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

December 18, 2019

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

RE: Closure Request
Poker Lake Unit Big Sinks 25 Federal Battery
Remediation Permit Numbers 2RP-4327
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request report detailing site assessment and soil sampling activities at the Poker Lake Unit (PLU) Big Sinks 25 Federal Battery (Site), located in Unit O, Section 25, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacted soil resulting from a produced water release within lined containment at the Site.

The release is included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the New Mexico Oil Conservation Division (NMOCD) effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018. The release is categorized as a Tier IV site in the Compliance Agreement, meaning the release occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing. Based on the laboratory analytical results for soil samples collected at the Site, XTO is submitting this Closure Request, describing site assessment activities that have occurred and requesting no further action for the release event.

RELEASE BACKGROUND

On July 24, 2017, the water dump line on the heater-treater developed a corrosion hole. Approximately 45 barrels (bbls) of produced water were released within the lined containment around the process equipment. A vacuum truck recovered all 45 bbls of released fluid from within the lined containment. XTO reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141) on August 4, 2017, and was assigned Remediation Permit (RP) Number 2RP-4327 (Attachment 1).

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of 19.15.29.12 of the NMAC. Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) well 320956103503001, located approximately 6,529 feet southwest of the Site. The water well has a depth to groundwater of 446 feet and a total depth of 480 feet. Ground surface elevation at the water well location is 3,408 feet above mean sea level (AMSL), which is approximately 48 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash located approximately 2,162 feet west-northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a low-potential karst area.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- TPH: 2,500 mg/kg; and
- Chloride: 20,000 mg/kg.

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On October 21, 2019, LTE personnel inspected the Site to evaluate the release area and assess the soil surrounding the process equipment containment. Boreholes were advanced via hand auger at six locations around the containment to assess for potential soil impacts. Boreholes BH01 through BH06 were advanced to a depth of 2 feet bgs. Delineation soil samples were collected from each borehole from depths of 1 foot and 2 feet bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil sample locations were mapped utilizing a handheld Global Positing System (GPS) unit and are depicted on Figure 2.

The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0.

Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in all delineation soil samples collected from boreholes BH01 through BH06. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Boreholes were advanced at six locations around the process equipment containment release area to assess for potential soil impacts as a result of the July 24, 2017, produced water release. Laboratory analytical results for the delineation soil samples collected from boreholes BH01 through BH06 indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and no further remediation was required.

The release occurred within lined containment and all released fluids were recovered during initial response activities. Based on visual observations, field screening, and laboratory analytical results, no impacted soil was identified as a result of the historical release. XTO requests no further action for RP Number 2RP-4327. An updated NMOCD Form C-141 is included as Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Aimee Cole
Project Environmental Scientist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Mike Bratcher, NMOCD
Bureau of Land Management

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-4327)
Attachment 2	Lithologic/Soil Sample Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES

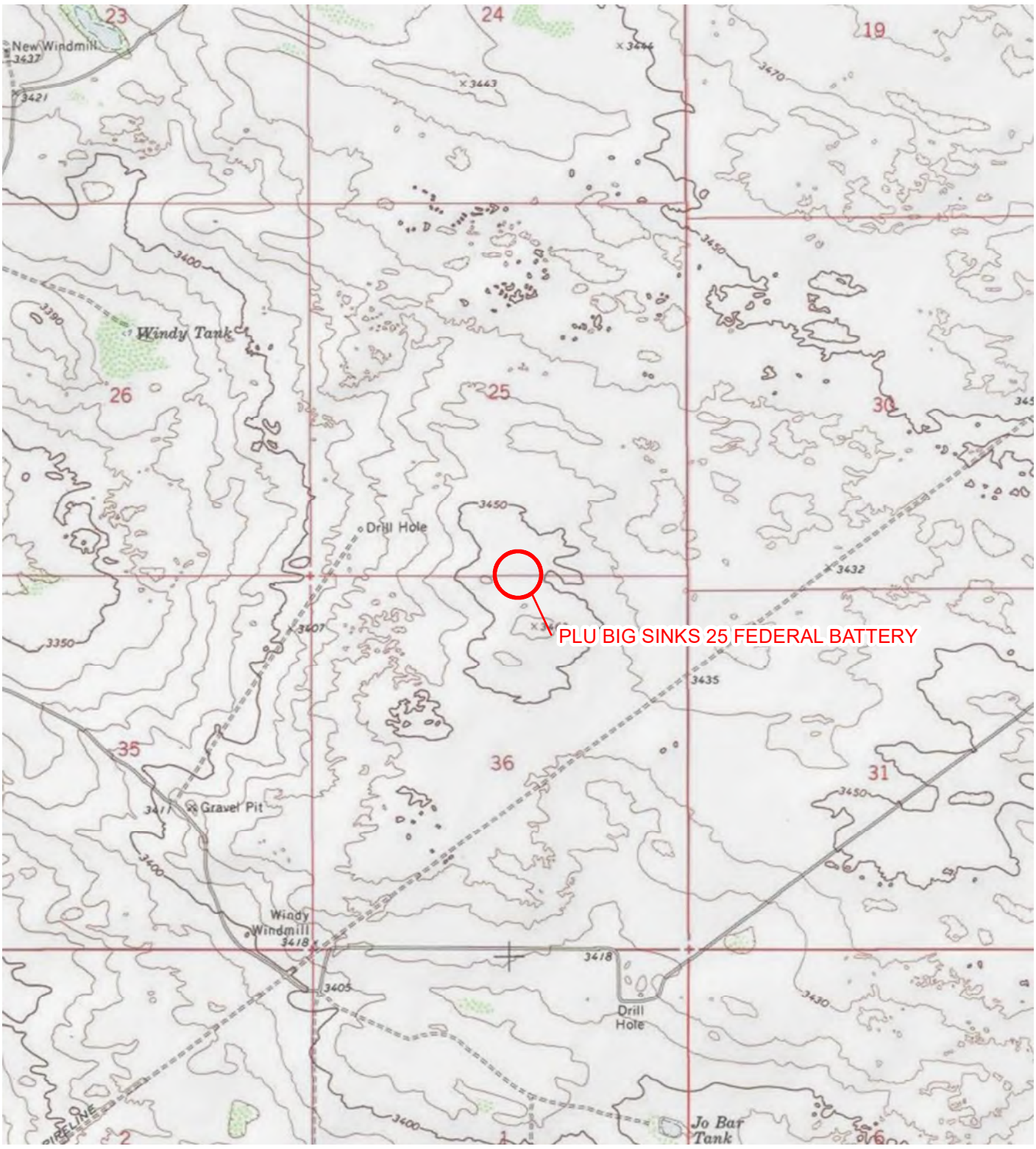


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4327

FIGURE 1
SITE LOCATION MAP
PLU BIG SINKS 25 FEDERAL BATTERY
UNIT O SEC 25 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918093_PLU CVX JV #005H_AKA BS25\012918093_FIG01_SL_2018_ALL_2RP.mxd

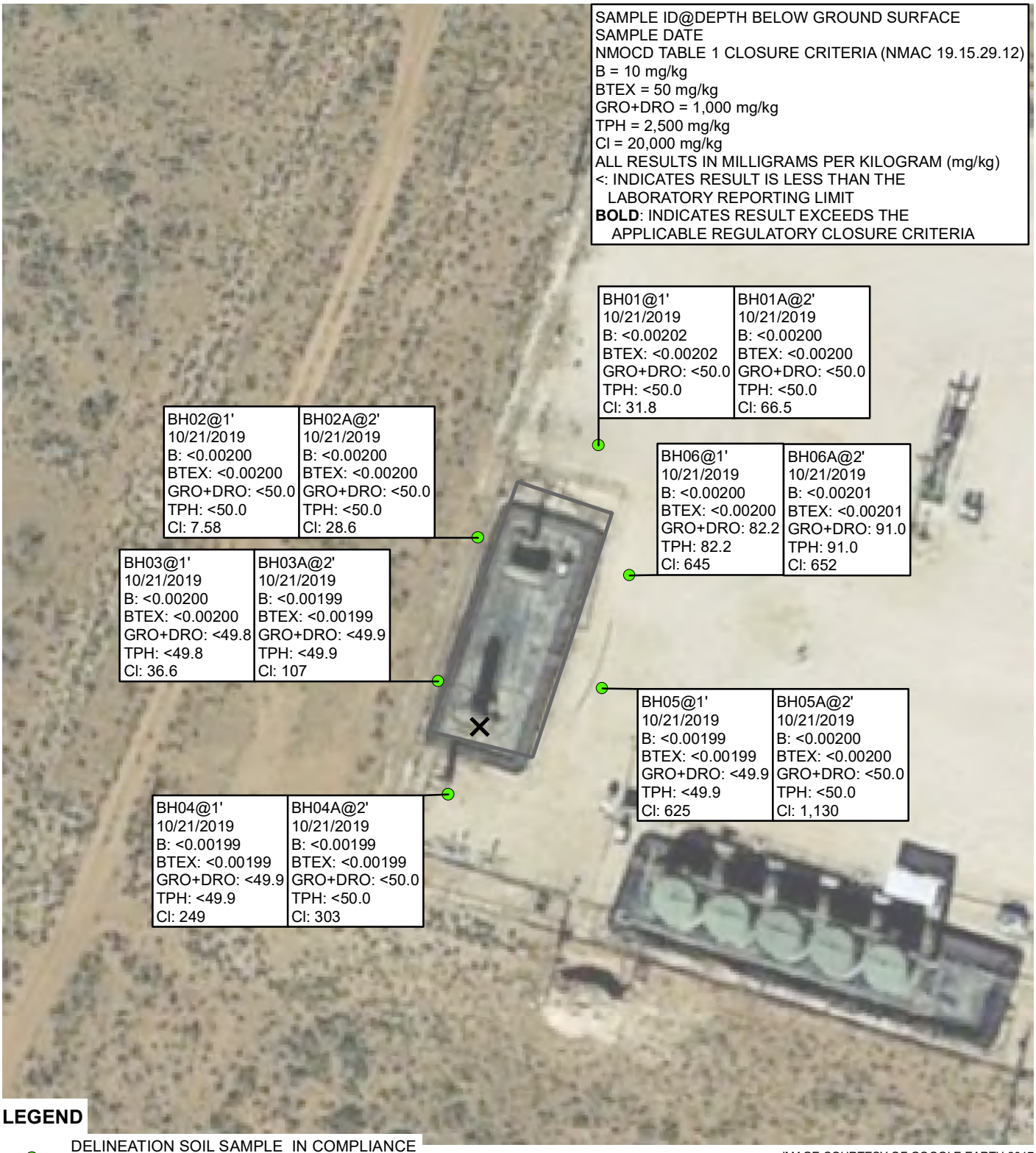


FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
PLU BIG SINKS 25 FEDERAL BATTERY
UNIT O SEC 25 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918093_PLU CVX JV #005H_AKA BS25\012918093_FIG03_DELINEATION_4327.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

PLU BIG SINKS 25 FEDERAL BATTERY
REMEDIATION PERMIT NUMBER 2RP-4327
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
BH01	1	10/21/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	31.8
BH01A	2	10/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	66.5
BH02	1	10/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	7.58
BH02A	2	10/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	28.6
BH03	1	10/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	36.6
BH03A	2	10/21/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	107
BH04	1	10/21/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	249
BH04A	2	10/21/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	303
BH05	1	10/21/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	625
BH05A	2	10/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	1,130
BH06	1	10/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	82.2	<49.9	82.2	82.2	645
BH06A	2	10/21/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	91.0	<49.8	91.0	91.0	652
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
ORO - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Division
mg/kg - milligrams per kilogram
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018
NE - not established
TPH - total petroleum hydrocarbons

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-4327)

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 04 2017
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 August 8, 2011

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

Release Notification and Corrective Action

nAB1722026431 BOPCO 2200737

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: PLU Big Sinks 25 Federal Battery (API - Poker Lake Unit CVX JV BS #005H)	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-39018

BOPCO

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	25	24S	30E	32	South	2400	East	Eddy

Latitude 32.181686° **Longitude** -103.833450°

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: Approx. 45 bbls	Volume Recovered: 45 bbls
Source of Release: Water dump line	Date and Hour of Occurrence: 7/24/2017 time unknown	Date and Hour of Discovery: 7/24/2017 11 am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher/Crystal Weaver (NMOCD), Jim Amos/Shelly Tucker (BLM)	
By Whom? Jacob Foust	Date and Hour 7/24/2017 3:14 pm by email	
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.*
The water dump line on the heater treater developed a hole due to corrosion and released fluid into plastic lined containment. The vessel was isolated until repair can be made.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the secondary containment area surrounding the process equipment. The area is surrounded by an earthen berm and also covered with a reinforced plastic liner. All visible fluids were recovered from the containment.

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

Signature:
Printed Name: Amy C Ruth
Title: Environmental Supervisor
E-mail Address: Amy_Ruth@xtoenergy.com
Date: 8/4/2017 Phone: 432-661-0571

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By

Approval Date: 8/7/17 Expiration Date: N/A

Conditions of Approval: See attached ☐ Attached

* Attach Additional Sheets If Necessary

Please refer to the New Mexico Oil Conservation Division Website for updated form(s) at: http://www.emnrd.state.nm.us/OCD/forms.html Thank you

2RP-4327

8/4/17 AB

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	2RP-4327
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-4327
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.181686 Longitude W 103.833450
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: PLU Big Sinks 25 Federal Battery	Site Type: Production Well Facility
Date Release Discovered: 7/24/2017	API# *(if applicable):* 30-015-39018

Unit Letter	Section	Township	Range	County
O	25	24S	32E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 45	Volume Recovered (bbls): 45
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The water dump line on the heater treater developed a hole due to corrosion and released fluid into plastic lined containment. All released fluid was recovered.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4327
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Release volume was greater than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? By Jacob Foust via email to Mike Bratcher/Crystal Weaver (NMOCD), Jim Amos/Shelly Tucker (BLM), on 7/24/2017 at 3:14 pm.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

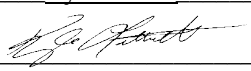
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:
N/A

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 12-18-2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4327
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4327
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 12-18-2019

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

OCD Only

Received by: Date:

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4327
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 12-18-2019

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

OCD Only

Received by: Date:

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Brittany Hall Date: 2/21/2023

Printed Name: Brittany Hall Title: Environmental Specialist

ATTACHMENT 2: LITHOLOGIC / SOIL SAMPLE LOGS

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

Identifier: BH01	Date: 10.21.19
Project Name: PLU Big Sinks 25 Federal Battery	RP Number: 2RP-4327
Logged By: SL	Method: Hand Auger
Hole Diameter: 2"	Total Depth: 2'
Lat/Long:	Field Screening: PID Chloride

LITHOLOGIC / SOIL SAMPLING LOG

Comments: TD @ 2'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
M	<1 179	0.2	N	BH01	0 1	1	SP-SM	1-2 Sand, Brown, no odor, no stain, m-f, poorly graded, trace silt, trace caliche
M	<1	0.2	N	BH01A	2	2		
					3 4 5 6 7 8 9 10 11 12			TD @ 2'

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

Identifier:	Date:
BH02	10-21-19
Project Name:	**RP Number:**
PLU Big Sinks 25 Federal Battery	2RP-4327
Logged By: SL	**Method:** Hand Auger
Hole Diameter: 24	**Total Depth:** 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: (PID) Chloride

Comments: TD @ 2'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
M	<1	0.3	BH02	1	1	1	SP-SM	1-2 Sand, Brown, no odor, no stain, m-f, poorly graded, trace silt, trace caliche
M	<1	0.9	BH02A	2	2	2		
					3			TD @ 2'
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
BH03	10.21.19
Project Name:	**RP Number:**
PLU Big Sinks 25 Federal Battery	2RP-4327
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SL / Method: Hand Auger
Lat/Long:	Field Screening: PID, Chloride / Hole Diameter: 2" / Total Depth: 2'

Comments: TD @ 2'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
M	Cl <179	1.4	N	BH03	0	1	SP+SM	
M	1.2 <179	0.7	N	BH03A	1			
					2	2		
					3			TD @ 2'
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
BH04	10.21.19
Project Name: PLU Big Sinks 25 federal Battery	**RP Number:** 2RP-4327
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SL / Method: Hand Auger
Lat/Long:	Field Screening: PID Chloride / Hole Diameter: 2" / Total Depth: 2'

Comments: TD @ 2'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			1-2 Sandy clay, Brown, m-f, no odor, no staining, poorly graded, trace silt
M	1.8	1.8	N	BH04	1	1	CL	
	252							
M	<1	0.6	N	BH04A	2	2		
	<179							
					3			TD @ 2'
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
BH05	10.21.19
Project Name:	**RP Number:**
PLU Big Sinks 25 Federal Battery	2RP-4327
Logged By: SL	**Method:** Hand Auger
Hole Diameter: 2"	**Total Depth:** 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: PID Chloride

Comments: TD @ 2'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			1-2
M	2.2	1.7	N	BH05	1	1	CL	Sandy clay, Brown, m-f, no odor, no stain, poorly graded, trace silt
M	3.8	1.3	N	BH05A	2	2		
					3			TD @ 2'
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
BH06	10-21-19
Project Name:	**RP Number:**
PLU Big Sinks 25 federal battery	2RP-4327
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SL / Method: Hand Auger
Lat/Long:	Field Screening: PID / Chloride — Hole Diameter: 2" — Total Depth: 2'

Comments: TD @ 2'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
N	2.8	1.3	N	BH06	0–1	1	SP-SM	1-2 Sand, with some caliche gravel, brown, tan, no odor, no stain, mst, poorly graded, trace silt
M	3	1.5	N	BH06A	1–2	2		
					2–12			TD @ 2'

ATTACHMENT 3: PHOTOGRAPHIC LOG

View of process equipment containment release area.

Project: 012918093	XTO Energy, Inc. PLU Big Sinks 25 Federal Battery	LTE Advancing Opportunity
April 2019	Photographic Log	

View of process equipment containment release area.

Project: 012918093	XTO Energy, Inc. PLU Big Sinks 25 Federal Battery	LTE Advancing Opportunity
April 2019	Photographic Log	

View of process equipment containment release area.

Project: 012918093	XTO Energy, Inc. PLU Big Sinks 25 Federal Battery	Advancing Opportunity
April 2019	Photographic Log	

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

Analytical Report 640652

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU Big Sinks 25 Federal Battery

2RP-4327

28-OCT-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

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

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

28-OCT-19

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

Reference: XENCO Report No(s): **640652**
PLU Big Sinks 25 Federal Battery
Project Address:

Dan Moir:

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) 640652. 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. 640652 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

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

Sample Cross Reference 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	10-21-19 12:20	1 ft	640652-001
BH01A	S	10-21-19 12:30	2 ft	640652-002
BH02	S	10-21-19 12:50	1 ft	640652-003
BH02A	S	10-21-19 13:00	2 ft	640652-004
BH03	S	10-21-19 13:20	1 ft	640652-005
BH03A	S	10-21-19 13:30	2 ft	640652-006
BH04	S	10-21-19 13:50	1 ft	640652-007
BH04A	S	10-21-19 14:00	2 ft	640652-008
BH05	S	10-21-19 14:20	1 ft	640652-009
BH05A	S	10-21-19 14:30	2 ft	640652-010
BH06	S	10-21-19 14:50	1 ft	640652-011
BH06A	S	10-21-19 15:00	2 ft	640652-012

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU Big Sinks 25 Federal Battery

Project ID: *2RP-4327*
Work Order Number(s): *640652*

Report Date: *28-OCT-19*
Date Received: *10/22/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3105494 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 640652-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012

Lab Sample ID 640652-001 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.
Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 640652-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 640652

LT Environmental, Inc., Arvada, CO

Project Name: PLU Big Sinks 25 Federal Battery

Project Id: 2RP-4327
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Oct-22-19 10:50 am
Report Date: 28-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640652-001		640652-002		640652-003		640652-004		640652-005		640652-006	
	Field Id:	BH01		BH01A		BH02		BH02A		BH03		BH03A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-21-19 12:20		Oct-21-19 12:30		Oct-21-19 12:50		Oct-21-19 13:00		Oct-21-19 13:20		Oct-21-19 13:30	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00	
	Analyzed:	Oct-26-19 15:37		Oct-26-19 15:57		Oct-26-19 16:17		Oct-26-19 16:37		Oct-26-19 16:57		Oct-26-19 17:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00403	0.00403	<0.00399	0.00399	<0.00400	0.00400	<0.00400	0.00400	<0.00401	0.00401	<0.00398	0.00398
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40	
	Analyzed:	Oct-23-19 13:35		Oct-23-19 13:50		Oct-23-19 13:55		Oct-23-19 14:00		Oct-23-19 14:05		Oct-23-19 14:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		31.8	5.00	66.5	5.05	7.58	4.99	28.6	4.97	36.6	5.01	107	4.95
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00	
	Analyzed:	Oct-23-19 22:56		Oct-23-19 23:59		Oct-24-19 00:21		Oct-24-19 00:42		Oct-24-19 01:02		Oct-24-19 01:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9
Total GRO-DRO		<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9
Total TPH		<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 640652

LT Environmental, Inc., Arvada, CO

Project Name: PLU Big Sinks 25 Federal Battery

Project Id: 2RP-4327
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Oct-22-19 10:50 am
Report Date: 28-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640652-007		640652-008		640652-009		640652-010		640652-011		640652-012	
	Field Id:	BH04		BH04A		BH05		BH05A		BH06		BH06A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-21-19 13:50		Oct-21-19 14:00		Oct-21-19 14:20		Oct-21-19 14:30		Oct-21-19 14:50		Oct-21-19 15:00	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00		Oct-24-19 15:00	
	Analyzed:	Oct-26-19 17:37		Oct-26-19 17:58		Oct-26-19 18:18		Oct-26-19 18:38		Oct-26-19 19:56		Oct-26-19 20:16	
	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	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40		Oct-23-19 12:40	
	Analyzed:	Oct-23-19 14:25		Oct-23-19 14:30		Oct-23-19 14:35		Oct-23-19 14:40		Oct-23-19 14:45		Oct-23-19 15:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		249	5.04	303	4.98	625	5.00	1130	5.03	645	5.05	652	4.96
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00		Oct-23-19 14:00	
	Analyzed:	Oct-24-19 01:44		Oct-24-19 02:05		Oct-24-19 02:26		Oct-24-19 02:47		Oct-24-19 04:05		Oct-24-19 04:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	82.2	49.9	91.0	49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8
Total GRO-DRO		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	82.2	49.9	91.0	49.8
Total TPH		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	82.2	49.9	91.0	49.8

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-001	Date Collected:	10.21.19 12.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31.8**	5.00	mg/kg	10.23.19 13.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.23.19 22.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.23.19 22.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.23.19 22.56	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.23.19 22.56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.23.19 22.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.23.19 22.56	
o-Terphenyl	84-15-1	89	%	70-135	10.23.19 22.56	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-001	Date Collected:	10.21.19 12.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.26.19 15.37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.26.19 15.37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.26.19 15.37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.26.19 15.37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.26.19 15.37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.26.19 15.37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.26.19 15.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.26.19 15.37	
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.26.19 15.37	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-002	Date Collected:	10.21.19 12.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.5**	5.05	mg/kg	10.23.19 13.50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.23.19 23.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.23.19 23.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.23.19 23.59	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.23.19 23.59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.23.19 23.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.23.19 23.59	
o-Terphenyl	84-15-1	103	%	70-135	10.23.19 23.59	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-002	Date Collected:	10.21.19 12.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.26.19 15.57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.26.19 15.57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.26.19 15.57	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.26.19 15.57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.26.19 15.57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.26.19 15.57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.26.19 15.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.26.19 15.57	
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.26.19 15.57	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-003	Date Collected:	10.21.19 12.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.58**	4.99	mg/kg	10.23.19 13.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 00.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 00.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 00.21	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 00.21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 00.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.24.19 00.21	
o-Terphenyl	84-15-1	96	%	70-135	10.24.19 00.21	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-003	Date Collected:	10.21.19 12.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.26.19 16.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.26.19 16.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.26.19 16.17	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.26.19 16.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.26.19 16.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.26.19 16.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.26.19 16.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.26.19 16.17	
1,4-Difluorobenzene	540-36-3	97	%	70-130	10.26.19 16.17	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-004	Date Collected:	10.21.19 13.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.6**	4.97	mg/kg	10.23.19 14.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 00.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 00.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 00.42	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 00.42	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 00.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	10.24.19 00.42	
o-Terphenyl	84-15-1	85	%	70-135	10.24.19 00.42	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-004	Date Collected:	10.21.19 13.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.26.19 16.37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.26.19 16.37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.26.19 16.37	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.26.19 16.37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.26.19 16.37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.26.19 16.37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.26.19 16.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	10.26.19 16.37	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.26.19 16.37	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-005	Date Collected:	10.21.19 13.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.6**	5.01	mg/kg	10.23.19 14.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.24.19 01.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.24.19 01.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.24.19 01.02	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.24.19 01.02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.24.19 01.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	10.24.19 01.02	
o-Terphenyl	84-15-1	85	%	70-135	10.24.19 01.02	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-005	Date Collected:	10.21.19 13.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.26.19 16.57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.26.19 16.57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.26.19 16.57	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.26.19 16.57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.26.19 16.57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.26.19 16.57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.26.19 16.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.26.19 16.57	
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.26.19 16.57	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-006	Date Collected:	10.21.19 13.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**107**	4.95	mg/kg	10.23.19 14.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 01.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 01.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 01.23	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 01.23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 01.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.24.19 01.23	
o-Terphenyl	84-15-1	86	%	70-135	10.24.19 01.23	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-006	Date Collected:	10.21.19 13.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.26.19 17.17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.26.19 17.17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.26.19 17.17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.26.19 17.17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.26.19 17.17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.26.19 17.17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.26.19 17.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.26.19 17.17	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.26.19 17.17	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-007	Date Collected:	10.21.19 13.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**249**	5.04	mg/kg	10.23.19 14.25		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 01.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 01.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 01.44	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 01.44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 01.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.24.19 01.44	
o-Terphenyl	84-15-1	105	%	70-135	10.24.19 01.44	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-007	Date Collected:	10.21.19 13.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.26.19 17.37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.26.19 17.37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.26.19 17.37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.26.19 17.37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.26.19 17.37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.26.19 17.37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.26.19 17.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.26.19 17.37	
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.26.19 17.37	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-008	Date Collected:	10.21.19 14.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**303**	4.98	mg/kg	10.23.19 14.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 02.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 02.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 02.05	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 02.05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 02.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.24.19 02.05	
o-Terphenyl	84-15-1	90	%	70-135	10.24.19 02.05	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-008	Date Collected:	10.21.19 14.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.26.19 17.58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.26.19 17.58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.26.19 17.58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.26.19 17.58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.26.19 17.58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.26.19 17.58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.26.19 17.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.26.19 17.58	
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.26.19 17.58	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-009	Date Collected:	10.21.19 14.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**625**	5.00	mg/kg	10.23.19 14.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 02.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 02.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 02.26	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 02.26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 02.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.24.19 02.26	
o-Terphenyl	84-15-1	91	%	70-135	10.24.19 02.26	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-009	Date Collected:	10.21.19 14.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.26.19 18.18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.26.19 18.18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.26.19 18.18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.26.19 18.18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.26.19 18.18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.26.19 18.18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.26.19 18.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	10.26.19 18.18	
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.26.19 18.18	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-010	Date Collected:	10.21.19 14.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1130**	5.03	mg/kg	10.23.19 14.40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105286			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 02.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 02.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 02.47	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 02.47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 02.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.24.19 02.47	
o-Terphenyl	84-15-1	92	%	70-135	10.24.19 02.47	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-010	Date Collected:	10.21.19 14.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.26.19 18.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.26.19 18.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.26.19 18.38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.26.19 18.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.26.19 18.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.26.19 18.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.26.19 18.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.26.19 18.38	
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.26.19 18.38	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-011	Date Collected:	10.21.19 14.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**645**	5.05	mg/kg	10.23.19 14.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105206			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 04.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	**82.2**	49.9	mg/kg	10.24.19 04.05		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 04.05	U	1
Total GRO-DRO	PHC628	**82.2**	49.9	mg/kg	10.24.19 04.05		1
Total TPH	PHC635	**82.2**	49.9	mg/kg	10.24.19 04.05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.24.19 04.05	
o-Terphenyl	84-15-1	102	%	70-135	10.24.19 04.05	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-011	Date Collected:	10.21.19 14.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.26.19 19.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.26.19 19.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.26.19 19.56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.26.19 19.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.26.19 19.56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.26.19 19.56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.26.19 19.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.26.19 19.56	
1,4-Difluorobenzene	540-36-3	94	%	70-130	10.26.19 19.56	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-012	Date Collected:	10.21.19 15.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.23.19 12.40	Basis:	Wet Weight
Seq Number:	3105210			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**652**	4.96	mg/kg	10.23.19 15.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.23.19 14.00	Basis:	Wet Weight
Seq Number:	3105206			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.24.19 04.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	**91.0**	49.8	mg/kg	10.24.19 04.23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.24.19 04.23	U	1
Total GRO-DRO	PHC628	**91.0**	49.8	mg/kg	10.24.19 04.23		1
Total TPH	PHC635	**91.0**	49.8	mg/kg	10.24.19 04.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	10.24.19 04.23	
o-Terphenyl	84-15-1	97	%	70-135	10.24.19 04.23	

Certificate of Analytical Results 640652

LT Environmental, Inc., Arvada, CO

PLU Big Sinks 25 Federal Battery

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.22.19 10.50
Lab Sample Id:	640652-012	Date Collected:	10.21.19 15.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.24.19 15.00	Basis:	Wet Weight
Seq Number:	3105494			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.26.19 20.16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.26.19 20.16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.26.19 20.16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.26.19 20.16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.26.19 20.16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.26.19 20.16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.26.19 20.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	10.26.19 20.16	
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.26.19 20.16	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 640652

LT Environmental, Inc.

PLU Big Sinks 25 Federal Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3105210 — Matrix: Solid — Date Prep: 10.23.19
MB Sample Id: 7688720-1-BLK — LCS Sample Id: 7688720-1-BKS — LCSD Sample Id: 7688720-1-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	260	104	254	102	90-110	2	20	mg/kg	10.23.19 13:25	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3105210 — Matrix: Soil — Date Prep: 10.23.19
Parent Sample Id: 640652-001 — MS Sample Id: 640652-001 S — MSD Sample Id: 640652-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	31.8	250	288	102	292	104	90-110	1	20	mg/kg	10.23.19 13:40	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3105210 — Matrix: Soil — Date Prep: 10.23.19
Parent Sample Id: 640652-011 — MS Sample Id: 640652-011 S — MSD Sample Id: 640652-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	645	253	872	90	879	92	90-110	1	20	mg/kg	10.23.19 14:50	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105206 — Matrix: Solid — Date Prep: 10.23.19
MB Sample Id: 7688740-1-BLK — LCS Sample Id: 7688740-1-BKS — LCSD Sample Id: 7688740-1-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	1170	117	1130	113	70-135	3	20	mg/kg	10.23.19 20:54	
Diesel Range Organics (DRO)	<15.0	1000	1030	103	1060	106	70-135	3	20	mg/kg	10.23.19 20:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		129		122		70-135	%	10.23.19 20:54
o-Terphenyl	103		116		119		70-135	%	10.23.19 20:54

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

QC Summary 640652

LT Environmental, Inc.

PLU Big Sinks 25 Federal Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105286 — Matrix: Solid — Date Prep: 10.23.19
MB Sample Id: 7688739-1-BLK — LCS Sample Id: 7688739-1-BKS — LCSD Sample Id: 7688739-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	984	98	988	99	70-135	0	20	mg/kg	10.23.19 22:15	
Diesel Range Organics (DRO)	<15.0	1000	913	91	922	92	70-135	1	20	mg/kg	10.23.19 22:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		100		100		70-135	%	10.23.19 22:15
o-Terphenyl	94		99		102		70-135	%	10.23.19 22:15

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105206 — Matrix: Solid — Date Prep: 10.23.19
MB Sample Id: 7688740-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.23.19 20:35	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105286 — Matrix: Solid — Date Prep: 10.23.19
MB Sample Id: 7688739-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.23.19 21:54	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105206 — Matrix: Soil — Date Prep: 10.23.19
Parent Sample Id: 640655-001 — MS Sample Id: 640655-001 S — MSD Sample Id: 640655-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	1230	123	1240	124	70-135	1	20	mg/kg	10.23.19 21:50	
Diesel Range Organics (DRO)	<15.0	999	1200	120	1220	122	70-135	2	20	mg/kg	10.23.19 21:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		129		70-135	%	10.23.19 21:50
o-Terphenyl	123		122		70-135	%	10.23.19 21:50

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

QC Summary 640652

LT Environmental, Inc.

PLU Big Sinks 25 Federal Battery

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3105286 | Matrix: Soil | Date Prep: 10.23.19
Parent Sample Id: 640652-001 | MS Sample Id: 640652-001 S | MSD Sample Id: 640652-001 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)	20.6	997	1040	102	1030	101	70-135	1	20	mg/kg	10.23.19 23:17	
Diesel Range Organics (DRO)	<15.0	997	993	100	983	99	70-135	1	20	mg/kg	10.23.19 23:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		98		70-135	%	10.23.19 23:17
o-Terphenyl	95		93		70-135	%	10.23.19 23:17

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3105494 | Matrix: Solid | Date Prep: 10.24.19
MB Sample Id: 7688837-1-BLK | LCS Sample Id: 7688837-1-BKS | LCSD Sample Id: 7688837-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.114	114	70-130	4	35	mg/kg	10.26.19 13:37	
Toluene	<0.00200	0.100	0.105	105	0.0994	99	70-130	5	35	mg/kg	10.26.19 13:37	
Ethylbenzene	<0.00200	0.100	0.105	105	0.0953	95	70-130	10	35	mg/kg	10.26.19 13:37	
m,p-Xylenes	<0.00400	0.200	0.211	106	0.189	95	70-130	11	35	mg/kg	10.26.19 13:37	
o-Xylene	<0.00200	0.100	0.106	106	0.0951	95	70-130	11	35	mg/kg	10.26.19 13:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		97		101		70-130	%	10.26.19 13:37
4-Bromofluorobenzene	95		106		93		70-130	%	10.26.19 13:37

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3105494 | Matrix: Soil | Date Prep: 10.24.19
Parent Sample Id: 640652-001 | MS Sample Id: 640652-001 S | MSD Sample Id: 640652-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0522	53	0.112	112	70-130	73	35	mg/kg	10.26.19 14:17	XF
Toluene	<0.00198	0.0990	0.0299	30	0.105	105	70-130	111	35	mg/kg	10.26.19 14:17	XF
Ethylbenzene	<0.00198	0.0990	0.0225	23	0.106	106	70-130	130	35	mg/kg	10.26.19 14:17	XF
m,p-Xylenes	<0.00396	0.198	0.0477	24	0.223	112	70-130	130	35	mg/kg	10.26.19 14:17	XF
o-Xylene	<0.00198	0.0990	0.0289	29	0.118	118	70-130	121	35	mg/kg	10.26.19 14:17	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	10.26.19 14:17
4-Bromofluorobenzene	119		117		70-130	%	10.26.19 14:17

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

Chain of Custody

XENCO LABORATORIES
Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Work Order No: 640052

Page 1 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slo@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	PLU Big Sinks 25 Federal Battery	Turn Around	
Project Number:	2RP - 4327	Routine	☑
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes / No	Wet Ice:	Yes / No	
Temperature (°C):	1.0	Thermometer ID		
Received Intact:	Yes / No	TNM007		
Cooler Custody Seals:	Yes / No / N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes / No / N/A	Total Containers:	12	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH01	S	10-21-19	1220	1'	1	X	X	X
BH01A	S	10.21.19	1230	2'	1	X	X	X
BH02	S	10.21.19	1250	1'	1	X	X	X
BH02A	S	10.21.19	1300	2'	1	X	X	X
BH03	S	10.21.19	1320	1'	1	X	X	X
BH03A	S	10-21-19	1330	2'	1	X	X	X
BH04	S	10.21.19	1350	1'	1	X	X	X
BH04A	S	10.21.19	1400	2'	1	X	X	X
BH05	S	10-21-19	1420	1'	1	X	X	X
BH05A	S	10-21-19	1430	2'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Spencer Lo	Anna Byers	10/22/19 1005	2 Anna Byers	Courtney	10/22/19 10:50
			4		
			6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: 640652

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 2 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849 Email:		slo@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	PLU Big Sinks 25 Federal Battery	Turn Around	
Project Number:	2RP-4327	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH06	S	10.21.19	1450	1	1	X	X	X
BH06A	S	10.21.19	1500	2	1	X	X	X

Work Order Notes

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Spencer Lo	Anna Byers	10/22/19 1005	2 Anna Byers	Courtney	10/22/19 10:50
			4		
			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **50572**

Date/Time: 10/22/19 12:18
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.: 776785946410

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
640652-001	S	BH01	10/21/19 12:20	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-001	S	BH01	10/21/19 12:20	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-001	S	BH01	10/21/19 12:20	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-002	S	BH01A	10/21/19 12:30	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-002	S	BH01A	10/21/19 12:30	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-002	S	BH01A	10/21/19 12:30	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-003	S	BH02	10/21/19 12:50	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-003	S	BH02	10/21/19 12:50	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-003	S	BH02	10/21/19 12:50	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-004	S	BH02A	10/21/19 13:00	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-004	S	BH02A	10/21/19 13:00	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-004	S	BH02A	10/21/19 13:00	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-005	S	BH03	10/21/19 13:20	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-005	S	BH03	10/21/19 13:20	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-005	S	BH03	10/21/19 13:20	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-006	S	BH03A	10/21/19 13:30	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-006	S	BH03A	10/21/19 13:30	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-006	S	BH03A	10/21/19 13:30	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-007	S	BH04	10/21/19 13:50	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-007	S	BH04	10/21/19 13:50	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-007	S	BH04	10/21/19 13:50	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-008	S	BH04A	10/21/19 14:00	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-008	S	BH04A	10/21/19 14:00	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-008	S	BH04A	10/21/19 14:00	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-009	S	BH05	10/21/19 14:20	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	

Inter-Office Shipment

IOS Number **50572**

Date/Time: 10/22/19 12:18
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.: 776785946410

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
640652-009	S	BH05	10/21/19 14:20	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-009	S	BH05	10/21/19 14:20	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-010	S	BH05A	10/21/19 14:30	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-010	S	BH05A	10/21/19 14:30	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-010	S	BH05A	10/21/19 14:30	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-011	S	BH06	10/21/19 14:50	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	
640652-011	S	BH06	10/21/19 14:50	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-011	S	BH06	10/21/19 14:50	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-012	S	BH06A	10/21/19 15:00	SW8015MOD_NM	TPH by SW8015 Mod	10/28/19	11/04/19	JKR	GRO-DRO PHCC10C28 PI	
640652-012	S	BH06A	10/21/19 15:00	E300_CL	Chloride by EPA 300	10/28/19	04/18/20	JKR	CL	
640652-012	S	BH06A	10/21/19 15:00	SW8021B	BTEX by EPA 8021B	10/28/19	11/04/19	JKR	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 10/22/2019

Received By: Brianna Teel

Date Received: 10/23/2019 11:02

Cooler Temperature: 0.3

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 50572

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Elizabeth McClellan **Date Sent:** 10/22/2019 12:18 PM

Received By: Brianna Teel **Date Received:** 10/23/2019 11:02 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Brianna Teel Date: 10/23/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/22/2019 10:50:00 AM

Work Order #: 640652

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**Yes**	
#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)?	**Yes**	Subbed to Midland
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 10/22/2019

Checklist reviewed by: Jessica Kramer Date: 10/22/2019

Jessica Kramer

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

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

CONDITIONS

Action 188854

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 188854
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	Site will need to meet the requirements of 19.15.29.13 NMAC at time of plugging and abandonment.	2/21/2023