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

April 18, 2018

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

RE: Closure Request
PLU CVX JV PC #015H
Remediation Permit Number 2RP-4620
Eddy County, New Mexico

Dear Mr. Bratcher;

LT Environmental, Inc. (LTE) on behalf of XTO Energy, Inc. (XTO), is pleased to present the following letter report detailing the soil sampling activities at the PLU CVX JV PC #015H well pad (Site) in Unit O of Section 19, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the investigation was to assess impacts to soil after produced water and crude oil were released from the wellhead stuffing box due to failed packing. This caused a release of approximately 6 barrels (bbls) of produced water and crude oil on January 30, 2018. The spill impacted approximately 3,000 square feet of soil around the well head. Free-standing liquid was removed with a vacuum truck; approximately 4 bbls of fluid were initially recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on February 14, 2018, and was assigned Remediation Permit Number (RP) 2RP-4620 (Attachment 1). The sampling was conducted in response to the conditions of approval from the NMOCD, documented on the Form C-141. Based on the results of the sampling event as described herein, XTO is requesting no further action for this release.

BACKGROUND

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well is C 02109, located approximately 1,950 feet northeast of the release, with a depth to groundwater of 130 feet bgs and a total depth of 150 feet bgs. The Site is greater than 1,000 feet from a water source and greater than 200 feet from a private domestic water source. The closest surface water to the Site is a a tributary of the Pecos River, a dry wash that is located approximately 1,630 feet north-northwest of the Site. Based on these criteria, the NMOCD site ranking for remediation action levels is 0, and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on standard practice in this region, LTE proposes a site-specific chloride action level of 600 mg/kg or within 10 percent (%) of the background concentrations.

EXCAVATION ACTIVITIES

The location of the excavation was based on visual inspection of the Site. Visual and olfactory evidence of the release was observed around the wellhead and mapped as shown on Figure 2. Excavation activities commenced on February 7, 2018, and concluded on February 8, 2018. In an effort to delineate hydrocarbon and chloride impacts to soil and direct excavation activities, LTE field screened soil samples using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. Approximately 112 cubic yards of impacted soil was removed via backhoe and hand digging when within 10 feet of production equipment or pipelines. Impacted soil was transported and properly disposed of at Lea Land, located in Eunice, New Mexico. Areas that were hand dug extended to approximately 0.5 feet bgs. When mechanical equipment was used, the excavation depth ranged from 1.5 feet bgs (BH6) to 3 feet bgs (BH1). The horizontal extent of the excavation corresponded to the release footprint and is illustrated on Figure 2.

SOIL SAMPLING

Following excavation activities, LTE collected a total of 17 confirmation soil samples on February 8, 2018, as depicted on Figure 2. In the excavation extent where depths exceeded 0.5 feet bgs, confirmation soil samples were collected from the base of the excavation (BH1 through BH6) and along the excavation sidewalls (SW1 through SW7). In areas where the top 0.5 feet of the surface was removed by hand, a confirmation surface sample was collected at 0.5 feet bgs (SS1 through SS4).

The soil samples were collected and 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 hand delivered to a laboratory courier at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by USEPA Method 8015M, and chloride by USEPA Method 300.

On March 21, 2018, LTE personnel returned to the Site to remediate any areas of residual impact to soil as indicated by laboratory analytical results exceeding NMOCD remediation action levels. Due to the proximity of the residual impacted soil relative to production equipment and associated safety concerns, further impact removal was conducted using hydro-excavation. Approximately 24 cubic yards of impacted soil were removed and properly disposed of at R360 Halfway Disposal Facility, located in Hobbs, New Mexico. LTE removed as much soil as possible while complying with XTO safety requirements and buffer zones around equipment. LTE collected six soil samples (BH-4R, SW3R, and SS1R through SS4R) in the same locations where previous soil samples had exceeded NMOCD remediation action levels. Soil sample locations are depicted on Figure 2. Soil samples were collected and handled as previously described; however, samples were analyzed for BTEX, TPH, and chloride by Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated BTEX and TPH concentrations were below the NMOCD remediation action levels in all samples. Laboratory analytical results for chloride indicated concentrations were below NMOCD remediation action levels in all sample locations, except in SW3R and SS2R, which exhibited concentrations of 650 mg/kg and 1,400 mg/kg, respectively. Laboratory analytical results are summarized on Figure 2 and in Table 1, and complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

Laboratory analytical results for soil samples collected within the former release footprint indicate hydrocarbon impact to soil, as defined by concentrations of BTEX and TPH do not exceed NMOCD site-specific remediation action levels. The chloride concentration in soil samples SW3R and SS2R exceed the NMOCD site-specific remediation action levels; however, due to the proximity of the remaining impact to soil relative to production equipment, it is not possible to remove additional soil without compromising safety on site. XTO has removed the bulk of impacted soil and it is unlikely that the remaining concentrations of chloride will impact groundwater (greater than 100 feet deep) or reach any surface water (a dry wash is the closest surface water and is almost 2,000 feet away from the Site). As such, LTE on behalf of XTO, requests to leave the remaining chloride that exceeds site-specific standards in place until final reclamation. An updated NMOCD Form C-141 is included with 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, M.S.,P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Crystal Weaver, NMOCD
Jim Amos, BLM
Shelly Tucker, BLM

Attachments:

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

FIGURES

Advancing Opportunity

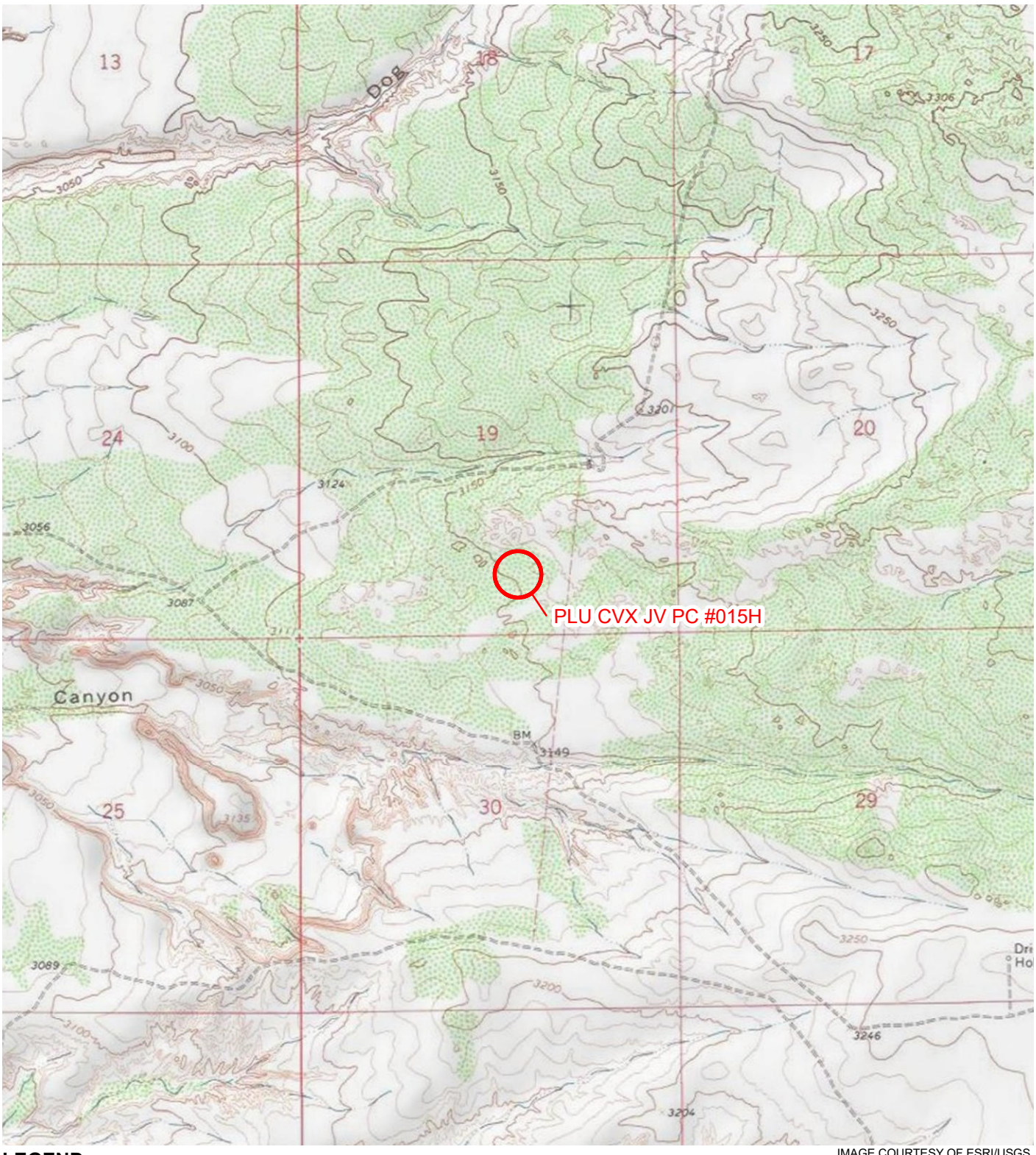


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

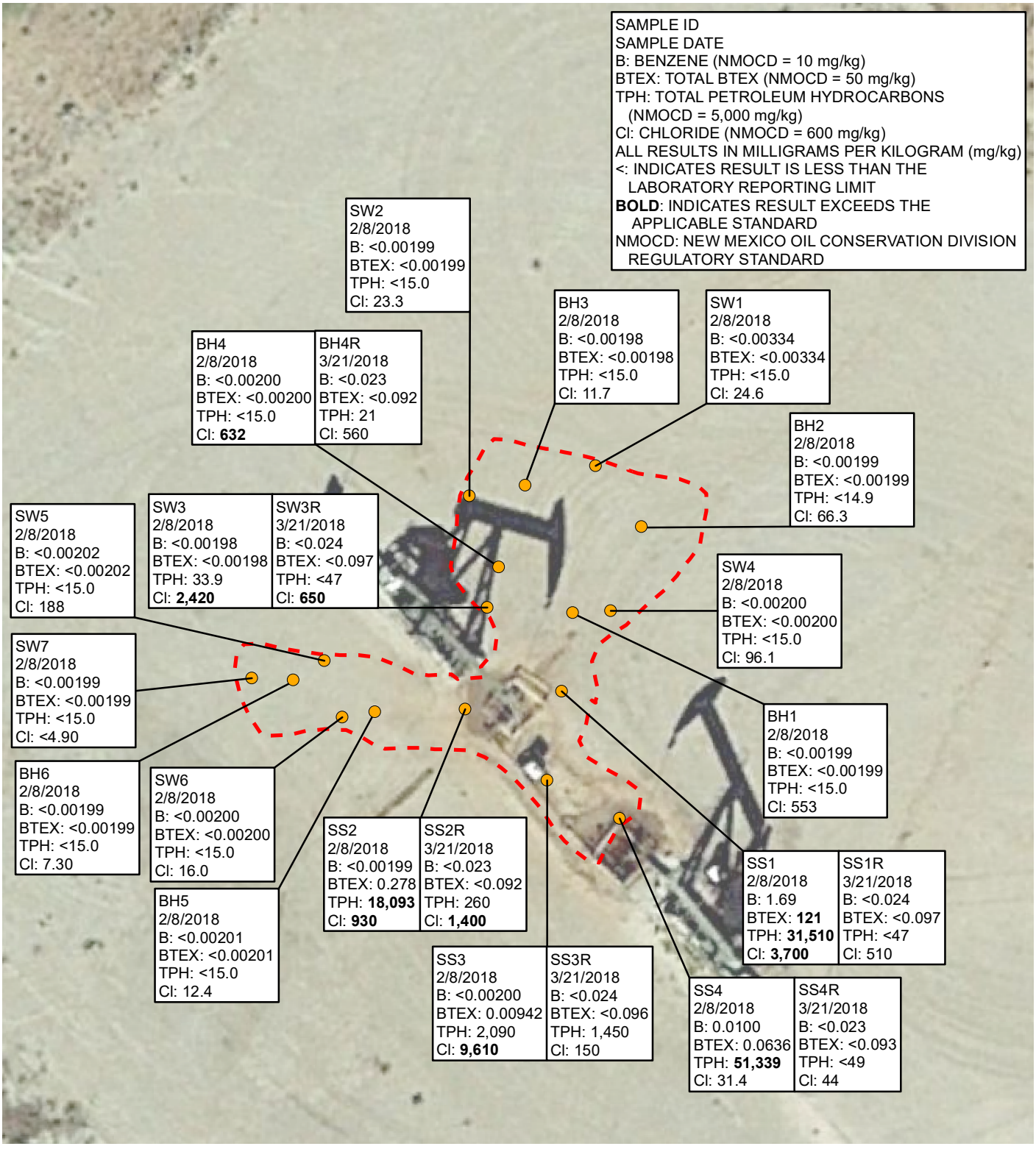
N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4620

FIGURE 1
SITE LOCATION MAP
PLU CVX JV PC #015H
UNIT O SEC 19 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918030_PLU CVX JV PC 015H\012918030_FIG01_SL.mxd



NOTE: REMEDIATION PERMIT NUMBER 2RP-4620

FIGURE 2
SOIL SAMPLE LOCATIONS
PLU CVX JV PC #015H
UNIT O SEC 19 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918030_PLU CVX JV PC 015H\012918030_FIG02_SITE_2018.mxd

TABLE

Advancing Opportunity

Released to Imaging: 2/28/2023 11:00:44 AM
Received by OCD: 2/28/2023 10:57:51 AM

TABLE 1
SOIL ANALYTICAL RESULTS
PLU CVX JV PC #015H
2RP-4620
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)	C28-40 Motor Oil Range Organcis (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
BH1	3	2/8/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	553
BH2	2.5	2/8/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	66.3
BH3	2.5	2/8/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	11.7
BH4	2.5	2/8/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	**632**
BH5	2.5	2/8/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	12.4
BH6	1.5	2/8/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	7.30
SW1	2.5	2/8/2018	<0.00334	<0.00334	<0.00334	<0.00334	<0.00334	<15.0	<15.0	<15.0	<15.0	24.6
SW2	2.5	2/8/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	23.3
SW3	2.5	2/8/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	33.9	<15.0	33.9	**2,420**
SW4	2.5	2/8/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	96.1
SW5	2.5	2/8/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	188
SW6	2.5	2/8/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	16.0
SW7	2.5	2/8/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<4.90
SS1	0.5	2/8/2018	1.69	21.6	14.6	82.8	**120.7**	4,820	24,000	2,690	**31,510**	**3,700**
SS2	0.5	2/8/2018	<0.00199	0.0277	0.0350	0.215	0.278	313	10,900	6,880	**18,093**	**930**
SS3	0.5	2/8/2018	<0.00200	0.00304	<0.00200	0.00638	0.00942	25.0	1,760	305	2,090	**9,610**
SS4	0.5	2/8/2018	0.0100	0.0174	<0.00201	0.0362	0.0636	359	44,700	6,280	**51,339**	31.4
BH-4R	3	3/21/2018	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	21	<49	21	560
SW3R	2.5	3/21/2018	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.4	<47	<47	**650**
SS1R	2.5	3/21/2018	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.3	<47	<47	510
SS2R	2	3/21/2018	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	160	100	260	**1,400**
SS3R	1	3/21/2018	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	460	990	1,450	150
SS4R	2.5	3/21/2018	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.8	<49	<49	44
NMOCD Remediation Action Level			10	NE	NE	NE	50	NE	NE	NE	5,000	600

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
TPH - total petroleum hydrocarbons
< - indicates results is below laboratory reporting limit
Bold - indicates result exceeds the applicable regulatory standard.

ATTACHMENT 1

INITIAL NMOCD FORM C-141

Advancing Opportunity

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 14 2018
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-141
Revised April 3, 2017

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

Release Notification and Corrective Action

nAB1804548640

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy BOPCO 260737	Contact: Kyle Littrell
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No: 432-221-7331
Facility Name: PLU CVX JV PC #015H	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No: 30-015-41195

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	19	24S	30E	820	South	2290	East	Eddy

Latitude 32.197989° **Longitude** -103.919535° NAD83

NATURE OF RELEASE

Type of Release: Produced Water/Crude Oil	Volume of Release: 6 bbls	Volume Recovered: 4 bbls
Source of Release: Well head	Date and Hour of Occurrence: 1/30/2018 time unknown	Date and Hour of Discovery: 1/30/2018 7 pm
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.*
Fluids released from wellhead stuffing box due to failed packing. Stuffing box was repaired.

Describe Area Affected and Cleanup Action Taken.*
The spill affected approximately 3,000 square feet of the caliche well pad. Standing fluids were recovered and an environmental contractor was retained to assist with remediation efforts. Impacted material has been removed and confirmation samples have been collected and sent to laboratory for analysis.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Kyle Littrell	Approved by Environmental Specialist:
Title: Environmental Coordinator	Approval Date: 2/14/18 Expiration Date: N/A
E-mail Address: Kyle_Littrell@xtoenergy.com	Conditions of Approval: See attached ☐ Attached 2RP-4620
Date: 2/13/2018 Phone: 432-221-7331	

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/14/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4620 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 3/14/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company XTO Energy	Contact: Kyle Littrell
Address 3104 E Greene Street, Carlsbad, NM 88220	Telephone No: 432-221-7331
Facility Name: PLU CVX JV PC #015H	Facility Type: Exploration and Production

Surface Owner Federal	Mineral Owner: Federal	API No. 30-015-41195

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	19	24S	30E	820	South	2290	East	Eddy

Latitude 32.197989 **Longitude** -103.919535 NAD83

NATURE OF RELEASE

Type of Release Produced water / Crude Oil	Volume of Release 6 bbl	Volume Recovered 4 bbls
Source of Release: Well head	Date and Hour of Occurrence 1/30/2018 time unknown	Date and Hour of Discovery 1/30/2018 7 pm
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.*
Fluids released from wellhead stuffing box due to failed packing. Stuffing box was repaired.

Describe Area Affected and Cleanup Action Taken.*
The spill affected approximately 3,000 square feet of the caliche well pad. Standing fluids were recovered and an environmental contractor was retained to assist with the remediation efforts. Impacted material was removed by mechanical excavation and hydro-excavation.

LTE collected confirmation soil samples on February 8, 2018 and March 21, 2018. Laboratory analytical results for the soil samples indicated BTEX and TPH concentrations did not exceed the NMOCD remediation action levels for the site. Laboratory analytical results for chloride exceeded the NMOCD remediation action level of 600 mg/kg in two of seventeen samples. The two samples exceeding the chloride standard contained 650 mg/kg and 1,400 mg/kg chloride. These two samples were collected near active wellhead production equipment and additional soil removal at those limited locations is not possible without compromising safety on site. Based on demonstrated efforts to remediate impacted soil, a site ranking of 0, and the location of the residual elevated chloride concentrations immediately next to production equipment, XTO requests to leave the elevated chloride concentrations in place until final reclamation.

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: Kyle Littrell

Title: SH&E Coordinator

E-mail Address: Kyle_Littrell@xtoenergy.com

Date: 4/16/2018 Phone: 432-221-7331

OIL CONSERVATION DIVISION

Deferral Approved by: Brittany Hall

Deferral approved: 2/28/2023

Conditions of Approval: Attached ☐

Deferral of contamination approved. A closure report will need to be submitted through the OCD Permitting website when remedation is completed at time of plugging and abandonment.

* Attach Additional Sheets If Necessary

ATTACHMENT 2

LABORATORY ANALYTICAL REPORTS

Advancing Opportunity

Analytical Report 576110

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU CVX JV PC #015H/ 30-015-41195

21-FEB-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

21-FEB-18

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

Reference: XENCO Report No(s): **576110**
PLU CVX JV PC #015H/ 30-015-41195
Project Address: NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 576110. 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. 576110 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Odessa Laboratory Director

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Sample Cross Reference 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH 1	S	02-08-18 12:35	3 ft	576110-001
BH 2	S	02-08-18 12:38	2.5 ft	576110-002
BH 3	S	02-08-18 12:41	2.5 ft	576110-003
BH 4	S	02-08-18 12:44	2.5 ft	576110-004
BH 5	S	02-08-18 12:47	2.5 ft	576110-005
BH 6	S	02-08-18 12:50	1.5 ft	576110-006
SW 1	S	02-08-18 13:54	2.5 ft	576110-007
SW 2	S	02-08-18 13:57	2.5 ft	576110-008
SW 3	S	02-08-18 14:00	2.5 ft	576110-009
SW 4	S	02-08-18 14:03	2.5 ft	576110-010
SW 5	S	02-08-18 14:06	2.5 ft	576110-011
SW 6	S	02-08-18 14:09	2.5 ft	576110-012
SW 7	S	02-08-18 14:12	2.5 ft	576110-013
SS 1	S	02-08-18 15:34	1" In	576110-014
SS 2	S	02-08-18 15:38	1" In	576110-015
SS 3	S	02-08-18 15:41	1" In	576110-016
SS 4	S	02-08-18 15:44	1" In	576110-017

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU CVX JV PC #015H/ 30-015-41195

Project ID:
Work Order Number(s): *576110*

Report Date: *21-FEB-18*
Date Received: *02/10/2018*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3041241 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3041265 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 576110-015 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, 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: 576110-007, -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.

Batch: LBA-3041694 Inorganic Anions by EPA 300
Lab Sample ID 576156-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 576110-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 576110

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV PC #015H/ 30-015-41195

Project Id:

Contact: Adrian Baker

Project Location: NM

Date Received in Lab: Sat Feb-10-18 08:50 am

Report Date: 21-FEB-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	576110-001		576110-002		576110-003		576110-004		576110-005		576110-006	
	Field Id:	BH 1		BH 2		BH 3		BH 4		BH 5		BH 6	
	Depth:	3- ft		2.5- ft		2.5- ft		2.5- ft		2.5- ft		1.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-08-18 12:35		Feb-08-18 12:38		Feb-08-18 12:41		Feb-08-18 12:44		Feb-08-18 12:47		Feb-08-18 12:50	
BTEX by EPA 8021B	***Extracted:***	Feb-15-18 13:00		Feb-15-18 13:00		Feb-15-18 13:00		Feb-15-18 13:00		Feb-15-18 13:00		Feb-15-18 13:00	
	Analyzed:	Feb-16-18 01:17		Feb-16-18 01:36		Feb-16-18 01:55		Feb-16-18 02:12		Feb-16-18 02:31		Feb-16-18 02:51	
	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	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Toluene		<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398	<0.00397	0.00397	<0.00401	0.00401	<0.00402	0.00402	<0.00398	0.00398
o-Xylene		<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total Xylenes		<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total BTEX		<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00	
	Analyzed:	Feb-21-18 00:12		Feb-21-18 00:28		Feb-21-18 00:33		Feb-21-18 00:38		Feb-21-18 00:44		Feb-21-18 01:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		553	4.97	66.3	5.01	11.7	5.01	632	4.93	12.4	5.01	7.30	4.97
TPH by SW8015 Mod	***Extracted:***	Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00	
	Analyzed:	Feb-14-18 20:20		Feb-14-18 21:21		Feb-14-18 21:46		Feb-14-18 22:06		Feb-14-18 22:29		Feb-14-18 22:50	
	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	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
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Jessica Kramer

Jessica Kramer
Odessa Laboratory Director

Certificate of Analysis Summary 576110

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV PC #015H/ 30-015-41195

Project Id:

Contact: Adrian Baker

Project Location: NM

Date Received in Lab: Sat Feb-10-18 08:50 am

Report Date: 21-FEB-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	576110-007		576110-008		576110-009		576110-010		576110-011		576110-012	
	Field Id:	SW 1		SW 2		SW 3		SW 4		SW 5		SW 6	
	Depth:	2.5- ft		2.5- ft		2.5- ft		2.5- ft		2.5- ft		2.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-08-18 13:54		Feb-08-18 13:57		Feb-08-18 14:00		Feb-08-18 14:03		Feb-08-18 14:06		Feb-08-18 14:09	
BTEX by EPA 8021B	***Extracted:***	Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15	
	Analyzed:	Feb-16-18 11:24		Feb-16-18 06:01		Feb-16-18 07:38		Feb-16-18 08:32		Feb-16-18 08:51		Feb-16-18 09:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00334	0.00334	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Toluene		<0.00334	0.00334	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene		<0.00334	0.00334	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes		<0.00669	0.00669	<0.00398	0.00398	<0.00397	0.00397	<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401
o-Xylene		<0.00334	0.00334	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes		<0.00334	0.00334	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total BTEX		<0.00334	0.00334	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00	
	Analyzed:	Feb-21-18 01:05		Feb-21-18 01:10		Feb-21-18 01:15		Feb-21-18 01:21		Feb-21-18 01:42		Feb-21-18 01:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		24.6	4.93	23.3	5.00	2420	24.6	96.1	4.98	188	4.99	16.0	4.98
TPH by SW8015 Mod	***Extracted:***	Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00	
	Analyzed:	Feb-14-18 23:10		Feb-14-18 23:33		Feb-14-18 23:53		Feb-15-18 00:14		Feb-15-18 01:14		Feb-15-18 01:34	
	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	33.9	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	33.9	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Odessa Laboratory Director

Certificate of Analysis Summary 576110

LT Environmental, Inc., Arvada, CO

Project Name: PLU CVX JV PC #015H/ 30-015-41195

Project Id:

Contact: Adrian Baker

Project Location: NM

Date Received in Lab: Sat Feb-10-18 08:50 am

Report Date: 21-FEB-18

Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	576110-013		576110-014		576110-015		576110-016		576110-017	
	Field Id:	SW 7		SS 1		SS 2		SS 3		SS 4	
	Depth:	2.5- ft		1"- In		1"- In		1"- In		1"- In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-08-18 14:12		Feb-08-18 15:34		Feb-08-18 15:38		Feb-08-18 15:41		Feb-08-18 15:44	
BTEX by EPA 8021B	***Extracted:***	Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15		Feb-15-18 17:15	
	Analyzed:	Feb-16-18 09:29		Feb-16-18 14:18		Feb-16-18 05:23		Feb-16-18 09:48		Feb-16-18 11:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	1.69	0.202	<0.00199	0.00199	<0.00200	0.00200	0.0100	0.00201
Toluene		<0.00199	0.00199	21.6	0.202	0.0277	0.00199	0.00304	0.00200	0.0174	0.00201
Ethylbenzene		<0.00199	0.00199	14.6	0.202	0.0350	0.00199	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	59.9	0.403	0.148	0.00398	0.00438	0.00399	0.0251	0.00402
o-Xylene		<0.00199	0.00199	22.9	0.202	0.0671	0.00199	0.00200	0.00200	0.0111	0.00201
Total Xylenes		<0.00199	0.00199	82.8	0.202	0.215	0.00199	0.00638	0.00200	0.0362	0.00201
Total BTEX		<0.00199	0.00199	121	0.202	0.278	0.00199	0.00942	0.00200	0.0636	0.00201
Inorganic Anions by EPA 300	***Extracted:***	Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00		Feb-20-18 16:00	
	Analyzed:	Feb-21-18 02:03		Feb-21-18 02:08		Feb-21-18 02:14		Feb-21-18 02:19		Feb-21-18 02:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.90	4.90	3700	24.5	930	4.94	9610	49.8	31.4	4.99
TPH by SW8015 Mod	***Extracted:***	Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00		Feb-14-18 15:00	
	Analyzed:	Feb-15-18 01:55		Feb-15-18 02:15		Feb-15-18 02:38		Feb-15-18 02:58		Feb-15-18 07:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	4820	74.8	313	74.7	25.0	15.0	359	149
Diesel Range Organics (DRO)		<15.0	15.0	24000	74.8	10900	74.7	1760	15.0	44700	149
Oil Range Hydrocarbons (ORO)		<15.0	15.0	2690	74.8	6880 E	74.7	305	15.0	6280	149
Total TPH		<15.0	15.0	31500	74.8	18100	74.7	2090	15.0	51300	149

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Jessica Kramer
Odessa Laboratory Director

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 1**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-001	Date Collected:	02.08.18 12.35	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**553**	4.97	mg/kg	02.21.18 00.12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 20.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 20.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 20.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 20.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	02.14.18 20.20	
o-Terphenyl	84-15-1	91	%	70-135	02.14.18 20.20	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 1**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-001	Date Collected:	02.08.18 12.35	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 13.00	Basis:	Wet Weight
Seq Number:	3041241				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.16.18 01.17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.16.18 01.17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.16.18 01.17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.16.18 01.17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.16.18 01.17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.16.18 01.17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.16.18 01.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	80-120	02.16.18 01.17	
1,4-Difluorobenzene	540-36-3	81	%	80-120	02.16.18 01.17	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 2**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-002	Date Collected:	02.08.18 12.38	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.3**	5.01	mg/kg	02.21.18 00.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.14.18 21.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	02.14.18 21.21	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	02.14.18 21.21	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	02.14.18 21.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.14.18 21.21	
o-Terphenyl	84-15-1	94	%	70-135	02.14.18 21.21	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 2**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-002	Date Collected:	02.08.18 12.38	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 13.00	Basis:	Wet Weight
Seq Number:	3041241				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.16.18 01.36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.16.18 01.36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.16.18 01.36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.16.18 01.36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.16.18 01.36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.16.18 01.36	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.16.18 01.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	02.16.18 01.36	
1,4-Difluorobenzene	540-36-3	86	%	80-120	02.16.18 01.36	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 3**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-003	Date Collected:	02.08.18 12.41	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.7**	5.01	mg/kg	02.21.18 00.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 21.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 21.46	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 21.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 21.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.14.18 21.46	
o-Terphenyl	84-15-1	87	%	70-135	02.14.18 21.46	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 3**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-003	Date Collected:	02.08.18 12.41	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 13.00	Basis:	Wet Weight
Seq Number:	3041241				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.16.18 01.55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.16.18 01.55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.16.18 01.55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.16.18 01.55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.16.18 01.55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.16.18 01.55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.16.18 01.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	02.16.18 01.55	
1,4-Difluorobenzene	540-36-3	89	%	80-120	02.16.18 01.55	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 4**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-004	Date Collected:	02.08.18 12.44	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**632**	4.93	mg/kg	02.21.18 00.38		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 22.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 22.06	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 22.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 22.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.14.18 22.06	
o-Terphenyl	84-15-1	101	%	70-135	02.14.18 22.06	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 4**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-004	Date Collected:	02.08.18 12.44	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 13.00	Basis:	Wet Weight
Seq Number:	3041241				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.16.18 02.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.16.18 02.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.16.18 02.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.16.18 02.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.16.18 02.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.16.18 02.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.16.18 02.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	82	%	80-120	02.16.18 02.12	
4-Bromofluorobenzene	460-00-4	100	%	80-120	02.16.18 02.12	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 5**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-005	Date Collected:	02.08.18 12.47	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.4**	5.01	mg/kg	02.21.18 00.44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 22.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 22.29	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 22.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 22.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.14.18 22.29	
o-Terphenyl	84-15-1	95	%	70-135	02.14.18 22.29	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 5**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-005	Date Collected:	02.08.18 12.47	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 13.00	Basis:	Wet Weight
Seq Number:	3041241				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.16.18 02.31	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.16.18 02.31	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.16.18 02.31	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.16.18 02.31	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.16.18 02.31	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.16.18 02.31	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.16.18 02.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	80-120	02.16.18 02.31	
4-Bromofluorobenzene	460-00-4	101	%	80-120	02.16.18 02.31	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 6**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-006	Date Collected:	02.08.18 12.50	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.30**	4.97	mg/kg	02.21.18 01.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 22.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 22.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 22.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 22.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.14.18 22.50	
o-Terphenyl	84-15-1	95	%	70-135	02.14.18 22.50	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**BH 6**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-006	Date Collected:	02.08.18 12.50	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 13.00	Basis:	Wet Weight
Seq Number:	3041241				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.16.18 02.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.16.18 02.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.16.18 02.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.16.18 02.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.16.18 02.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.16.18 02.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.16.18 02.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	80-120	02.16.18 02.51	
1,4-Difluorobenzene	540-36-3	89	%	80-120	02.16.18 02.51	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 1**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-007	Date Collected:	02.08.18 13.54	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.6**	4.93	mg/kg	02.21.18 01.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 23.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 23.10	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 23.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 23.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.14.18 23.10	
o-Terphenyl	84-15-1	96	%	70-135	02.14.18 23.10	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 1**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-007	Date Collected:	02.08.18 13.54	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00334	0.00334	mg/kg	02.16.18 11.24	U	1
Toluene	108-88-3	<0.00334	0.00334	mg/kg	02.16.18 11.24	U	1
Ethylbenzene	100-41-4	<0.00334	0.00334	mg/kg	02.16.18 11.24	U	1
m,p-Xylenes	179601-23-1	<0.00669	0.00669	mg/kg	02.16.18 11.24	U	1
o-Xylene	95-47-6	<0.00334	0.00334	mg/kg	02.16.18 11.24	U	1
Total Xylenes	1330-20-7	<0.00334	0.00334	mg/kg	02.16.18 11.24	U	1
Total BTEX		<0.00334	0.00334	mg/kg	02.16.18 11.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	80-120	02.16.18 11.24	
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.16.18 11.24	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 2**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-008	Date Collected:	02.08.18 13.57	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.3**	5.00	mg/kg	02.21.18 01.10		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 23.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.14.18 23.33	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 23.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.14.18 23.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.14.18 23.33	
o-Terphenyl	84-15-1	89	%	70-135	02.14.18 23.33	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 2**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-008	Date Collected:	02.08.18 13.57	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.16.18 06.01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.16.18 06.01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.16.18 06.01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.16.18 06.01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.16.18 06.01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.16.18 06.01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.16.18 06.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	80-120	02.16.18 06.01	
1,4-Difluorobenzene	540-36-3	82	%	80-120	02.16.18 06.01	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 3**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-009	Date Collected:	02.08.18 14.00	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2420**	24.6	mg/kg	02.21.18 01.15		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.14.18 23.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	**33.9**	15.0	mg/kg	02.14.18 23.53		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.14.18 23.53	U	1
Total TPH	PHC635	**33.9**	15.0	mg/kg	02.14.18 23.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	02.14.18 23.53	
o-Terphenyl	84-15-1	111	%	70-135	02.14.18 23.53	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 3**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-009	Date Collected:	02.08.18 14.00	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.16.18 07.38	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.16.18 07.38	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.16.18 07.38	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.16.18 07.38	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.16.18 07.38	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.16.18 07.38	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.16.18 07.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	81	%	80-120	02.16.18 07.38	
4-Bromofluorobenzene	460-00-4	101	%	80-120	02.16.18 07.38	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 4**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-010	Date Collected:	02.08.18 14.03	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**96.1**	4.98	mg/kg	02.21.18 01.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.15.18 00.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.15.18 00.14	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.15.18 00.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.15.18 00.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.15.18 00.14	
o-Terphenyl	84-15-1	98	%	70-135	02.15.18 00.14	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 4**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-010	Date Collected:	02.08.18 14.03	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.16.18 08.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.16.18 08.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.16.18 08.32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.16.18 08.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.16.18 08.32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.16.18 08.32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.16.18 08.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	80-120	02.16.18 08.32	
4-Bromofluorobenzene	460-00-4	98	%	80-120	02.16.18 08.32	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 5**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-011	Date Collected:	02.08.18 14.06	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**188**	4.99	mg/kg	02.21.18 01.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.15.18 01.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.15.18 01.14	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.15.18 01.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.15.18 01.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.15.18 01.14	
o-Terphenyl	84-15-1	98	%	70-135	02.15.18 01.14	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 5**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-011	Date Collected:	02.08.18 14.06	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.16.18 08.51	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.16.18 08.51	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.16.18 08.51	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.16.18 08.51	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.16.18 08.51	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.16.18 08.51	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.16.18 08.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	80-120	02.16.18 08.51	
4-Bromofluorobenzene	460-00-4	108	%	80-120	02.16.18 08.51	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 6**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-012	Date Collected:	02.08.18 14.09	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.0**	4.98	mg/kg	02.21.18 01.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.15.18 01.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.15.18 01.34	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.15.18 01.34	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.15.18 01.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.15.18 01.34	
o-Terphenyl	84-15-1	104	%	70-135	02.15.18 01.34	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 6**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-012	Date Collected:	02.08.18 14.09	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.16.18 09.10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.16.18 09.10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.16.18 09.10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.16.18 09.10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.16.18 09.10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.16.18 09.10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.16.18 09.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	80-120	02.16.18 09.10	
1,4-Difluorobenzene	540-36-3	85	%	80-120	02.16.18 09.10	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 7**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-013	Date Collected:	02.08.18 14.12	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	02.21.18 02.03	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.15.18 01.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.15.18 01.55	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	02.15.18 01.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.15.18 01.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.15.18 01.55	
o-Terphenyl	84-15-1	95	%	70-135	02.15.18 01.55	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SW 7**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-013	Date Collected:	02.08.18 14.12	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.16.18 09.29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.16.18 09.29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.16.18 09.29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.16.18 09.29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.16.18 09.29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.16.18 09.29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.16.18 09.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	80-120	02.16.18 09.29	
1,4-Difluorobenzene	540-36-3	84	%	80-120	02.16.18 09.29	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 1**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-014	Date Collected:	02.08.18 15.34	Sample Depth:	1" In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3700**	24.5	mg/kg	02.21.18 02.08		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**4820**	74.8	mg/kg	02.15.18 02.15		5
Diesel Range Organics (DRO)	C10C28DRO	**24000**	74.8	mg/kg	02.15.18 02.15		5
Oil Range Hydrocarbons (ORO)	PHCG2835	**2690**	74.8	mg/kg	02.15.18 02.15		5
Total TPH	PHC635	**31500**	74.8	mg/kg	02.15.18 02.15		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	02.15.18 02.15	
o-Terphenyl	84-15-1	100	%	70-135	02.15.18 02.15	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 1**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-014	Date Collected:	02.08.18 15.34	Sample Depth:	1" In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**1.69**	0.202	mg/kg	02.16.18 14.18		100
Toluene	108-88-3	**21.6**	0.202	mg/kg	02.16.18 14.18		100
Ethylbenzene	100-41-4	**14.6**	0.202	mg/kg	02.16.18 14.18		100
m,p-Xylenes	179601-23-1	**59.9**	0.403	mg/kg	02.16.18 14.18		100
o-Xylene	95-47-6	**22.9**	0.202	mg/kg	02.16.18 14.18		100
Total Xylenes	1330-20-7	**82.8**	0.202	mg/kg	02.16.18 14.18		100
Total BTEX		**121**	0.202	mg/kg	02.16.18 14.18		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	02.16.18 14.18	
4-Bromofluorobenzene	460-00-4	113	%	80-120	02.16.18 14.18	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 2**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-015	Date Collected:	02.08.18 15.38	Sample Depth:	1" In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**930**	4.94	mg/kg	02.21.18 02.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**313**	74.7	mg/kg	02.15.18 02.38		5
Diesel Range Organics (DRO)	C10C28DRO	**10900**	74.7	mg/kg	02.15.18 02.38		5
Oil Range Hydrocarbons (ORO)	PHCG2835	**6880**	74.7	mg/kg	02.15.18 02.38	E	5
Total TPH	PHC635	**18100**	74.7	mg/kg	02.15.18 02.38		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.15.18 02.38	
o-Terphenyl	84-15-1	88	%	70-135	02.15.18 02.38	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 2**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-015	Date Collected:	02.08.18 15.38	Sample Depth:	1" In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.16.18 05.23	U	1
Toluene	108-88-3	**0.0277**	0.00199	mg/kg	02.16.18 05.23		1
Ethylbenzene	100-41-4	**0.0350**	0.00199	mg/kg	02.16.18 05.23		1
m,p-Xylenes	179601-23-1	**0.148**	0.00398	mg/kg	02.16.18 05.23		1
o-Xylene	95-47-6	**0.0671**	0.00199	mg/kg	02.16.18 05.23		1
Total Xylenes	1330-20-7	**0.215**	0.00199	mg/kg	02.16.18 05.23		1
Total BTEX		**0.278**	0.00199	mg/kg	02.16.18 05.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	81	%	80-120	02.16.18 05.23	
4-Bromofluorobenzene	460-00-4	114	%	80-120	02.16.18 05.23	

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LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 3**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-016	Date Collected:	02.08.18 15.41	Sample Depth:	1" In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9610**	49.8	mg/kg	02.21.18 02.19		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**25.0**	15.0	mg/kg	02.15.18 02.58		1
Diesel Range Organics (DRO)	C10C28DRO	**1760**	15.0	mg/kg	02.15.18 02.58		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**305**	15.0	mg/kg	02.15.18 02.58		1
Total TPH	PHC635	**2090**	15.0	mg/kg	02.15.18 02.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	02.15.18 02.58	
o-Terphenyl	84-15-1	88	%	70-135	02.15.18 02.58	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 3**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-016	Date Collected:	02.08.18 15.41	Sample Depth:	1" In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.16.18 09.48	U	1
Toluene	108-88-3	**0.00304**	0.00200	mg/kg	02.16.18 09.48		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.16.18 09.48	U	1
m,p-Xylenes	179601-23-1	**0.00438**	0.00399	mg/kg	02.16.18 09.48		1
o-Xylene	95-47-6	**0.00200**	0.00200	mg/kg	02.16.18 09.48		1
Total Xylenes	1330-20-7	**0.00638**	0.00200	mg/kg	02.16.18 09.48		1
Total BTEX		**0.00942**	0.00200	mg/kg	02.16.18 09.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	80-120	02.16.18 09.48	
1,4-Difluorobenzene	540-36-3	83	%	80-120	02.16.18 09.48	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 4**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-017	Date Collected:	02.08.18 15.44	Sample Depth:	1" In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	02.20.18 16.00	Basis:	Wet Weight
Seq Number:	3041694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31.4**	4.99	mg/kg	02.21.18 02.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.14.18 15.00	Basis:	Wet Weight
Seq Number:	3041133				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**359**	149	mg/kg	02.15.18 07.31		10
Diesel Range Organics (DRO)	C10C28DRO	**44700**	149	mg/kg	02.15.18 07.31		10
Oil Range Hydrocarbons (ORO)	PHCG2835	**6280**	149	mg/kg	02.15.18 07.31		10
Total TPH	PHC635	**51300**	149	mg/kg	02.15.18 07.31		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.15.18 07.31	
o-Terphenyl	84-15-1	91	%	70-135	02.15.18 07.31	

Certificate of Analytical Results 576110

LT Environmental, Inc., Arvada, CO

PLU CVX JV PC #015H/ 30-015-41195

Sample Id:	**SS 4**	Matrix:	Soil	Date Received:	02.10.18 08.50
Lab Sample Id:	576110-017	Date Collected:	02.08.18 15.44	Sample Depth:	1" In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	02.15.18 17.15	Basis:	Wet Weight
Seq Number:	3041265				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.0100**	0.00201	mg/kg	02.16.18 11.43		1
Toluene	108-88-3	**0.0174**	0.00201	mg/kg	02.16.18 11.43		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.16.18 11.43	U	1
m,p-Xylenes	179601-23-1	**0.0251**	0.00402	mg/kg	02.16.18 11.43		1
o-Xylene	95-47-6	**0.0111**	0.00201	mg/kg	02.16.18 11.43		1
Total Xylenes	1330-20-7	**0.0362**	0.00201	mg/kg	02.16.18 11.43		1
Total BTEX		**0.0636**	0.00201	mg/kg	02.16.18 11.43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	80-120	02.16.18 11.43	
1,4-Difluorobenzene	540-36-3	87	%	80-120	02.16.18 11.43	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 576110

LT Environmental, Inc.

PLU CVX JV PC #015H/ 30-015-41195

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3041694 — Matrix: Solid — Date Prep: 02.20.18
MB Sample Id: 7639487-1-BLK — LCS Sample Id: 7639487-1-BKS — LCSD Sample Id: 7639487-1-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	258	103	257	103	90-110	0	20	mg/kg	02.20.18 19:14	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3041694 — Matrix: Soil — Date Prep: 02.20.18
Parent Sample Id: 576110-001 — MS Sample Id: 576110-001 S — MSD Sample Id: 576110-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	553	249	788	94	756	82	90-110	4	20	mg/kg	02.21.18 00:17	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3041694 — Matrix: Soil — Date Prep: 02.20.18
Parent Sample Id: 576156-001 — MS Sample Id: 576156-001 S — MSD Sample Id: 576156-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.29	247	266	105	267	105	90-110	0	20	mg/kg	02.21.18 01:31	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3041133 — Matrix: Solid — Date Prep: 02.14.18
MB Sample Id: 7639169-1-BLK — LCS Sample Id: 7639169-1-BKS — LCSD Sample Id: 7639169-1-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	1090	109	931	93	70-135	16	35	mg/kg	02.14.18 19:37	
Diesel Range Organics (DRO)	<15.0	1000	1150	115	1020	102	70-135	12	35	mg/kg	02.14.18 19:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		128		114		70-135	%	02.14.18 19:37
o-Terphenyl	95		129		107		70-135	%	02.14.18 19:37

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
E = MSD/LCSD Result

QC Summary 576110

LT Environmental, Inc.

PLU CVX JV PC #015H/ 30-015-41195

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3041133 — Matrix: Soil — Date Prep: 02.14.18
Parent Sample Id: 576110-001 — MS Sample Id: 576110-001 S — MSD Sample Id: 576110-001 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	998	954	96	959	96	70-135	1	35	mg/kg	02.14.18 20:40	
Diesel Range Organics (DRO)	<15.0	998	1010	101	994	100	70-135	2	35	mg/kg	02.14.18 20:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		98		70-135	%	02.14.18 20:40
o-Terphenyl	92		89		70-135	%	02.14.18 20:40

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3041241 — Matrix: Solid — Date Prep: 02.15.18
MB Sample Id: 7639243-1-BLK — LCS Sample Id: 7639243-1-BKS — LCSD Sample Id: 7639243-1-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	0.0891	88	0.0855	86	70-130	4	35	mg/kg	02.15.18 17:57	
Toluene	<0.00202	0.101	0.0937	93	0.0893	89	70-130	5	35	mg/kg	02.15.18 17:57	
Ethylbenzene	<0.00202	0.101	0.102	101	0.0996	100	71-129	2	35	mg/kg	02.15.18 17:57	
m,p-Xylenes	<0.00403	0.202	0.200	99	0.195	98	70-135	3	35	mg/kg	02.15.18 17:57	
o-Xylene	<0.00202	0.101	0.0991	98	0.0966	97	71-133	3	35	mg/kg	02.15.18 17:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		92		88		80-120	%	02.15.18 17:57
4-Bromofluorobenzene	97		108		107		80-120	%	02.15.18 17:57

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3041265 — Matrix: Solid — Date Prep: 02.15.18
MB Sample Id: 7639259-1-BLK — LCS Sample Id: 7639259-1-BKS — LCSD Sample Id: 7639259-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0800	80	0.0812	80	70-130	1	35	mg/kg	02.16.18 03:29	
Toluene	<0.00201	0.100	0.0836	84	0.0859	85	70-130	3	35	mg/kg	02.16.18 03:29	
Ethylbenzene	<0.00201	0.100	0.0921	92	0.0945	94	71-129	3	35	mg/kg	02.16.18 03:29	
m,p-Xylenes	<0.00402	0.201	0.180	90	0.186	92	70-135	3	35	mg/kg	02.16.18 03:29	
o-Xylene	<0.00201	0.100	0.0909	91	0.0933	92	71-133	3	35	mg/kg	02.16.18 03:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		89		87		80-120	%	02.16.18 03:29
4-Bromofluorobenzene	87		107		113		80-120	%	02.16.18 03:29

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

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

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 576110

LT Environmental, Inc.

PLU CVX JV PC #015H/ 30-015-41195

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3041241 Matrix: Soil Date Prep: 02.15.18
Parent Sample Id: 576108-001 MS Sample Id: 576108-001 S MSD Sample Id: 576108-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0801	80	0.0788	79	70-130	2	35	mg/kg	02.15.18 18:35	
Toluene	<0.00200	0.0998	0.0833	83	0.0810	81	70-130	3	35	mg/kg	02.15.18 18:35	
Ethylbenzene	<0.00200	0.0998	0.0876	88	0.0852	85	71-129	3	35	mg/kg	02.15.18 18:35	
m,p-Xylenes	<0.00399	0.200	0.171	86	0.166	83	70-135	3	35	mg/kg	02.15.18 18:35	
o-Xylene	<0.00200	0.0998	0.0850	85	0.0843	84	71-133	1	35	mg/kg	02.15.18 18:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		90		80-120	%	02.15.18 18:35
4-Bromofluorobenzene	106		107		80-120	%	02.15.18 18:35

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3041265 Matrix: Soil Date Prep: 02.15.18
Parent Sample Id: 576110-015 MS Sample Id: 576110-015 S MSD Sample Id: 576110-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0292	29	0.0354	36	70-130	19	35	mg/kg	02.16.18 04:07	X
Toluene	0.0277	0.100	0.0384	11	0.0420	14	70-130	9	35	mg/kg	02.16.18 04:07	X
Ethylbenzene	0.0350	0.100	0.0427	8	0.0418	7	71-129	2	35	mg/kg	02.16.18 04:07	X
m,p-Xylenes	0.148	0.200	0.162	7	0.148	0	70-135	9	35	mg/kg	02.16.18 04:07	X
o-Xylene	0.0671	0.100	0.0738	7	0.0672	0	71-133	9	35	mg/kg	02.16.18 04:07	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		83		80-120	%	02.16.18 04:07
4-Bromofluorobenzene	114		115		80-120	%	02.16.18 04:07

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

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

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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CHAIN OF CUSTODY

Page 1 Of 2

Revision 2016.1

XENCO LABORATORIES

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Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143
Service Center- Amarillo, TX (806)678-4514
Service Center- Hobbs, NM (575) 392-7550
www.xenco.com

Xenco Quote #

Xenco Job # 576110

Client / Reporting Information

Company Name / Branch: LTE / Permian

Company Address: 3300 N. A Street Bldg 1 suite 103

Email: Abaker@LTenv.com Phone No: 432-704-5178

Project Contact: Adrian Baker

Samplers's Name: Aaron Williamson

Project Information

Project Name/Number: PLU CVX JV PC #015H / 30-015-41195

Project Location: NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 30 015 41195

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	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Btex Method 8021	TPH Method 8015	Chloride Method 300.1	Field Comments
1	BH 1	3'	2/8/18	12:35	S	1									X	X	X	
2	BH 2	2.5'		12:38											X	X	X	
3	BH 3	2.5'		12:41											X	X	X	
4	BH 4	2.5'		12:44											X	X	X	
5	BH 5	2.5'		12:47											X	X	X	
6	BH 6	1.5'		12:50											X	X	X	
7	SW 1	2.5'		13:54											X	X	X	
8	SW 2	2.5'		13:57											X	X	X	
9	SW 3	2.5'		14:00											X	X	X	
10	SW 4	2.5'		14:03											X	X	X	

Turnaround Time (Business days)

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

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
- [ ] Level II Report with TRRP checklist

Notes:

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

FED-EX / UF

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

Relinquished by Sampler: 1		Date Time: 2-10-18 8:30	Received By: 1	2.10.18 8:55	Relinquished By: 2	Date Time:	Received By:
Relinquished by: 3		Date Time:	Received By: 3		Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5		Date Time:	Received By: 5		Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. Thermo. Corr. Factor

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75 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.

Received by OCD: 2/28/2023 10:57:51 AM
Released to Imaging: 2/28/2023 11:00:44 AM
Final 1.001
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CHAIN OF CUSTODY

Page 2 Of 2

Revision 2016.1

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Service Center - Baton Rouge, LA (832) 712-8143
Service Center- Amarillo, TX (806)678-4514
Service Center- Hobbs, NM (575) 392-7550
www.xenco.com

Xenco Quote #

Xenco Job # 576110

Client / Reporting Information

Company Name / Branch: LTE/Permian
Company Address: 3300 N. A street Bldg 1 suite 103
Email: Abaker@LTenv.com Phone No: 432-704-5178
Project Contact: Adrian Baker
Samplers's Name: Aaron Williamson

Project Information

Project Name/Number: PLU CUXJV PC #015H / 30-015-41195
Project Location: NM
Invoice To: XTO Energy-Kyle Littrell
PO Number: 30 015 41195

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 Method 8021	TPH Method 8015	Chloride Method 300.1	Field Comments
1	SW5	2.5'	2/8/18	14:06	S	1									X	X	X	
2	SW6	2.5'		14:09											X	X	X	
3	SW7	2.5'		14:12											X	X	X	
4	SS1	1"		15:34											X	X	X	
5	SS2	1"		15:38											X	X	X	
6	SS3	1"		15:41											X	X	X	
7	SS4	1"		15:44											X	X	X	
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 Standard TAT

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
- [ ] Level II Report with TRRP checklist

Notes:

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

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:
1		2.10.18 8:50	1 2.10.18 8:50	2	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:
			3	4	4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable / On Ice / Cooler Temp. / Thermo. Corr. Factor
			5		On Ice: 4

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75 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.

Received by OCD: 2/28/2023 10:57:51 AM
Released to Imaging: 2/28/2023 11:00:44 AM
Final 1.001
Page 47 of 48

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/10/2018 08:50:00 AM

Work Order #: 576110

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Connie Hernandez Date: 02/12/2018

Connie Hernandez

Checklist reviewed by: Jessica Kramer Date: 02/12/2018

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: PLU 015H_2RP NA OrderNo.: 1803E18

Dear Adrian Baker:

Hall Environmental Analysis Laboratory received 6 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 **1803E18**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** BH-4R @ 3'
Project: PLU 015H_2RP NA **Collection Date:** 3/21/2018 2:15:00 PM
Lab ID: 1803E18-001 **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)	21	9.8		mg/Kg	1	3/30/2018 2:26:40 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2018 2:26:40 AM
Surr: DNOP	89.8	70-130		%Rec	1	3/30/2018 2:26:40 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	560	30		mg/Kg	20	4/3/2018 1:59:46 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**
Benzene	ND	0.023		mg/Kg	1	3/28/2018 7:26:07 PM
Toluene	ND	0.046		mg/Kg	1	3/28/2018 7:26:07 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/28/2018 7:26:07 PM
Xylenes, Total	ND	0.092		mg/Kg	1	3/28/2018 7:26:07 PM
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	3/28/2018 7:26:07 PM
Surr: Toluene-d8	92.5	70-130		%Rec	1	3/28/2018 7:26:07 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/28/2018 7:26:07 PM
Surr: BFB	115	70-130		%Rec	1	3/28/2018 7:26:07 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 **1803E18**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SW3R @ 2.5'
Project: PLU 015H_2RP NA **Collection Date:** 3/21/2018 2:15:00 PM
Lab ID: 1803E18-002 **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)	ND	9.4		mg/Kg	1	3/30/2018 2:48:30 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2018 2:48:30 AM
Surr: DNOP	91.0	70-130		%Rec	1	3/30/2018 2:48:30 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	650	30		mg/Kg	20	4/3/2018 2:12:11 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**
Benzene	ND	0.024		mg/Kg	1	3/29/2018 7:42:33 PM
Toluene	ND	0.048		mg/Kg	1	3/29/2018 7:42:33 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2018 7:42:33 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2018 7:42:33 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	3/29/2018 7:42:33 PM
Surr: Toluene-d8	85.1	70-130		%Rec	1	3/29/2018 7:42:33 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2018 10:30:59 PM
Surr: BFB	116	70-130		%Rec	1	3/28/2018 10:30:59 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 **1803E18**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS1R @ 2.5'
Project: PLU 015H_2RP NA **Collection Date:** 3/21/2018 2:20:00 PM
Lab ID: 1803E18-003 **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: **JME**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/30/2018 3:10:22 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2018 3:10:22 AM
Surr: DNOP	90.4	70-130		%Rec	1	3/30/2018 3:10:22 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	510	30		mg/Kg	20	4/3/2018 1:41:50 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**
Benzene	ND	0.024		mg/Kg	1	3/29/2018 8:05:38 PM
Toluene	ND	0.048		mg/Kg	1	3/29/2018 8:05:38 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2018 8:05:38 PM
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2018 8:05:38 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	3/29/2018 8:05:38 PM
Surr: Toluene-d8	87.7	70-130		%Rec	1	3/29/2018 8:05:38 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2018 10:54:05 PM
Surr: BFB	114	70-130		%Rec	1	3/28/2018 10:54:05 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 **1803E18**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS3R @ 1'
Project: PLU 015H_2RP NA **Collection Date:** 3/21/2018 4:40:00 PM
Lab ID: 1803E18-004 **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: **JME**
Diesel Range Organics (DRO)	460	94		mg/Kg	10	3/30/2018 2:42:14 PM
Motor Oil Range Organics (MRO)	990	470		mg/Kg	10	3/30/2018 2:42:14 PM
Surr: DNOP	0	70-130	S	%Rec	10	3/30/2018 2:42:14 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	150	30		mg/Kg	20	4/3/2018 1:54:14 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**
Benzene	ND	0.024		mg/Kg	1	3/29/2018 8:28:44 PM
Toluene	ND	0.048		mg/Kg	1	3/29/2018 8:28:44 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2018 8:28:44 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/29/2018 8:28:44 PM
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	3/29/2018 8:28:44 PM
Surr: Toluene-d8	91.0	70-130		%Rec	1	3/29/2018 8:28:44 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2018 11:17:10 PM
Surr: BFB	117	70-130		%Rec	1	3/28/2018 11:17:10 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 **1803E18**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS4R @ 2.5'
Project: PLU 015H_2RP NA **Collection Date:** 3/21/2018 5:20:00 PM
Lab ID: 1803E18-005 **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: **JME**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/30/2018 4:15:30 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2018 4:15:30 AM
Surr: DNOP	112	70-130		%Rec	1	3/30/2018 4:15:30 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	44	30		mg/Kg	20	4/3/2018 2:06:38 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**
Benzene	ND	0.023		mg/Kg	1	3/29/2018 8:51:51 PM
Toluene	ND	0.046		mg/Kg	1	3/29/2018 8:51:51 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/29/2018 8:51:51 PM
Xylenes, Total	ND	0.093		mg/Kg	1	3/29/2018 8:51:51 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	3/29/2018 8:51:51 PM
Surr: Toluene-d8	86.6	70-130		%Rec	1	3/29/2018 8:51:51 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/28/2018 11:40:15 PM
Surr: BFB	115	70-130		%Rec	1	3/28/2018 11:40:15 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 **1803E18**
Date Reported: **4/4/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Midland **Client Sample ID:** SS2R @ 2'
Project: PLU 015H_2RP NA **Collection Date:** 3/21/2018 5:45:00 PM
Lab ID: 1803E18-006 **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)	160	9.5		mg/Kg	1	3/30/2018 4:37:17 AM
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	3/30/2018 4:37:17 AM
Surr: DNOP	103	70-130		%Rec	1	3/30/2018 4:37:17 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	1400	75		mg/Kg	50	4/3/2018 2:24:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**
Benzene	ND	0.023		mg/Kg	1	3/29/2018 9:14:55 PM
Toluene	ND	0.046		mg/Kg	1	3/29/2018 9:14:55 PM
Ethylbenzene	ND	0.046		mg/Kg	1	3/29/2018 9:14:55 PM
Xylenes, Total	ND	0.092		mg/Kg	1	3/29/2018 9:14:55 PM
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	3/29/2018 9:14:55 PM
Surr: Toluene-d8	89.0	70-130		%Rec	1	3/29/2018 9:14:55 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/29/2018 12:03:12 AM
Surr: BFB	112	70-130		%Rec	1	3/29/2018 12:03:12 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#: **1803E18**

04-Apr-18

Client: XTO Midland

Project: PLU 015H_2RP NA

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			

Sample ID	**MB-37385**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37385**	RunNo:	**50271**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/3/2018**	SeqNo:	**1628346**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37385**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37385**	RunNo:	**50271**					
Prep Date:	**4/2/2018**	Analysis Date:	**4/3/2018**	SeqNo:	**1628347**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	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#: **1803E18**
04-Apr-18

Client: XTO Midland
Project: PLU 015H_2RP NA

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#: **1803E18**
04-Apr-18

Client: XTO Midland
Project: PLU 015H_2RP NA

Sample ID	**lcs-37273**	SampType:	**LCS4**	TestCode:	**EPA Method 8260B: Volatiles Short List**					
Client ID:	**BatchQC**	Batch ID:	**37273**	RunNo:	**50140**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624719**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.8	80	120			
Toluene	0.94	0.050	1.000	0	93.9	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.5	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.4	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID	**mb-37273**	SampType:	**MBLK**	TestCode:	**EPA Method 8260B: Volatiles Short List**					
Client ID:	**PBS**	Batch ID:	**37273**	RunNo:	**50140**					
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**	SeqNo:	**1624720**	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	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.44		0.5000		88.6	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#: **1803E18**

04-Apr-18

Client: XTO Midland

Project: PLU 015H_2RP NA

Sample ID	**1803e18-001ams**	SampType:	**MS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**BH-4R @ 3'**	Batch ID:	**37273**		RunNo:	**50140**				
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**		SeqNo:	**1624669**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.93	0	103	64.7	142			
Surr: BFB	520		498.5		104	70	130			

Sample ID	**1803e18-001amsd**	SampType:	**MSD**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**BH-4R @ 3'**	Batch ID:	**37273**		RunNo:	**50140**				
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**		SeqNo:	**1624670**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.78	0	103	64.7	142	1.10	20	
Surr: BFB	490		495.5		99.3	70	130	0	0	

Sample ID	**lcs-37273**	SampType:	**LCS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**37273**		RunNo:	**50140**				
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**		SeqNo:	**1624698**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	70	130			
Surr: BFB	490		500.0		97.8	70	130			

Sample ID	**mb-37273**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**37273**		RunNo:	**50140**				
Prep Date:	**3/27/2018**	Analysis Date:	**3/28/2018**		SeqNo:	**1624699**	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	550		500.0		109	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

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: 1803E18 RcptNo: 1

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

Completed By: Michelle Garcia 3/27/2018 11:52:07 AM Michelle Garcia

Reviewed By: 03/27/18

Labeled By JMO

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			

Released to Imaging: 2/28/2023 11:00:44 AM
Received by OCD: 2/28/2023 10:57:51 AM

Chain-of-Custody Record

Client: XTO Energy, Delware division	☒ Standard ☐ Rush
Kyle Litterll	Project Name: PLU #015H_2RP - NA
Mailing Addre: 3300 N. A. Street Suite 103 Midland, Texas 79705	Project #: 2RP - NA
Phone #: 433-704-5178	Project Manager: Adrian Baker
email or Fax#: abaker@ltenv.com	Sampler: Josh Adams
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	On Ice: ☒ Yes ☐ No
Accreditation: ☐ NELAP ☐ Other	Sample Temperature: 43°
☐ EDD (Type)	

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. 1803E18	TPH - 8015 DRO, MRO, GRO	BTEX - 8021	Chlorides - 300.1
3/21/2018	1415	SOIL	BH-4R @ 3'	(1) 4oz.	cool	001	X	X	X
3/21/2018	1415	SOIL	SW3R @ 2.5'	(1) 4oz.	cool	002	X	X	X
3/21/2018	1420	SOIL	SS1R @ 2.5'	(1) 4oz.	cool	003	X	X	X
3/21/2018	1640	SOIL	SS3R @ 1'	(1) 4oz.	cool	004	X	X	X
3/21/2018	1720	SOIL	SS4R @ 2.5'	(1) 4oz.	cool	005	X	X	X
3/21/2018	1745	SOIL	SS2R @ 2'	(1) 4oz.	cool	006	X	X	X

3/23/2018	Time: 0730	Relinquished by:	Received by:	Date: 3/23/18	Time: 0730
Date: 3/26/18	Time: 1900	Relinquished by:	Received by: (Olivier 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.

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

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

CONDITIONS

Action 191454

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 191454
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	2RP-4620 closed. Please refer to incident #NAB1804548640 in all future communication.	2/28/2023
bhall	Deferral approved. Incident #NAB1804548640 will remain in "Closure not approved" status until an approved closure report is submitted through the OCD Permitting website when remediation is complete.	2/28/2023