id: 7659966-1-BKS — LCSD Sample Id: 7659966-1-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	264	106	263	105	90-110	0	20	mg/kg	08.08.18 08:40	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059287 — Matrix: Soil — Date Prep: 08.07.18
Parent Sample Id: 594721-001 — MS Sample Id: 594721-001 S — MSD Sample Id: 594721-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	68.2	250	318	100	319	100	90-110	0	20	mg/kg	08.07.18 19:33	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059287 — Matrix: Soil — Date Prep: 08.07.18
Parent Sample Id: 594721-011 — MS Sample Id: 594721-011 S — MSD Sample Id: 594721-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	142	249	384	97	390	100	90-110	2	20	mg/kg	08.07.18 21:07	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059413 — Matrix: Soil — Date Prep: 08.08.18
Parent Sample Id: 594721-021 — MS Sample Id: 594721-021 S — MSD Sample Id: 594721-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	118	248	357	96	358	97	90-110	0	20	mg/kg	08.08.18 09:01	

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

QC Summary 594721

LT Environmental, Inc.

PLU CVX JV RR 005H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059413 Matrix: Soil Date Prep: 08.08.18
Parent Sample Id: 594742-001 MS Sample Id: 594742-001 S MSD Sample Id: 594742-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	253	102	253	102	90-110	0	20	mg/kg	08.08.18 10:34	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3059063 Matrix: Solid Date Prep: 08.06.18
MB Sample Id: 7659882-1-BLK LCS Sample Id: 7659882-1-BKS LCSD Sample Id: 7659882-1-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	906	91	902	90	70-135	0	20	mg/kg	08.06.18 12:49	
Diesel Range Organics (DRO)	<15.0	1000	926	93	923	92	70-135	0	20	mg/kg	08.06.18 12:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		127		125		70-135	%	08.06.18 12:49
o-Terphenyl	96		101		100		70-135	%	08.06.18 12:49

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3059065 Matrix: Solid Date Prep: 08.06.18
MB Sample Id: 7659883-1-BLK LCS Sample Id: 7659883-1-BKS LCSD Sample Id: 7659883-1-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	921	92	937	94	70-135	2	20	mg/kg	08.06.18 18:21	
Diesel Range Organics (DRO)	<15.0	1000	948	95	974	97	70-135	3	20	mg/kg	08.06.18 18:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		128		124		70-135	%	08.06.18 18:21
o-Terphenyl	100		101		106		70-135	%	08.06.18 18:21

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3059063 Matrix: Soil Date Prep: 08.06.18
Parent Sample Id: 594715-001 MS Sample Id: 594715-001 S MSD Sample Id: 594715-001 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)	<15.0	999	868	87	913	92	70-135	5	20	mg/kg	08.06.18 13:47	
Diesel Range Organics (DRO)	<15.0	999	885	89	920	92	70-135	4	20	mg/kg	08.06.18 13:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		125		70-135	%	08.06.18 13:47
o-Terphenyl	100		98		70-135	%	08.06.18 13:47

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 594721

LT Environmental, Inc.

PLU CVX JV RR 005H

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3059065 | Matrix: Soil | Date Prep: 08.06.18
Parent Sample Id: 594721-001 | MS Sample Id: 594721-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	896	90	70-135	mg/kg	08.06.18 19:19	
Gasoline Range Hydrocarbons (GRO)	<15.0	999	906	91	70-135	mg/kg	08.06.18 19:39	
Diesel Range Organics (DRO)	<15.0	999	921	92	70-135	mg/kg	08.06.18 19:19	
Diesel Range Organics (DRO)	<15.0	999	932	93	70-135	mg/kg	08.06.18 19:39	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		70-135	%	08.06.18 19:19
1-Chlorooctane	128		70-135	%	08.06.18 19:39
o-Terphenyl	101		70-135	%	08.06.18 19:19
o-Terphenyl	99		70-135	%	08.06.18 19:39

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3059418 | Matrix: Solid | Date Prep: 08.08.18
MB Sample Id: 7660071-1-BLK | LCS Sample Id: 7660071-1-BKS | LCSD Sample Id: 7660071-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.106	105	70-130	2	35	mg/kg	08.08.18 20:58	
Toluene	<0.00200	0.100	0.101	101	0.103	102	70-130	2	35	mg/kg	08.08.18 20:58	
Ethylbenzene	<0.00200	0.100	0.106	106	0.108	107	70-130	2	35	mg/kg	08.08.18 20:58	
m,p-Xylenes	<0.00401	0.200	0.222	111	0.226	112	70-130	2	35	mg/kg	08.08.18 20:58	
o-Xylene	<0.00200	0.100	0.111	111	0.114	113	70-130	3	35	mg/kg	08.08.18 20:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		120		127		70-130	%	08.08.18 20:58
4-Bromofluorobenzene	94		104		100		70-130	%	08.08.18 20:58

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3059525 | Matrix: Solid | Date Prep: 08.09.18
MB Sample Id: 7660129-1-BLK | LCS Sample Id: 7660129-1-BKS | LCSD Sample Id: 7660129-1-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	0.110	109	0.117	117	70-130	6	35	mg/kg	08.09.18 11:58	
Toluene	<0.00202	0.101	0.102	101	0.110	110	70-130	8	35	mg/kg	08.09.18 11:58	
Ethylbenzene	<0.00202	0.101	0.109	108	0.117	117	70-130	7	35	mg/kg	08.09.18 11:58	
m,p-Xylenes	<0.00403	0.202	0.235	116	0.248	124	70-130	5	35	mg/kg	08.09.18 11:58	
o-Xylene	<0.00202	0.101	0.117	116	0.116	116	70-130	1	35	mg/kg	08.09.18 11:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		113		116		70-130	%	08.09.18 11:58
4-Bromofluorobenzene	97		106		106		70-130	%	08.09.18 11:58

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 594721

LT Environmental, Inc.

PLU CVX JV RR 005H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3059418 Matrix: Soil Date Prep: 08.08.18
Parent Sample Id: 594721-001 MS Sample Id: 594721-001 S MSD Sample Id: 594721-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0683	68	0.0710	70	70-130	4	35	mg/kg	08.08.18 21:40	X
Toluene	<0.00201	0.100	0.0645	65	0.0665	66	70-130	3	35	mg/kg	08.08.18 21:40	X
Ethylbenzene	<0.00201	0.100	0.0643	64	0.0702	70	70-130	9	35	mg/kg	08.08.18 21:40	X
m,p-Xylenes	<0.00402	0.201	0.133	66	0.145	72	70-130	9	35	mg/kg	08.08.18 21:40	X
o-Xylene	<0.00201	0.100	0.0667	67	0.0683	68	70-130	2	35	mg/kg	08.08.18 21:40	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	125		119		70-130	%	08.08.18 21:40
4-Bromofluorobenzene	99		102		70-130	%	08.08.18 21:40

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3059525 Matrix: Soil Date Prep: 08.09.18
Parent Sample Id: 594721-020 MS Sample Id: 594721-020 S MSD Sample Id: 594721-020 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	0.0829	83	0.0785	79	70-130	5	35	mg/kg	08.09.18 12:40	
Toluene	<0.00199	0.0996	0.0764	77	0.0711	71	70-130	7	35	mg/kg	08.09.18 12:40	
Ethylbenzene	<0.00199	0.0996	0.0804	81	0.0768	77	70-130	5	35	mg/kg	08.09.18 12:40	
m,p-Xylenes	<0.00398	0.199	0.173	87	0.166	83	70-130	4	35	mg/kg	08.09.18 12:40	
o-Xylene	<0.00199	0.0996	0.0838	84	0.0803	80	70-130	4	35	mg/kg	08.09.18 12:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	126		124		70-130	%	08.09.18 12:40
4-Bromofluorobenzene	108		112		70-130	%	08.09.18 12:40

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

XENCO LABORATORIES

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Dallas Texas (214-902-0300)

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Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

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CHAIN OF CUSTODY

Page 1 of 3

Xenco Quote #

Xenco Job # 594721

Client / Reporting information

Company Name / Branch: LT Environmental, Inc Permian

Company Address: 3300 North "A" Street, Building 1, Unit 103 Midland Tx 79705

Email: abaker@ltenv.com Phone No: (432)704-5178

Project Contact: Adrian Baker

Samplers's Name Lynda Lambach

Project Information

Project Name/Number: PW CVXJV RR 0051H

Project Location: NM 2RP 2934 2RP 3048

Invoice To: XTO Kyle Littrell

PO Number:

Analytical Information

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (on 4 BTEX)	TPH (MRO, GRO, DRO) 8015	Chloride (300.0)	Field Comments
1	SW01	2'	07/31/18	12:00	S	1								X	X	X	X	
2	SW02	2'		10:05	S	1								X	X	X	X	
3	SW03	2'		10:10	S	1								X	X	X	X	
4	FS01	3'		10:15	S	1								X	X	X	X	
5	FS02	5'		10:20	S	1								X	X	X	X	
6	SW04	2'		13:25	S	1								X	X	X	X	
7	SW05	2'		13:30	S	1								X	X	X	X	
8	SW06	1'		13:35	S	1								X	X	X	X	
9	SW07	1'		13:40	S	1								X	X	X	X	
10	FS03	6'	V	14:45	S	1								X	X	X	X	

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

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		06/03/18 06:15	1	2	8/3 15:30	2 8/6/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 0.2 Thermo. Corr. Factor 0.0

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

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Stafford, Texas (281-240-4200)

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San Antonio, Texas (210-509-3334)

Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

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CHAIN OF CUSTODY

Page 2 of 3

Xenco Quote #

Xenco Job # 594721

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc Permian

Company Address: 3300 North A Street, Building 1, unit 103 Midland Tx 79705

Email: abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Lynda Lambach

Project Information

Project Name/Number: PLU RFX JV RR 005H

Project Location: NM 2RP2934 2RP3048

Invoice To: XTO - Kyle Littrell

PO Number:

Analytical Information

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

No.	Field ID / Point of Collection	Sample Depth	Collection Date	Collection Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (Only BTEX)	TPH (MRO, GRO, DRO) 8015	Chloride (300.0)	Field Comments
1	FS04	9'	07/31/18	14:50	S	1								X	X	X	X	
2	FS05	5'		14:55	S	1								X	X	X	X	
3	FS06	3'		15:00	S	1								X	X	X	X	
4	FS07	2.5'		15:05	S	1								X	X	X	X	
5	FS08	4'		15:10	S	1								X	X	X	X	
6	SW08	1'		15:15	S	1								X	X	X	X	
7	SW09	4'		15:20	S	1								X	X	X	X	
8	SW10	4'		15:30	S	1								X	X	X	X	
9	SW11	4'		15:35	S	1								X	X	X	X	
10																		

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

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		08/03/18 06:15	1	2	8/3 15:30	2 8/04/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4 1000
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. 5.2 / Thermo. Corr. Factor 0.0

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

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)

Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

www.xenco.com

CHAIN OF CUSTODY

Page 3 of 3

Xenco Quote #

Xenco Job # 594721

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc Permian

Company Address: 3300 North A Street, Building 1, Unit 103 Midland, TX 79705

Email: abaker@ltenv.com

Phone No: 432 704-5178

Project Contact: Adrian Baker

Samplers's Name: Lynde Lambert

Project Information

Project Name/Number: PLU C VX JV RR 005H

Project Location: NM 2RP2934 2RP3048

Invoice To: XTO - Kyle Littrell

PO Number:

Analytical Information

BTEX 8021 (only BTEX)

TPH (MRO, GRO, DRO) 8015

chloride (300.00)

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SS07	1'	08/1/18	16:30	S	1								X	
2	SS06	1'		16:35	S	1								X	
3	SS05A	1'		16:40	S	1								X	
4	SS03A	1'		16:45	S	1								X	
5	SS08	1'		16:50	S	1								X	
6															
7															
8															
9															
10															

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

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	Lynde Lambert	06/08/18 0615	1	2	8/3 15:30	2 8/6/18 1000
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. 0.2 Thermo. Corr. Factor 0.0

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: 08/06/2018 10:00:00 AM

Work Order #: 594721

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: Katie Lowe Date: 08/06/2018

Checklist reviewed by: Jessica Kramer Date: 08/06/2018

Jessica Kramer

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 04, 2018

Adrian Baker
XTO Midland
6401 Holiday Hill Rd #200
Midland, TX 79707
TEL: (432) 894-5641
FAX

RE: 2RP 2934 Delaware Soil Sampling OrderNo.: 1803E08

Dear Adrian Baker:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/27/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1803E08**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS01
Project: 2RP 2934 Delaware Soil Sampling **Collection Date:** 3/20/2018 12:15:00 PM
Lab ID: 1803E08-001 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	3/29/2018 6:22:49 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/29/2018 6:22:49 PM
Surr: DNOP	84.8	70-130		%Rec	1	3/29/2018 6:22:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2018 7:15:44 PM
Surr: BFB	92.5	15-316		%Rec	1	3/28/2018 7:15:44 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	3/28/2018 7:15:44 PM
Toluene	ND	0.048		mg/Kg	1	3/28/2018 7:15:44 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/28/2018 7:15:44 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/28/2018 7:15:44 PM
Surr: 4-Bromofluorobenzene	85.6	80-120		%Rec	1	3/28/2018 7:15:44 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	2500	75		mg/Kg	50	4/3/2018 2:37:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1803E08**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS02
Project: 2RP 2934 Delaware Soil Sampling **Collection Date:** 3/20/2018 12:17:00 PM
Lab ID: 1803E08-002 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/3/2018 9:57:01 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/3/2018 9:57:01 AM
Surr: DNOP	78.1	70-130		%Rec	1	4/3/2018 9:57:01 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/28/2018 7:39:13 PM
Surr: BFB	91.2	15-316		%Rec	1	3/28/2018 7:39:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	3/28/2018 7:39:13 PM
Toluene	ND	0.047		mg/Kg	1	3/28/2018 7:39:13 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/28/2018 7:39:13 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/28/2018 7:39:13 PM
Surr: 4-Bromofluorobenzene	83.8	80-120		%Rec	1	3/28/2018 7:39:13 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	670	30		mg/Kg	20	4/2/2018 10:49:19 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1803E08**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS03
Project: 2RP 2934 Delaware Soil Sampling **Collection Date:** 3/20/2018 12:19:00 PM
Lab ID: 1803E08-003 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/3/2018 10:19:03 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/3/2018 10:19:03 AM
Surr: DNOP	81.1	70-130		%Rec	1	4/3/2018 10:19:03 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2018 8:02:38 PM
Surr: BFB	88.7	15-316		%Rec	1	3/28/2018 8:02:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	3/28/2018 8:02:38 PM
Toluene	ND	0.048		mg/Kg	1	3/28/2018 8:02:38 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/28/2018 8:02:38 PM
Xylenes, Total	ND	0.095		mg/Kg	1	3/28/2018 8:02:38 PM
Surr: 4-Bromofluorobenzene	84.7	80-120		%Rec	1	3/28/2018 8:02:38 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	1300	75		mg/Kg	50	4/3/2018 2:49:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1803E08**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS04
Project: 2RP 2934 Delaware Soil Sampling **Collection Date:** 3/20/2018 12:21:00 PM
Lab ID: 1803E08-004 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	21	9.7		mg/Kg	1	4/3/2018 10:40:59 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/3/2018 10:40:59 AM
Surr: DNOP	86.7	70-130		%Rec	1	4/3/2018 10:40:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/28/2018 8:25:53 PM
Surr: BFB	95.8	15-316		%Rec	1	3/28/2018 8:25:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.023		mg/Kg	1	3/28/2018 8:25:53 PM
Toluene	ND	0.046		mg/Kg	1	3/28/2018 8:25:53 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/28/2018 8:25:53 PM
Xylenes, Total	ND	0.092		mg/Kg	1	3/28/2018 8:25:53 PM
Surr: 4-Bromofluorobenzene	88.8	80-120		%Rec	1	3/28/2018 8:25:53 PM
EPA METHOD 300.0: ANIONS						Analyst: **CJS**
Chloride	430	30		mg/Kg	20	4/2/2018 11:38:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1803E08**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS05
Project: 2RP 2934 Delaware Soil Sampling **Collection Date:** 3/20/2018 12:23:00 PM
Lab ID: 1803E08-005 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/3/2018 11:03:01 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/3/2018 11:03:01 AM
Surr: DNOP	70.2	70-130		%Rec	1	4/3/2018 11:03:01 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2018 8:49:17 PM
Surr: BFB	91.6	15-316		%Rec	1	3/28/2018 8:49:17 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.025		mg/Kg	1	3/28/2018 8:49:17 PM
Toluene	ND	0.049		mg/Kg	1	3/28/2018 8:49:17 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/28/2018 8:49:17 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/28/2018 8:49:17 PM
Surr: 4-Bromofluorobenzene	85.9	80-120		%Rec	1	3/28/2018 8:49:17 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	2100	75		mg/Kg	50	4/3/2018 11:06:01 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E08**
04-Apr-18

Client: XTO Midland
Project: 2RP 2934 Delaware Soil Sampling

Sample ID	**MB-37382**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37382**	RunNo:	**50253**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/2/2018**	SeqNo:	**1628264**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37382**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37382**	RunNo:	**50253**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/2/2018**	SeqNo:	**1628265**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E08**

04-Apr-18

Client: XTO Midland

Project: 2RP 2934 Delaware Soil Sampling

Sample ID	**MB-37282**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**37282**	RunNo:	**50178**					
Prep Date:	**3/28/2018**	Analysis Date:	**3/29/2018**	SeqNo:	**1625706**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	70	130			

Sample ID	**LCS-37282**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**37282**	RunNo:	**50178**					
Prep Date:	**3/28/2018**	Analysis Date:	**3/29/2018**	SeqNo:	**1625708**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	4.5		5.000		90.0	70	130			

Sample ID	**LCS-37380**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**37380**	RunNo:	**50268**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/3/2018**	SeqNo:	**1628463**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.1	70	130			
Surr: DNOP	4.2		5.000		84.7	70	130			

Sample ID	**MB-37380**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**37380**	RunNo:	**50268**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/3/2018**	SeqNo:	**1628464**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E08**

04-Apr-18

Client: XTO Midland

Project: 2RP 2934 Delaware Soil Sampling

Sample ID	**MB-37267**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624553**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.6	15	316			

Sample ID	**LCS-37267**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624554**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	75.9	131			
Surr: BFB	1000		1000		105	15	316			

Sample ID	**RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**G50163**	RunNo:	**50163**					
Prep Date:		Analysis Date:	**3/28/2018**	SeqNo:	**1624630**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.8	15	316			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**G50163**	RunNo:	**50163**					
Prep Date:		Analysis Date:	**3/28/2018**	SeqNo:	**1624631**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		107	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E08**

04-Apr-18

Client: XTO Midland

Project: 2RP 2934 Delaware Soil Sampling

Sample ID	**MB-37267**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624591**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		86.4	80	120			

Sample ID	**LCS-37267**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624592**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.2	77.3	128			
Toluene	0.98	0.050	1.000	0	98.4	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	101	81.6	129			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.5	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: XTO MIDLAND Work Order Number: 1803E08 RcptNo: 1

Received By: Mandy Woods 3/27/2018 9:30:00 AM

Completed By: Michelle Garcia 3/27/2018 10:46:42 AM Michelle Garcia

Reviewed By: DDS 3/27/18

MW 3/27/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good	Yes			

Client:	XTO Energy, Delware division
	Kyle Litterll
Mailing Addre	3300 N. A. Street Suite 103 Midland, Texas 79705
Phone #:	433-704-5178
email or Fax#:	abaker@ltenv.com
QA/QC Package:	☐ Standard ☐ Level 4 (Full Validation)
Accreditation:	☐ NELAP ☐ Other
☐ EDD (Type)	

☒ Standard ☐ Rush

Project Name: 2RP - 2934 Delaware Soil Sampling

Project #: 2RP - 2934

Project Manager: Adrian Baker

Sampler: Josh Adams

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1803E08	TPH - 8015 DRO, MRO, GRO	BTEX - 8021	Chlorides - 300.1
3/20/2018	1215	SOIL	SS01	(1) 4oz.	cool	-001	X	X	X
3/20/2018	1217	SOIL	SS02	(1) 4oz.	cool	-002	X	X	X
3/20/2018	1219	SOIL	SS03	(1) 4oz.	cool	-003	X	X	X
3/20/2018	1221	SOIL	SS04	(1) 4oz.	cool	-004	X	X	X
3/20/2018	1223	SOIL	SS05	(1) 4oz.	cool	-005	X	X	X

3/23/2018	Time: 0730	Relinquished by:	Received by:	Date 3/5/18	Time 0730
Date: 3/26/18	Time: 1900	Relinquished by:	Received by: courier 3/27	Date 3/27/18	Time 0930

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 04, 2018

Adrian Baker

XTO Midland
6401 Holiday Hill Rd #200
Midland, TX 79707
TEL: (432) 894-5641
FAX

RE: 2RP 3048 Delaware Soil Sampling OrderNo.: 1803E12

Dear Adrian Baker:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/27/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1803E12**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS01
Project: 2RP 3048 Delaware Soil Sampling **Collection Date:** 3/20/2018 1:05:00 PM
Lab ID: 1803E12-001 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/30/2018 12:37:21 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2018 12:37:21 AM
Surr: DNOP	77.0	70-130		%Rec	1	3/30/2018 12:37:21 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/28/2018 10:22:55 PM
Surr: BFB	91.8	15-316		%Rec	1	3/28/2018 10:22:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.023		mg/Kg	1	3/28/2018 10:22:55 PM
Toluene	ND	0.047		mg/Kg	1	3/28/2018 10:22:55 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/28/2018 10:22:55 PM
Xylenes, Total	ND	0.094		mg/Kg	1	3/28/2018 10:22:55 PM
Surr: 4-Bromofluorobenzene	84.7	80-120		%Rec	1	3/28/2018 10:22:55 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	2400	75		mg/Kg	50	4/3/2018 11:18:26 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1803E12**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS02
Project: 2RP 3048 Delaware Soil Sampling **Collection Date:** 3/20/2018 1:07:00 PM
Lab ID: 1803E12-002 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	19	9.7		mg/Kg	1	3/30/2018 12:59:15 AM
Motor Oil Range Organics (MRO)	65	48		mg/Kg	1	3/30/2018 12:59:15 AM
Surr: DNOP	83.5	70-130		%Rec	1	3/30/2018 12:59:15 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2018 10:46:05 PM
Surr: BFB	93.5	15-316		%Rec	1	3/28/2018 10:46:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	3/28/2018 10:46:05 PM
Toluene	ND	0.049		mg/Kg	1	3/28/2018 10:46:05 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/28/2018 10:46:05 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/28/2018 10:46:05 PM
Surr: 4-Bromofluorobenzene	85.7	80-120		%Rec	1	3/28/2018 10:46:05 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	370	30		mg/Kg	20	4/3/2018 11:30:50 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1803E12**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS03
Project: 2RP 3048 Delaware Soil Sampling **Collection Date:** 3/20/2018 1:09:00 PM
Lab ID: 1803E12-003 **Matrix:** SOIL **Received Date:** 3/27/2018 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**
Diesel Range Organics (DRO)	52	9.4		mg/Kg	1	4/2/2018 10:49:50 AM
Motor Oil Range Organics (MRO)	61	47		mg/Kg	1	4/2/2018 10:49:50 AM
Surr: DNOP	79.8	70-130		%Rec	1	4/2/2018 10:49:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/28/2018 11:09:33 PM
Surr: BFB	91.7	15-316		%Rec	1	3/28/2018 11:09:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.023		mg/Kg	1	3/28/2018 11:09:33 PM
Toluene	ND	0.046		mg/Kg	1	3/28/2018 11:09:33 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/28/2018 11:09:33 PM
Xylenes, Total	ND	0.093		mg/Kg	1	3/28/2018 11:09:33 PM
Surr: 4-Bromofluorobenzene	86.6	80-120		%Rec	1	3/28/2018 11:09:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	350	30		mg/Kg	20	4/3/2018 11:43:15 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E12**

04-Apr-18

Client: XTO Midland

Project: 2RP 3048 Delaware Soil Sampling

Sample ID	**MB-37382**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37382**	RunNo:	**50253**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/2/2018**	SeqNo:	**1628264**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37382**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37382**	RunNo:	**50253**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/2/2018**	SeqNo:	**1628265**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E12**

04-Apr-18

Client: XTO Midland

Project: 2RP 3048 Delaware Soil Sampling

Sample ID	**MB-37283**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**37283**	RunNo:	**50178**					
Prep Date:	**3/28/2018**	Analysis Date:	**3/29/2018**	SeqNo:	**1625707**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.7		10.00		77.2	70	130			

Sample ID	**LCS-37283**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**37283**	RunNo:	**50204**					
Prep Date:	**3/28/2018**	Analysis Date:	**3/30/2018**	SeqNo:	**1626106**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	3.7		5.000		73.6	70	130			

Sample ID	**LCS-37326**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**37326**	RunNo:	**50229**					
Prep Date:	**3/29/2018**	Analysis Date:	**4/2/2018**	SeqNo:	**1627194**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.8	70	130			

Sample ID	**MB-37326**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**37326**	RunNo:	**50229**					
Prep Date:	**3/29/2018**	Analysis Date:	**4/2/2018**	SeqNo:	**1627195**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		92.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E12**

04-Apr-18

Client: XTO Midland

Project: 2RP 3048 Delaware Soil Sampling

Sample ID	**MB-37267**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624553**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.6	15	316			

Sample ID	**LCS-37267**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624554**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	75.9	131			
Surr: BFB	1000		1000		105	15	316			

Sample ID	**RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**G50163**	RunNo:	**50163**					
Prep Date:		Analysis Date:	**3/28/2018**	SeqNo:	**1624630**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.8	15	316			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**G50163**	RunNo:	**50163**					
Prep Date:		Analysis Date:	**3/28/2018**	SeqNo:	**1624631**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		107	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803E12**

04-Apr-18

Client: XTO Midland

Project: 2RP 3048 Delaware Soil Sampling

Sample ID	**MB-37267**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624591**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		86.4	80	120			

Sample ID	**LCS-37267**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**37267**	RunNo:	**50162**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624592**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.2	77.3	128			
Toluene	0.98	0.050	1.000	0	98.4	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	101	81.6	129			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.5	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: XTO MIDLAND Work Order Number: 1803E12 RcptNo: 1

Received By: Mandy Woods 3/27/2018 9:30:00 AM

Completed By: Michelle Garcia 3/27/2018 11:19:22 AM Michelle Garcia

Reviewed By: DDS 3/27/18

MW 3/27/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good	Yes			

Chain-of-Custody Record

Client: XTO Energy, Delware division	☒ Standard ☐ Rush
Kyle Litterll	Project Name: 2RP - 3048
Mailing Addre: 3300 N. A. Street Suite 103 Midland, Texas 79705	Delaware Soil Sampling
	Project #:
Phone #: 433-704-5178	2RP - 3048
email or Fax#: abaker@ltenv.com	Project Manager:
QA/QC Package:	
☐ Standard ☐ Level 4 (Full Validation)	Adrian Baker
Accreditation:	Sampler: Josh Adams
☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 6.4.3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1803E17	TPH - 8015 DRO, MRO, GRO	BTEX - 8021	Chlorides - 300.1
3/20/2018	1305	SOIL	SS01	(1) 4oz.	cool	001	X	X	X
3/20/2018	1307	SOIL	SS02	(1) 4oz.	cool	002	X	X	X
3/20/2018	1309	SOIL	SS03	(1) 4oz.	cool	003	X	X	X

Analysis Request

Date	Time	Relinquished by:	Received by:	Date	Time
3/23/2018	0730			3/23/18	0730
Date: 3/26/18	Time: 1900	Relinquished by:	Received by: Courier 3/27	3/27/18	0930

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

ATTACHMENT 3: PHOTO LOG

View west of the former release area (2RP-2934 and 2RP-3048)

Project: 012918088	XTO Energy, Inc. Poker Lake Unit CVX-JV-RR #005H Tank Battery	LTE Advancing Opportunity
August 6, 2018	Photographic Log	

View northeast of the excavation (2RP-2934 and 2RP-3048)

Project: 012918088	XTO Energy, Inc. Poker Lake Unit CVX-JV-RR #005H Tank Battery	LTE Advancing Opportunity
August 6, 2018	Photographic Log	

View south of final excavation area (2RP-2934 and 2RP-3048)

Project: 012918088	XTO Energy, Inc. Poker Lake Unit CVX-JV-RR #005H Tank Battery	LTE Advancing Opportunity
August 6, 2018	Photographic Log	

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

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

CONDITIONS

Action 194125

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 194125
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

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