

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	NRM2017437201
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

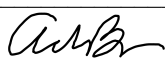
State of New Mexico
Oil Conservation Division

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

Initial Response

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

☐ The source of the release has been stopped. ☐ The impacted area has been secured to protect human health and the environment. ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature:  _____	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>6/22/2020</u>

NRM2017437201

Location:	PLU 213 Battery	
Spill Date:	6/6/2020	
Area 1		
Approximate Area =	2545.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =		
0.03		
VOLUME OF LEAK		
Total Crude Oil =	1.57	bbls
Area 2		
Approximate Area =	3456.00	sq. ft.
Average Saturation (or depth) of spill =	1.00	inches
Average Porosity Factor =		
0.03		
VOLUME OF LEAK		
Total Crude Oil =	1.54	bbls
Area 3		
Approximate Area =	7679.00	sq. ft.
Average Saturation (or depth) of spill =	0.13	inches
Average Porosity Factor =		
0.15		
VOLUME OF LEAK		
Total Crude Oil =	2.14	bbls
Area 4		
Approximate Area =	18516.00	sq. ft.
Average Saturation (or depth) of spill =	0.06	inches
Average Porosity Factor =		
0.15		
VOLUME OF LEAK		
Total Crude Oil =	2.58	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	7.83	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	2.00	bbls

Incident ID	NRM2017437201
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>> 100</u> (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

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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: _____

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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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: _____

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



LT Environmental, Inc.

3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

October 30, 2020

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

**RE: Closure Request
Poker Lake Unit 213 Battery
Incident Number NRM2017437201
Eddy County, New Mexico**

To Whom it May Concern:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), is pleased to present the following Closure Request detailing site assessment, soil sampling, and excavation activities at the Poker Lake Unit (PLU) 213 Battery (Site) in Unit P, Section 18, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of crude oil at the Site. Based on the excavation activities and results of the soil sampling events, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NRM2017437201.

RELEASE BACKGROUND

On June 6, 2020, a heater treater fire tube gasket malfunctioned, resulting in the release of 7.83 barrels (bbls) of crude oil onto the surface of the well pad and into the pasture area north of the pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 2 bbls of crude oil were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on June 18, 2020 and was assigned Incident Number NRM2017437201.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. Two permitted groundwater wells were located less than 1 mile to the north and south of the Site. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 321321103544101, located approximately 0.69 miles north of the Site. The groundwater well was most recently measured in January 1998 has a reported depth to groundwater of 168 feet



bgs and an unknown total depth. Ground surface elevation at the groundwater well location is 3,192 feet above mean sea level (amsl), which is approximately 5 feet lower in elevation than the Site. The next closest permitted groundwater well with depth to groundwater data is NMOSE well C02109, located approximately 0.75 miles south of the Site. The groundwater well has a reported depth to groundwater of 150 feet bgs and an unknown total depth. Ground surface elevation at the groundwater well location is 3,164 feet amsl, which is approximately 33 feet lower in elevation than the Site. There are five additional groundwater wells within a 2-mile radius of the Site that indicate regional depth to groundwater is greater than 100 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1. There are no regional or Site-specific hydrological conditions, such as shallow surface water, karst features, wetlands, or vegetation that suggest the Site is conducive to shallow groundwater.

The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 600 feet south 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 not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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
- Chloride: 20,000 mg/kg

A reclamation closure criteria of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On July 16 and September 15, 2020, LTE personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. LTE personnel



collected eleven preliminary assessment soil samples (SS01 through SS11) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the impacted soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

The preliminary 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 transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 and SS08 through SS11, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and reclamation criteria. Laboratory analytical results for preliminary soil samples SS02 through SS07 exceeded the Closure Criteria and/or the reclamation criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

EXCAVATION AND DELINEATION SOIL SAMPLING ACTIVITIES

Between July 30, 2020 and October 22, 2020, LTE personnel were at the Site to oversee site assessment and excavation activities.

Potholes were advanced via backhoe at six locations within the release extent to assess the lateral and vertical extent of impacted soil. Potholes PH01 through PH06 were advanced to depths ranging from 3 feet to 5 feet bgs. Delineation soil samples were collected from each pothole from depths ranging from 2 feet to 5 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The pothole and delineation soil sample locations are depicted on Figure 3.

Impacted soil was excavated from the release area as indicated by visible staining, field screening activities, and laboratory analytical results for the preliminary and delineation soil samples. Excavation activities were performed using track-mounted backhoe, transport vehicle, and hydrovac. The excavation occurred on pad near the production equipment and in the adjacent pasture north of the pad. To direct excavation activities, LTE screened soil for volatile aromatic



hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Photographic documentation is included in Attachment 3.

Following removal of impacted soil, LTE collected 5-point composite soil samples at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 through SW26 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 4 feet bgs. Composite soil samples FS01 through FS34, FS21A, FS22A, and FS26A through FS28A were collected from the floor of the excavation from depths ranging from 0.5 feet bgs to 4 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 4.

The excavation area totaled approximately 6,800 square feet. A total of approximately 430 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation areas were secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 and SS08 through SS11 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and reclamation criteria. Laboratory analytical results for preliminary soil samples SS02 and SS04 through SS07 indicated that chloride and/or TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria. Laboratory analytical results for preliminary soil samples SS02, SS03, and SS04 indicated that TPH concentrations exceeded the reclamation criteria.

Laboratory analytical results for the delineation soil samples collected from potholes PH01, PH02, PH03, PH04, and PH06 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and compliant with the reclamation criteria in samples collected in the pasture from the top four feet of the subsurface. Laboratory analytical results indicated that TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria in delineation soil sample PH05.

Based on laboratory analytical results for the preliminary and delineation soil samples, impacted soil was excavated. Laboratory analytical results for excavation sidewall samples SW01 through SW04, SW06, SW07, and SW09 through SW26, and floor samples FS01 through FS20, FS23 through FS25, and FS29 through FS34 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and compliant with the reclamation criteria in samples collected in the pasture from the top four feet of the subsurface.

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Excavation sidewall samples SW05 and SW08 and floor samples FS21, FS22, FS26, FS27, and FS28 initially exceeded the Closure Criteria and/or the reclamation criteria. Additional soil was removed from these areas and subsequent soil samples SW25, SW26, FS21A, FS22A, FS26A, FS27A, and FS28A collected from the final excavation extent, were compliant. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the June 6, 2020 release of crude oil. Laboratory analytical results for excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, soil samples collected in the pasture from the top four feet of the subsurface were compliant with the reclamation criteria. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The disturbed pasture area will be re-seeded with an approved BLM seed mixture.

Initial response efforts which included removal of freestanding fluids via hydrovac and excavation of impacted soil have mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. LTE and XTO believe these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests no further action for Incident Number NRM2017437201.

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

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Spencer Lo".

Spencer Lo
Staff Geologist

A handwritten signature in black ink, appearing to read "Ashley L. Ager".

Ashley L. Ager, P.G.
Senior Geologist



District II
Page 6

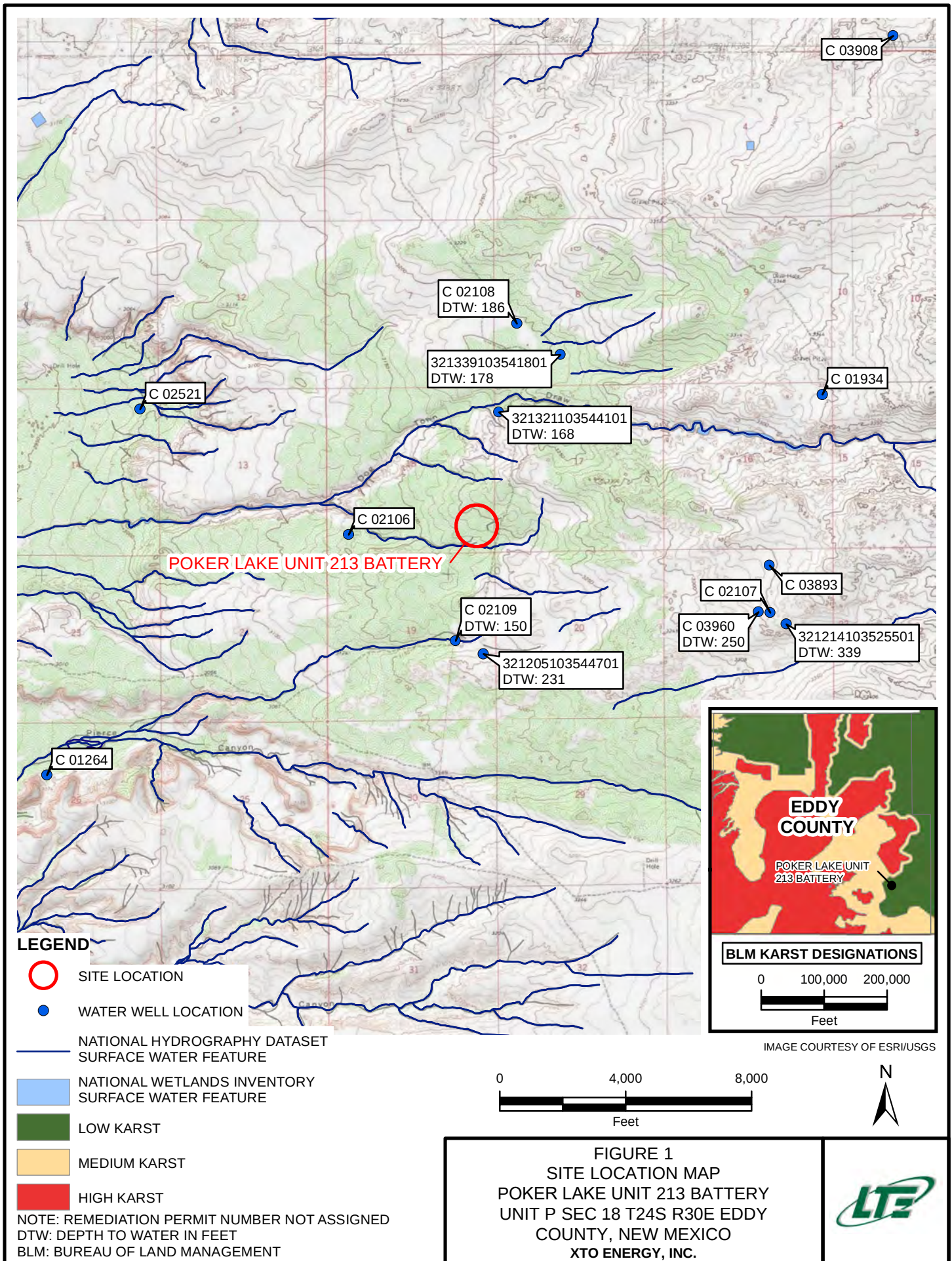
cc: Kyle Littrell, XTO
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, Bureau of Land Management

Attachments:

Figure 1 Site Location Map
Figure 2 Preliminary Soil Sample Locations
Figure 3 Delineation Soil Sample Locations
Figure 4 Excavation Soil Sample Locations
Table 1 Soil Analytical Results
Attachment 1 Referenced Well Records
Attachment 2 Lithologic/Sampling Log
Attachment 3 Photographic Log
Attachment 4 Laboratory Analytical Reports

FIGURES





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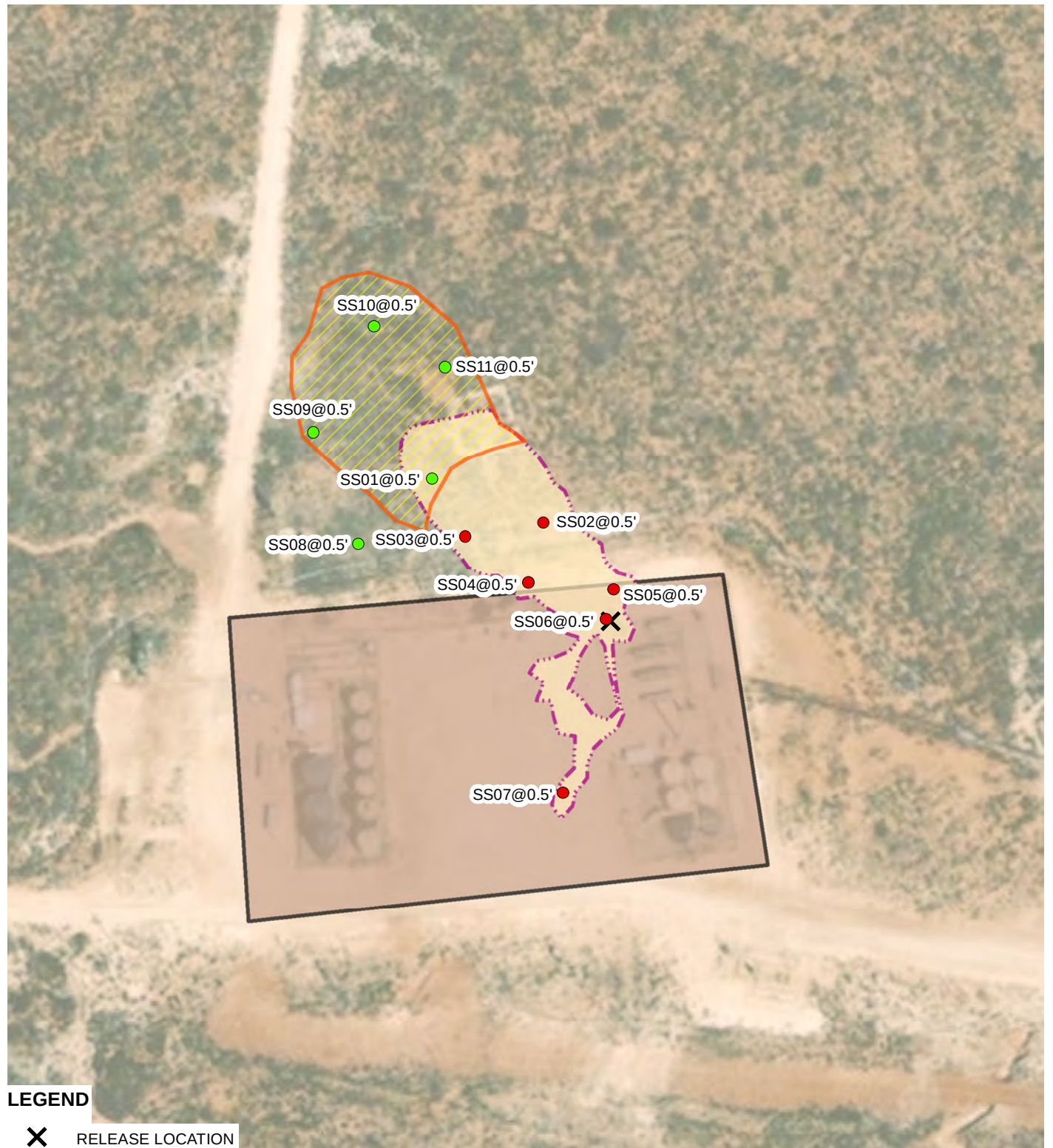


IMAGE COURTESY OF ESRI

LEGEND

RELEASE LOCATION

PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS
EXCEEDING APPLICABLE CLOSURE CRITERIAPRELIMINARY SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

RELEASE EXTENT



OVERSPRAY AREA



WELLPAD EXTENT

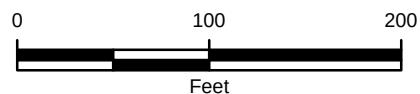
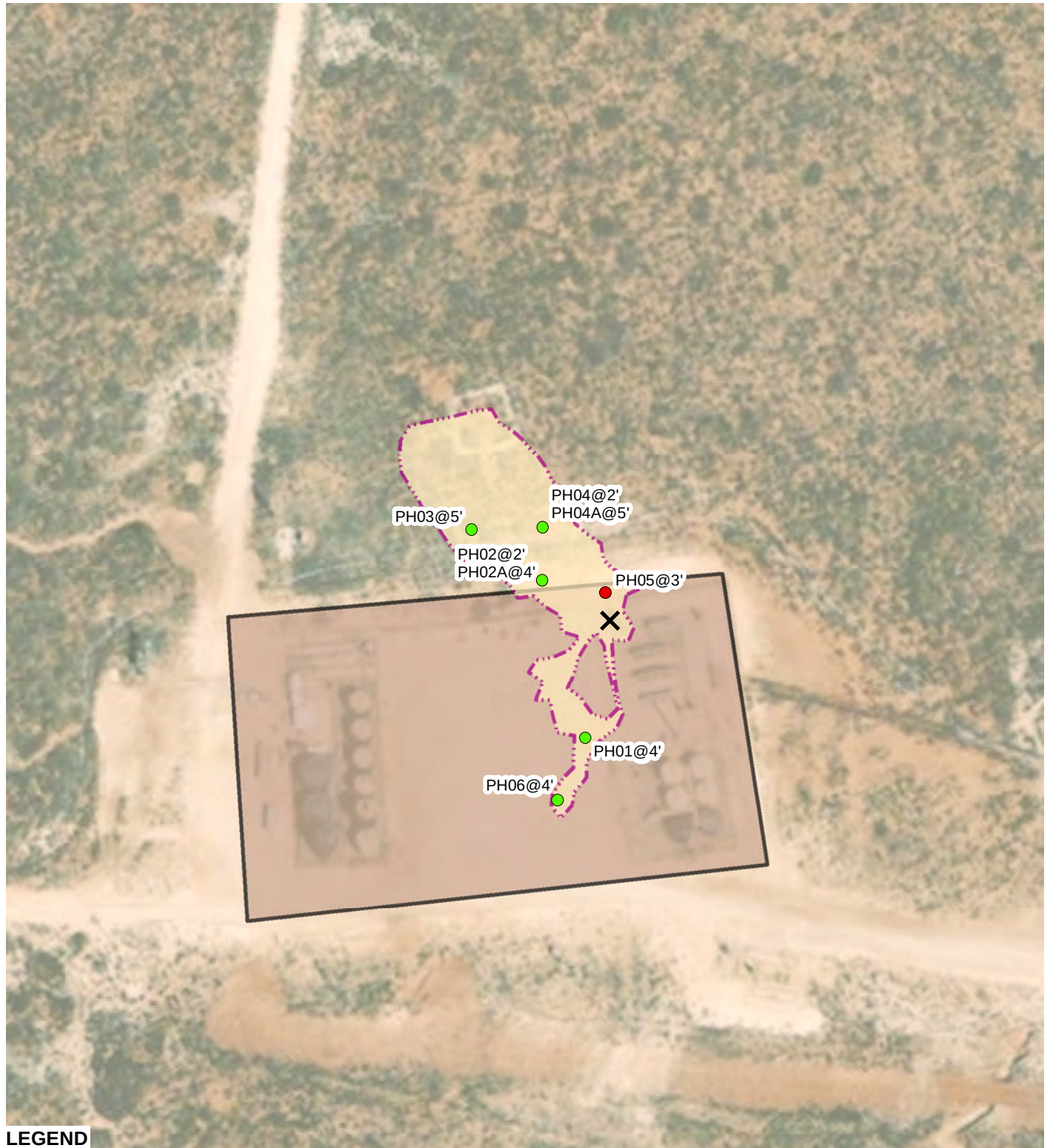
NOTE: REMEDIATION PERMIT NUMBER NOT ASSIGNED
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT 213 BATTERY
 UNIT P SEC 18 T24S R30E
 EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



**LEGEND**

- X** RELEASE LOCATION
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

- RELEASE EXTENT
- WELLPAD EXTENT

NOTE: REMEDIATION PERMIT NUMBER NOT ASSIGNED
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

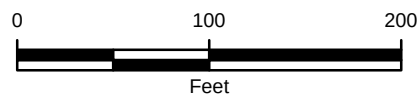
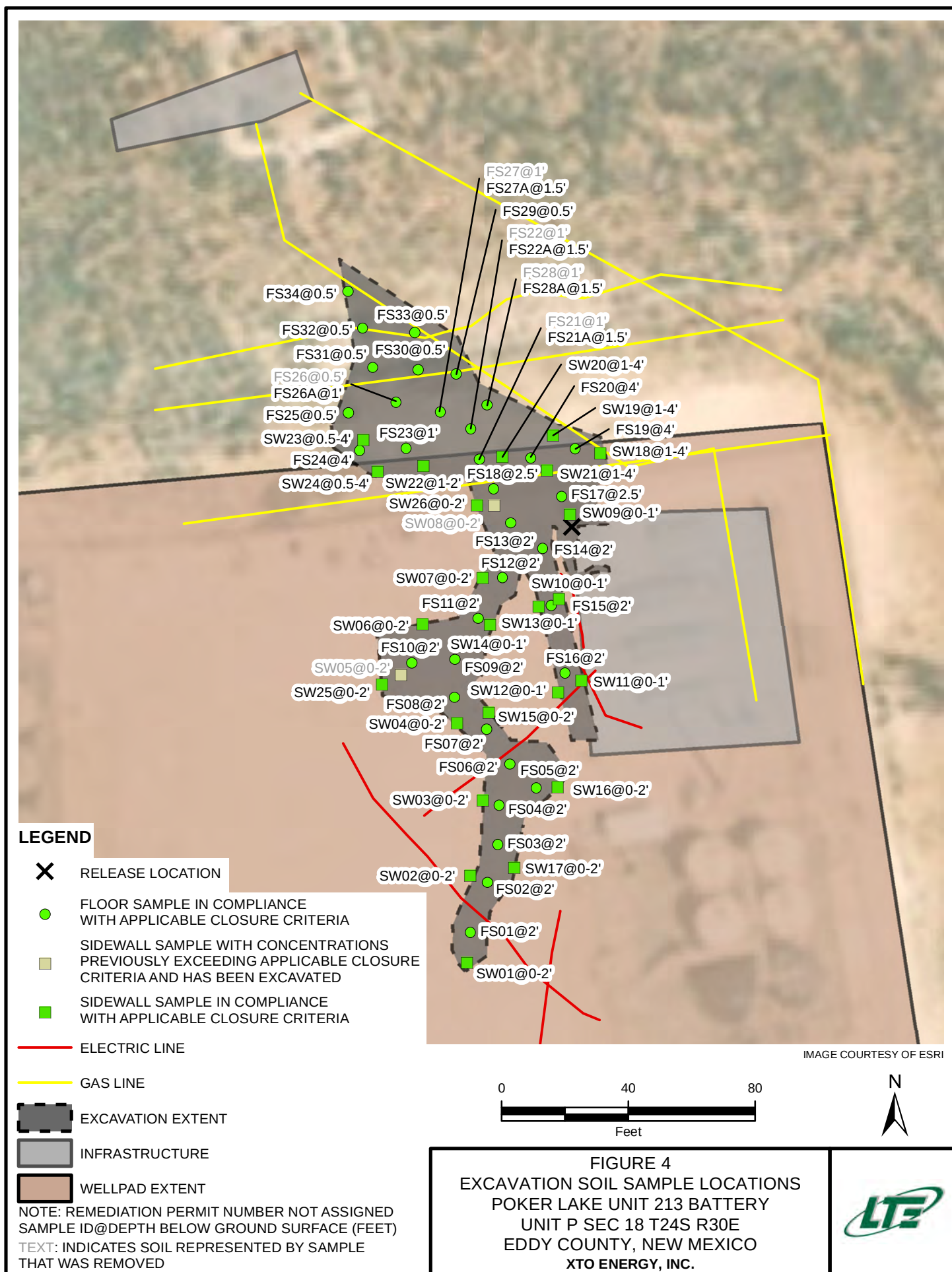


FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT 213 BATTERY
 UNIT P SEC 18 T24S R30E
 EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.





TABLES



TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT 213 BATTERY
INCIDENT ID NRM2017437201
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)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000
SS01	0.5	07/16/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	84.1	<50.2	84.1	84.1	10.2*
SS02	0.5	07/16/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<250	3,890	917	3,890	4,810	501*
SS03	0.5	07/16/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	364	92.2	364	456	22.0*
SS04	0.5	07/16/2020	<0.0998	5.34	6.40	23.8	35.5	1,820	47,200	7,920	49,000	56,900	86.9*
SS05	0.5	07/16/2020	<0.100	4.58	7.62	35.6	47.8	2,960	49,200	5,620	52,200	57,800	209
SS06	0.5	07/16/2020	<0.0998	<0.0998	<0.0998	8.62	8.62	1,070	35,000	4,340	36,100	40,400	15,900
SS07	0.5	07/16/2020	<0.100	3.47	7.02	32.8	43.3	2,250	40,800	6,570	43,100	49,600	497
SS08	0.5	09/15/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	<9.92*
SS09	0.5	09/15/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1*
SS10	0.5	09/15/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	<9.90*
SS11	0.5	09/15/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	<9.92*
PH01	4	07/30/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	142	<50.1	142	142	262
PH02	2	07/30/2020	<0.00200	<0.00200	0.0109	<0.00200	0.0109	<50.2	<50.2	<50.2	<50.2	<50.2	101*
PH02A	4	07/30/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	167*
PH03	5	07/30/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	14.2*
PH04	2	07/30/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	10.6*
PH04A	5	07/30/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	14.2*
PH05	3	07/30/2020	<0.0501	7.20	6.93	26.2	40.4	2,120	9,540	745	11,700	12,400	93.2
PH06	4	07/30/2020	<0.00202	0.00271	0.0149	0.0706	0.0882	<49.9	255	<49.9	255	255	121
SW01	0 - 2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	42.0
SW02	0 - 2	08/17/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	237	<50.3	237	237	574
SW03	0 - 2	08/17/2020	<0.00200	<0.00200	<0.00200	0.0120	0.0120	<49.8	228	<49.8	228	228	143
SW04	0 - 2	08/17/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	39.2

**TABLE 1
SOIL ANALYTICAL RESULTS**

**POKER LAKE UNIT 213 BATTERY
INCIDENT ID NRM2017437201
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)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000
SW05	0 - 2	08/17/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	1,100	103	1,100	1,200	544
SW06	0 - 2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	236	<50.1	236	236	203
SW07	0 - 2	08/17/2020	<0.00199	<0.00199	<0.00199	0.0275	0.0275	<50.0	171	<50.0	171	171	158
SW08	0 - 2	08/17/2020	<0.00200	<0.00200	<0.00200	0.00558	0.00558	<50.0	1,520	159	1,520	1680	371
SW09	0 - 1	08/17/2020	<0.00200	<0.00200	<0.00200	0.0384	0.0384	<50.0	<50.0	<50.0	<50.0	<50.0	322
SW10	0 - 1	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	207
SW11	0 - 1	08/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	27.8
SW12	0 - 1	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	33.5
SW13	0 - 1	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	63.1	<50.0	63.1	63.1	433
SW14	0 - 1	08/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	630
SW15	0 - 2	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	150
SW16	0 - 2	08/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	48.2
SW17	0 - 2	08/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	54.3	<50.0	54.3	54.3	334
SW18	1 - 4	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	103
SW19	1 - 4	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	19.3*
SW20	1 - 4	08/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	45.8
SW21	1 - 4	08/18/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	33.6
SW22	1 - 2	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	87.7
SW23	0.5 - 4	08/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	189*
SW24	0.5 - 4	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<9.98
SW25	0 - 2	08/24/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	689
SW26	0 - 2	08/24/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	71.2	<49.9	71.2	71.2	1,010
FS01	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	35.0

TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT 213 BATTERY
INCIDENT ID NRM2017437201
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)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000
FS02	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	659	107	659	766	72.4
FS03	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	71.9
FS04	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	187	<49.8	187	187	131
FS05	2	08/17/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	32.2
FS06	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	159	<49.9	159	159	83.6
FS07	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	631	<49.9	631	631	69.5
FS08	2	08/17/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	611	63.9	611	675	114
FS09	2	08/17/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	630	61.8	630	692	94.1
FS10	2	08/17/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	85.0	<50.3	85.0	85.0	218
FS11	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	193	<50.2	193	193	423
FS12	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	320	<50.3	320	320	516
FS13	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	486	<50.2	486	486	1,290
FS14	2	08/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	945	115	945	1,060	88.2
FS15	2	08/17/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	248	<49.9	248	248	863
FS16	2	08/17/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	324	<50.1	324	324	316
FS17	2.5	08/19/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	739
FS18	2.5	08/19/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	91.8
FS19	4	08/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	418	51.3	418	469	66.4
FS20	4	08/18/2020	<0.00199	<0.00199	0.0171	<0.00199	0.0171	<49.9	108	<49.9	108	108	251
FS21	1	08/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	1,630	160	1,630	1,790	269
FS21A	1.5	08/24/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	147	<49.9	147	147	188
FS22	1	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	444	53.3	444	497	77.1*
FS22A	1.5	09/15/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	82.8*

**TABLE 1
SOIL ANALYTICAL RESULTS**

**POKER LAKE UNIT 213 BATTERY
INCIDENT ID NRM2017437201
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)
NMOCDD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000
FS23	1	08/18/2020	<0.00200	<0.00200	0.0311	<0.00200	0.0311	<49.9	<49.9	<49.9	<49.9	<49.9	12.1*
FS24	4	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	510*
FS25	0.5	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	12.9*
FS26	0.5	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	575	80.9	575	656	353*
FS26A	1.0	09/15/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	89.9*
FS27	1	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	105	<50.3	105	105	42.7*
FS27A	1.5	09/15/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	88.8*
FS28	1	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	226	<49.9	226	226	106*
FS28A	1.5	10/22/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.4	97.6	<50.4	97.6	97.6	96.4*
FS29	0.5	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	33.3*
FS30	0.5	08/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	41.2*
FS31	0.5	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	16.5*
FS32	0.5	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	26.7*
FS33	0.5	08/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	89.4	<49.8	89.4	89.4	34.1*
FS34	0.5	08/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	18.1*

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCDD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

* - indicates sample was collected in area to be reclaimed after remediation is complete;

closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

Greyed data represents samples that were excavated



ATTACHMENT 1: REFERENCED WELL RECORD





New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02109	1	2	4	19	24S	30E	602130	3563412 

x		
Driller License:	Driller Company:	
Driller Name: UNKNOWN		
Drill Start Date:	Drill Finish Date: 12/31/1963	Plug Date:
Log File Date:	PCW Rcv Date:	Source:
Pump Type:	Pipe Discharge Size:	Estimated Yield: 40 GPM
Casing Size: 7.00	Depth Well: 130 feet	Depth Water: 150 feet

x

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)					(NAD83 UTM in meters)		
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02108	1	3	08	24S	30E	602702	3566487*	
Driller License:		Driller Company:							
Driller Name:		UNKNOWN							
Drill Start Date:		Drill Finish Date:			12/31/1963		Plug Date:		
Log File Date:		PCW Rcv Date:			Source:				
Pump Type:		Pipe Discharge Size:					Estimated Yield: 16 GPM		
Casing Size: 7.00		Depth Well:			200 feet		Depth Water: 186 feet		

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	03960 POD1	1	3	2	21	24S	30E	605062	3563712 

Driller License:	1753	Driller Company:	VANGUARD WATER WELLS		
Driller Name:	JACOBO FRIESSEN				
Drill Start Date:	11/12/2016	Drill Finish Date:	11/12/2016	Plug Date:	
Log File Date:	11/17/2016	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:	6.00	Depth Well:	475 feet	Depth Water:	250 feet

Water Bearing Stratifications:	Top	Bottom	Description
	182	250	Sandstone/Gravel/Conglomerate
	402	460	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	250	290
	395	435

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POINT OF DIVERSION SUMMARY

USGS 321205103544701 24S.30E.19.42113

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°12'05", Longitude 103°54'47" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 452 feet

Land surface altitude: 3,188 feet above NAVD88.

Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

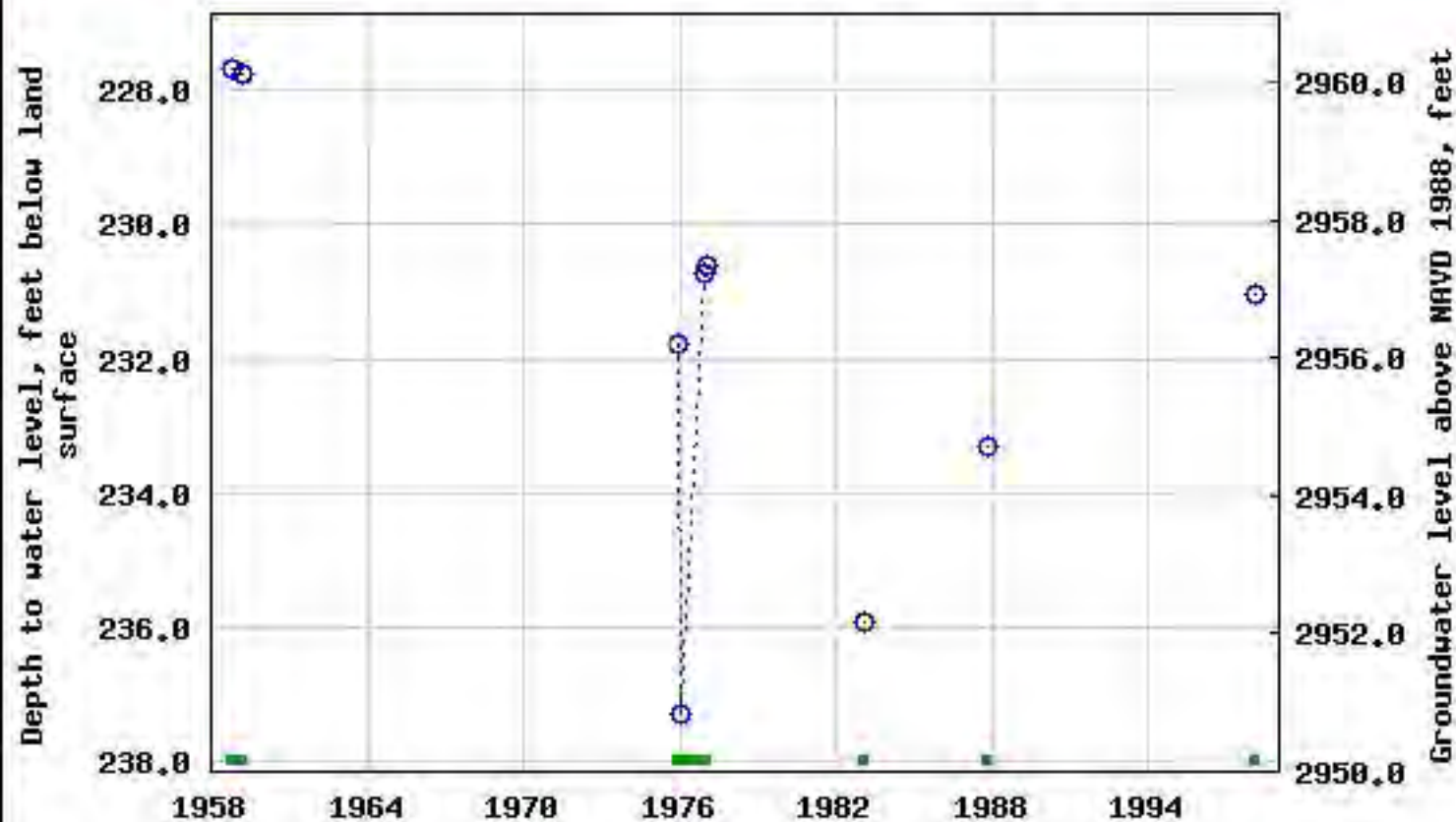
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-10-24	1998-01-27	9
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data
Inquiries](#)

USGS 321205103544701 24S.30E.19.42113



USGS 321214103525501 24S.30E.21.23144

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°12'14", Longitude 103°52'55" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,371 feet above NAVD88.

Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

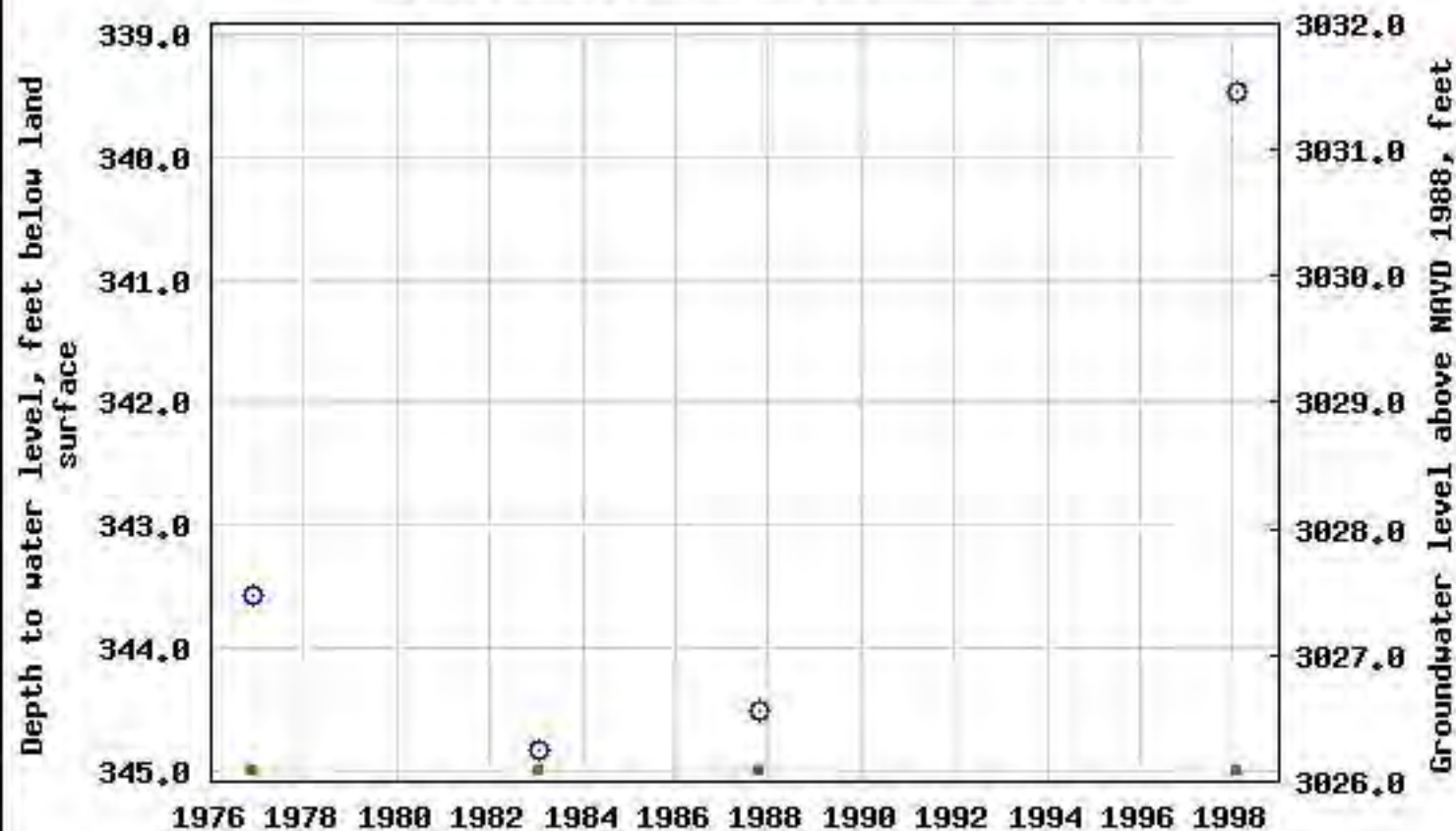
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1976-12-01	1998-01-28	4
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data
Inquiries](#)

USGS 321214103525501 24S.30E.21.23144



USGS 321321103544101 24S.30E.18.22144**Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°13'21", Longitude 103°54'41" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: not determined.
Land surface altitude: 3,192 feet above NAVD88.

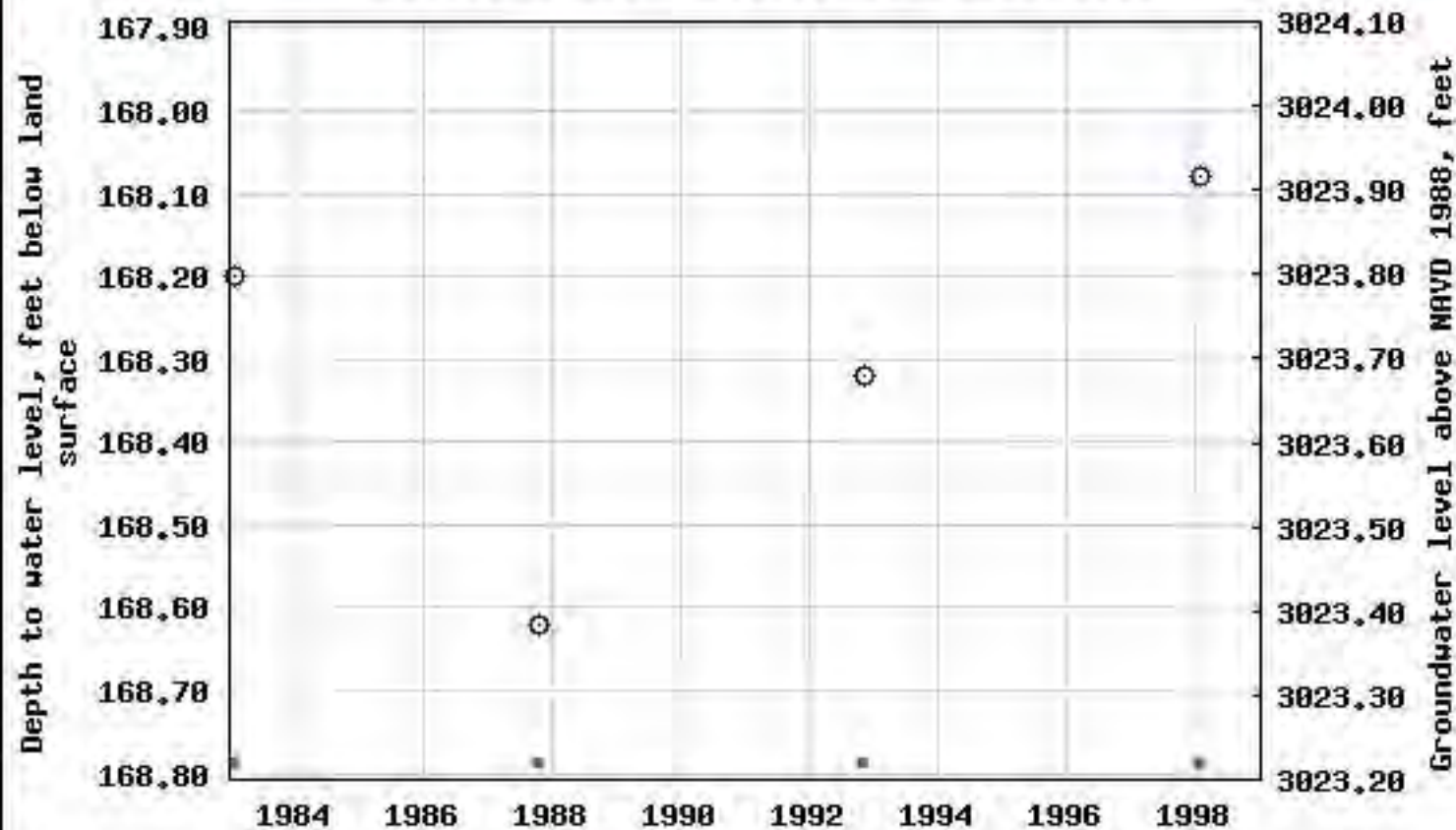
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1983-02-01	1998-01-27	4
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to [New Mexico Water Science Center Water-Data
Inquiries](#)

USGS 321321103544101 24S.30E.18.22144



USGS 321339103541801 24S.30E.08.33222

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°13'39", Longitude 103°54'18" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 192 feet

Land surface altitude: 3,207 feet above NAVD88.

Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

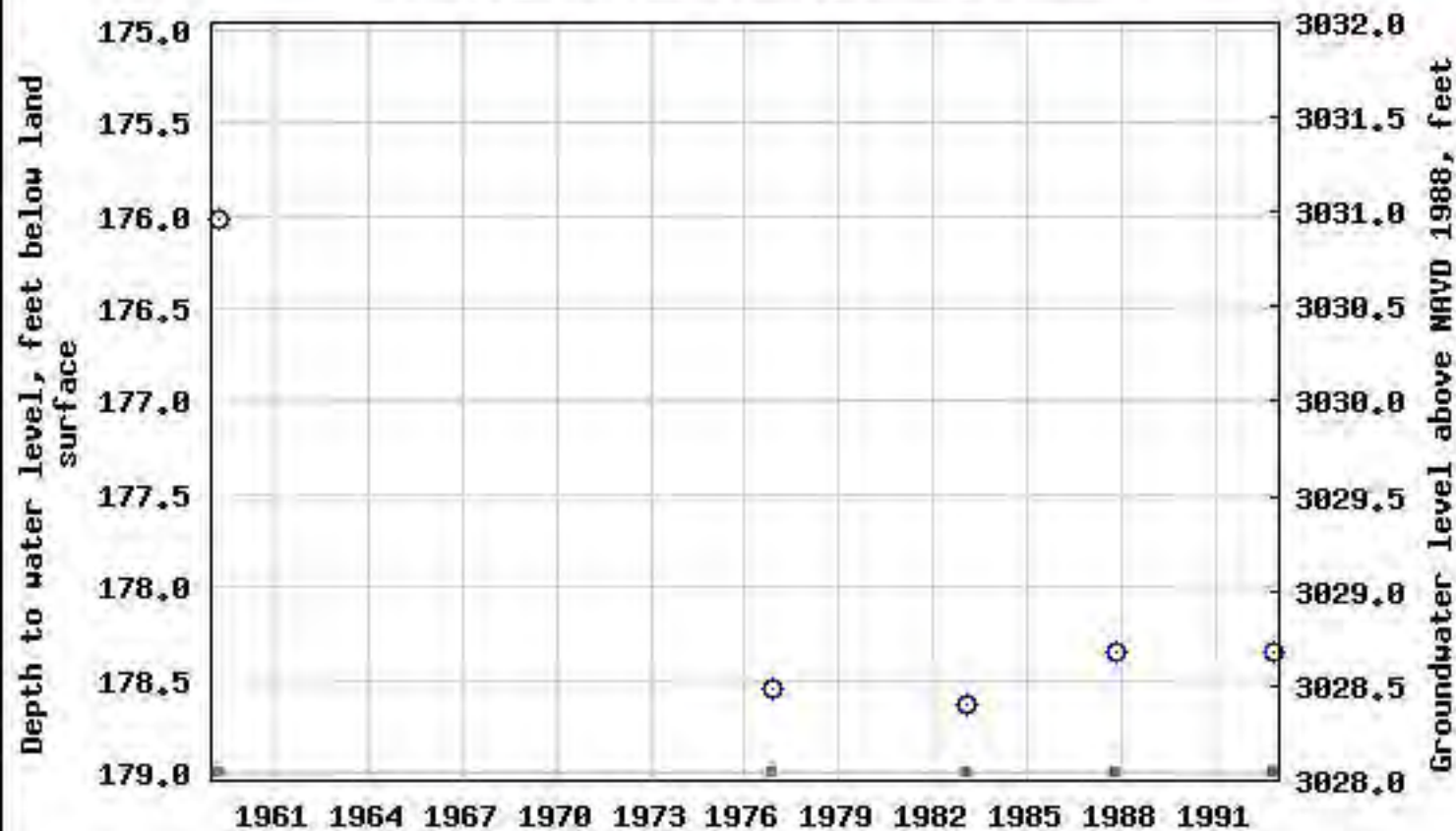
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-03-23	1992-11-04	5
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data
Inquiries](#)

USGS 321339103541801 24S.30E.08.33222



ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG



 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP		BH or PH Name:		Date:				
		PH01		7.30.20				
		Site Name: PLU 213						
		RP or Incident Number:						
LTE Job Number: 012920106								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening:		Logged By: SL				
		HACH Chloride strips, PID		Method: Backhoe				
				Hole Diameter: —				
				Total Depth: 4'				
Comments: TD @ 4' - Refusal								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	0-0.5' Caliche, odor, stain, tan
M	186	49.9	N			1	SP SM	0.5'-3' Sand, odor, no stain, m-f, Brown, trace silt, poorly graded
M	320	73.4	N			2		
M	377	57.7	N			3		
						4	CCHE	3'-4' Caliche, odor, no stain, tan
D	268	78.2	N	PH01	4	4		TD @ 4'
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		



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

A proud member
of WSP

BH or PH Name:

PH02

Date:

7.30.20

Site Name: PLU 213

RP or Incident Number:

LTE Job Number: 012920106

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SL

Method: Backhoe

Lat/Long:

Field Screening:

HACH Chloride strips, PID

Hole Diameter:

Total Depth: 5'

Comments:

TD @ 5'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	320	19.8	N			0		
M	186	1.2	N	PH02	2'	1	SP-SM	0-2' Sand, odor, no stain, m-f, Brown. trace silt, poor in graded
D	186	40.3	N			2		
D	186	1.1	N	PH02A	4'	3	CCHE	2'-5' Caliche, w/ sand. odor, no stain, m-f, poorly graded, Brown sand
D	186	1.2	N			4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

TD @ 5'



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

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BH or PH Name:

PH03

Date:

7.30.20

Site Name: PLU 213

RP or Incident Number:

LTE Job Number: 012920106

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

HACH Chloride strips, PID

Logged By: SL

Method: Backhoe

Hole Diameter:

Total Depth:

5'

Comments:

TD @ 5'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-2
D	<186	0.1	N			1	SP-sh	Sand w/ caliche, Brown-tan, no odor, no stain, m-f, poorly graded
D	<186	0.0	N			2		
D	<186	0.0	N			3	SP-sh	2'-5'
D	<186	0.0	N			4		Sandho odor, no stain, Brown, m-f, poorly graded, trace silt
D	<186	1.7	N	PH03	5	5		TD @ 5'
						6		
						7		
						8		
						9		
						10		
						11		
						12		

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP		BH or PH Name:		Date:				
		PH04		7.30.20				
		Site Name: PLU 213						
		RP or Incident Number:						
LTE Job Number: 012920106								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening:		Logged By: SL				
		HACH Chloride strips, PID		Method: Backhoe				
Hole Diameter:		Total Depth:		5'				
Comments: TD @ 5'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<186	0.0	N			0		0-2'
						1	SP sm	Sand w/ caliche, Brown, no odor, no stain, m-f, poorly graded, trace silt
D	<186	0.1	N	PH04	2'	2		
D	<186	0.4	N			3	SP sm	2'-5'
						4		Sand, Brown, no odor, no stain, m-f, poorly graded, trace silt
D	<186	0.2	N	PH04A	5'	5		
						6		TD @ 5'
						7		
						8		
						9		
						10		
						11		
						12		



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

BH or PH Name:

PH05

Date:

7.30.20

Site Name: PLU 213

RP or Incident Number:

LTE Job Number: 012920106

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: SL

Method: Backhoe

Lat/Long:

Field Screening:

HACH Chloride strips, PID

Hole Diameter:

Total Depth:

3'

Comments:

rd e 3' - Refusal

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-2'
M	<186	1619	N			1	SP sm	sand, Brown, odor, no stain, moist, m-f poorly graded, trace silt
M	<186	1629	N			2		-1- increase caliche content
M	<186	1323	N	PH05	3'	3	CHE	2-3' caliche w/ sand, tan, odor, no stain, m-f, poorly graded, Brown sand
						4		rd e 3' - Refusal
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		



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

BH or PH Name:

PH06

Date:

7.30.20

Site Name: PLU 213

RP or Incident Number:

LTE Job Number: 012920106

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

HACH Chloride strips, PID

Logged By: SL

Method: Backhoe

Hole Diameter:

Total Depth: 4'

Comments:

TD @ 4' - Refusal

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	<186	16.9	N			0		0-2'
						1	SP sm	sand, Brown, odor, no stain, moist, m-f, poorly graded, trace silt
M	<186	13.8	N			2		
D	<186	102.8	N			3	CC/HG	2-4'
								Caliche w/ sand, odor, tan, m-f, poorly graded, Brown sand, trace silt
D	<186	67.1	N	PH06	4'	4		TD @ 4' - Refusal
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG



Photograph 1: Northern view of release.



Photograph 2: Staining on pad.



Photograph 3: Western view of staining and release.



Photograph 4: Northeastern view of staining on pad and near equipment.

Poker Lake Unit 213 Battery
Incident Number NRM2017437201
Photographs Taken: June 6, 2020 – August 24, 2020

PHOTOGRAPHIC LOG



Photograph 5: Northeastern view of hydrovac excavation near equipment.



Photograph 6: Eastern view of excavation on pad.



Photograph 7: Northwestern view of excavation towards pasture.



Photograph 8: Western view of excavation.

PHOTOGRAPHIC LOG



Photograph 9: Southeastern view of excavation in pasture.



Photograph 10: Backfill in equipment area.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS



Certificate of Analysis Summary 667438



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213

Project Id: 012920105
Contact: Korey Kennedy
Project Location:

Date Received in Lab: Thu 07.16.2020 13:35
Report Date: 07.22.2020 15:50
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667438-001	667438-002	667438-003	667438-004	667438-005	667438-006
	<i>Field Id:</i>	SS01	SS02	SS03	SS04	SS05	SS06
	<i>Depth:</i>	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.16.2020 10:48	07.16.2020 10:53	07.16.2020 10:57	07.16.2020 11:03	07.16.2020 11:06	07.16.2020 11:08
BTEX by EPA 8021B	<i>Extracted:</i>	07.16.2020 16:00	07.16.2020 16:00	07.16.2020 16:00	07.16.2020 16:00	07.16.2020 16:00	07.16.2020 16:00
	<i>Analyzed:</i>	07.16.2020 19:08	07.16.2020 19:28	07.16.2020 19:48	07.17.2020 13:40	07.17.2020 14:01	07.17.2020 14:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.0998 0.0998	<0.100 0.100	<0.0998 0.0998
Toluene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	5.34 0.399	4.58 0.400	<0.0998 0.0998
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	6.40 0.399	7.62 0.400	<0.0998 0.0998
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402	<0.00396 0.00396	14.7 0.798	25.6 0.800	5.60 0.798
o-Xylene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	9.06 0.399	10.0 0.400	3.02 0.399
Total Xylenes		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	23.8 0.399	35.6 0.400	8.62 0.399
Total BTEX		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	35.5 0.0998	47.8 0.100	8.62 0.0998
Chloride by EPA 300	<i>Extracted:</i>	07.16.2020 15:47	07.16.2020 15:47	07.16.2020 15:47	07.16.2020 15:47	07.16.2020 15:47	07.16.2020 15:47
	<i>Analyzed:</i>	07.16.2020 18:08	07.16.2020 18:14	07.16.2020 18:20	07.16.2020 18:48	07.16.2020 18:53	07.16.2020 18:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.2 9.92	501 9.98	22.0 10.0	86.9 10.0	209 10.1	15900 501
TPH by SW8015 Mod	<i>Extracted:</i>	07.16.2020 14:20	07.16.2020 14:20	07.16.2020 14:20	07.16.2020 14:20	07.16.2020 14:20	07.16.2020 14:20
	<i>Analyzed:</i>	07.16.2020 18:57	07.16.2020 20:18	07.16.2020 19:18	07.17.2020 11:59	07.17.2020 11:18	07.16.2020 19:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<250 250	<50.0 50.0	1820 1000	2960 500	1070 498
Diesel Range Organics (DRO)		84.1 50.2	3890 250	364 50.0	47200 1000	49200 500	35000 498
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	917 250	92.2 50.0	7920 1000	5620 500	4340 498
Total GRO-DRO		84.1 50.2	3890 250	364 50.0	49000 1000	52200 500	36100 498
Total TPH		84.1 50.2	4810 250	456 50.0	56900 1000	57800 500	40400 498

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 667438

LT Environmental, Inc., Arvada, CO

Project Name: PLU 213

Project Id: 012920105
 Contact: Korey Kennedy
 Project Location:

Date Received in Lab: Thu 07.16.2020 13:35
 Report Date: 07.22.2020 15:50
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 667438-007 Field Id: SS07 Depth: 0.5- ft Matrix: SOIL Sampled: 07.16.2020 11:11					
BTEX by EPA 8021B	Extracted: 07.16.2020 16:00 Analyzed: 07.17.2020 15:37 Units/RL: mg/kg RL					
Benzene	<0.100 0.100					
Toluene	3.47 0.400					
Ethylbenzene	7.02 0.400					
m,p-Xylenes	22.1 0.800					
o-Xylene	10.7 0.400					
Total Xylenes	32.8 0.400					
Total BTEX	43.3 0.100					
Chloride by EPA 300	Extracted: 07.16.2020 15:47 Analyzed: 07.16.2020 19:04 Units/RL: mg/kg RL					
Chloride	497 9.94					
TPH by SW8015 Mod	Extracted: 07.16.2020 14:20 Analyzed: 07.17.2020 11:38 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	2250 503					
Diesel Range Organics (DRO)	40800 503					
Motor Oil Range Hydrocarbons (MRO)	6570 503					
Total GRO-DRO	43100 503					
Total TPH	49600 503					

BRL - Below Reporting Limit

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





Analytical Report 667438

for

LT Environmental, Inc.

Project Manager: Korey Kennedy

PLU 213

012920105

07.22.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.22.2020

Project Manager: **Korey Kennedy**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **667438**

PLU 213

Project Address:

Korey Kennedy:

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 Eurofins Xenco, LLC Report Number(s) 667438. 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 Eurofins Xenco, LLC. 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. 667438 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 667438****LT Environmental, Inc., Arvada, CO**

PLU 213

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	07.16.2020 10:48	0.5 ft	667438-001
SS02	S	07.16.2020 10:53	0.5 ft	667438-002
SS03	S	07.16.2020 10:57	0.5 ft	667438-003
SS04	S	07.16.2020 11:03	0.5 ft	667438-004
SS05	S	07.16.2020 11:06	0.5 ft	667438-005
SS06	S	07.16.2020 11:08	0.5 ft	667438-006
SS07	S	07.16.2020 11:11	0.5 ft	667438-007



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 213

Project ID: 012920105
Work Order Number(s): 667438

Report Date: 07.22.2020
Date Received: 07.16.2020

Sample receipt non conformances and comments:

V1.001 revision (client email) Corrected sample depths to feet.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3131933 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 667438-004.



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS01** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-001 Date Collected: 07.16.2020 10:48 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	9.92	mg/kg	07.16.2020 18:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131902

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.16.2020 18:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	84.1	50.2	mg/kg	07.16.2020 18:57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.16.2020 18:57	U	1
Total GRO-DRO	PHC628	84.1	50.2	mg/kg	07.16.2020 18:57		1
Total TPH	PHC635	84.1	50.2	mg/kg	07.16.2020 18:57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	07.16.2020 18:57	
o-Terphenyl	84-15-1	105	%	70-135	07.16.2020 18:57	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS01** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-001 Date Collected: 07.16.2020 10:48 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 16:00 Basis: Wet Weight
 Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.16.2020 19:08	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.16.2020 19:08	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.16.2020 19:08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.16.2020 19:08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.16.2020 19:08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.16.2020 19:08	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.16.2020 19:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.16.2020 19:08		
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.16.2020 19:08		



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS02** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-002 Date Collected: 07.16.2020 10:53 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	501	9.98	mg/kg	07.16.2020 18:14		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131902

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	07.16.2020 20:18	U	5
Diesel Range Organics (DRO)	C10C28DRO	3890	250	mg/kg	07.16.2020 20:18		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	917	250	mg/kg	07.16.2020 20:18		5
Total GRO-DRO	PHC628	3890	250	mg/kg	07.16.2020 20:18		5
Total TPH	PHC635	4810	250	mg/kg	07.16.2020 20:18		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	07.16.2020 20:18	
o-Terphenyl	84-15-1	110	%	70-135	07.16.2020 20:18	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS02**
 Lab Sample Id: 667438-002

Matrix: Soil
 Date Collected: 07.16.2020 10:53

Date Received: 07.16.2020 13:35
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.16.2020 16:00

Basis: Wet Weight

Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.16.2020 19:28	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.16.2020 19:28	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.16.2020 19:28	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.16.2020 19:28	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.16.2020 19:28	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.16.2020 19:28	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.16.2020 19:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.16.2020 19:28	
4-Bromofluorobenzene	460-00-4	98	%	70-130	07.16.2020 19:28	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS03** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-003 Date Collected: 07.16.2020 10:57 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.0	10.0	mg/kg	07.16.2020 18:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131902

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.16.2020 19:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	364	50.0	mg/kg	07.16.2020 19:18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	92.2	50.0	mg/kg	07.16.2020 19:18		1
Total GRO-DRO	PHC628	364	50.0	mg/kg	07.16.2020 19:18		1
Total TPH	PHC635	456	50.0	mg/kg	07.16.2020 19:18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.16.2020 19:18	
o-Terphenyl	84-15-1	98	%	70-135	07.16.2020 19:18	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS03** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-003 Date Collected: 07.16.2020 10:57 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 16:00 Basis: Wet Weight
 Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.16.2020 19:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.16.2020 19:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.16.2020 19:48	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.16.2020 19:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.16.2020 19:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.16.2020 19:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.16.2020 19:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.16.2020 19:48		
4-Bromofluorobenzene	460-00-4	83	%	70-130	07.16.2020 19:48		



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS04** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-004 Date Collected: 07.16.2020 11:03 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	86.9	10.0	mg/kg	07.16.2020 18:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131933

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1820	1000	mg/kg	07.17.2020 11:59		20
Diesel Range Organics (DRO)	C10C28DRO	47200	1000	mg/kg	07.17.2020 11:59		20
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	7920	1000	mg/kg	07.17.2020 11:59		20
Total GRO-DRO	PHC628	49000	1000	mg/kg	07.17.2020 11:59		20
Total TPH	PHC635	56900	1000	mg/kg	07.17.2020 11:59		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	137	%	70-135	07.17.2020 11:59	**
o-Terphenyl	84-15-1	129	%	70-135	07.17.2020 11:59	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS04** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-004 Date Collected: 07.16.2020 11:03 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 16:00 Basis: Wet Weight
 Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0998	0.0998	mg/kg	07.17.2020 13:40	U	200
Toluene	108-88-3	5.34	0.399	mg/kg	07.17.2020 13:40		200
Ethylbenzene	100-41-4	6.40	0.399	mg/kg	07.17.2020 13:40		200
m,p-Xylenes	179601-23-1	14.7	0.798	mg/kg	07.17.2020 13:40		200
o-Xylene	95-47-6	9.06	0.399	mg/kg	07.17.2020 13:40		200
Total Xylenes	1330-20-7	23.8	0.399	mg/kg	07.17.2020 13:40		200
Total BTEX		35.5	0.0998	mg/kg	07.17.2020 13:40		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	07.17.2020 13:40		
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.17.2020 13:40		



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS05** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-005 Date Collected: 07.16.2020 11:06 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	209	10.1	mg/kg	07.16.2020 18:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131933

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2960	500	mg/kg	07.17.2020 11:18		10
Diesel Range Organics (DRO)	C10C28DRO	49200	500	mg/kg	07.17.2020 11:18		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	5620	500	mg/kg	07.17.2020 11:18		10
Total GRO-DRO	PHC628	52200	500	mg/kg	07.17.2020 11:18		10
Total TPH	PHC635	57800	500	mg/kg	07.17.2020 11:18		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	07.17.2020 11:18	
o-Terphenyl	84-15-1	88	%	70-135	07.17.2020 11:18	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS05** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-005 Date Collected: 07.16.2020 11:06 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 16:00 Basis: Wet Weight
 Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.100	0.100	mg/kg	07.17.2020 14:01	U	200
Toluene	108-88-3	4.58	0.400	mg/kg	07.17.2020 14:01		200
Ethylbenzene	100-41-4	7.62	0.400	mg/kg	07.17.2020 14:01		200
m,p-Xylenes	179601-23-1	25.6	0.800	mg/kg	07.17.2020 14:01		200
o-Xylene	95-47-6	10.0	0.400	mg/kg	07.17.2020 14:01		200
Total Xylenes	1330-20-7	35.6	0.400	mg/kg	07.17.2020 14:01		200
Total BTEX		47.8	0.100	mg/kg	07.17.2020 14:01		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	07.17.2020 14:01		
4-Bromofluorobenzene	460-00-4	101	%	70-130	07.17.2020 14:01		



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LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS06** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-006 Date Collected: 07.16.2020 11:08 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15900	501	mg/kg	07.16.2020 18:59		50

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131933

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1070	498	mg/kg	07.16.2020 19:18		10
Diesel Range Organics (DRO)	C10C28DRO	35000	498	mg/kg	07.16.2020 19:18		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	4340	498	mg/kg	07.16.2020 19:18		10
Total GRO-DRO	PHC628	36100	498	mg/kg	07.16.2020 19:18		10
Total TPH	PHC635	40400	498	mg/kg	07.16.2020 19:18		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	07.16.2020 19:18	
o-Terphenyl	84-15-1	121	%	70-135	07.16.2020 19:18	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS06** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-006 Date Collected: 07.16.2020 11:08 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 16:00 Basis: Wet Weight
 Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0998	0.0998	mg/kg	07.17.2020 14:42	U	200
Toluene	108-88-3	<0.0998	0.0998	mg/kg	07.17.2020 14:42	U	200
Ethylbenzene	100-41-4	<0.0998	0.0998	mg/kg	07.17.2020 14:42	U	200
m,p-Xylenes	179601-23-1	5.60	0.798	mg/kg	07.17.2020 14:42		200
o-Xylene	95-47-6	3.02	0.399	mg/kg	07.17.2020 14:42		200
Total Xylenes	1330-20-7	8.62	0.399	mg/kg	07.17.2020 14:42		200
Total BTEX		8.62	0.0998	mg/kg	07.17.2020 14:42		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	07.17.2020 14:42		
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.17.2020 14:42		



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS07** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-007 Date Collected: 07.16.2020 11:11 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	497	9.94	mg/kg	07.16.2020 19:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 14:20 Basis: Wet Weight
 Seq Number: 3131933

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2250	503	mg/kg	07.17.2020 11:38		10
Diesel Range Organics (DRO)	C10C28DRO	40800	503	mg/kg	07.17.2020 11:38		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	6570	503	mg/kg	07.17.2020 11:38		10
Total GRO-DRO	PHC628	43100	503	mg/kg	07.17.2020 11:38		10
Total TPH	PHC635	49600	503	mg/kg	07.17.2020 11:38		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	07.17.2020 11:38	
o-Terphenyl	84-15-1	90	%	70-135	07.17.2020 11:38	



Certificate of Analytical Results 667438

LT Environmental, Inc., Arvada, CO

PLU 213

Sample Id: **SS07** Matrix: Soil Date Received: 07.16.2020 13:35
 Lab Sample Id: 667438-007 Date Collected: 07.16.2020 11:11 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 16:00 Basis: Wet Weight
 Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.100	0.100	mg/kg	07.17.2020 15:37	U	200
Toluene	108-88-3	3.47	0.400	mg/kg	07.17.2020 15:37		200
Ethylbenzene	100-41-4	7.02	0.400	mg/kg	07.17.2020 15:37		200
m,p-Xylenes	179601-23-1	22.1	0.800	mg/kg	07.17.2020 15:37		200
o-Xylene	95-47-6	10.7	0.400	mg/kg	07.17.2020 15:37		200
Total Xylenes	1330-20-7	32.8	0.400	mg/kg	07.17.2020 15:37		200
Total BTEX		43.3	0.100	mg/kg	07.17.2020 15:37		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.17.2020 15:37		
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.17.2020 15:37		



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213

Analytical Method: Chloride by EPA 300

Seq Number: 3131940

MB Sample Id: 7707504-1-BLK

Matrix: Solid

LCS Sample Id: 7707504-1-BKS

Prep Method: E300P

Date Prep: 07.16.2020

LCSD Sample Id: 7707504-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	265	106	90-110	4	20	mg/kg	07.16.2020 16:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3131940

Parent Sample Id: 667349-038

Matrix: Soil

MS Sample Id: 667349-038 S

Prep Method: E300P

Date Prep: 07.16.2020

MSD Sample Id: 667349-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.1	200	211	100	210	100	90-110	0	20	mg/kg	07.16.2020 17:02	

Analytical Method: Chloride by EPA 300

Seq Number: 3131940

Parent Sample Id: 667438-003

Matrix: Soil

MS Sample Id: 667438-003 S

Prep Method: E300P

Date Prep: 07.16.2020

MSD Sample Id: 667438-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.0	200	219	99	220	99	90-110	0	20	mg/kg	07.16.2020 18:25	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131902

MB Sample Id: 7707495-1-BLK

Matrix: Solid

LCS Sample Id: 7707495-1-BKS

Prep Method: SW8015P

Date Prep: 07.16.2020

LCSD Sample Id: 7707495-1-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	1020	102	945	95	70-135	8	35	mg/kg	07.16.2020 12:52	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1080	108	70-135	3	35	mg/kg	07.16.2020 12:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		128		123		70-135	%	07.16.2020 12:52
o-Terphenyl	103		127		117		70-135	%	07.16.2020 12:52

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131933

MB Sample Id: 7707491-1-BLK

Matrix: Solid

LCS Sample Id: 7707491-1-BKS

Prep Method: SW8015P

Date Prep: 07.16.2020

LCSD Sample Id: 7707491-1-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	860	86	744	74	70-135	14	35	mg/kg	07.16.2020 12:52	
Diesel Range Organics (DRO)	<50.0	1000	984	98	800	80	70-135	21	35	mg/kg	07.16.2020 12:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		123		106		70-135	%	07.16.2020 12:52
o-Terphenyl	105		106		87		70-135	%	07.16.2020 12:52

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131902

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.16.2020

MB Sample Id: 7707495-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.16.2020 12:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131933

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.16.2020

MB Sample Id: 7707491-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.16.2020 12:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131902

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.16.2020

Parent Sample Id: 667349-017

MS Sample Id: 667349-017 S

MSD Sample Id: 667349-017 SD

Parameter

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)	<50.1	1000	1000	100	941	94	70-135	6	35	mg/kg	07.16.2020 13:53	
Diesel Range Organics (DRO)	<50.1	1000	1140	114	1090	109	70-135	4	35	mg/kg	07.16.2020 13:53	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		121		70-135	%	07.16.2020 13:53
o-Terphenyl	122		116		70-135	%	07.16.2020 13:53

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131933

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.16.2020

Parent Sample Id: 667349-037

MS Sample Id: 667349-037 S

MSD Sample Id: 667349-037 SD

Parameter

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)	<50.0	999	944	94	1040	104	70-135	10	35	mg/kg	07.16.2020 13:53	
Diesel Range Organics (DRO)	<50.0	999	1090	109	1200	120	70-135	10	35	mg/kg	07.16.2020 13:53	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		132		70-135	%	07.16.2020 13:53
o-Terphenyl	114		125		70-135	%	07.16.2020 13:53

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.
PLU 213

Analytical Method: BTEX by EPA 8021B

Seq Number: 3131937

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.16.2020

MB Sample Id: 7707480-1-BLK

LCS Sample Id: 7707480-1-BKS

LCSD Sample Id: 7707480-1-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	0.0779	78	0.104	104	70-130	29	35	mg/kg	07.16.2020 14:34	
Toluene	<0.00200	0.100	0.0739	74	0.0996	100	70-130	30	35	mg/kg	07.16.2020 14:34	
Ethylbenzene	<0.00200	0.100	0.0788	79	0.105	105	71-129	29	35	mg/kg	07.16.2020 14:34	
m,p-Xylenes	<0.00400	0.200	0.159	80	0.213	107	70-135	29	35	mg/kg	07.16.2020 14:34	
o-Xylene	<0.00200	0.100	0.0792	79	0.105	105	71-133	28	35	mg/kg	07.16.2020 14:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		98		70-130	%	07.16.2020 14:34
4-Bromofluorobenzene	105		97		99		70-130	%	07.16.2020 14:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3131937

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.16.2020

Parent Sample Id: 667349-037

MS Sample Id: 667349-037 S

MSD Sample Id: 667349-037 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0952	95	0.104	103	70-130	9	35	mg/kg	07.16.2020 21:24	
Toluene	<0.00200	0.0998	0.0899	90	0.100	99	70-130	11	35	mg/kg	07.16.2020 21:24	
Ethylbenzene	<0.00200	0.0998	0.0939	94	0.102	101	71-129	8	35	mg/kg	07.16.2020 21:24	
m,p-Xylenes	<0.00399	0.200	0.192	96	0.207	102	70-135	8	35	mg/kg	07.16.2020 21:24	
o-Xylene	<0.00200	0.0998	0.0946	95	0.102	101	71-133	8	35	mg/kg	07.16.2020 21:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		70-130	%	07.16.2020 21:24
4-Bromofluorobenzene	100		97		70-130	%	07.16.2020 21:24

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



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) 764-1296
Phoenix, AZ (602-392-7550) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-3333
Hobbs, NM (575-392-7550)

Chain of Custody

Work Order No: 12274158

Project Manager:	<i>Koley Kennedy</i>		Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office		Company Name:	XTO Energy
Address:	3300 North A St. Bldg 1, Unit 222		Address:	3104 E Greene St.
City, State ZIP:	Midland, TX 79705		City, State ZIP:	Carlsbad, NM
Phone:	(432) 704-5178	Email:	imorrissey@ltenv.com kcasey@ltenv.com kjenning@ltenv.com	

Work Order Comments									
Program: UST/PST ☐ PRP ☐ brownfields ☐ RC ☐ Superfund ☐									
State of Project: NM									
Reporting: level II ☐ level III ☐ ST/UST ☐ RRP ☐ level IV ☐									
Deliverables: EDD ☐ ADAPT ☐ Other:									

Project Name:	PLU 213 Battery		Turn Around	ANALYSIS REQUEST										Work Order Notes
Project Number:	012920105		Routine ☒											
P.O. Number:			Rush:											
Sampler's Name:	Travis Casey		Due Date:											

SAMPLE RECEIPT			
Temp Blank:	Yes	No	Wet Ice: Yes No
Temperature (°C):	16/1.4 Thermometer ID		
Received Intact:	Yes No	TMM007	
Cooler Custody Seals:	Yes No	Correction Factor:	-0.2
Sample Custody Seals:	Yes No	Total Containers:	7

Number of Containers

(EPA 8015)

(EPA 8021)

(EPA 300.0)

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP)	BTEX (E)	Chloride												Sample Comments
5501	5	07/16/20	1078	0.5-3"	1	X	X	X												Discrete
5502			1053		1	X	X	X												
5503			1057		1	X	X	X												
5504			1103		1	X	X	X												
5505			1106		1	X	X	X												
5506			1108		1	X	X	X												
5507			1111		1	X	X	X												
																				

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	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn
<i>Circle Method(s) and Metal(s) to be analyzed</i>			TCLP / SPLP	6010:	8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U												
			offer. Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.																														
			1631 / 245.1 / 7470 / 7471 : Hg																														

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/16/80 13:35			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.16.2020 01.35.00 PM

Work Order #: 667438

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)?	1.4
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

*** 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: 07.16.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.20.2020

Certificate of Analysis Summary 668753



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Thu 07.30.2020 17:03

Contact: Dan Moir

Report Date: 08.03.2020 14:08

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668753-001	668753-002	668753-003	668753-004	668753-005	668753-006
	<i>Field Id:</i>	PH01	PH02	PH02A	PH03	PH04	PH04A
	<i>Depth:</i>	4- ft	2- ft	4- ft	5- ft	2- ft	5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.30.2020 10:20	07.30.2020 10:35	07.30.2020 10:45	07.30.2020 11:20	07.30.2020 11:35	07.30.2020 11:45
BTEX by EPA 8021B	<i>Extracted:</i>	07.30.2020 17:26	07.30.2020 17:26	07.30.2020 17:26	07.31.2020 14:01	07.31.2020 14:01	07.31.2020 14:01
	<i>Analyzed:</i>	07.31.2020 05:12	07.31.2020 04:27	07.31.2020 04:49	07.31.2020 15:30	07.31.2020 15:51	07.31.2020 16:11
	<i>Units/RL:</i>	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	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	0.0109 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00403 0.00403	<0.00401 0.00401	<0.00398 0.00398	<0.00403 0.00403	<0.00401 0.00401	<0.00398 0.00398
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00202 0.00202	0.0109 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	07.31.2020 14:15	07.31.2020 14:15	07.31.2020 14:15	07.31.2020 14:15	07.31.2020 14:15	07.31.2020 14:15
	<i>Analyzed:</i>	07.31.2020 14:32	07.31.2020 14:53	07.31.2020 15:00	07.31.2020 15:07	07.31.2020 15:14	07.31.2020 15:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		262 10.0	101 10.1	167 10.0	14.2 9.96	10.6 10.0	14.2 9.92
TPH by SW8015 Mod	<i>Extracted:</i>	07.31.2020 10:40	07.31.2020 10:40	07.31.2020 10:40	07.31.2020 10:40	07.31.2020 10:40	07.31.2020 10:40
	<i>Analyzed:</i>	07.31.2020 14:20	07.31.2020 14:40	07.31.2020 13:19	07.31.2020 15:00	07.31.2020 15:20	07.31.2020 15:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.2 50.2	<50.2 50.2	<50.2 50.2	<49.9 49.9	<50.2 50.2
Diesel Range Organics (DRO)		142 50.1	<50.2 50.2	<50.2 50.2	<50.2 50.2	<49.9 49.9	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.2 50.2	<50.2 50.2	<50.2 50.2	<49.9 49.9	<50.2 50.2
Total GRO-DRO		142 50.1	<50.2 50.2	<50.2 50.2	<50.2 50.2	<49.9 49.9	<50.2 50.2
Total TPH		142 50.1	<50.2 50.2	<50.2 50.2	<50.2 50.2	<49.9 49.9	<50.2 50.2

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 668753

LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 07.30.2020 17:03

Report Date: 08.03.2020 14:08

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	668753-007	668753-008				
	Field Id:	PH05	PH06				
	Depth:	3- ft	4- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	07.30.2020 12:00	07.30.2020 13:20				
BTEX by EPA 8021B	Extracted:	07.31.2020 14:01	07.31.2020 14:01				
	Analyzed:	08.03.2020 11:26	07.31.2020 16:32				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.0501 0.0501	<0.00202 0.00202				
Benzene							
Toluene		7.20 0.200	0.00271 0.00202				
Ethylbenzene		6.93 0.200	0.0149 0.00202				
m,p-Xylenes		6.83 0.401	0.0484 0.00403				
o-Xylene		19.4 0.200	0.0222 0.00202				
Total Xylenes		26.2 0.200	0.0706 0.00202				
Total BTEX		40.4 0.0501	0.0882 0.00202				
Chloride by EPA 300	Extracted:	07.31.2020 14:15	07.31.2020 14:15				
	Analyzed:	07.31.2020 15:42	07.31.2020 15:49				
	Units/RL:	mg/kg RL	mg/kg RL				
		93.2 9.96	121 10.0				
Chloride							
TPH by SW8015 Mod	Extracted:	07.31.2020 10:40	07.31.2020 10:40				
	Analyzed:	07.31.2020 17:21	07.31.2020 16:01				
	Units/RL:	mg/kg RL	mg/kg RL				
		2120 251	<49.9 49.9				
Gasoline Range Hydrocarbons (GRO)							
Diesel Range Organics (DRO)		9540 251	255 49.9				
Motor Oil Range Hydrocarbons (MRO)		745 251	<49.9 49.9				
Total GRO-DRO		11700 251	255 49.9				
Total TPH		12400 251	255 49.9				

BRL - Below Reporting Limit

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





Analytical Report 668753

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.03.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **668753**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 668753. 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 Eurofins Xenco, LLC. 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. 668753 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 668753****LT Environmental, Inc., Arvada, CO**

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	07.30.2020 10:20	4 ft	668753-001
PH02	S	07.30.2020 10:35	2 ft	668753-002
PH02A	S	07.30.2020 10:45	4 ft	668753-003
PH03	S	07.30.2020 11:20	5 ft	668753-004
PH04	S	07.30.2020 11:35	2 ft	668753-005
PH04A	S	07.30.2020 11:45	5 ft	668753-006
PH05	S	07.30.2020 12:00	3 ft	668753-007
PH06	S	07.30.2020 13:20	4 ft	668753-008



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 213 Battery

Project ID: 012920106
Work Order Number(s): 668753

Report Date: 08.03.2020
Date Received: 07.30.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH01** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-001 Date Collected: 07.30.2020 10:20 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	262	10.0	mg/kg	07.31.2020 14:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.31.2020 14:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	142	50.1	mg/kg	07.31.2020 14:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.31.2020 14:20	U	1
Total GRO-DRO	PHC628	142	50.1	mg/kg	07.31.2020 14:20		1
Total TPH	PHC635	142	50.1	mg/kg	07.31.2020 14:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	07.31.2020 14:20	
o-Terphenyl	84-15-1	79	%	70-135	07.31.2020 14:20	



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH01**
Lab Sample Id: 668753-001

Matrix: Soil
Date Collected: 07.30.2020 10:20

Date Received: 07.30.2020 17:03
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.30.2020 17:26

Basis: Wet Weight

Seq Number: 3133119

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.31.2020 05:12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.31.2020 05:12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.31.2020 05:12	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.31.2020 05:12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.31.2020 05:12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.31.2020 05:12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.31.2020 05:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.31.2020 05:12	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.31.2020 05:12	



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH02** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-002 Date Collected: 07.30.2020 10:35 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	101	10.1	mg/kg	07.31.2020 14:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.31.2020 14:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.31.2020 14:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.31.2020 14:40	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.31.2020 14:40	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.31.2020 14:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	07.31.2020 14:40	
o-Terphenyl	84-15-1	81	%	70-135	07.31.2020 14:40	



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH02**
Lab Sample Id: 668753-002

Matrix: Soil
Date Collected: 07.30.2020 10:35

Date Received: 07.30.2020 17:03
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.30.2020 17:26

Basis: Wet Weight

Seq Number: 3133119

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.31.2020 04:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.31.2020 04:27	U	1
Ethylbenzene	100-41-4	0.0109	0.00200	mg/kg	07.31.2020 04:27		1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.31.2020 04:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.31.2020 04:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.31.2020 04:27	U	1
Total BTEX		0.0109	0.00200	mg/kg	07.31.2020 04:27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	07.31.2020 04:27		
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.31.2020 04:27		



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH02A** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-003 Date Collected: 07.30.2020 10:45 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	167	10.0	mg/kg	07.31.2020 15:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.31.2020 13:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.31.2020 13:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.31.2020 13:19	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.31.2020 13:19	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.31.2020 13:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	07.31.2020 13:19	
o-Terphenyl	84-15-1	75	%	70-135	07.31.2020 13:19	



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH02A**
Lab Sample Id: 668753-003

Matrix: Soil
Date Collected: 07.30.2020 10:45

Date Received: 07.30.2020 17:03
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.30.2020 17:26

Basis: Wet Weight

Seq Number: 3133119

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.31.2020 04:49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.31.2020 04:49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.31.2020 04:49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.31.2020 04:49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.31.2020 04:49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.31.2020 04:49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.31.2020 04:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.31.2020 04:49	
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.31.2020 04:49	



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH03** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-004 Date Collected: 07.30.2020 11:20 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.2	9.96	mg/kg	07.31.2020 15:07		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.31.2020 15:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.31.2020 15:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.31.2020 15:00	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.31.2020 15:00	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.31.2020 15:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	07.31.2020 15:00	
o-Terphenyl	84-15-1	81	%	70-135	07.31.2020 15:00	



Certificate of Analytical Results 668753

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH03** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-004 Date Collected: 07.30.2020 11:20 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:01 Basis: Wet Weight
 Seq Number: 3133315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.31.2020 15:30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.31.2020 15:30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.31.2020 15:30	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.31.2020 15:30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.31.2020 15:30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.31.2020 15:30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.31.2020 15:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.31.2020 15:30		
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.31.2020 15:30		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH04** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-005 Date Collected: 07.30.2020 11:35 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.6	10.0	mg/kg	07.31.2020 15:14		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.31.2020 15:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.31.2020 15:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.31.2020 15:20	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	07.31.2020 15:20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.31.2020 15:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	07.31.2020 15:20	
o-Terphenyl	84-15-1	77	%	70-135	07.31.2020 15:20	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH04** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-005 Date Collected: 07.30.2020 11:35 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:01 Basis: Wet Weight
 Seq Number: 3133315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.31.2020 15:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.31.2020 15:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.31.2020 15:51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.31.2020 15:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.31.2020 15:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.31.2020 15:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.31.2020 15:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	07.31.2020 15:51		
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.31.2020 15:51		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH04A** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-006 Date Collected: 07.30.2020 11:45 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.2	9.92	mg/kg	07.31.2020 15:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.31.2020 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.31.2020 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.31.2020 15:41	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.31.2020 15:41	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.31.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	07.31.2020 15:41	
o-Terphenyl	84-15-1	78	%	70-135	07.31.2020 15:41	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH04A**
 Lab Sample Id: 668753-006

Matrix: Soil
 Date Collected: 07.30.2020 11:45

Date Received: 07.30.2020 17:03
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.31.2020 14:01

Basis: Wet Weight

Seq Number: 3133315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.31.2020 16:11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.31.2020 16:11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.31.2020 16:11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.31.2020 16:11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.31.2020 16:11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.31.2020 16:11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.31.2020 16:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	07.31.2020 16:11		
1,4-Difluorobenzene	540-36-3	91	%	70-130	07.31.2020 16:11		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH05** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-007 Date Collected: 07.30.2020 12:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	93.2	9.96	mg/kg	07.31.2020 15:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2120	251	mg/kg	07.31.2020 17:21		5
Diesel Range Organics (DRO)	C10C28DRO	9540	251	mg/kg	07.31.2020 17:21		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	745	251	mg/kg	07.31.2020 17:21		5
Total GRO-DRO	PHC628	11700	251	mg/kg	07.31.2020 17:21		5
Total TPH	PHC635	12400	251	mg/kg	07.31.2020 17:21		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	07.31.2020 17:21	
o-Terphenyl	84-15-1	104	%	70-135	07.31.2020 17:21	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH05**
Lab Sample Id: 668753-007

Matrix: Soil
Date Collected: 07.30.2020 12:00

Date Received: 07.30.2020 17:03
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.31.2020 14:01

Basis: Wet Weight

Seq Number: 3133315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0501	0.0501	mg/kg	08.03.2020 11:26	U	100
Toluene	108-88-3	7.20	0.200	mg/kg	08.03.2020 11:26		100
Ethylbenzene	100-41-4	6.93	0.200	mg/kg	08.03.2020 11:26		100
m,p-Xylenes	179601-23-1	6.83	0.401	mg/kg	08.03.2020 11:26		100
o-Xylene	95-47-6	19.4	0.200	mg/kg	08.03.2020 11:26		100
Total Xylenes	1330-20-7	26.2	0.200	mg/kg	08.03.2020 11:26		100
Total BTEX		40.4	0.0501	mg/kg	08.03.2020 11:26		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	08.03.2020 11:26		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.03.2020 11:26		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH06** Matrix: Soil Date Received: 07.30.2020 17:03
 Lab Sample Id: 668753-008 Date Collected: 07.30.2020 13:20 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.31.2020 14:15 Basis: Wet Weight
 Seq Number: 3133310

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	121	10.0	mg/kg	07.31.2020 15:49		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.31.2020 10:40 Basis: Wet Weight
 Seq Number: 3133298

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.31.2020 16:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	255	49.9	mg/kg	07.31.2020 16:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.31.2020 16:01	U	1
Total GRO-DRO	PHC628	255	49.9	mg/kg	07.31.2020 16:01		1
Total TPH	PHC635	255	49.9	mg/kg	07.31.2020 16:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	07.31.2020 16:01	
o-Terphenyl	84-15-1	79	%	70-135	07.31.2020 16:01	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **PH06**
Lab Sample Id: 668753-008

Matrix: Soil
Date Collected: 07.30.2020 13:20

Date Received: 07.30.2020 17:03
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.31.2020 14:01

Basis: Wet Weight

Seq Number: 3133315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.31.2020 16:32	U	1
Toluene	108-88-3	0.00271	0.00202	mg/kg	07.31.2020 16:32		1
Ethylbenzene	100-41-4	0.0149	0.00202	mg/kg	07.31.2020 16:32		1
m,p-Xylenes	179601-23-1	0.0484	0.00403	mg/kg	07.31.2020 16:32		1
o-Xylene	95-47-6	0.0222	0.00202	mg/kg	07.31.2020 16:32		1
Total Xylenes	1330-20-7	0.0706	0.00202	mg/kg	07.31.2020 16:32		1
Total BTEX		0.0882	0.00202	mg/kg	07.31.2020 16:32		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.31.2020 16:32		
1,4-Difluorobenzene	540-36-3	97	%	70-130	07.31.2020 16:32		



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3133310

MB Sample Id: 7708527-1-BLK

Matrix: Solid

LCS Sample Id: 7708527-1-BKS

Prep Method: E300P

Date Prep: 07.31.2020

LCSD Sample Id: 7708527-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	270	108	267	107	90-110	1	20	mg/kg	07.31.2020 14:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3133310

Parent Sample Id: 668753-001

Matrix: Soil

MS Sample Id: 668753-001 S

Prep Method: E300P

Date Prep: 07.31.2020

MSD Sample Id: 668753-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	262	202	479	107	479	107	90-110	0	20	mg/kg	07.31.2020 14:39	

Analytical Method: Chloride by EPA 300

Seq Number: 3133310

Parent Sample Id: 668849-003

Matrix: Soil

MS Sample Id: 668849-003 S

Prep Method: E300P

Date Prep: 07.31.2020

MSD Sample Id: 668849-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	209	105	209	105	90-110	0	20	mg/kg	07.31.2020 16:11	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3133298

MB Sample Id: 7708503-1-BLK

Matrix: Solid

LCS Sample Id: 7708503-1-BKS

Prep Method: SW8015P

Date Prep: 07.31.2020

LCSD Sample Id: 7708503-1-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	959	96	933	93	70-135	3	35	mg/kg	07.31.2020 11:35	
Diesel Range Organics (DRO)	<50.0	1000	981	98	951	95	70-135	3	35	mg/kg	07.31.2020 11:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		97		94		70-135	%	07.31.2020 11:35
o-Terphenyl	79		83		81		70-135	%	07.31.2020 11:35

Analytical Method: TPH by SW8015 Mod

Seq Number: 3133298

Matrix: Solid

MB Sample Id: 7708503-1-BLK

Prep Method: SW8015P

Date Prep: 07.31.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.31.2020 11:15	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3133298

Parent Sample Id: 668753-003

Matrix: Soil

MS Sample Id: 668753-003 S

Prep Method: SW8015P

Date Prep: 07.31.2020

MSD Sample Id: 668753-003 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)	<50.1	1000	939	94	978	98	70-135	4	35	mg/kg	07.31.2020 13:39	
Diesel Range Organics (DRO)	<50.1	1000	958	96	1000	100	70-135	4	35	mg/kg	07.31.2020 13:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		100		70-135	%	07.31.2020 13:39
o-Terphenyl	82		84		70-135	%	07.31.2020 13:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133119

MB Sample Id: 7708440-1-BLK

Matrix: Solid

LCS Sample Id: 7708440-1-BKS

Prep Method: SW5035A

Date Prep: 07.30.2020

LCSD Sample Id: 7708440-1-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	0.115	115	0.114	114	70-130	1	35	mg/kg	07.30.2020 16:53	
Toluene	<0.00200	0.100	0.110	110	0.108	108	70-130	2	35	mg/kg	07.30.2020 16:53	
Ethylbenzene	<0.00200	0.100	0.102	102	0.101	101	71-129	1	35	mg/kg	07.30.2020 16:53	
m,p-Xylenes	<0.00400	0.200	0.207	104	0.204	102	70-135	1	35	mg/kg	07.30.2020 16:53	
o-Xylene	<0.00200	0.100	0.102	102	0.101	101	71-133	1	35	mg/kg	07.30.2020 16:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		99		70-130	%	07.30.2020 16:53
4-Bromofluorobenzene	94		102		101		70-130	%	07.30.2020 16:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133315

MB Sample Id: 7708529-1-BLK

Matrix: Solid

LCS Sample Id: 7708529-1-BKS

Prep Method: SW5035A

Date Prep: 07.31.2020

LCSD Sample Id: 7708529-1-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	0.0997	100	0.0954	95	70-130	4	35	mg/kg	07.31.2020 13:34	
Toluene	<0.00200	0.100	0.0945	95	0.0905	91	70-130	4	35	mg/kg	07.31.2020 13:34	
Ethylbenzene	<0.00200	0.100	0.0992	99	0.0953	95	71-129	4	35	mg/kg	07.31.2020 13:34	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.194	97	70-135	5	35	mg/kg	07.31.2020 13:34	
o-Xylene	<0.00200	0.100	0.101	101	0.0972	97	71-133	4	35	mg/kg	07.31.2020 13:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		97		95		70-130	%	07.31.2020 13:34
4-Bromofluorobenzene	104		100		92		70-130	%	07.31.2020 13:34

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133119

Parent Sample Id: 668668-001

Matrix: Soil

MS Sample Id: 668668-001 S

Prep Method: SW5035A

Date Prep: 07.30.2020

MSD Sample Id: 668668-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.127	127	0.124	124	70-130	2	35	mg/kg	07.30.2020 17:38	
Toluene	<0.00201	0.100	0.123	123	0.123	123	70-130	0	35	mg/kg	07.30.2020 17:38	
Ethylbenzene	<0.00201	0.100	0.112	112	0.110	110	71-129	2	35	mg/kg	07.30.2020 17:38	
m,p-Xylenes	<0.00402	0.201	0.226	112	0.222	110	70-135	2	35	mg/kg	07.30.2020 17:38	
o-Xylene	<0.00201	0.100	0.111	111	0.109	109	71-133	2	35	mg/kg	07.30.2020 17:38	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	07.30.2020 17:38
4-Bromofluorobenzene	101		101		70-130	%	07.30.2020 17:38

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133315

Parent Sample Id: 668753-004

Matrix: Soil

MS Sample Id: 668753-004 S

Prep Method: SW5035A

Date Prep: 07.31.2020

MSD Sample Id: 668753-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.108	108	0.0972	97	70-130	11	35	mg/kg	07.31.2020 14:14	
Toluene	<0.00199	0.0996	0.104	104	0.0915	92	70-130	13	35	mg/kg	07.31.2020 14:14	
Ethylbenzene	<0.00199	0.0996	0.107	107	0.0933	93	71-129	14	35	mg/kg	07.31.2020 14:14	
m,p-Xylenes	<0.00398	0.199	0.217	109	0.188	94	70-135	14	35	mg/kg	07.31.2020 14:14	
o-Xylene	<0.00199	0.0996	0.108	108	0.0939	94	71-133	14	35	mg/kg	07.31.2020 14:14	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		98		70-130	%	07.31.2020 14:14
4-Bromofluorobenzene	98		89		70-130	%	07.31.2020 14:14

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



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) 382-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

Chain of Custody

Work Order No: 1608753

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Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
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:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

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

Project Name:	PLU 213 Battery	Turn Around
Project Number:	0129 20106	Routine ☒ Rush:
P.O. Number:		
Sampler's Name:	Spencer Lo	Due Date:

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	3.8/3.6	Thermometer ID				
Received In tact:	Yes ☒ No	TMM007				
Cooler Custody Seals:	Yes ☒ No	Correction Factor: -0.2				
Sample Custody Seals:	Yes ☒ No	Total Containers: 8				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA 8015)	BTEX (EPA 8015)	Chloride (EPA 8015)	Sample Comments											
PH01	S	7.30.20	1020	4'	1	X	X	X												
PH02	S	7.30.20	1035	2'	1	X	X	X												
PH02A	S	7.30.20	1045	4'	1	X	X	X												
PH03	S	7.30.20	1120	5'	1	X	X	X												
PH04	S	7.30.20	1135	2'	1	X	X	X												
PH04A	S	7.30.20	1145	5'	1	X	X	X												
PH05	S	7.30.20	1200	3'	1	X	X	X												
PH06	S	7.30.20	1320	4'	1	X	X	X												

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/30/20 17:03			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.30.2020 05.03.00 PM

Work Order #: 668753

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)?	3.6
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

*** 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: 07.30.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.31.2020

Certificate of Analysis Summary 670458



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:51

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670458-001	670458-002	670458-003	670458-004	670458-005	670458-006
	<i>Field Id:</i>	SW01	SW02	SW03	SW04	SW05	SW06
	<i>Depth:</i>	0-2 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.17.2020 13:00	08.17.2020 13:10	08.17.2020 13:20	08.17.2020 13:30	08.17.2020 13:40	08.17.2020 13:50
BTEX by EPA 8021B	<i>Extracted:</i>	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00
	<i>Analyzed:</i>	08.20.2020 01:39	08.20.2020 01:59	08.20.2020 02:19	08.20.2020 02:40	08.20.2020 03:00	08.20.2020 03:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00402 0.00402	0.00761 0.00400	<0.00403 0.00403	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	0.00437 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	0.0120 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	0.0120 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00
	<i>Analyzed:</i>	08.20.2020 09:15	08.20.2020 09:32	08.20.2020 09:37	08.20.2020 09:43	08.20.2020 09:48	08.20.2020 10:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		42.0 9.92	574 10.0	143 9.92	39.2 9.92	544 9.94	203 9.98
TPH by SW8015 Mod	<i>Extracted:</i>	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00	08.19.2020 16:00
	<i>Analyzed:</i>	08.19.2020 16:38	08.19.2020 18:39	08.19.2020 16:58	08.19.2020 17:19	08.19.2020 17:39	08.19.2020 17:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.3 50.3	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.1 50.1
Diesel Range Organics (DRO)		<50.1 50.1	237 50.3	228 49.8	<50.1 50.1	1100 50.3	236 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.3 50.3	<49.8 49.8	<50.1 50.1	103 50.3	<50.1 50.1
Total GRO-DRO		<50.1 50.1	237 50.3	228 49.8	<50.1 50.1	1100 50.3	236 50.1
Total TPH		<50.1 50.1	237 50.3	228 49.8	<50.1 50.1	1200 50.3	236 50.1

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670458



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:51

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670458-007	670458-008	670458-009	670458-010	670458-011	670458-012
	Field Id:	SW07	SW08	SW09	SW010	SW011	SW012
	Depth:	0-2 ft	0-2 ft	0-1 ft	0-1 ft	0-1 ft	0-1 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.17.2020 14:10	08.17.2020 14:20	08.17.2020 15:25	08.18.2020 09:40	08.18.2020 09:50	08.18.2020 10:00
BTEX by EPA 8021B	Extracted:	08.19.2020 16:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00
	Analyzed:	08.20.2020 03:41	08.20.2020 07:14	08.20.2020 06:45	08.20.2020 07:55	08.20.2020 08:15	08.20.2020 08:35
	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	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00400 0.00400	<0.00399 0.00399	<0.00397 0.00397	<0.00401 0.00401
o-Xylene		0.0275 0.00199	0.00558 0.00200	0.0384 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		0.0275 0.00199	0.00558 0.00200	0.0384 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		0.0275 0.00199	0.00558 0.00200	0.0384 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Chloride by EPA 300	Extracted:	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00
	Analyzed:	08.20.2020 10:11	08.20.2020 10:16	08.20.2020 10:22	08.20.2020 10:27	08.20.2020 10:33	08.20.2020 10:50
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		158 9.96	371 9.88	322 9.98	207 10.0	27.8 9.96	33.5 9.96
TPH by SW8015 Mod	Extracted:	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30
	Analyzed:	08.19.2020 22:01	08.19.2020 23:02	08.19.2020 23:22	08.19.2020 23:42	08.20.2020 00:03	08.20.2020 00:22
	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	<49.8 49.8	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		171 50.0	1520 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	159 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0
Total GRO-DRO		171 50.0	1520 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0
Total TPH		171 50.0	1680 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670458



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:51

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670458-013	670458-014	670458-015	670458-016	670458-017	
	Field Id:	SW013	SW014	SW015	SW016	SW017	
	Depth:	0-1 ft	0-1 ft	0-2 ft	0-2 ft	0-2 ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	08.18.2020 10:10	08.18.2020 10:20	08.18.2020 10:30	08.18.2020 10:40	08.18.2020 10:50	
BTEX by EPA 8021B	Extracted:	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	
	Analyzed:	08.20.2020 08:56	08.20.2020 09:16	08.20.2020 09:37	08.20.2020 09:57	08.20.2020 10:18	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	
m,p-Xylenes		<0.00399 0.00399	<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	
Chloride by EPA 300	Extracted:	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	
	Analyzed:	08.20.2020 10:55	08.20.2020 11:12	08.20.2020 11:17	08.20.2020 11:23	08.20.2020 11:29	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		433 9.98	630 9.92	150 9.90	48.2 9.94	334 10.1	
TPH by SW8015 Mod	Extracted:	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	
	Analyzed:	08.20.2020 00:43	08.20.2020 01:03	08.20.2020 01:23	08.20.2020 01:44	08.20.2020 02:24	
	Units/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	<49.9 49.9	<50.0 50.0	
Diesel Range Organics (DRO)		63.1 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	54.3 50.0	
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	
Total GRO-DRO		63.1 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	54.3 50.0	
Total TPH		63.1 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	54.3 50.0	

BRL - Below Reporting Limit

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



Analytical Report 670458

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670458**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670458. 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 Eurofins Xenco, LLC. 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. 670458 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 670458****LT Environmental, Inc., Arvada, CO**

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	08.17.2020 13:00	0 - 2 ft	670458-001
SW02	S	08.17.2020 13:10	0 - 2 ft	670458-002
SW03	S	08.17.2020 13:20	0 - 2 ft	670458-003
SW04	S	08.17.2020 13:30	0 - 2 ft	670458-004
SW05	S	08.17.2020 13:40	0 - 2 ft	670458-005
SW06	S	08.17.2020 13:50	0 - 2 ft	670458-006
SW07	S	08.17.2020 14:10	0 - 2 ft	670458-007
SW08	S	08.17.2020 14:20	0 - 2 ft	670458-008
SW09	S	08.17.2020 15:25	0 - 1 ft	670458-009
SW010	S	08.18.2020 09:40	0 - 1 ft	670458-010
SW011	S	08.18.2020 09:50	0 - 1 ft	670458-011
SW012	S	08.18.2020 10:00	0 - 1 ft	670458-012
SW013	S	08.18.2020 10:10	0 - 1 ft	670458-013
SW014	S	08.18.2020 10:20	0 - 1 ft	670458-014
SW015	S	08.18.2020 10:30	0 - 2 ft	670458-015
SW016	S	08.18.2020 10:40	0 - 2 ft	670458-016
SW017	S	08.18.2020 10:50	0 - 2 ft	670458-017



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670458

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW01** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-001 Date Collected: 08.17.2020 13:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.0	9.92	mg/kg	08.20.2020 09:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135054

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.19.2020 16:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.19.2020 16:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.19.2020 16:38	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.19.2020 16:38	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.19.2020 16:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	08.19.2020 16:38	
o-Terphenyl	84-15-1	94	%	70-135	08.19.2020 16:38	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW01**
 Lab Sample Id: 670458-001

Matrix: Soil
 Date Collected: 08.17.2020 13:00

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 16:00

Basis: Wet Weight

Seq Number: 3135050

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 01:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 01:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 01:39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.20.2020 01:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 01:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 01:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 01:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.20.2020 01:39	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.20.2020 01:39	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW02** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-002 Date Collected: 08.17.2020 13:10 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	574	10.0	mg/kg	08.20.2020 09:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135054

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.19.2020 18:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	237	50.3	mg/kg	08.19.2020 18:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.19.2020 18:39	U	1
Total GRO-DRO	PHC628	237	50.3	mg/kg	08.19.2020 18:39		1
Total TPH	PHC635	237	50.3	mg/kg	08.19.2020 18:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.19.2020 18:39	
o-Terphenyl	84-15-1	98	%	70-135	08.19.2020 18:39	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW02** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-002 Date Collected: 08.17.2020 13:10 Sample Depth: 0 - 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135050

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.20.2020 01:59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.20.2020 01:59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.20.2020 01:59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.20.2020 01:59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.20.2020 01:59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.20.2020 01:59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.20.2020 01:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	08.20.2020 01:59		
1,4-Difluorobenzene	540-36-3	76	%	70-130	08.20.2020 01:59		



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW03** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-003 Date Collected: 08.17.2020 13:20 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	143	9.92	mg/kg	08.20.2020 09:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135054

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.19.2020 16:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	228	49.8	mg/kg	08.19.2020 16:58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.19.2020 16:58	U	1
Total GRO-DRO	PHC628	228	49.8	mg/kg	08.19.2020 16:58		1
Total TPH	PHC635	228	49.8	mg/kg	08.19.2020 16:58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.19.2020 16:58	
o-Terphenyl	84-15-1	88	%	70-135	08.19.2020 16:58	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW03**
 Lab Sample Id: 670458-003

Matrix: Soil
 Date Collected: 08.17.2020 13:20

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 16:00

Basis: Wet Weight

Seq Number: 3135050

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 02:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 02:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 02:19	U	1
m,p-Xylenes	179601-23-1	0.00761	0.00400	mg/kg	08.20.2020 02:19		1
o-Xylene	95-47-6	0.00437	0.00200	mg/kg	08.20.2020 02:19		1
Total Xylenes	1330-20-7	0.0120	0.00200	mg/kg	08.20.2020 02:19		1
Total BTEX		0.0120	0.00200	mg/kg	08.20.2020 02:19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.20.2020 02:19	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.20.2020 02:19	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW04** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-004 Date Collected: 08.17.2020 13:30 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.2	9.92	mg/kg	08.20.2020 09:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135054

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.19.2020 17:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.19.2020 17:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.19.2020 17:19	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.19.2020 17:19	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.19.2020 17:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.19.2020 17:19	
o-Terphenyl	84-15-1	89	%	70-135	08.19.2020 17:19	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW04**
 Lab Sample Id: 670458-004

Matrix: Soil
 Date Collected: 08.17.2020 13:30

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 16:00

Basis: Wet Weight

Seq Number: 3135050

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.20.2020 02:40	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.20.2020 02:40	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.20.2020 02:40	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.20.2020 02:40	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.20.2020 02:40	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.20.2020 02:40	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.20.2020 02:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.20.2020 02:40	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.20.2020 02:40	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW05** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-005 Date Collected: 08.17.2020 13:40 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	544	9.94	mg/kg	08.20.2020 09:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135054

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.19.2020 17:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	1100	50.3	mg/kg	08.19.2020 17:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	103	50.3	mg/kg	08.19.2020 17:39		1
Total GRO-DRO	PHC628	1100	50.3	mg/kg	08.19.2020 17:39		1
Total TPH	PHC635	1200	50.3	mg/kg	08.19.2020 17:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	08.19.2020 17:39	
o-Terphenyl	84-15-1	94	%	70-135	08.19.2020 17:39	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW05**
 Lab Sample Id: 670458-005

Matrix: Soil
 Date Collected: 08.17.2020 13:40

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 16:00

Basis: Wet Weight

Seq Number: 3135050

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 03:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 03:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 03:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 03:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 03:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 03:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 03:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.20.2020 03:00		
4-Bromofluorobenzene	460-00-4	95	%	70-130	08.20.2020 03:00		



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW06** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-006 Date Collected: 08.17.2020 13:50 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	203	9.98	mg/kg	08.20.2020 10:05		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 16:00 Basis: Wet Weight
 Seq Number: 3135054

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.19.2020 17:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	236	50.1	mg/kg	08.19.2020 17:59		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.19.2020 17:59	U	1
Total GRO-DRO	PHC628	236	50.1	mg/kg	08.19.2020 17:59		1
Total TPH	PHC635	236	50.1	mg/kg	08.19.2020 17:59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.19.2020 17:59	
o-Terphenyl	84-15-1	99	%	70-135	08.19.2020 17:59	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW06**
 Lab Sample Id: 670458-006

Matrix: Soil
 Date Collected: 08.17.2020 13:50

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 16:00

Basis: Wet Weight

Seq Number: 3135050

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 03:20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 03:20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 03:20	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 03:20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 03:20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 03:20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 03:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.20.2020 03:20	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.20.2020 03:20	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW07** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-007 Date Collected: 08.17.2020 14:10 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	158	9.96	mg/kg	08.20.2020 10:11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 22:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	171	50.0	mg/kg	08.19.2020 22:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 22:01	U	1
Total GRO-DRO	PHC628	171	50.0	mg/kg	08.19.2020 22:01		1
Total TPH	PHC635	171	50.0	mg/kg	08.19.2020 22:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	08.19.2020 22:01	
o-Terphenyl	84-15-1	94	%	70-135	08.19.2020 22:01	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW07**
 Lab Sample Id: 670458-007

Matrix: Soil
 Date Collected: 08.17.2020 14:10

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3135050

Prep Method: SW5035A

% Moisture:

Date Prep: 08.19.2020 16:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 03:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 03:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 03:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 03:41	U	1
o-Xylene	95-47-6	0.0275	0.00199	mg/kg	08.20.2020 03:41		1
Total Xylenes	1330-20-7	0.0275	0.00199	mg/kg	08.20.2020 03:41		1
Total BTEX		0.0275	0.00199	mg/kg	08.20.2020 03:41		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.20.2020 03:41		
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.20.2020 03:41		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW08** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-008 Date Collected: 08.17.2020 14:20 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	371	9.88	mg/kg	08.20.2020 10:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 23:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	1520	50.0	mg/kg	08.19.2020 23:02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	159	50.0	mg/kg	08.19.2020 23:02		1
Total GRO-DRO	PHC628	1520	50.0	mg/kg	08.19.2020 23:02		1
Total TPH	PHC635	1680	50.0	mg/kg	08.19.2020 23:02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	08.19.2020 23:02	
o-Terphenyl	84-15-1	97	%	70-135	08.19.2020 23:02	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW08**
 Lab Sample Id: 670458-008

Matrix: Soil
 Date Collected: 08.17.2020 14:20

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 07:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 07:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 07:14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 07:14	U	1
o-Xylene	95-47-6	0.00558	0.00200	mg/kg	08.20.2020 07:14		1
Total Xylenes	1330-20-7	0.00558	0.00200	mg/kg	08.20.2020 07:14		1
Total BTEX		0.00558	0.00200	mg/kg	08.20.2020 07:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.20.2020 07:14	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 07:14	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW09** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-009 Date Collected: 08.17.2020 15:25 Sample Depth: 0 - 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	322	9.98	mg/kg	08.20.2020 10:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 23:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 23:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 23:22	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.19.2020 23:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 23:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.19.2020 23:22	
o-Terphenyl	84-15-1	84	%	70-135	08.19.2020 23:22	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW09** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-009 Date Collected: 08.17.2020 15:25 Sample Depth: 0 - 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 06:45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 06:45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 06:45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.20.2020 06:45	U	1
o-Xylene	95-47-6	0.0384	0.00200	mg/kg	08.20.2020 06:45		1
Total Xylenes	1330-20-7	0.0384	0.00200	mg/kg	08.20.2020 06:45		1
Total BTEX		0.0384	0.00200	mg/kg	08.20.2020 06:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.20.2020 06:45	
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.20.2020 06:45	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW010** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-010 Date Collected: 08.18.2020 09:40 Sample Depth: 0 - 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	207	10.0	mg/kg	08.20.2020 10:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.19.2020 23:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.19.2020 23:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.19.2020 23:42	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.19.2020 23:42	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.19.2020 23:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.19.2020 23:42	
o-Terphenyl	84-15-1	93	%	70-135	08.19.2020 23:42	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW010**
Lab Sample Id: 670458-010

Matrix: Soil
Date Collected: 08.18.2020 09:40

Date Received: 08.19.2020 14:05
Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 07:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 07:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 07:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 07:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 07:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 07:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 07:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 07:55		
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 07:55		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW011** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-011 Date Collected: 08.18.2020 09:50 Sample Depth: 0 - 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.8	9.96	mg/kg	08.20.2020 10:33		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 00:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 00:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 00:03	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 00:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 00:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.20.2020 00:03	
o-Terphenyl	84-15-1	96	%	70-135	08.20.2020 00:03	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW011**
Lab Sample Id: 670458-011

Matrix: Soil
Date Collected: 08.18.2020 09:50

Date Received: 08.19.2020 14:05
Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 08:15	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 08:15	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 08:15	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.20.2020 08:15	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 08:15	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 08:15	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 08:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 08:15	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.20.2020 08:15	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW012** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-012 Date Collected: 08.18.2020 10:00 Sample Depth: 0 - 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.5	9.96	mg/kg	08.20.2020 10:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 00:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 00:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 00:22	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 00:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 00:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.20.2020 00:22	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 00:22	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW012**
Lab Sample Id: 670458-012

Matrix: Soil
Date Collected: 08.18.2020 10:00

Date Received: 08.19.2020 14:05
Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 08:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 08:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 08:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.20.2020 08:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 08:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 08:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 08:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.20.2020 08:35		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.20.2020 08:35		



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW013** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-013 Date Collected: 08.18.2020 10:10 Sample Depth: 0 - 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	433	9.98	mg/kg	08.20.2020 10:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 00:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	63.1	50.0	mg/kg	08.20.2020 00:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 00:43	U	1
Total GRO-DRO	PHC628	63.1	50.0	mg/kg	08.20.2020 00:43		1
Total TPH	PHC635	63.1	50.0	mg/kg	08.20.2020 00:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.20.2020 00:43	
o-Terphenyl	84-15-1	95	%	70-135	08.20.2020 00:43	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW013**
 Lab Sample Id: 670458-013

Matrix: Soil
 Date Collected: 08.18.2020 10:10

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 08:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 08:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 08:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 08:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 08:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 08:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 08:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.20.2020 08:56		
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 08:56		



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW014** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-014 Date Collected: 08.18.2020 10:20 Sample Depth: 0 - 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	630	9.92	mg/kg	08.20.2020 11:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 01:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 01:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 01:03	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 01:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 01:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.20.2020 01:03	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 01:03	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW014**
 Lab Sample Id: 670458-014

Matrix: Soil
 Date Collected: 08.18.2020 10:20

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 09:16	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 09:16	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 09:16	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.20.2020 09:16	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 09:16	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 09:16	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 09:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.20.2020 09:16	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.20.2020 09:16	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW015** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-015 Date Collected: 08.18.2020 10:30 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	9.90	mg/kg	08.20.2020 11:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 01:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 01:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 01:23	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 01:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 01:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.20.2020 01:23	
o-Terphenyl	84-15-1	95	%	70-135	08.20.2020 01:23	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW015**
 Lab Sample Id: 670458-015

Matrix: Soil
 Date Collected: 08.18.2020 10:30

Date Received: 08.19.2020 14:05
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 09:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 09:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 09:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 09:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 09:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 09:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 09:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.20.2020 09:37	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.20.2020 09:37	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW016** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-016 Date Collected: 08.18.2020 10:40 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.2	9.94	mg/kg	08.20.2020 11:23		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.20.2020 01:44	
o-Terphenyl	84-15-1	91	%	70-135	08.20.2020 01:44	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW016**
Lab Sample Id: 670458-016

Matrix: Soil
Date Collected: 08.18.2020 10:40

Date Received: 08.19.2020 14:05
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 09:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 09:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 09:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 09:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 09:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 09:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 09:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.20.2020 09:57	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.20.2020 09:57	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW017** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670458-017 Date Collected: 08.18.2020 10:50 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	334	10.1	mg/kg	08.20.2020 11:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 02:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	54.3	50.0	mg/kg	08.20.2020 02:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 02:24	U	1
Total GRO-DRO	PHC628	54.3	50.0	mg/kg	08.20.2020 02:24		1
Total TPH	PHC635	54.3	50.0	mg/kg	08.20.2020 02:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.20.2020 02:24	
o-Terphenyl	84-15-1	97	%	70-135	08.20.2020 02:24	



Certificate of Analytical Results 670458

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW017**
Lab Sample Id: 670458-017

Matrix: Soil
Date Collected: 08.18.2020 10:50

Date Received: 08.19.2020 14:05
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 10:18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 10:18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 10:18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 10:18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 10:18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 10:18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 10:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.20.2020 10:18		
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.20.2020 10:18		

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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135195

MB Sample Id: 7709779-1-BLK

Matrix: Solid

LCS Sample Id: 7709779-1-BKS

Prep Method: E300P

Date Prep: 08.19.2020

LCSD Sample Id: 7709779-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	267	107	90-110	1	20	mg/kg	08.20.2020 09:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3135195

Parent Sample Id: 670458-001

Matrix: Soil

MS Sample Id: 670458-001 S

Prep Method: E300P

Date Prep: 08.19.2020

MSD Sample Id: 670458-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.0	199	244	102	245	102	90-110	0	20	mg/kg	08.20.2020 09:20	

Analytical Method: Chloride by EPA 300

Seq Number: 3135195

Parent Sample Id: 670458-011

Matrix: Soil

MS Sample Id: 670458-011 S

Prep Method: E300P

Date Prep: 08.19.2020

MSD Sample Id: 670458-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	27.8	200	234	103	234	103	90-110	0	20	mg/kg	08.20.2020 10:38	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135054

MB Sample Id: 7709767-1-BLK

Matrix: Solid

LCS Sample Id: 7709767-1-BKS

Prep Method: SW8015P

Date Prep: 08.19.2020

LCSD Sample Id: 7709767-1-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	1320	132	1070	107	70-135	21	35	mg/kg	08.19.2020 10:52	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1020	102	70-135	9	35	mg/kg	08.19.2020 10:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	132		82		133		70-135	%	08.19.2020 10:52
o-Terphenyl	122		79		108		70-135	%	08.19.2020 10:52

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135067

MB Sample Id: 7709798-1-BLK

Matrix: Solid

LCS Sample Id: 7709798-1-BKS

Prep Method: SW8015P

Date Prep: 08.19.2020

LCSD Sample Id: 7709798-1-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	883	88	932	93	70-135	5	35	mg/kg	08.19.2020 21:21	
Diesel Range Organics (DRO)	<50.0	1000	906	91	959	96	70-135	6	35	mg/kg	08.19.2020 21:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		115		118		70-135	%	08.19.2020 21:21
o-Terphenyl	98		103		106		70-135	%	08.19.2020 21:21

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135054

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.19.2020

MB Sample Id: 7709767-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.19.2020 10:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135067

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.19.2020

MB Sample Id: 7709798-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.19.2020 21:00	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135054

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.19.2020

Parent Sample Id: 670385-015

MS Sample Id: 670385-015 S

MSD Sample Id: 670385-015 SD

Parameter

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)	<50.1	1000	1220	122	1070	107	70-135	13	35	mg/kg	08.19.2020 11:53	
Diesel Range Organics (DRO)	<50.1	1000	1120	112	1030	103	70-135	8	35	mg/kg	08.19.2020 11:53	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	134		119		70-135	%	08.19.2020 11:53
o-Terphenyl	98		97		70-135	%	08.19.2020 11:53

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135067

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.19.2020

Parent Sample Id: 670458-007

MS Sample Id: 670458-007 S

MSD Sample Id: 670458-007 SD

Parameter

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)	<50.0	999	912	91	970	97	70-135	6	35	mg/kg	08.19.2020 22:22	
Diesel Range Organics (DRO)	171	999	1130	96	1120	95	70-135	1	35	mg/kg	08.19.2020 22:22	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		118		70-135	%	08.19.2020 22:22
o-Terphenyl	97		100		70-135	%	08.19.2020 22:22

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135050

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.19.2020

MB Sample Id: 7709774-1-BLK

LCS Sample Id: 7709774-1-BKS

LCSD Sample Id: 7709774-1-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	0.0945	95	0.0997	100	70-130	5	35	mg/kg	08.19.2020 17:11	
Toluene	<0.00200	0.100	0.0893	89	0.0930	93	70-130	4	35	mg/kg	08.19.2020 17:11	
Ethylbenzene	<0.00200	0.100	0.0957	96	0.0969	97	71-129	1	35	mg/kg	08.19.2020 17:11	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.196	98	70-135	2	35	mg/kg	08.19.2020 17:11	
o-Xylene	<0.00200	0.100	0.0963	96	0.0963	96	71-133	0	35	mg/kg	08.19.2020 17:11	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	92		97		101		70-130			%	08.19.2020 17:11	
4-Bromofluorobenzene	106		99		100		70-130			%	08.19.2020 17:11	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135193

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.19.2020

MB Sample Id: 7709775-1-BLK

LCS Sample Id: 7709775-1-BKS

LCSD Sample Id: 7709775-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.0966	97	70-130	7	35	mg/kg	08.20.2020 05:17	
Toluene	<0.00200	0.100	0.0978	98	0.0908	91	70-130	7	35	mg/kg	08.20.2020 05:17	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0941	94	71-129	7	35	mg/kg	08.20.2020 05:17	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.191	96	70-135	6	35	mg/kg	08.20.2020 05:17	
o-Xylene	<0.00200	0.100	0.101	101	0.0962	96	71-133	5	35	mg/kg	08.20.2020 05:17	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	98		99		97		70-130			%	08.20.2020 05:17	
4-Bromofluorobenzene	103		96		100		70-130			%	08.20.2020 05:17	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135050

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.19.2020

Parent Sample Id: 670385-015

MS Sample Id: 670385-015 S

MSD Sample Id: 670385-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.101	101	0.105	105	70-130	4	35	mg/kg	08.19.2020 17:52	
Toluene	<0.00200	0.0998	0.0872	87	0.0993	99	70-130	13	35	mg/kg	08.19.2020 17:52	
Ethylbenzene	<0.00200	0.0998	0.0871	87	0.103	103	71-129	17	35	mg/kg	08.19.2020 17:52	
m,p-Xylenes	<0.00399	0.200	0.174	87	0.204	102	70-135	16	35	mg/kg	08.19.2020 17:52	
o-Xylene	<0.00200	0.0998	0.0859	86	0.101	101	71-133	16	35	mg/kg	08.19.2020 17:52	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			98		101		70-130			%	08.19.2020 17:52	
4-Bromofluorobenzene			100		100		70-130			%	08.19.2020 17:52	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.
PLU 213 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135193

Parent Sample Id: 670458-008

Matrix: Soil

MS Sample Id: 670458-008 S

Prep Method: SW5035A

Date Prep: 08.19.2020

MSD Sample Id: 670458-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00182	0.0909	0.0902	99	0.0979	98	70-130	8	35	mg/kg	08.20.2020 14:58	
Toluene	<0.00182	0.0909	0.0820	90	0.0936	94	70-130	13	35	mg/kg	08.20.2020 14:58	
Ethylbenzene	<0.00182	0.0909	0.0848	93	0.0954	96	71-129	12	35	mg/kg	08.20.2020 14:58	
m,p-Xylenes	<0.00364	0.182	0.172	95	0.194	97	70-135	12	35	mg/kg	08.20.2020 14:58	
o-Xylene	0.00558	0.0909	0.0858	88	0.0971	92	71-133	12	35	mg/kg	08.20.2020 14:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		70-130	%	08.20.2020 14:58
4-Bromofluorobenzene	99		102		70-130	%	08.20.2020 14:58

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



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 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

Chain of Custody

Work Order No:

670458

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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:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

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

ANALYSIS REQUEST

Work Order Notes

Project Name:	PLU 213 Battery	Turn Around	Routine
Project Number:	012920106	Rush:	
P.O. Number:		Due Date:	
Sampler's Name:	Spencer Lo		

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	24.5-2	Thermometer ID				
Received Intact:	Yes	No	Correction Factor:			
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seals:	Yes	No	17			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers															
SW01	S	8/17/2020	1300	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW02	S	8/17/2020	1310	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW03	S	8/17/2020	1320	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW04	S	8/17/2020	1330	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW05	S	8/17/2020	1340	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW06	S	8/17/2020	1350	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW07	S	8/17/2020	1410	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW08	S	8/17/2020	1420	0-2'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW09	S	8/17/2020	1525	0-1'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SW10	S	8/18/2020	940	0-1'	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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 Ti 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 Ti U

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8/19/20 14:05			

Revised Date 05/14/18 Rev. 2018.1



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Midland TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-1111
Hobbs, NM (575-392-7550)

Page _____ of _____

Chain of Custody

Work Order No: 670458

Project Manager:
Dan Moir

Company Name:
LT Environmental, Inc., Permian office

Address:
3300 North A Street

City, State ZIP:
Midland, TX 79705

Phone:
(432) 236-3849

Email:
slo@ltenv.com, dmoir@ltenv.com, kkenedy@ltenv.com

Project Name:
PLU 213 Battery

Project Number:
012920106

P.O. Number:
Spencer Lo

Sampler's Name:
Spencer Lo

Turn Around
Routine ☒
Rush:
Due Date:

SAMPLE RECEIPT

Temperature (°C):
24/27/32
Received In tact:
Cooler Custody Seals:
Sample Custody Seals:

Temp Blank:
Yes No
Yes No
Yes No
Yes No

Well Ice:
Yes No
Yes No
Yes No
Yes No

Thermometer ID
Correction Factor:
Total Containers:

Sample Identification

Matrix

Date Sampled

Time Sampled

Depth

SW11
SW12
SW13
SW14
SW15
SW16
SW17

S
S
S
S
S
S
S

8/18/2020
8/18/2020
8/18/2020
8/18/2020
8/18/2020
8/18/2020
8/18/2020

950
1000
1010
1020
1030
1040
1050

0-1'
0-1'
0-1'
0-1'
0-2'
0-2'
0-2'

1
1
1
1
1
1
1

X
X
X
X
X
X
X

X
X
X
X
X
X
X

Number of Containers

TPH (EPA 8015)

BTEX (EPA 0=8021)

Chloride (EPA 300.0)

ANALYSIS REQUEST

Work Order Notes

Program: UST/PTST ☐ RRP ☐ Brownfields ☐ KRC ☐ Superfund

State of Project:
Reporting Level I ☐ Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: EDD ☐ ADAPT ☐ Other:

TAT starts the day received 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 Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCPLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

8/19/20 14:05

2

4

6

Revised Date 05/14/18 Rev. 20

Certificate of Analysis Summary 670464



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:35

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670464-001	670464-002	670464-003	670464-004	670464-005	670464-006
	<i>Field Id:</i>	FS01	FS02	FS03	FS04	FS05	FS06
	<i>Depth:</i>	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.17.2020 10:20	08.17.2020 10:30	08.17.2020 10:40	08.17.2020 10:50	08.17.2020 11:00	08.17.2020 11:10
BTEX by EPA 8021B	<i>Extracted:</i>	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00
	<i>Analyzed:</i>	08.20.2020 11:34	08.20.2020 11:54	08.20.2020 12:14	08.20.2020 12:35	08.20.2020 12:55	08.20.2020 13:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00400 0.00400	<0.00400 0.00400	<0.00397 0.00397	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33
	<i>Analyzed:</i>	08.20.2020 11:34	08.20.2020 11:40	08.20.2020 11:45	08.20.2020 12:19	08.20.2020 12:36	08.20.2020 12:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		35.0 10.0	72.4 9.94	71.9 9.98	131 9.94	32.2 9.92	83.6 9.96
TPH by SW8015 Mod	<i>Extracted:</i>	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30
	<i>Analyzed:</i>	08.20.2020 02:44	08.20.2020 03:04	08.20.2020 03:25	08.20.2020 03:45	08.20.2020 04:05	08.20.2020 04:25
	<i>Units/RL:</i>	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	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	659 49.8	<49.9 49.9	187 49.8	<50.0 50.0	159 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	107 49.8	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total GRO-DRO		<50.0 50.0	659 49.8	<49.9 49.9	187 49.8	<50.0 50.0	159 49.9
Total TPH		<50.0 50.0	766 49.8	<49.9 49.9	187 49.8	<50.0 50.0	159 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670464



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:35

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670464-007	670464-008	670464-009	670464-010	670464-011	670464-012
	Field Id:	FS07	FS08	FS09	FS010	FS011	FS012
	Depth:	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.17.2020 11:20	08.17.2020 11:30	08.17.2020 11:40	08.17.2020 11:50	08.17.2020 12:00	08.17.2020 12:10
BTEX by EPA 8021B	Extracted:	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:00	08.19.2020 17:22	08.19.2020 17:22
	Analyzed:	08.20.2020 13:36	08.20.2020 13:56	08.20.2020 14:17	08.20.2020 14:37	08.20.2020 03:23	08.20.2020 03:45
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	Extracted:	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33
	Analyzed:	08.20.2020 12:47	08.20.2020 12:52	08.20.2020 13:09	08.20.2020 13:15	08.20.2020 13:20	08.20.2020 13:26
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		69.5 9.94	114 10.0	94.1 10.0	218 9.98	423 9.98	516 9.94
TPH by SW8015 Mod	Extracted:	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30
	Analyzed:	08.20.2020 04:45	08.20.2020 05:06	08.20.2020 05:26	08.19.2020 22:01	08.19.2020 23:02	08.19.2020 23:22
	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	<49.9 49.9	<49.9 49.9	<50.3 50.3	<50.2 50.2	<50.3 50.3
Diesel Range Organics (DRO)		631 49.9	611 49.9	630 49.9	85.0 50.3	193 50.2	320 50.3
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	63.9 49.9	61.8 49.9	<50.3 50.3	<50.2 50.2	<50.3 50.3
Total GRO-DRO		631 49.9	611 49.9	630 49.9	85.0 50.3	193 50.2	320 50.3
Total TPH		631 49.9	675 49.9	692 49.9	85.0 50.3	193 50.2	320 50.3

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670464



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 08.19.2020 14:05

Report Date: 08.21.2020 17:35

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670464-013	670464-014	670464-015	670464-016		
	<i>Field Id:</i>	FS013	FS014	FS015	FS016		
	<i>Depth:</i>	2- ft	2- ft	2- ft	2- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	08.17.2020 12:20	08.17.2020 12:30	08.17.2020 12:40	08.17.2020 12:50		
BTEX by EPA 8021B	<i>Extracted:</i>	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22		
	<i>Analyzed:</i>	08.20.2020 04:07	08.20.2020 04:30	08.20.2020 04:52	08.20.2020 05:15		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198		
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198		
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198		
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00397 0.00397	<0.00396 0.00396		
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198		
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198		
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198		
Chloride by EPA 300	<i>Extracted:</i>	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33		
	<i>Analyzed:</i>	08.20.2020 13:31	08.20.2020 13:37	08.20.2020 13:54	08.20.2020 13:59		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		1290 50.1	88.2 9.96	863 9.98	316 9.96		
TPH by SW8015 Mod	<i>Extracted:</i>	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30		
	<i>Analyzed:</i>	08.19.2020 23:42	08.20.2020 00:03	08.20.2020 00:22	08.20.2020 00:43		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<49.9 49.9	<50.1 50.1		
Diesel Range Organics (DRO)		486 50.2	945 49.8	248 49.9	324 50.1		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	115 49.8	<49.9 49.9	<50.1 50.1		
Total GRO-DRO		486 50.2	945 49.8	248 49.9	324 50.1		
Total TPH		486 50.2	1060 49.8	248 49.9	324 50.1		

BRL - Below Reporting Limit

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



Analytical Report 670464

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670464**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670464. 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 Eurofins Xenco, LLC. 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. 670464 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 670464****LT Environmental, Inc., Arvada, CO**

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	08.17.2020 10:20	2 ft	670464-001
FS02	S	08.17.2020 10:30	2 ft	670464-002
FS03	S	08.17.2020 10:40	2 ft	670464-003
FS04	S	08.17.2020 10:50	2 ft	670464-004
FS05	S	08.17.2020 11:00	2 ft	670464-005
FS06	S	08.17.2020 11:10	2 ft	670464-006
FS07	S	08.17.2020 11:20	2 ft	670464-007
FS08	S	08.17.2020 11:30	2 ft	670464-008
FS09	S	08.17.2020 11:40	2 ft	670464-009
FS010	S	08.17.2020 11:50	2 ft	670464-010
FS011	S	08.17.2020 12:00	2 ft	670464-011
FS012	S	08.17.2020 12:10	2 ft	670464-012
FS013	S	08.17.2020 12:20	2 ft	670464-013
FS014	S	08.17.2020 12:30	2 ft	670464-014
FS015	S	08.17.2020 12:40	2 ft	670464-015
FS016	S	08.17.2020 12:50	2 ft	670464-016



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670464

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS01** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-001 Date Collected: 08.17.2020 10:20 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.0	10.0	mg/kg	08.20.2020 11:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 02:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 02:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 02:44	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 02:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 02:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.20.2020 02:44	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 02:44	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS01**
 Lab Sample Id: 670464-001

Matrix: Soil
 Date Collected: 08.17.2020 10:20

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 11:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 11:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 11:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 11:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 11:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 11:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 11:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 11:34	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.20.2020 11:34	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS02** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-002 Date Collected: 08.17.2020 10:30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	72.4	9.94	mg/kg	08.20.2020 11:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 03:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	659	49.8	mg/kg	08.20.2020 03:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	107	49.8	mg/kg	08.20.2020 03:04		1
Total GRO-DRO	PHC628	659	49.8	mg/kg	08.20.2020 03:04		1
Total TPH	PHC635	766	49.8	mg/kg	08.20.2020 03:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.20.2020 03:04	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 03:04	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS02**
Lab Sample Id: 670464-002

Matrix: Soil
Date Collected: 08.17.2020 10:30

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 11:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 11:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 11:54	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 11:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 11:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 11:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 11:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.20.2020 11:54		
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.20.2020 11:54		



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS03** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-003 Date Collected: 08.17.2020 10:40 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	71.9	9.98	mg/kg	08.20.2020 11:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 03:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 03:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 03:25	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 03:25	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 03:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.20.2020 03:25	
o-Terphenyl	84-15-1	91	%	70-135	08.20.2020 03:25	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS03**
Lab Sample Id: 670464-003

Matrix: Soil
Date Collected: 08.17.2020 10:40

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 12:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 12:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 12:14	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.20.2020 12:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 12:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 12:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 12:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.20.2020 12:14	
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.20.2020 12:14	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS04** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-004 Date Collected: 08.17.2020 10:50 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	131	9.94	mg/kg	08.20.2020 12:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 03:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	187	49.8	mg/kg	08.20.2020 03:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.20.2020 03:45	U	1
Total GRO-DRO	PHC628	187	49.8	mg/kg	08.20.2020 03:45		1
Total TPH	PHC635	187	49.8	mg/kg	08.20.2020 03:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.20.2020 03:45	
o-Terphenyl	84-15-1	83	%	70-135	08.20.2020 03:45	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS04**
 Lab Sample Id: 670464-004

Matrix: Soil
 Date Collected: 08.17.2020 10:50

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 12:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 12:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 12:35	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.20.2020 12:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 12:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 12:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 12:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.20.2020 12:35	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.20.2020 12:35	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS05** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-005 Date Collected: 08.17.2020 11:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.2	9.92	mg/kg	08.20.2020 12:36		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 04:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 04:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 04:05	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 04:05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 04:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.20.2020 04:05	
o-Terphenyl	84-15-1	86	%	70-135	08.20.2020 04:05	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS05**
Lab Sample Id: 670464-005

Matrix: Soil
Date Collected: 08.17.2020 11:00

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 12:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 12:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 12:55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.20.2020 12:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 12:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 12:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 12:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.20.2020 12:55	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 12:55	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS06** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-006 Date Collected: 08.17.2020 11:10 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.6	9.96	mg/kg	08.20.2020 12:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 04:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	159	49.9	mg/kg	08.20.2020 04:25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 04:25	U	1
Total GRO-DRO	PHC628	159	49.9	mg/kg	08.20.2020 04:25		1
Total TPH	PHC635	159	49.9	mg/kg	08.20.2020 04:25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.20.2020 04:25	
o-Terphenyl	84-15-1	94	%	70-135	08.20.2020 04:25	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS06**
Lab Sample Id: 670464-006

Matrix: Soil
Date Collected: 08.17.2020 11:10

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 13:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 13:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 13:16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 13:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 13:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 13:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 13:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	08.20.2020 13:16	
1,4-Difluorobenzene	540-36-3	74	%	70-130	08.20.2020 13:16	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS07** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-007 Date Collected: 08.17.2020 11:20 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	69.5	9.94	mg/kg	08.20.2020 12:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 04:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	631	49.9	mg/kg	08.20.2020 04:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 04:45	U	1
Total GRO-DRO	PHC628	631	49.9	mg/kg	08.20.2020 04:45		1
Total TPH	PHC635	631	49.9	mg/kg	08.20.2020 04:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.20.2020 04:45	
o-Terphenyl	84-15-1	70	%	70-135	08.20.2020 04:45	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS07**
Lab Sample Id: 670464-007

Matrix: Soil
Date Collected: 08.17.2020 11:20

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 13:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 13:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 13:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 13:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 13:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 13:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 13:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 13:36	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.20.2020 13:36	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS08** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-008 Date Collected: 08.17.2020 11:30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	114	10.0	mg/kg	08.20.2020 12:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 05:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	611	49.9	mg/kg	08.20.2020 05:06		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	63.9	49.9	mg/kg	08.20.2020 05:06		1
Total GRO-DRO	PHC628	611	49.9	mg/kg	08.20.2020 05:06		1
Total TPH	PHC635	675	49.9	mg/kg	08.20.2020 05:06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.20.2020 05:06	
o-Terphenyl	84-15-1	87	%	70-135	08.20.2020 05:06	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS08**
Lab Sample Id: 670464-008

Matrix: Soil
Date Collected: 08.17.2020 11:30

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 13:56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 13:56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 13:56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 13:56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 13:56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 13:56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 13:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.20.2020 13:56	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.20.2020 13:56	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS09** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-009 Date Collected: 08.17.2020 11:40 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	94.1	10.0	mg/kg	08.20.2020 13:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135067

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 05:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	630	49.9	mg/kg	08.20.2020 05:26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	61.8	49.9	mg/kg	08.20.2020 05:26		1
Total GRO-DRO	PHC628	630	49.9	mg/kg	08.20.2020 05:26		1
Total TPH	PHC635	692	49.9	mg/kg	08.20.2020 05:26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.20.2020 05:26	
o-Terphenyl	84-15-1	77	%	70-135	08.20.2020 05:26	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS09** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-009 Date Collected: 08.17.2020 11:40 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:00 Basis: Wet Weight
 Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 14:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 14:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 14:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 14:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 14:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 14:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 14:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.20.2020 14:17		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.20.2020 14:17		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS010** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-010 Date Collected: 08.17.2020 11:50 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	218	9.98	mg/kg	08.20.2020 13:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.19.2020 22:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	85.0	50.3	mg/kg	08.19.2020 22:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.19.2020 22:01	U	1
Total GRO-DRO	PHC628	85.0	50.3	mg/kg	08.19.2020 22:01		1
Total TPH	PHC635	85.0	50.3	mg/kg	08.19.2020 22:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.19.2020 22:01	
o-Terphenyl	84-15-1	83	%	70-135	08.19.2020 22:01	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS010**
 Lab Sample Id: 670464-010

Matrix: Soil
 Date Collected: 08.17.2020 11:50

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:00

Basis: Wet Weight

Seq Number: 3135193

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 14:37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 14:37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 14:37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 14:37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 14:37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 14:37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 14:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.20.2020 14:37		
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.20.2020 14:37		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS011** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-011 Date Collected: 08.17.2020 12:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	423	9.98	mg/kg	08.20.2020 13:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.19.2020 23:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	193	50.2	mg/kg	08.19.2020 23:02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.19.2020 23:02	U	1
Total GRO-DRO	PHC628	193	50.2	mg/kg	08.19.2020 23:02		1
Total TPH	PHC635	193	50.2	mg/kg	08.19.2020 23:02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.19.2020 23:02	
o-Terphenyl	84-15-1	97	%	70-135	08.19.2020 23:02	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS011**
 Lab Sample Id: 670464-011

Matrix: Soil
 Date Collected: 08.17.2020 12:00

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 03:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 03:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 03:23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 03:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 03:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 03:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 03:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	08.20.2020 03:23	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.20.2020 03:23	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS012** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-012 Date Collected: 08.17.2020 12:10 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	516	9.94	mg/kg	08.20.2020 13:26		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.19.2020 23:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	320	50.3	mg/kg	08.19.2020 23:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.19.2020 23:22	U	1
Total GRO-DRO	PHC628	320	50.3	mg/kg	08.19.2020 23:22		1
Total TPH	PHC635	320	50.3	mg/kg	08.19.2020 23:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.19.2020 23:22	
o-Terphenyl	84-15-1	97	%	70-135	08.19.2020 23:22	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS012**
 Lab Sample Id: 670464-012

Matrix: Soil
 Date Collected: 08.17.2020 12:10

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 03:45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 03:45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 03:45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 03:45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 03:45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 03:45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 03:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.20.2020 03:45		
4-Bromofluorobenzene	460-00-4	94	%	70-130	08.20.2020 03:45		



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS013** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-013 Date Collected: 08.17.2020 12:20 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1290	50.1	mg/kg	08.20.2020 13:31		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.19.2020 23:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	486	50.2	mg/kg	08.19.2020 23:42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.19.2020 23:42	U	1
Total GRO-DRO	PHC628	486	50.2	mg/kg	08.19.2020 23:42		1
Total TPH	PHC635	486	50.2	mg/kg	08.19.2020 23:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.19.2020 23:42	
o-Terphenyl	84-15-1	116	%	70-135	08.19.2020 23:42	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS013**
 Lab Sample Id: 670464-013

Matrix: Soil
 Date Collected: 08.17.2020 12:20

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 04:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 04:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 04:07	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 04:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 04:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 04:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 04:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	08.20.2020 04:07	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.20.2020 04:07	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS014** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-014 Date Collected: 08.17.2020 12:30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	88.2	9.96	mg/kg	08.20.2020 13:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 00:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	945	49.8	mg/kg	08.20.2020 00:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	115	49.8	mg/kg	08.20.2020 00:03		1
Total GRO-DRO	PHC628	945	49.8	mg/kg	08.20.2020 00:03		1
Total TPH	PHC635	1060	49.8	mg/kg	08.20.2020 00:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	08.20.2020 00:03	
o-Terphenyl	84-15-1	73	%	70-135	08.20.2020 00:03	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS014**
 Lab Sample Id: 670464-014

Matrix: Soil
 Date Collected: 08.17.2020 12:30

Date Received: 08.19.2020 14:05
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 04:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 04:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 04:30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 04:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 04:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 04:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 04:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.20.2020 04:30	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.20.2020 04:30	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS015** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-015 Date Collected: 08.17.2020 12:40 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	863	9.98	mg/kg	08.20.2020 13:54		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 00:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	248	49.9	mg/kg	08.20.2020 00:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 00:22	U	1
Total GRO-DRO	PHC628	248	49.9	mg/kg	08.20.2020 00:22		1
Total TPH	PHC635	248	49.9	mg/kg	08.20.2020 00:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.20.2020 00:22	
o-Terphenyl	84-15-1	98	%	70-135	08.20.2020 00:22	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS015**
Lab Sample Id: 670464-015

Matrix: Soil
Date Collected: 08.17.2020 12:40

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 04:52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 04:52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 04:52	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.20.2020 04:52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 04:52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 04:52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 04:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.20.2020 04:52	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.20.2020 04:52	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS016** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670464-016 Date Collected: 08.17.2020 12:50 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	316	9.96	mg/kg	08.20.2020 13:59		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.20.2020 00:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	324	50.1	mg/kg	08.20.2020 00:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.20.2020 00:43	U	1
Total GRO-DRO	PHC628	324	50.1	mg/kg	08.20.2020 00:43		1
Total TPH	PHC635	324	50.1	mg/kg	08.20.2020 00:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.20.2020 00:43	
o-Terphenyl	84-15-1	89	%	70-135	08.20.2020 00:43	



Certificate of Analytical Results 670464

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS016**
Lab Sample Id: 670464-016

Matrix: Soil
Date Collected: 08.17.2020 12:50

Date Received: 08.19.2020 14:05
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 05:15	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 05:15	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 05:15	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.20.2020 05:15	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 05:15	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 05:15	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 05:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.20.2020 05:15	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.20.2020 05:15	

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. **ND** Not Detected.

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



LT Environmental, Inc.
PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135195

MB Sample Id: 7709779-1-BLK

Matrix: Solid

LCS Sample Id: 7709779-1-BKS

Prep Method: E300P

Date Prep: 08.19.2020

LCSD Sample Id: 7709779-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	267	107	90-110	1	20	mg/kg	08.20.2020 09:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3135198

MB Sample Id: 7709861-1-BLK

Matrix: Solid

LCS Sample Id: 7709861-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709861-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	268	107	90-110	1	20	mg/kg	08.20.2020 12:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3135195

Parent Sample Id: 670458-001

Matrix: Soil

MS Sample Id: 670458-001 S

Prep Method: E300P

Date Prep: 08.19.2020

MSD Sample Id: 670458-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.0	199	244	102	245	102	90-110	0	20	mg/kg	08.20.2020 09:20	

Analytical Method: Chloride by EPA 300

Seq Number: 3135195

Parent Sample Id: 670458-011

Matrix: Soil

MS Sample Id: 670458-011 S

Prep Method: E300P

Date Prep: 08.19.2020

MSD Sample Id: 670458-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	27.8	200	234	103	234	103	90-110	0	20	mg/kg	08.20.2020 10:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3135198

Parent Sample Id: 670464-004

Matrix: Soil

MS Sample Id: 670464-004 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670464-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	131	200	339	104	339	104	90-110	0	20	mg/kg	08.20.2020 12:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3135198

Parent Sample Id: 670464-014

Matrix: Soil

MS Sample Id: 670464-014 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670464-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	88.2	200	294	103	293	102	90-110	0	20	mg/kg	08.20.2020 13:42	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135057

MB Sample Id: 7709789-1-BLK

Matrix: Solid

LCS Sample Id: 7709789-1-BKS

Prep Method: SW8015P

Date Prep: 08.19.2020

LCSD Sample Id: 7709789-1-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	1020	102	1320	132	70-135	26	35	mg/kg	08.19.2020 21:21	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1140	114	70-135	9	35	mg/kg	08.19.2020 21:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		126		83		70-135	%	08.19.2020 21:21
o-Terphenyl	97		116		113		70-135	%	08.19.2020 21:21

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135067

MB Sample Id: 7709798-1-BLK

Matrix: Solid

LCS Sample Id: 7709798-1-BKS

Prep Method: SW8015P

Date Prep: 08.19.2020

LCSD Sample Id: 7709798-1-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	883	88	932	93	70-135	5	35	mg/kg	08.19.2020 21:21	
Diesel Range Organics (DRO)	<50.0	1000	906	91	959	96	70-135	6	35	mg/kg	08.19.2020 21:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		115		118		70-135	%	08.19.2020 21:21
o-Terphenyl	98		103		106		70-135	%	08.19.2020 21:21

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135057

Matrix: Solid
MB Sample Id: 7709789-1-BLK

Prep Method: SW8015P

Date Prep: 08.19.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.19.2020 21:00	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135067

Matrix: Solid
MB Sample Id: 7709798-1-BLK

Prep Method: SW8015P

Date Prep: 08.19.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.19.2020 21:00	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135057

Parent Sample Id: 670464-010

Matrix: Soil

MS Sample Id: 670464-010 S

Prep Method: SW8015P

Date Prep: 08.19.2020

MSD Sample Id: 670464-010 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)	<49.9	997	1180	118	1100	110	70-135	7	35	mg/kg	08.19.2020 22:22	
Diesel Range Organics (DRO)	85.0	997	1080	100	1110	103	70-135	3	35	mg/kg	08.19.2020 22:22	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		126		70-135	%	08.19.2020 22:22
o-Terphenyl	90		95		70-135	%	08.19.2020 22:22

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135067

Parent Sample Id: 670458-007

Matrix: Soil

MS Sample Id: 670458-007 S

Prep Method: SW8015P

Date Prep: 08.19.2020

MSD Sample Id: 670458-007 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)	<50.0	999	912	91	970	97	70-135	6	35	mg/kg	08.19.2020 22:22	
Diesel Range Organics (DRO)	171	999	1130	96	1120	95	70-135	1	35	mg/kg	08.19.2020 22:22	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		118		70-135	%	08.19.2020 22:22
o-Terphenyl	97		100		70-135	%	08.19.2020 22:22

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135193

MB Sample Id: 7709775-1-BLK

Matrix: Solid

LCS Sample Id: 7709775-1-BKS

Prep Method: SW5035A

Date Prep: 08.19.2020

LCSD Sample Id: 7709775-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.0966	97	70-130	7	35	mg/kg	08.20.2020 05:17	
Toluene	<0.00200	0.100	0.0978	98	0.0908	91	70-130	7	35	mg/kg	08.20.2020 05:17	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0941	94	71-129	7	35	mg/kg	08.20.2020 05:17	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.191	96	70-135	6	35	mg/kg	08.20.2020 05:17	
o-Xylene	<0.00200	0.100	0.101	101	0.0962	96	71-133	5	35	mg/kg	08.20.2020 05:17	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		97		70-130	%	08.20.2020 05:17
4-Bromofluorobenzene	103		96		100		70-130	%	08.20.2020 05:17

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135126

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.19.2020

MB Sample Id: 7709776-1-BLK

LCS Sample Id: 7709776-1-BKS

LCSD Sample Id: 7709776-1-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	0.0958	96	0.110	110	70-130	14	35	mg/kg	08.20.2020 01:20	
Toluene	<0.00200	0.100	0.0912	91	0.106	106	70-130	15	35	mg/kg	08.20.2020 01:20	
Ethylbenzene	<0.00200	0.100	0.0847	85	0.0980	98	71-129	15	35	mg/kg	08.20.2020 01:20	
m,p-Xylenes	<0.00400	0.200	0.172	86	0.199	100	70-135	15	35	mg/kg	08.20.2020 01:20	
o-Xylene	<0.00200	0.100	0.0850	85	0.0985	99	71-133	15	35	mg/kg	08.20.2020 01:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		100		70-130	%	08.20.2020 01:20
4-Bromofluorobenzene	88		90		87		70-130	%	08.20.2020 01:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135193

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.19.2020

Parent Sample Id: 670458-008

MS Sample Id: 670458-008 S

MSD Sample Id: 670458-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00182	0.0909	0.0902	99	0.0979	98	70-130	8	35	mg/kg	08.20.2020 14:58	
Toluene	<0.00182	0.0909	0.0820	90	0.0936	94	70-130	13	35	mg/kg	08.20.2020 14:58	
Ethylbenzene	<0.00182	0.0909	0.0848	93	0.0954	96	71-129	12	35	mg/kg	08.20.2020 14:58	
m,p-Xylenes	<0.00364	0.182	0.172	95	0.194	97	70-135	12	35	mg/kg	08.20.2020 14:58	
o-Xylene	0.00558	0.0909	0.0858	88	0.0971	92	71-133	12	35	mg/kg	08.20.2020 14:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		70-130	%	08.20.2020 14:58
4-Bromofluorobenzene	99		102		70-130	%	08.20.2020 14:58

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135126

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.19.2020

Parent Sample Id: 670464-011

MS Sample Id: 670464-011 S

MSD Sample Id: 670464-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.104	105	70-130	5	35	mg/kg	08.20.2020 11:47	
Toluene	<0.00200	0.100	0.103	103	0.0987	100	70-130	4	35	mg/kg	08.20.2020 11:47	
Ethylbenzene	<0.00200	0.100	0.0960	96	0.0911	92	71-129	5	35	mg/kg	08.20.2020 11:47	
m,p-Xylenes	<0.00400	0.200	0.194	97	0.184	93	70-135	5	35	mg/kg	08.20.2020 11:47	
o-Xylene	<0.00200	0.100	0.0961	96	0.0920	93	71-133	4	35	mg/kg	08.20.2020 11:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		70-130	%	08.20.2020 11:47
4-Bromofluorobenzene	88		88		70-130	%	08.20.2020 11:47

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



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 (575-382-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Chain of Custody
 Work Order No: 670464

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Little
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:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com
Project Name:	PLU 213 Battery	Turn Around	
Project Number:	012920106	Routine	
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT				ANALYSIS REQUEST				Work Order Notes	
Temperature (°C):	Temp Blank:	Yes	No	Wet Ice:	Yes	No			
Received Intact:	Yes	No		Thermometer ID					
Cooler Custody Seals:	Yes	No		Correction Factor:					
Sample Custody Seals:	Yes	No		Total Containers:					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	
FS01	S	8/17/2020	1020	2'	1	X	X	X	
FS02	S	8/17/2020	1030	2'	1	X	X	X	
FS03	S	8/17/2020	1040	2'	1	X	X	X	
FS04	S	8/17/2020	1050	2'	1	X	X	X	
FS05	S	8/17/2020	1100	2'	1	X	X	X	
FS06	S	8/17/2020	1110	2'	1	X	X	X	
FS07	S	8/17/2020	1120	2'	1	X	X	X	
FS08	S	8/17/2020	1130	2'	1	X	X	X	
FS09	S	8/17/2020	1140	2'	1	X	X	X	
FS10	S	8/17/2020	1150	2'	1	X	X	X	

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 Ti 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 Ti U 1631 / 245.1 / 7470 / 7471 : Hg

ce: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8/19/20 14:05			

Certificate of Analysis Summary 670468



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:36

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670468-001	670468-002	670468-003	670468-004	670468-005	670468-006
	<i>Field Id:</i>	FS21	FS22	FS23	FS24	FS25	FS26
	<i>Depth:</i>	1- ft	1- ft	1- ft	4- ft	0.5- ft	0.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.18.2020 13:50	08.18.2020 14:00	08.18.2020 14:10	08.18.2020 14:20	08.18.2020 14:30	08.18.2020 14:40
BTEX by EPA 8021B	<i>Extracted:</i>	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22
	<i>Analyzed:</i>	08.20.2020 05:37	08.20.2020 06:00	08.20.2020 06:22	08.20.2020 06:44	08.20.2020 08:04	08.20.2020 08:25
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	0.0311 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401	<0.00399 0.00399	<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	0.0311 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33	08.20.2020 08:33
	<i>Analyzed:</i>	08.20.2020 14:16	08.20.2020 14:22	08.20.2020 14:27	08.20.2020 14:33	08.20.2020 14:38	08.20.2020 14:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		269 9.90	77.1 9.98	12.1 9.94	510 9.90	12.9 10.0	353 9.98
TPH by SW8015 Mod	<i>Extracted:</i>	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30
	<i>Analyzed:</i>	08.20.2020 01:03	08.20.2020 01:23	08.20.2020 01:44	08.20.2020 02:24	08.20.2020 02:44	08.20.2020 03:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	<50.3 50.3
Diesel Range Organics (DRO)		1630 49.8	444 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	575 50.3
Motor Oil Range Hydrocarbons (MRO)		160 49.8	53.3 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	80.9 50.3
Total GRO-DRO		1630 49.8	444 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	575 50.3
Total TPH		1790 49.8	497 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	656 50.3

BRL - Below Reporting Limit

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



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:36

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670468-007	670468-008	670468-009	670468-010	670468-011	670468-012
	Field Id:	FS27	FS28	FS29	FS30	FS31	FS32
	Depth:	1- ft	1- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.18.2020 14:50	08.18.2020 15:00	08.18.2020 15:10	08.18.2020 15:20	08.18.2020 15:30	08.18.2020 15:40
BTEX by EPA 8021B	Extracted:	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22	08.19.2020 17:22
	Analyzed:	08.20.2020 08:47	08.20.2020 09:10	08.20.2020 16:37	08.20.2020 09:55	08.20.2020 10:17	08.20.2020 10:39
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00401 0.00401	<0.00399 0.00399	<0.00397 0.00397	<0.00399 0.00399	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	Extracted:	08.20.2020 08:33	08.20.2020 12:36	08.20.2020 12:36	08.20.2020 12:36	08.20.2020 12:36	08.20.2020 12:36
	Analyzed:	08.20.2020 14:49	08.20.2020 17:15	08.20.2020 17:21	08.20.2020 17:26	08.20.2020 17:32	08.20.2020 17:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		42.7 9.98	106 9.98	33.3 9.90	41.2 9.98	16.5 9.90	26.7 10.1
TPH by SW8015 Mod	Extracted:	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30	08.19.2020 17:30
	Analyzed:	08.20.2020 03:25	08.20.2020 03:45	08.20.2020 04:05	08.20.2020 04:25	08.20.2020 04:45	08.20.2020 05:06
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<49.9 49.9	<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.2 50.2
Diesel Range Organics (DRO)		105 50.3	226 49.9	<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<49.9 49.9	<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.2 50.2
Total GRO-DRO		105 50.3	226 49.9	<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.2 50.2
Total TPH		105 50.3	226 49.9	<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.2 50.2

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670468



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:36

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670468-013	670468-014				
	Field Id:	FS33	FS34				
	Depth:	0.5- ft	0.5- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	08.18.2020 15:50	08.18.2020 16:00				
BTEX by EPA 8021B	Extracted:	08.19.2020 17:22	08.19.2020 17:22				
	Analyzed:	08.20.2020 11:02	08.20.2020 11:24				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.00198 0.00198	<0.00200 0.00200				
Benzene		<0.00198 0.00198	<0.00200 0.00200				
Toluene		<0.00198 0.00198	<0.00200 0.00200				
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200				
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399				
o-Xylene		<0.00198 0.00198	<0.00200 0.00200				
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200				
Total BTEX		<0.00198 0.00198	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	08.20.2020 12:36	08.20.2020 12:36				
	Analyzed:	08.20.2020 17:43	08.20.2020 17:48				
	Units/RL:	mg/kg RL	mg/kg RL				
		34.1 9.98	18.1 9.90				
Chloride							
TPH by SW8015 Mod	Extracted:	08.19.2020 17:30	08.20.2020 12:30				
	Analyzed:	08.20.2020 05:26	08.20.2020 22:00				
	Units/RL:	mg/kg RL	mg/kg RL				
		<49.8 49.8	<50.0 50.0				
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0				
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0				
Total GRO-DRO		<49.8 49.8	<50.0 50.0				
Total TPH		<49.8 49.8	<50.0 50.0				

BRL - Below Reporting Limit

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



Analytical Report 670468

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670468**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670468. 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 Eurofins Xenco, LLC. 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. 670468 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 670468****LT Environmental, Inc., Arvada, CO**

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS21	S	08.18.2020 13:50	1 ft	670468-001
FS22	S	08.18.2020 14:00	1 ft	670468-002
FS23	S	08.18.2020 14:10	1 ft	670468-003
FS24	S	08.18.2020 14:20	4 ft	670468-004
FS25	S	08.18.2020 14:30	0.5 ft	670468-005
FS26	S	08.18.2020 14:40	0.5 ft	670468-006
FS27	S	08.18.2020 14:50	1 ft	670468-007
FS28	S	08.18.2020 15:00	1 ft	670468-008
FS29	S	08.18.2020 15:10	0.5 ft	670468-009
FS30	S	08.18.2020 15:20	0.5 ft	670468-010
FS31	S	08.18.2020 15:30	0.5 ft	670468-011
FS32	S	08.18.2020 15:40	0.5 ft	670468-012
FS33	S	08.18.2020 15:50	0.5 ft	670468-013
FS34	S	08.18.2020 16:00	0.5 ft	670468-014



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670468

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670468

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS21** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-001 Date Collected: 08.18.2020 13:50 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	269	9.90	mg/kg	08.20.2020 14:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 01:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	1630	49.8	mg/kg	08.20.2020 01:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	160	49.8	mg/kg	08.20.2020 01:03		1
Total GRO-DRO	PHC628	1630	49.8	mg/kg	08.20.2020 01:03		1
Total TPH	PHC635	1790	49.8	mg/kg	08.20.2020 01:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.20.2020 01:03	
o-Terphenyl	84-15-1	105	%	70-135	08.20.2020 01:03	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS21**
Lab Sample Id: 670468-001

Matrix: Soil
Date Collected: 08.18.2020 13:50

Date Received: 08.19.2020 14:05
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 05:37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 05:37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 05:37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 05:37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 05:37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 05:37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 05:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	127	%	70-130	08.20.2020 05:37	
1,4-Difluorobenzene	540-36-3	91	%	70-130	08.20.2020 05:37	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS22** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-002 Date Collected: 08.18.2020 14:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	77.1	9.98	mg/kg	08.20.2020 14:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 01:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	444	49.8	mg/kg	08.20.2020 01:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	53.3	49.8	mg/kg	08.20.2020 01:23		1
Total GRO-DRO	PHC628	444	49.8	mg/kg	08.20.2020 01:23		1
Total TPH	PHC635	497	49.8	mg/kg	08.20.2020 01:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	08.20.2020 01:23	
o-Terphenyl	84-15-1	110	%	70-135	08.20.2020 01:23	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS22** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-002 Date Collected: 08.18.2020 14:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.19.2020 17:22 Basis: Wet Weight
 Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 06:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 06:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 06:00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 06:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 06:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 06:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 06:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.20.2020 06:00		
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.20.2020 06:00		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS23** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-003 Date Collected: 08.18.2020 14:10 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.1	9.94	mg/kg	08.20.2020 14:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 01:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.20.2020 01:44	
o-Terphenyl	84-15-1	104	%	70-135	08.20.2020 01:44	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS23**
 Lab Sample Id: 670468-003

Matrix: Soil
 Date Collected: 08.18.2020 14:10

Date Received: 08.19.2020 14:05
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 06:22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 06:22	U	1
Ethylbenzene	100-41-4	0.0311	0.00200	mg/kg	08.20.2020 06:22		1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 06:22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 06:22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 06:22	U	1
Total BTEX		0.0311	0.00200	mg/kg	08.20.2020 06:22		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.20.2020 06:22		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.20.2020 06:22		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS24** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-004 Date Collected: 08.18.2020 14:20 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	510	9.90	mg/kg	08.20.2020 14:33		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 02:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.20.2020 02:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.20.2020 02:24	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.20.2020 02:24	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.20.2020 02:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.20.2020 02:24	
o-Terphenyl	84-15-1	105	%	70-135	08.20.2020 02:24	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS24**
 Lab Sample Id: 670468-004

Matrix: Soil
 Date Collected: 08.18.2020 14:20

Date Received: 08.19.2020 14:05
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 06:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 06:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 06:44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.20.2020 06:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 06:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 06:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 06:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	08.20.2020 06:44	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.20.2020 06:44	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS25** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-005 Date Collected: 08.18.2020 14:30 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.9	10.0	mg/kg	08.20.2020 14:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.20.2020 02:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.20.2020 02:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.20.2020 02:44	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	08.20.2020 02:44	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.20.2020 02:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.20.2020 02:44	
o-Terphenyl	84-15-1	96	%	70-135	08.20.2020 02:44	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS25**
 Lab Sample Id: 670468-005

Matrix: Soil
 Date Collected: 08.18.2020 14:30

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 08:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 08:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 08:04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 08:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 08:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 08:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 08:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.20.2020 08:04	
4-Bromofluorobenzene	460-00-4	87	%	70-130	08.20.2020 08:04	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS26** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-006 Date Collected: 08.18.2020 14:40 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	353	9.98	mg/kg	08.20.2020 14:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.20.2020 03:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	575	50.3	mg/kg	08.20.2020 03:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	80.9	50.3	mg/kg	08.20.2020 03:04		1
Total GRO-DRO	PHC628	575	50.3	mg/kg	08.20.2020 03:04		1
Total TPH	PHC635	656	50.3	mg/kg	08.20.2020 03:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.20.2020 03:04	
o-Terphenyl	84-15-1	99	%	70-135	08.20.2020 03:04	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS26**
Lab Sample Id: 670468-006

Matrix: Soil
Date Collected: 08.18.2020 14:40

Date Received: 08.19.2020 14:05
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 08:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 08:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 08:25	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 08:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 08:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 08:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 08:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 08:25	
4-Bromofluorobenzene	460-00-4	93	%	70-130	08.20.2020 08:25	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS27** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-007 Date Collected: 08.18.2020 14:50 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 08:33 Basis: Wet Weight
 Seq Number: 3135198

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.7	9.98	mg/kg	08.20.2020 14:49		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.20.2020 03:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	105	50.3	mg/kg	08.20.2020 03:25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.20.2020 03:25	U	1
Total GRO-DRO	PHC628	105	50.3	mg/kg	08.20.2020 03:25		1
Total TPH	PHC635	105	50.3	mg/kg	08.20.2020 03:25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.20.2020 03:25	
o-Terphenyl	84-15-1	102	%	70-135	08.20.2020 03:25	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS27**
 Lab Sample Id: 670468-007

Matrix: Soil
 Date Collected: 08.18.2020 14:50

Date Received: 08.19.2020 14:05
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 08:47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 08:47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 08:47	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.20.2020 08:47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 08:47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 08:47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 08:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.20.2020 08:47		
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.20.2020 08:47		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS28** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-008 Date Collected: 08.18.2020 15:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	106	9.98	mg/kg	08.20.2020 17:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 03:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	226	49.9	mg/kg	08.20.2020 03:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 03:45	U	1
Total GRO-DRO	PHC628	226	49.9	mg/kg	08.20.2020 03:45		1
Total TPH	PHC635	226	49.9	mg/kg	08.20.2020 03:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.20.2020 03:45	
o-Terphenyl	84-15-1	99	%	70-135	08.20.2020 03:45	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS28**
 Lab Sample Id: 670468-008

Matrix: Soil
 Date Collected: 08.18.2020 15:00

Date Received: 08.19.2020 14:05
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 09:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 09:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 09:10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.20.2020 09:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 09:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 09:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 09:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	08.20.2020 09:10		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 09:10		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS29** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-009 Date Collected: 08.18.2020 15:10 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.3	9.90	mg/kg	08.20.2020 17:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 04:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 04:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 04:05	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 04:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 04:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.20.2020 04:05	
o-Terphenyl	84-15-1	107	%	70-135	08.20.2020 04:05	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS29**
 Lab Sample Id: 670468-009

Matrix: Soil
 Date Collected: 08.18.2020 15:10

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 16:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 16:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 16:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 16:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 16:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 16:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 16:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.20.2020 16:37		
4-Bromofluorobenzene	460-00-4	90	%	70-130	08.20.2020 16:37		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS30** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-010 Date Collected: 08.18.2020 15:20 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.2	9.98	mg/kg	08.20.2020 17:26		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 04:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.20.2020 04:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.20.2020 04:25	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.20.2020 04:25	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.20.2020 04:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	08.20.2020 04:25	
o-Terphenyl	84-15-1	106	%	70-135	08.20.2020 04:25	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS30**
Lab Sample Id: 670468-010

Matrix: Soil
Date Collected: 08.18.2020 15:20

Date Received: 08.19.2020 14:05
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 09:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 09:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 09:55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.20.2020 09:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 09:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 09:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 09:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	08.20.2020 09:55	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.20.2020 09:55	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS31** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-011 Date Collected: 08.18.2020 15:30 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.5	9.90	mg/kg	08.20.2020 17:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 04:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.20.2020 04:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.20.2020 04:45	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.20.2020 04:45	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.20.2020 04:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.20.2020 04:45	
o-Terphenyl	84-15-1	99	%	70-135	08.20.2020 04:45	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS31**
 Lab Sample Id: 670468-011

Matrix: Soil
 Date Collected: 08.18.2020 15:30

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 10:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 10:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 10:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 10:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 10:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 10:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 10:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	08.20.2020 10:17	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.20.2020 10:17	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS32** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-012 Date Collected: 08.18.2020 15:40 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.7	10.1	mg/kg	08.20.2020 17:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.20.2020 05:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.20.2020 05:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.20.2020 05:06	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	08.20.2020 05:06	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.20.2020 05:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	08.20.2020 05:06	
o-Terphenyl	84-15-1	103	%	70-135	08.20.2020 05:06	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS32**
Lab Sample Id: 670468-012

Matrix: Soil
Date Collected: 08.18.2020 15:40

Date Received: 08.19.2020 14:05
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 10:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 10:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 10:39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 10:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 10:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 10:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 10:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.20.2020 10:39		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.20.2020 10:39		



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS33** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-013 Date Collected: 08.18.2020 15:50 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.1	9.98	mg/kg	08.20.2020 17:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.19.2020 17:30 Basis: Wet Weight
 Seq Number: 3135057

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.20.2020 05:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	89.4	49.8	mg/kg	08.20.2020 05:26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.20.2020 05:26	U	1
Total GRO-DRO	PHC628	89.4	49.8	mg/kg	08.20.2020 05:26		1
Total TPH	PHC635	89.4	49.8	mg/kg	08.20.2020 05:26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.20.2020 05:26	
o-Terphenyl	84-15-1	106	%	70-135	08.20.2020 05:26	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS33**
 Lab Sample Id: 670468-013

Matrix: Soil
 Date Collected: 08.18.2020 15:50

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 11:02	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 11:02	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 11:02	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.20.2020 11:02	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 11:02	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 11:02	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 11:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.20.2020 11:02	
4-Bromofluorobenzene	460-00-4	86	%	70-130	08.20.2020 11:02	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS34** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670468-014 Date Collected: 08.18.2020 16:00 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.1	9.90	mg/kg	08.20.2020 17:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 22:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 22:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 22:00	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 22:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 22:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.20.2020 22:00	
o-Terphenyl	84-15-1	90	%	70-135	08.20.2020 22:00	



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LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS34**
 Lab Sample Id: 670468-014

Matrix: Soil
 Date Collected: 08.18.2020 16:00

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.19.2020 17:22

Basis: Wet Weight

Seq Number: 3135126

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 11:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 11:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 11:24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.20.2020 11:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 11:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 11:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 11:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	08.20.2020 11:24	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.20.2020 11:24	

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. **ND** Not Detected.

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



LT Environmental, Inc.
PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135198

MB Sample Id: 7709861-1-BLK

Matrix: Solid

LCS Sample Id: 7709861-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709861-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	268	107	90-110	1	20	mg/kg	08.20.2020 12:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3135200

MB Sample Id: 7709862-1-BLK

Matrix: Solid

LCS Sample Id: 7709862-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709862-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	264	106	267	107	90-110	1	20	mg/kg	08.20.2020 15:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3135198

Parent Sample Id: 670464-004

Matrix: Soil

MS Sample Id: 670464-004 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670464-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	131	200	339	104	339	104	90-110	0	20	mg/kg	08.20.2020 12:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3135198

Parent Sample Id: 670464-014

Matrix: Soil

MS Sample Id: 670464-014 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670464-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	88.2	200	294	103	293	102	90-110	0	20	mg/kg	08.20.2020 13:42	

Analytical Method: Chloride by EPA 300

Seq Number: 3135200

Parent Sample Id: 670511-001

Matrix: Soil

MS Sample Id: 670511-001 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670511-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14.1	199	224	105	224	105	90-110	0	20	mg/kg	08.20.2020 15:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3135200

Parent Sample Id: 670511-011

Matrix: Soil

MS Sample Id: 670511-011 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670511-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.4	200	248	103	247	102	90-110	0	20	mg/kg	08.20.2020 16:47	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135057

MB Sample Id: 7709789-1-BLK

Matrix: Solid

LCS Sample Id: 7709789-1-BKS

Prep Method: SW8015P

Date Prep: 08.19.2020

LCSD Sample Id: 7709789-1-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	1020	102	1320	132	70-135	26	35	mg/kg	08.19.2020 21:21	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1140	114	70-135	9	35	mg/kg	08.19.2020 21:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		126		83		70-135	%	08.19.2020 21:21
o-Terphenyl	97		116		113		70-135	%	08.19.2020 21:21

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

MB Sample Id: 7709859-1-BLK

Matrix: Solid

LCS Sample Id: 7709859-1-BKS

Prep Method: SW8015P

Date Prep: 08.20.2020

LCSD Sample Id: 7709859-1-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	951	95	944	94	70-135	1	35	mg/kg	08.20.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	986	99	979	98	70-135	1	35	mg/kg	08.20.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		114		110		70-135	%	08.20.2020 13:55
o-Terphenyl	87		104		100		70-135	%	08.20.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135057

Matrix: Solid

MB Sample Id: 7709789-1-BLK

Prep Method: SW8015P

Date Prep: 08.19.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.19.2020 21:00	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Matrix: Solid

MB Sample Id: 7709859-1-BLK

Prep Method: SW8015P

Date Prep: 08.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.20.2020 13:34	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135057

Parent Sample Id: 670464-010

Matrix: Soil

MS Sample Id: 670464-010 S

Prep Method: SW8015P

Date Prep: 08.19.2020

MSD Sample Id: 670464-010 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)	<49.9	997	1180	118	1100	110	70-135	7	35	mg/kg	08.19.2020 22:22	
Diesel Range Organics (DRO)	85.0	997	1080	100	1110	103	70-135	3	35	mg/kg	08.19.2020 22:22	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		126		70-135	%	08.19.2020 22:22
o-Terphenyl	90		95		70-135	%	08.19.2020 22:22

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Parent Sample Id: 670474-001

Matrix: Soil

MS Sample Id: 670474-001 S

Prep Method: SW8015P

Date Prep: 08.20.2020

MSD Sample Id: 670474-001 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)	<50.0	999	986	99	920	92	70-135	7	35	mg/kg	08.20.2020 14:55	
Diesel Range Organics (DRO)	<50.0	999	1030	103	973	97	70-135	6	35	mg/kg	08.20.2020 14:55	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		114		70-135	%	08.20.2020 14:55
o-Terphenyl	113		105		70-135	%	08.20.2020 14:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135126

MB Sample Id: 7709776-1-BLK

Matrix: Solid

LCS Sample Id: 7709776-1-BKS

Prep Method: SW5035A

Date Prep: 08.19.2020

LCSD Sample Id: 7709776-1-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	0.0958	96	0.110	110	70-130	14	35	mg/kg	08.20.2020 01:20	
Toluene	<0.00200	0.100	0.0912	91	0.106	106	70-130	15	35	mg/kg	08.20.2020 01:20	
Ethylbenzene	<0.00200	0.100	0.0847	85	0.0980	98	71-129	15	35	mg/kg	08.20.2020 01:20	
m,p-Xylenes	<0.00400	0.200	0.172	86	0.199	100	70-135	15	35	mg/kg	08.20.2020 01:20	
o-Xylene	<0.00200	0.100	0.0850	85	0.0985	99	71-133	15	35	mg/kg	08.20.2020 01:20	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		100		70-130	%	08.20.2020 01:20
4-Bromofluorobenzene	88		90		87		70-130	%	08.20.2020 01:20

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135126

Parent Sample Id: 670464-011

Matrix: Soil

MS Sample Id: 670464-011 S

Prep Method: SW5035A

Date Prep: 08.19.2020

MSD Sample Id: 670464-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.104	105	70-130	5	35	mg/kg	08.20.2020 11:47	
Toluene	<0.00200	0.100	0.103	103	0.0987	100	70-130	4	35	mg/kg	08.20.2020 11:47	
Ethylbenzene	<0.00200	0.100	0.0960	96	0.0911	92	71-129	5	35	mg/kg	08.20.2020 11:47	
m,p-Xylenes	<0.00400	0.200	0.194	97	0.184	93	70-135	5	35	mg/kg	08.20.2020 11:47	
o-Xylene	<0.00200	0.100	0.0961	96	0.0920	93	71-133	4	35	mg/kg	08.20.2020 11:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		70-130	%	08.20.2020 11:47
4-Bromofluorobenzene	88		88		70-130	%	08.20.2020 11:47

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 1670468

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)

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Project Manager:	Den Moir	Bill to: (if different)	Kyle Litrell
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:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

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

Project Name:	PLU 213 Battery	Turn Around	☒
Project Number:	012920106	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

Temperature (°C):	24.3	Temp Blank:	☒	Yes	No	Wet Ice:	☒	Yes	No
Received Intact:	Yes	No	Thermometer ID	TMM007					
Cooler Custody Seals:	Yes	No	Correction Factor:	-0.2					
Sample Custody Seals:	Yes	No	Total Containers:	14					

Sample Identification					Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA 8015)	BTEX (EPA 8015)	Chloride (EPA 8015)	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
FS21		S	8/18/2020	1350	1'	1	X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed: 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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and sub-contractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8/19/20 14:05			



Chain of Custody

Work Order No:

670468

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

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Page 2 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
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:	slg@ltenv.com, dmair@ltenv.com, kennedy@ltenv.com

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

Project Name:	PLU 213 Battery	Turn Around
Project Number:	012920106	Routine ☒
P.O. Number:		Rush:
Sampler's Name:	Spencer Lo	Due Date:

Temperature (°C):		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Received intact:	Yes	Thermometer ID					
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
FS31	S	8/18/2020	1530	0.5'	1
FS32	S	8/18/2020	1540	0.5'	1
FS33	S	8/18/2020	1550	0.5'	1
FS34	S	8/18/2020	1600	0.5'	1

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

 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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

ce: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8/19/20 14:05			

Certificate of Analysis Summary 670474



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:36

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670474-001	670474-002				
	Field Id:	FS17	FS18				
	Depth:	2.5-	2.5- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	08.19.2020 09:50	08.19.2020 10:00				
BTEX by EPA 8021B	Extracted:	08.20.2020 15:05	08.20.2020 15:05				
	Analyzed:	08.20.2020 20:54	08.20.2020 21:15				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.00198 0.00198	<0.00199 0.00199				
Benzene		<0.00198 0.00198	<0.00199 0.00199				
Toluene		<0.00198 0.00198	<0.00199 0.00199				
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199				
m,p-Xylenes		<0.00395 0.00395	<0.00398 0.00398				
o-Xylene		<0.00198 0.00198	<0.00199 0.00199				
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199				
Total BTEX		<0.00198 0.00198	<0.00199 0.00199				
Chloride by EPA 300	Extracted:	08.20.2020 12:36	08.20.2020 15:44				
	Analyzed:	08.20.2020 17:54	08.20.2020 18:27				
	Units/RL:	mg/kg RL	mg/kg RL				
		739 10.0	91.8 9.94				
Chloride							
TPH by SW8015 Mod	Extracted:	08.20.2020 12:30	08.20.2020 12:30				
	Analyzed:	08.20.2020 14:35	08.20.2020 15:36				
	Units/RL:	mg/kg RL	mg/kg RL				
		<50.1 50.1	<50.1 50.1				
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1				
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1				
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1				
Total GRO-DRO		<50.1 50.1	<50.1 50.1				
Total TPH		<50.1 50.1	<50.1 50.1				

BRL - Below Reporting Limit

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



Analytical Report 670474

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670474**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670474. 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 Eurofins Xenco, LLC. 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. 670474 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 670474

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS17	S	08.19.2020 09:50	2.5	670474-001
FS18	S	08.19.2020 10:00	2.5 ft	670474-002



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 213 Battery

Project ID: 012920106
Work Order Number(s): 670474

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670474

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS17** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670474-001 Date Collected: 08.19.2020 09:50 Sample Depth: 2.5
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 12:36 Basis: Wet Weight
 Seq Number: 3135200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	739	10.0	mg/kg	08.20.2020 17:54		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.20.2020 14:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.20.2020 14:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.20.2020 14:35	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.20.2020 14:35	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.20.2020 14:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.20.2020 14:35	
o-Terphenyl	84-15-1	94	%	70-135	08.20.2020 14:35	



Certificate of Analytical Results 670474

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS17**
Lab Sample Id: 670474-001

Matrix: Soil
Date Collected: 08.19.2020 09:50

Date Received: 08.19.2020 14:05
Sample Depth: 2.5

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 20:54	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 20:54	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 20:54	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	08.20.2020 20:54	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 20:54	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 20:54	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 20:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.20.2020 20:54	
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.20.2020 20:54	



Certificate of Analytical Results 670474

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS18** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670474-002 Date Collected: 08.19.2020 10:00 Sample Depth: 2.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	91.8	9.94	mg/kg	08.20.2020 18:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.20.2020 15:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.20.2020 15:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.20.2020 15:36	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.20.2020 15:36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.20.2020 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.20.2020 15:36	
o-Terphenyl	84-15-1	93	%	70-135	08.20.2020 15:36	



Certificate of Analytical Results 670474

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS18**
 Lab Sample Id: 670474-002

Matrix: Soil
 Date Collected: 08.19.2020 10:00

Date Received: 08.19.2020 14:05
 Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 21:15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 21:15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 21:15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 21:15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 21:15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 21:15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 21:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 21:15	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 21:15	



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135200

MB Sample Id: 7709862-1-BLK

Matrix: Solid

LCS Sample Id: 7709862-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709862-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	264	106	267	107	90-110	1	20	mg/kg	08.20.2020 15:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

MB Sample Id: 7709865-1-BLK

Matrix: Solid

LCS Sample Id: 7709865-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	267	107	90-110	1	20	mg/kg	08.20.2020 18:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3135200

Parent Sample Id: 670511-001

Matrix: Soil

MS Sample Id: 670511-001 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670511-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14.1	199	224	105	224	105	90-110	0	20	mg/kg	08.20.2020 15:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3135200

Parent Sample Id: 670511-011

Matrix: Soil

MS Sample Id: 670511-011 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670511-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.4	200	248	103	247	102	90-110	0	20	mg/kg	08.20.2020 16:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670474-002

Matrix: Soil

MS Sample Id: 670474-002 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670474-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	91.8	200	298	103	297	103	90-110	0	20	mg/kg	08.20.2020 18:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670532-001

Matrix: Soil

MS Sample Id: 670532-001 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670532-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11400	198	11600	101	11600	101	90-110	0	20	mg/kg	08.20.2020 19:51	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

MB Sample Id: 7709859-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.20.2020

LCS Sample Id: 7709859-1-BKS

LCSD Sample Id: 7709859-1-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	951	95	944	94	70-135	1	35	mg/kg	08.20.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	986	99	979	98	70-135	1	35	mg/kg	08.20.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		114		110		70-135	%	08.20.2020 13:55
o-Terphenyl	87		104		100		70-135	%	08.20.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.20.2020

MB Sample Id: 7709859-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.20.2020 13:34	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.20.2020

Parent Sample Id: 670474-001

MS Sample Id: 670474-001 S

MSD Sample Id: 670474-001 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)	<50.0	999	986	99	920	92	70-135	7	35	mg/kg	08.20.2020 14:55	
Diesel Range Organics (DRO)	<50.0	999	1030	103	973	97	70-135	6	35	mg/kg	08.20.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		114		70-135	%	08.20.2020 14:55
o-Terphenyl	113		105		70-135	%	08.20.2020 14:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135260

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.20.2020

MB Sample Id: 7709858-1-BLK

LCS Sample Id: 7709858-1-BKS

LCSD Sample Id: 7709858-1-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	0.106	106	0.102	102	70-130	4	35	mg/kg	08.20.2020 16:55	
Toluene	<0.00200	0.100	0.101	101	0.0956	96	70-130	5	35	mg/kg	08.20.2020 16:55	
Ethylbenzene	<0.00200	0.100	0.107	107	0.101	101	71-129	6	35	mg/kg	08.20.2020 16:55	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.205	103	70-135	4	35	mg/kg	08.20.2020 16:55	
o-Xylene	<0.00200	0.100	0.106	106	0.102	102	71-133	4	35	mg/kg	08.20.2020 16:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		103		99		70-130	%	08.20.2020 16:55
4-Bromofluorobenzene	98		102		96		70-130	%	08.20.2020 16:55

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135260

Parent Sample Id: 670485-001

Matrix: Soil

MS Sample Id: 670485-001 S

Prep Method: SW5035A

Date Prep: 08.20.2020

MSD Sample Id: 670485-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0969	96	0.0950	94	70-130	2	35	mg/kg	08.21.2020 11:47	
Toluene	<0.00201	0.101	0.0911	90	0.0880	87	70-130	3	35	mg/kg	08.21.2020 11:47	
Ethylbenzene	<0.00201	0.101	0.0973	96	0.0822	81	71-129	17	35	mg/kg	08.21.2020 11:47	
m,p-Xylenes	<0.00402	0.201	0.191	95	0.165	82	70-135	15	35	mg/kg	08.21.2020 11:47	
o-Xylene	<0.00201	0.101	0.0947	94	0.0821	81	71-133	14	35	mg/kg	08.21.2020 11:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		98		70-130	%	08.21.2020 11:47
4-Bromofluorobenzene	95		98		70-130	%	08.21.2020 11:47

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 1670474

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

www.xenco.com

Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Little
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:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

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

Project Name:	PLU 213 Battery	Turn Around
Project Number:	012920106	Routine ☒ Rush:
P.O. Number:		Due Date:
Sampler's Name:	Spencer Lo	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	24/2.2	Thermometer ID: TMM007				
Received In tact:	Yes	No	Correction Factor: -0.2			
Cooler Custody Seals:	Yes	No	Total Containers: 2			
Sample Custody Seals:	Yes	No				

5 PM

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E	BTEX (	Chlorid																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</
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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 Ti 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 Ti U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Spencer Lo</i>	<i>[Signature]</i>	8/19/20 14:05			

Certificate of Analysis Summary 670483



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:54

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670483-001	670483-002				
	Field Id:	FS19	FS20				
	Depth:	4- ft	4- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	08.18.2020 13:30	08.18.2020 13:40				
BTEX by EPA 8021B	Extracted:	08.20.2020 15:01	08.20.2020 15:01				
	Analyzed:	08.21.2020 02:20	08.21.2020 02:42				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.00198 0.00198	<0.00199 0.00199				
Benzene		<0.00198 0.00198	<0.00199 0.00199				
Toluene		<0.00198 0.00198	0.0171 0.00199				
Ethylbenzene		<0.00396 0.00396	<0.00398 0.00398				
m,p-Xylenes		<0.00198 0.00198	<0.00199 0.00199				
o-Xylene		<0.00198 0.00198	<0.00199 0.00199				
Total Xylenes		<0.00198 0.00198	0.0171 0.00199				
Total BTEX		<0.00198 0.00198					
Chloride by EPA 300	Extracted:	08.20.2020 15:44	08.20.2020 15:44				
	Analyzed:	08.20.2020 18:44	08.20.2020 18:50				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		66.4 9.96	251 9.94				
TPH by SW8015 Mod	Extracted:	08.20.2020 12:30	08.20.2020 12:30				
	Analyzed:	08.20.2020 15:56	08.20.2020 16:16				
	Units/RL:	mg/kg RL	mg/kg RL				
		<49.9 49.9	<49.9 49.9				
Gasoline Range Hydrocarbons (GRO)		418 49.9	108 49.9				
Diesel Range Organics (DRO)		51.3 49.9	<49.9 49.9				
Motor Oil Range Hydrocarbons (MRO)		418 49.9	108 49.9				
Total GRO-DRO		469 49.9	108 49.9				
Total TPH							

BRL - Below Reporting Limit

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



Analytical Report 670483

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670483**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670483. 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 Eurofins Xenco, LLC. 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. 670483 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 670483

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS19	S	08.18.2020 13:30	4 ft	670483-001
FS20	S	08.18.2020 13:40	4 ft	670483-002



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 213 Battery

Project ID: 012920106
Work Order Number(s): 670483

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670483

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS19** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670483-001 Date Collected: 08.18.2020 13:30 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	66.4	9.96	mg/kg	08.20.2020 18:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	418	49.9	mg/kg	08.20.2020 15:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	51.3	49.9	mg/kg	08.20.2020 15:56		1
Total GRO-DRO	PHC628	418	49.9	mg/kg	08.20.2020 15:56		1
Total TPH	PHC635	469	49.9	mg/kg	08.20.2020 15:56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.20.2020 15:56	
o-Terphenyl	84-15-1	98	%	70-135	08.20.2020 15:56	



Certificate of Analytical Results 670483

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS19**
 Lab Sample Id: 670483-001

Matrix: Soil
 Date Collected: 08.18.2020 13:30

Date Received: 08.19.2020 14:05
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:01

Basis: Wet Weight

Seq Number: 3135191

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.21.2020 02:20	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.21.2020 02:20	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.21.2020 02:20	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.21.2020 02:20	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.21.2020 02:20	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.21.2020 02:20	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.21.2020 02:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.21.2020 02:20	
4-Bromofluorobenzene	460-00-4	93	%	70-130	08.21.2020 02:20	



Certificate of Analytical Results 670483

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS20** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670483-002 Date Collected: 08.18.2020 13:40 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	251	9.94	mg/kg	08.20.2020 18:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 16:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	108	49.9	mg/kg	08.20.2020 16:16		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 16:16	U	1
Total GRO-DRO	PHC628	108	49.9	mg/kg	08.20.2020 16:16		1
Total TPH	PHC635	108	49.9	mg/kg	08.20.2020 16:16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.20.2020 16:16	
o-Terphenyl	84-15-1	98	%	70-135	08.20.2020 16:16	



Certificate of Analytical Results 670483

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS20**
Lab Sample Id: 670483-002

Matrix: Soil
Date Collected: 08.18.2020 13:40

Date Received: 08.19.2020 14:05
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:01

Basis: Wet Weight

Seq Number: 3135191

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.21.2020 02:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.21.2020 02:42	U	1
Ethylbenzene	100-41-4	0.0171	0.00199	mg/kg	08.21.2020 02:42		1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.21.2020 02:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.21.2020 02:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.21.2020 02:42	U	1
Total BTEX		0.0171	0.00199	mg/kg	08.21.2020 02:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.21.2020 02:42	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.21.2020 02:42	

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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

MB Sample Id: 7709865-1-BLK

Matrix: Solid

LCS Sample Id: 7709865-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	267	107	90-110	1	20	mg/kg	08.20.2020 18:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670474-002

Matrix: Soil

MS Sample Id: 670474-002 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670474-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	91.8	200	298	103	297	103	90-110	0	20	mg/kg	08.20.2020 18:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670532-001

Matrix: Soil

MS Sample Id: 670532-001 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670532-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11400	198	11600	101	11600	101	90-110	0	20	mg/kg	08.20.2020 19:51	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

MB Sample Id: 7709859-1-BLK

Matrix: Solid

LCS Sample Id: 7709859-1-BKS

Prep Method: SW8015P

Date Prep: 08.20.2020

LCSD Sample Id: 7709859-1-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	951	95	944	94	70-135	1	35	mg/kg	08.20.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	986	99	979	98	70-135	1	35	mg/kg	08.20.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		114		110		70-135	%	08.20.2020 13:55
o-Terphenyl	87		104		100		70-135	%	08.20.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Matrix: Solid

MB Sample Id: 7709859-1-BLK

Prep Method: SW8015P

Date Prep: 08.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.20.2020 13:34	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Parent Sample Id: 670474-001

Matrix: Soil

MS Sample Id: 670474-001 S

Prep Method: SW8015P

Date Prep: 08.20.2020

MSD Sample Id: 670474-001 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)	<50.0	999	986	99	920	92	70-135	7	35	mg/kg	08.20.2020 14:55	
Diesel Range Organics (DRO)	<50.0	999	1030	103	973	97	70-135	6	35	mg/kg	08.20.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		114		70-135	%	08.20.2020 14:55
o-Terphenyl	113		105		70-135	%	08.20.2020 14:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135191

MB Sample Id: 7709856-1-BLK

Matrix: Solid

LCS Sample Id: 7709856-1-BKS

Prep Method: SW5035A

Date Prep: 08.20.2020

LCSD Sample Id: 7709856-1-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	0.109	109	0.113	113	70-130	4	35	mg/kg	08.20.2020 15:52	
Toluene	<0.00200	0.100	0.104	104	0.108	108	70-130	4	35	mg/kg	08.20.2020 15:52	
Ethylbenzene	<0.00200	0.100	0.0981	98	0.102	102	71-129	4	35	mg/kg	08.20.2020 15:52	
m,p-Xylenes	<0.00400	0.200	0.199	100	0.206	103	70-135	3	35	mg/kg	08.20.2020 15:52	
o-Xylene	<0.00200	0.100	0.0966	97	0.100	100	71-133	3	35	mg/kg	08.20.2020 15:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		101		70-130	%	08.20.2020 15:52
4-Bromofluorobenzene	86		87		88		70-130	%	08.20.2020 15:52

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135191

Parent Sample Id: 670511-001

Matrix: Soil

MS Sample Id: 670511-001 S

Prep Method: SW5035A

Date Prep: 08.20.2020

MSD Sample Id: 670511-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.123	123	0.122	122	70-130	1	35	mg/kg	08.20.2020 17:22	
Toluene	<0.00201	0.100	0.117	117	0.116	116	70-130	1	35	mg/kg	08.20.2020 17:22	
Ethylbenzene	<0.00201	0.100	0.109	109	0.108	108	71-129	1	35	mg/kg	08.20.2020 17:22	
m,p-Xylenes	<0.00402	0.201	0.221	110	0.220	110	70-135	0	35	mg/kg	08.20.2020 17:22	
o-Xylene	<0.00201	0.100	0.107	107	0.107	107	71-133	0	35	mg/kg	08.20.2020 17:22	

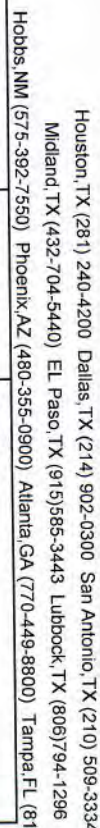
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	08.20.2020 17:22
4-Bromofluorobenzene	87		91		70-130	%	08.20.2020 17:22

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Work Order No: 678483

Page 1 of 1

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

SAMPLE RECEIPT		Temp Blank:	Yes	No	Well Ice:	Yes	No
Temperature (°C):	8.4/8.2	Thermometer ID					
Received Intact:	Yes	No	711007				
Cooler Custody Seals:	Yes	No	Correction Factor:		-0.2		
Sample Custody Seals:	Yes	No	Total Containers:		2		

Number of Containers

(EPA 8015)

(EPA 0=8021)

Side (EPA 300.0)

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

[illegible]

Circle Method(s) and Metal(s) to be analyzed		200.8 / 6020:	200.7 / 6010	Total
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb mg Ni Ni N Se Ag	16311 / 245.1 / 7470 / 7471 : Hg
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U				

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			8/19/20 14:05	2		
3				4		
5				6		

Revised Date 05/14/18 Rev 20/18

Certificate of Analysis Summary 670485



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:46

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670485-001	670485-002	670485-003	670485-004		
	Field Id:	SW18	SW19	SW20	SW21		
	Depth:	1-4 ft	1-4 ft	1-4 ft	1-4 ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	08.18.2020 12:00	08.18.2020 12:10	08.18.2020 12:20	08.18.2020 12:30		
BTEX by EPA 8021B	Extracted:	08.20.2020 15:05	08.20.2020 15:05	08.20.2020 15:05	08.20.2020 15:05		
	Analyzed:	08.20.2020 18:52	08.20.2020 19:12	08.20.2020 19:33	08.20.2020 19:53		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201		
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201		
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201		
m,p-Xylenes		<0.00401 0.00401	<0.00401 0.00401	<0.00398 0.00398	<0.00402 0.00402		
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201		
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201		
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201		
Chloride by EPA 300	Extracted:	08.20.2020 15:44	08.20.2020 15:44	08.20.2020 15:44	08.20.2020 15:44		
	Analyzed:	08.20.2020 18:55	08.20.2020 19:01	08.20.2020 19:18	08.20.2020 19:23		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		103 9.98	19.3 9.98	45.8 9.96	33.6 9.92		
TPH by SW8015 Mod	Extracted:	08.20.2020 12:30	08.20.2020 12:30	08.20.2020 12:30	08.20.2020 12:30		
	Analyzed:	08.20.2020 16:37	08.20.2020 16:57	08.20.2020 17:17	08.20.2020 17:37		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.0 50.0		
Diesel Range Organics (DRO)		<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.0 50.0		
Total GRO-DRO		<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.0 50.0		
Total TPH		<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.0 50.0		

BRL - Below Reporting Limit

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



Analytical Report 670485

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670485**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670485. 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 Eurofins Xenco, LLC. 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. 670485 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 670485****LT Environmental, Inc., Arvada, CO**

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW18	S	08.18.2020 12:00	1 - 4 ft	670485-001
SW19	S	08.18.2020 12:10	1 - 4 ft	670485-002
SW20	S	08.18.2020 12:20	1 - 4 ft	670485-003
SW21	S	08.18.2020 12:30	1 - 4 ft	670485-004



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670485

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW18** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670485-001 Date Collected: 08.18.2020 12:00 Sample Depth: 1 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	103	9.98	mg/kg	08.20.2020 18:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.20.2020 16:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.20.2020 16:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.20.2020 16:37	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	08.20.2020 16:37	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.20.2020 16:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.20.2020 16:37	
o-Terphenyl	84-15-1	96	%	70-135	08.20.2020 16:37	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW18**
 Lab Sample Id: 670485-001

Matrix: Soil
 Date Collected: 08.18.2020 12:00

Date Received: 08.19.2020 14:05
 Sample Depth: 1 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 18:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 18:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 18:52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.20.2020 18:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 18:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 18:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 18:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.20.2020 18:52	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.20.2020 18:52	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW19** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670485-002 Date Collected: 08.18.2020 12:10 Sample Depth: 1 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.3	9.98	mg/kg	08.20.2020 19:01		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 16:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 16:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 16:57	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 16:57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 16:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.20.2020 16:57	
o-Terphenyl	84-15-1	94	%	70-135	08.20.2020 16:57	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW19**
 Lab Sample Id: 670485-002

Matrix: Soil
 Date Collected: 08.18.2020 12:10

Date Received: 08.19.2020 14:05
 Sample Depth: 1 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 19:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 19:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 19:12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.20.2020 19:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 19:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 19:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 19:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 19:12	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.20.2020 19:12	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW20** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670485-003 Date Collected: 08.18.2020 12:20 Sample Depth: 1 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	45.8	9.96	mg/kg	08.20.2020 19:18		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.20.2020 17:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.20.2020 17:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.20.2020 17:17	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.20.2020 17:17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.20.2020 17:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.20.2020 17:17	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 17:17	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW20**
 Lab Sample Id: 670485-003

Matrix: Soil
 Date Collected: 08.18.2020 12:20

Date Received: 08.19.2020 14:05
 Sample Depth: 1 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.20.2020 19:33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.20.2020 19:33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.20.2020 19:33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.20.2020 19:33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.20.2020 19:33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.20.2020 19:33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.20.2020 19:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.20.2020 19:33	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.20.2020 19:33	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW21** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670485-004 Date Collected: 08.18.2020 12:30 Sample Depth: 1 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.6	9.92	mg/kg	08.20.2020 19:23		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 17:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 17:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 17:37	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 17:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 17:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.20.2020 17:37	
o-Terphenyl	84-15-1	94	%	70-135	08.20.2020 17:37	



Certificate of Analytical Results 670485

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW21**
Lab Sample Id: 670485-004

Matrix: Soil
Date Collected: 08.18.2020 12:30

Date Received: 08.19.2020 14:05
Sample Depth: 1 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.20.2020 19:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.20.2020 19:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.20.2020 19:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.20.2020 19:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.20.2020 19:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.20.2020 19:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.20.2020 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.20.2020 19:53	
1,4-Difluorobenzene	540-36-3	125	%	70-130	08.20.2020 19:53	



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

MB Sample Id: 7709865-1-BLK

Matrix: Solid

LCS Sample Id: 7709865-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	267	107	90-110	1	20	mg/kg	08.20.2020 18:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670474-002

Matrix: Soil

MS Sample Id: 670474-002 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670474-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	91.8	200	298	103	297	103	90-110	0	20	mg/kg	08.20.2020 18:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670532-001

Matrix: Soil

MS Sample Id: 670532-001 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670532-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11400	198	11600	101	11600	101	90-110	0	20	mg/kg	08.20.2020 19:51	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

MB Sample Id: 7709859-1-BLK

Matrix: Solid

LCS Sample Id: 7709859-1-BKS

Prep Method: SW8015P

Date Prep: 08.20.2020

LCSD Sample Id: 7709859-1-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	951	95	944	94	70-135	1	35	mg/kg	08.20.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	986	99	979	98	70-135	1	35	mg/kg	08.20.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		114		110		70-135	%	08.20.2020 13:55
o-Terphenyl	87		104		100		70-135	%	08.20.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Matrix: Solid

MB Sample Id: 7709859-1-BLK

Prep Method: SW8015P

Date Prep: 08.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.20.2020 13:34	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Parent Sample Id: 670474-001

Matrix: Soil

MS Sample Id: 670474-001 S

Prep Method: SW8015P

Date Prep: 08.20.2020

MSD Sample Id: 670474-001 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)	<50.0	999	986	99	920	92	70-135	7	35	mg/kg	08.20.2020 14:55	
Diesel Range Organics (DRO)	<50.0	999	1030	103	973	97	70-135	6	35	mg/kg	08.20.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		114		70-135	%	08.20.2020 14:55
o-Terphenyl	113		105		70-135	%	08.20.2020 14:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135260

MB Sample Id: 7709858-1-BLK

Matrix: Solid

LCS Sample Id: 7709858-1-BKS

Prep Method: SW5035A

Date Prep: 08.20.2020

LCSD Sample Id: 7709858-1-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	0.106	106	0.102	102	70-130	4	35	mg/kg	08.20.2020 16:55	
Toluene	<0.00200	0.100	0.101	101	0.0956	96	70-130	5	35	mg/kg	08.20.2020 16:55	
Ethylbenzene	<0.00200	0.100	0.107	107	0.101	101	71-129	6	35	mg/kg	08.20.2020 16:55	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.205	103	70-135	4	35	mg/kg	08.20.2020 16:55	
o-Xylene	<0.00200	0.100	0.106	106	0.102	102	71-133	4	35	mg/kg	08.20.2020 16:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		103		99		70-130	%	08.20.2020 16:55
4-Bromofluorobenzene	98		102		96		70-130	%	08.20.2020 16:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135260

Parent Sample Id: 670485-001

Matrix: Soil

MS Sample Id: 670485-001 S

Prep Method: SW5035A

Date Prep: 08.20.2020

MSD Sample Id: 670485-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0969	96	0.0950	94	70-130	2	35	mg/kg	08.21.2020 11:47	
Toluene	<0.00201	0.101	0.0911	90	0.0880	87	70-130	3	35	mg/kg	08.21.2020 11:47	
Ethylbenzene	<0.00201	0.101	0.0973	96	0.0822	81	71-129	17	35	mg/kg	08.21.2020 11:47	
m,p-Xylenes	<0.00402	0.201	0.191	95	0.165	82	70-135	15	35	mg/kg	08.21.2020 11:47	
o-Xylene	<0.00201	0.101	0.0947	94	0.0821	81	71-133	14	35	mg/kg	08.21.2020 11:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		98		70-130	%	08.21.2020 11:47
4-Bromofluorobenzene	95		98		70-130	%	08.21.2020 11:47

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

PIONEER NATURAL RESOURCES CHAIN OF CUSTODY

www.xenco.com

El Paso, TX (915-585-3443)

Client / Reporting Information						Pioneer Natural Resources Project Information							Analytical Information								Matrix Codes				
Company Name / Branch: Earth Systems Response and Restoration						PUR Project Number/Work Order Number 60421																			
Company Address: 4115 South County Road 1297 Odessa, Texas 79765 Email: kwilliams@earthsys.net						Property Name Middle N. New HH 108H																			
Phone No: 325663604						Cost Center																			
Project Contact: Kris Williams						Job Type (circle one) : Remediation / Waste / Water Management																			
Project Number: 0417						Requisitioner Ana Ramirez																			
Sampler's Name						PUR Incident # 60421																			
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE	Number of preserved bottles								Field Comments		
1	HA-1 (CO-0.5)	0-0.5	8/14/20	15:40	S	2									TPH (Tx1005)										
2	HA-1 (0.5-1)	0.5-1	8/14/20	15:45	S	2									x x										
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
Turnaround Time (Business days)						Data Deliverable Information						Notes:													
☐ Same Day TAT						☒ 5 Day TAT						☐ Level II Std QC						☐ Level IV (Full Data Pkg /raw data)						m Jones @ earthsys.net	
☐ Next Day EMERGENCY						☐ 7 Day TAT						☐ Level III Std QC + Forms						☐ TRRP Level IV							
☐ 2 Day EMERGENCY						☐ Contract TAT						☐ Level 3 (CLP Forms)						☐ UST / RG -411							
☐ 3 Day EMERGENCY												☐ TRRP Checklist													
TAT Starts Day received by Lab, if received by 5:00 pm												FED-EX / UPS: Tracking #													
Relinquished by Sampler:												SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLE IS CHANGE POSSESSION, INCLUDING COURIER DELIVERY													
1 Wason Jones												Date Time: 8/16/20 16:30		Received By: [Signature]		Date Time:		Relinquished By:		Date Time:		Received By:			
Relinquished by:												Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:			
3												Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:			
Relinquished by:												Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:			
5												Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:			
Preserved where applicable												Cody Tern. Thermo Corr. Factor													

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

Certificate of Analysis Summary 670486



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Wed 08.19.2020 14:05

Contact: Dan Moir

Report Date: 08.21.2020 17:53

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670486-001	670486-002	670486-003			
	Field Id:	SW22	SW23	SW24			
	Depth:	1-2 ft	0.5-4 ft	0.5-4 ft			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	08.18.2020 12:40	08.18.2020 12:50	08.18.2020 13:00			
BTEX by EPA 8021B	Extracted:	08.20.2020 15:05	08.20.2020 15:05	08.20.2020 15:05			
	Analyzed:	08.20.2020 20:13	08.20.2020 20:34	08.21.2020 08:55			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200			
Benzene							
Toluene							
Ethylbenzene							
m,p-Xylenes							
o-Xylene							
Total Xylenes							
Total BTEX							
Chloride by EPA 300	Extracted:	08.20.2020 15:44	08.20.2020 15:44	08.20.2020 15:44			
	Analyzed:	08.20.2020 19:29	08.20.2020 19:34	08.20.2020 19:40			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
		87.7 9.80	189 9.88	<9.98 9.98			
Chloride							
TPH by SW8015 Mod	Extracted:	08.20.2020 12:30	08.20.2020 12:30	08.20.2020 12:30			
	Analyzed:	08.20.2020 17:57	08.20.2020 18:18	08.20.2020 18:58			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
		<50.0 50.0	<50.0 50.0	<49.9 49.9			
Gasoline Range Hydrocarbons (GRO)							
Diesel Range Organics (DRO)							
Motor Oil Range Hydrocarbons (MRO)							
Total GRO-DRO							
Total TPH							

BRL - Below Reporting Limit

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



Analytical Report 670486

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.21.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.21.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670486**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670486. 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 Eurofins Xenco, LLC. 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. 670486 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW22	S	08.18.2020 12:40	1 - 2 ft	670486-001
SW23	S	08.18.2020 12:50	0.5 - 4 ft	670486-002
SW24	S	08.18.2020 13:00	0.5 - 4 ft	670486-003



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670486

Report Date: 08.21.2020
Date Received: 08.19.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW22** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670486-001 Date Collected: 08.18.2020 12:40 Sample Depth: 1 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	87.7	9.80	mg/kg	08.20.2020 19:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 17:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 17:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 17:57	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 17:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 17:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.20.2020 17:57	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 17:57	



Certificate of Analytical Results 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW22**
 Lab Sample Id: 670486-001

Matrix: Soil
 Date Collected: 08.18.2020 12:40

Date Received: 08.19.2020 14:05
 Sample Depth: 1 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.20.2020 20:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.20.2020 20:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.20.2020 20:13	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.20.2020 20:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.20.2020 20:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.20.2020 20:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.20.2020 20:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.20.2020 20:13	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 20:13	



Certificate of Analytical Results 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW23** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670486-002 Date Collected: 08.18.2020 12:50 Sample Depth: 0.5 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	189	9.88	mg/kg	08.20.2020 19:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.20.2020 18:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.20.2020 18:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.20.2020 18:18	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.20.2020 18:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.20.2020 18:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.20.2020 18:18	
o-Terphenyl	84-15-1	92	%	70-135	08.20.2020 18:18	



Certificate of Analytical Results 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW23**
 Lab Sample Id: 670486-002

Matrix: Soil
 Date Collected: 08.18.2020 12:50

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.20.2020 20:34	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.20.2020 20:34	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.20.2020 20:34	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.20.2020 20:34	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.20.2020 20:34	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.20.2020 20:34	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.20.2020 20:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.20.2020 20:34	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.20.2020 20:34	



Certificate of Analytical Results 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW24** Matrix: Soil Date Received: 08.19.2020 14:05
 Lab Sample Id: 670486-003 Date Collected: 08.18.2020 13:00 Sample Depth: 0.5 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.20.2020 15:44 Basis: Wet Weight
 Seq Number: 3135201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.20.2020 19:40	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.20.2020 12:30 Basis: Wet Weight
 Seq Number: 3135203

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.20.2020 18:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.20.2020 18:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.20.2020 18:58	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.20.2020 18:58	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.20.2020 18:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.20.2020 18:58	
o-Terphenyl	84-15-1	97	%	70-135	08.20.2020 18:58	



Certificate of Analytical Results 670486

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW24**
 Lab Sample Id: 670486-003

Matrix: Soil
 Date Collected: 08.18.2020 13:00

Date Received: 08.19.2020 14:05
 Sample Depth: 0.5 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.20.2020 15:05

Basis: Wet Weight

Seq Number: 3135260

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.21.2020 08:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.21.2020 08:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.21.2020 08:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.21.2020 08:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.21.2020 08:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.21.2020 08:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.21.2020 08:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.21.2020 08:55		
1,4-Difluorobenzene	540-36-3	93	%	70-130	08.21.2020 08:55		



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

MB Sample Id: 7709865-1-BLK

Matrix: Solid

LCS Sample Id: 7709865-1-BKS

Prep Method: E300P

Date Prep: 08.20.2020

LCSD Sample Id: 7709865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	267	107	90-110	1	20	mg/kg	08.20.2020 18:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670474-002

Matrix: Soil

MS Sample Id: 670474-002 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670474-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	91.8	200	298	103	297	103	90-110	0	20	mg/kg	08.20.2020 18:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135201

Parent Sample Id: 670532-001

Matrix: Soil

MS Sample Id: 670532-001 S

Prep Method: E300P

Date Prep: 08.20.2020

MSD Sample Id: 670532-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11400	198	11600	101	11600	101	90-110	0	20	mg/kg	08.20.2020 19:51	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

MB Sample Id: 7709859-1-BLK

Matrix: Solid

LCS Sample Id: 7709859-1-BKS

Prep Method: SW8015P

Date Prep: 08.20.2020

LCSD Sample Id: 7709859-1-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	951	95	944	94	70-135	1	35	mg/kg	08.20.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	986	99	979	98	70-135	1	35	mg/kg	08.20.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		114		110		70-135	%	08.20.2020 13:55
o-Terphenyl	87		104		100		70-135	%	08.20.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Matrix: Solid

MB Sample Id: 7709859-1-BLK

Prep Method: SW8015P

Date Prep: 08.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.20.2020 13:34	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135203

Parent Sample Id: 670474-001

Matrix: Soil

MS Sample Id: 670474-001 S

Prep Method: SW8015P

Date Prep: 08.20.2020

MSD Sample Id: 670474-001 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)	<50.0	999	986	99	920	92	70-135	7	35	mg/kg	08.20.2020 14:55	
Diesel Range Organics (DRO)	<50.0	999	1030	103	973	97	70-135	6	35	mg/kg	08.20.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		114		70-135	%	08.20.2020 14:55
o-Terphenyl	113		105		70-135	%	08.20.2020 14:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135260

MB Sample Id: 7709858-1-BLK

Matrix: Solid

LCS Sample Id: 7709858-1-BKS

Prep Method: SW5035A

Date Prep: 08.20.2020

LCSD Sample Id: 7709858-1-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	0.106	106	0.102	102	70-130	4	35	mg/kg	08.20.2020 16:55	
Toluene	<0.00200	0.100	0.101	101	0.0956	96	70-130	5	35	mg/kg	08.20.2020 16:55	
Ethylbenzene	<0.00200	0.100	0.107	107	0.101	101	71-129	6	35	mg/kg	08.20.2020 16:55	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.205	103	70-135	4	35	mg/kg	08.20.2020 16:55	
o-Xylene	<0.00200	0.100	0.106	106	0.102	102	71-133	4	35	mg/kg	08.20.2020 16:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		103		99		70-130	%	08.20.2020 16:55
4-Bromofluorobenzene	98		102		96		70-130	%	08.20.2020 16:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135260

Parent Sample Id: 670485-001

Matrix: Soil

MS Sample Id: 670485-001 S

Prep Method: SW5035A

Date Prep: 08.20.2020

MSD Sample Id: 670485-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0969	96	0.0950	94	70-130	2	35	mg/kg	08.21.2020 11:47	
Toluene	<0.00201	0.101	0.0911	90	0.0880	87	70-130	3	35	mg/kg	08.21.2020 11:47	
Ethylbenzene	<0.00201	0.101	0.0973	96	0.0822	81	71-129	17	35	mg/kg	08.21.2020 11:47	
m,p-Xylenes	<0.00402	0.201	0.191	95	0.165	82	70-135	15	35	mg/kg	08.21.2020 11:47	
o-Xylene	<0.00201	0.101	0.0947	94	0.0821	81	71-133	14	35	mg/kg	08.21.2020 11:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		98		70-130	%	08.21.2020 11:47
4-Bromofluorobenzene	95		98		70-130	%	08.21.2020 11:47

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

Work Order No: 676486

Page ____ of ____

Work Order Comments	
Program: UST/PST	☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:	
Reporting: Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD	☐ ADAPT ☐ Other: ☐

[illegible][illegible][illegible]

8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mn	Mo	Ni	K	Se	V	Zn
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TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

ce; signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8/19/20 14:05			

Certificate of Analysis Summary 670856



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Tue 08.25.2020 09:53

Contact: Dan Moir

Report Date: 08.28.2020 10:52

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670856-001					
	Field Id:	FS21A					
	Depth:	1.5-					
	Matrix:	SOIL					
	Sampled:	08.24.2020 13:30					
BTEX by EPA 8021B	Extracted:	08.25.2020 15:07					
	Analyzed:	08.25.2020 22:04					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00400 0.00400					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Chloride by EPA 300	Extracted:	08.25.2020 14:46					
	Analyzed:	08.25.2020 20:33					
	Units/RL:	mg/kg RL					
Chloride		188 10.1					
TPH by SW8015 Mod	Extracted:	08.26.2020 12:15					
	Analyzed:	08.26.2020 14:00					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9					
Diesel Range Organics (DRO)		147 49.9					
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9					
Total GRO-DRO		147 49.9					
Total TPH		147 49.9					

BRL - Below Reporting Limit

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



Analytical Report 670856

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.28.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.28.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670856**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670856. 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 Eurofins Xenco, LLC. 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. 670856 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 670856

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS21A	S	08.24.2020 13:30	1.5	670856-001



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670856

Report Date: 08.28.2020
Date Received: 08.25.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670856

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS21A** Matrix: Soil Date Received: 08.25.2020 09:53
 Lab Sample Id: 670856-001 Date Collected: 08.24.2020 13:30 Sample Depth: 1.5
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.25.2020 14:46 Basis: Wet Weight
 Seq Number: 3135562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	188	10.1	mg/kg	08.25.2020 20:33		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.26.2020 12:15 Basis: Wet Weight
 Seq Number: 3135668

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.26.2020 14:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	147	49.9	mg/kg	08.26.2020 14:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.26.2020 14:00	U	1
Total GRO-DRO	PHC628	147	49.9	mg/kg	08.26.2020 14:00		1
Total TPH	PHC635	147	49.9	mg/kg	08.26.2020 14:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.26.2020 14:00	
o-Terphenyl	84-15-1	78	%	70-135	08.26.2020 14:00	



Certificate of Analytical Results 670856

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS21A**
Lab Sample Id: 670856-001

Matrix: Soil
Date Collected: 08.24.2020 13:30

Date Received: 08.25.2020 09:53
Sample Depth: 1.5

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.25.2020 15:07

Basis: Wet Weight

Seq Number: 3135561

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.25.2020 22:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.25.2020 22:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.25.2020 22:04	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.25.2020 22:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.25.2020 22:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.25.2020 22:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.25.2020 22:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.25.2020 22:04	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.25.2020 22:04	

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. **ND** Not Detected.

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



LT Environmental, Inc.
PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

MB Sample Id: 7710133-1-BLK

Matrix: Solid

LCS Sample Id: 7710133-1-BKS

Prep Method: E300P

Date Prep: 08.25.2020

LCSD Sample Id: 7710133-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	254	102	90-110	0	20	mg/kg	08.25.2020 16:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

Parent Sample Id: 670827-001

Matrix: Soil

MS Sample Id: 670827-001 S

Prep Method: E300P

Date Prep: 08.25.2020

MSD Sample Id: 670827-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	77.9	200	283	103	283	103	90-110	0	20	mg/kg	08.25.2020 17:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

Parent Sample Id: 670849-001

Matrix: Soil

MS Sample Id: 670849-001 S

Prep Method: E300P

Date Prep: 08.25.2020

MSD Sample Id: 670849-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.3	198	214	102	215	103	90-110	0	20	mg/kg	08.25.2020 19:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

MB Sample Id: 7710216-1-BLK

Matrix: Solid

LCS Sample Id: 7710216-1-BKS

Prep Method: SW8015P

Date Prep: 08.26.2020

LCSD Sample Id: 7710216-1-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	940	94	961	96	70-135	2	35	mg/kg	08.26.2020 11:59	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1030	103	70-135	1	35	mg/kg	08.26.2020 11:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		129		130		70-135	%	08.26.2020 11:59
o-Terphenyl	112		122		115		70-135	%	08.26.2020 11:59

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

Matrix: Solid

MB Sample Id: 7710216-1-BLK

Prep Method: SW8015P

Date Prep: 08.26.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 11:38	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

Parent Sample Id: 670983-001

Matrix: Soil

MS Sample Id: 670983-001 S

Prep Method: SW8015P

Date Prep: 08.26.2020

MSD Sample Id: 670983-001 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)	<50.0	999	931	93	956	96	70-135	3	35	mg/kg	08.26.2020 12:59	
Diesel Range Organics (DRO)	<50.0	999	990	99	1040	104	70-135	5	35	mg/kg	08.26.2020 12:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		129		70-135	%	08.26.2020 12:59
o-Terphenyl	117		122		70-135	%	08.26.2020 12:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135561

MB Sample Id: 7710128-1-BLK

Matrix: Solid

LCS Sample Id: 7710128-1-BKS

Prep Method: SW5035A

Date Prep: 08.25.2020

LCSD Sample Id: 7710128-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	08.25.2020 15:27	
Toluene	<0.00200	0.100	0.0990	99	0.0987	99	70-130	0	35	mg/kg	08.25.2020 15:27	
Ethylbenzene	<0.00200	0.100	0.105	105	0.101	101	71-129	4	35	mg/kg	08.25.2020 15:27	
m,p-Xylenes	<0.00400	0.200	0.210	105	0.205	103	70-135	2	35	mg/kg	08.25.2020 15:27	
o-Xylene	<0.00200	0.100	0.105	105	0.103	103	71-133	2	35	mg/kg	08.25.2020 15:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		95		70-130	%	08.25.2020 15:27
4-Bromofluorobenzene	108		97		97		70-130	%	08.25.2020 15:27

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135561

Parent Sample Id: 670903-009

Matrix: Soil

MS Sample Id: 670903-009 S

Prep Method: SW5035A

Date Prep: 08.25.2020

MSD Sample Id: 670903-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.116	116	0.0918	92	70-130	23	35	mg/kg	08.25.2020 16:08	
Toluene	<0.00200	0.100	0.109	109	0.0823	82	70-130	28	35	mg/kg	08.25.2020 16:08	
Ethylbenzene	<0.00200	0.100	0.108	108	0.0770	77	71-129	34	35	mg/kg	08.25.2020 16:08	
m,p-Xylenes	<0.00400	0.200	0.216	108	0.151	76	70-135	35	35	mg/kg	08.25.2020 16:08	
o-Xylene	<0.00200	0.100	0.106	106	0.0784	78	71-133	30	35	mg/kg	08.25.2020 16:08	

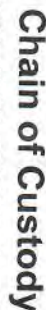
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		95		70-130	%	08.25.2020 16:08
4-Bromofluorobenzene	94		104		70-130	%	08.25.2020 16:08

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Work Order No: 676856

Page 1 of 1
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Project Name:		PLU 213		Boat		Turn Around		ANALYSIS REQUEST										Preservative Codes	
Project Number:		612920106		Routine		☒		Pris. Code										MeOH: Me	
Project Location				Rush:														None: NO	
Sampler's Name:		Speaker		Due Date:														HNO3: HN	
PO #:				Quote #:														H2SO4: H2	

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	4.2/4.0						
Received intact:	Yes No						
Cooler Custody Seals:	Yes NO						
Sample Custody Seals:	Yes NO						
Thermometer ID		T. NM. 003					
Correction Factor:		-0.2					
Total Containers:							

Number of Containers

(EPA 8015)

X (EPA 8021)

ride (EPA 300)

HCL: HL

NaOH: Na

Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

[illegible]

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	8-25-20 4:00 PM	<i>[Signature]</i>	<i>[Signature]</i>	8-25-20 09:53

Downloaded Data: 09/01/2016 09:53:53

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.25.2020 09.53.00 AM

Work Order #: 670856

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)?	4
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 08.25.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.26.2020

Certificate of Analysis Summary 670859



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 08.25.2020 09:53

Report Date: 08.28.2020 10:52

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670859-001					
	Field Id:	SW26					
	Depth:	0-2 ft					
	Matrix:	SOIL					
	Sampled:	08.24.2020 13:45					
BTEX by EPA 8021B	Extracted:	08.25.2020 15:07					
	Analyzed:	08.25.2020 22:24					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00400 0.00400					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Chloride by EPA 300	Extracted:	08.25.2020 14:46					
	Analyzed:	08.25.2020 20:41					
	Units/RL:	mg/kg RL					
Chloride		1010 50.1					
TPH by SW8015 Mod	Extracted:	08.26.2020 12:15					
	Analyzed:	08.26.2020 14:20					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9					
Diesel Range Organics (DRO)		71.2 49.9					
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9					
Total GRO-DRO		71.2 49.9					
Total TPH		71.2 49.9					

BRL - Below Reporting Limit

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



Analytical Report 670859

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.28.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.28.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670859**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670859. 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 Eurofins Xenco, LLC. 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. 670859 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 670859

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW26	S	08.24.2020 13:45	0 - 2 ft	670859-001



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670859

Report Date: 08.28.2020
Date Received: 08.25.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670859

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW26** Matrix: Soil Date Received: 08.25.2020 09:53
 Lab Sample Id: 670859-001 Date Collected: 08.24.2020 13:45 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.25.2020 14:46 Basis: Wet Weight
 Seq Number: 3135562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1010	50.1	mg/kg	08.25.2020 20:41		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.26.2020 12:15 Basis: Wet Weight
 Seq Number: 3135668

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.26.2020 14:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	71.2	49.9	mg/kg	08.26.2020 14:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.26.2020 14:20	U	1
Total GRO-DRO	PHC628	71.2	49.9	mg/kg	08.26.2020 14:20		1
Total TPH	PHC635	71.2	49.9	mg/kg	08.26.2020 14:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.26.2020 14:20	
o-Terphenyl	84-15-1	110	%	70-135	08.26.2020 14:20	



Certificate of Analytical Results 670859

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW26**
 Lab Sample Id: 670859-001

Matrix: Soil
 Date Collected: 08.24.2020 13:45

Date Received: 08.25.2020 09:53
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.25.2020 15:07

Basis: Wet Weight

Seq Number: 3135561

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.25.2020 22:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.25.2020 22:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.25.2020 22:24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.25.2020 22:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.25.2020 22:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.25.2020 22:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.25.2020 22:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.25.2020 22:24	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.25.2020 22:24	



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

MB Sample Id: 7710133-1-BLK

Matrix: Solid

LCS Sample Id: 7710133-1-BKS

Prep Method: E300P

Date Prep: 08.25.2020

LCSD Sample Id: 7710133-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	254	102	90-110	0	20	mg/kg	08.25.2020 16:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

Parent Sample Id: 670827-001

Matrix: Soil

MS Sample Id: 670827-001 S

Prep Method: E300P

Date Prep: 08.25.2020

MSD Sample Id: 670827-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	77.9	200	283	103	283	103	90-110	0	20	mg/kg	08.25.2020 17:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

Parent Sample Id: 670849-001

Matrix: Soil

MS Sample Id: 670849-001 S

Prep Method: E300P

Date Prep: 08.25.2020

MSD Sample Id: 670849-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.3	198	214	102	215	103	90-110	0	20	mg/kg	08.25.2020 19:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

MB Sample Id: 7710216-1-BLK

Matrix: Solid

LCS Sample Id: 7710216-1-BKS

Prep Method: SW8015P

Date Prep: 08.26.2020

LCSD Sample Id: 7710216-1-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	940	94	961	96	70-135	2	35	mg/kg	08.26.2020 11:59	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1030	103	70-135	1	35	mg/kg	08.26.2020 11:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		129		130		70-135	%	08.26.2020 11:59
o-Terphenyl	112		122		115		70-135	%	08.26.2020 11:59

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

Matrix: Solid

MB Sample Id: 7710216-1-BLK

Prep Method: SW8015P

Date Prep: 08.26.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 11:38	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

Parent Sample Id: 670983-001

Matrix: Soil

MS Sample Id: 670983-001 S

Prep Method: SW8015P

Date Prep: 08.26.2020

MSD Sample Id: 670983-001 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)	<50.0	999	931	93	956	96	70-135	3	35	mg/kg	08.26.2020 12:59	
Diesel Range Organics (DRO)	<50.0	999	990	99	1040	104	70-135	5	35	mg/kg	08.26.2020 12:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		129		70-135	%	08.26.2020 12:59
o-Terphenyl	117		122		70-135	%	08.26.2020 12:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135561

MB Sample Id: 7710128-1-BLK

Matrix: Solid

LCS Sample Id: 7710128-1-BKS

Prep Method: SW5035A

Date Prep: 08.25.2020

LCSD Sample Id: 7710128-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	08.25.2020 15:27	
Toluene	<0.00200	0.100	0.0990	99	0.0987	99	70-130	0	35	mg/kg	08.25.2020 15:27	
Ethylbenzene	<0.00200	0.100	0.105	105	0.101	101	71-129	4	35	mg/kg	08.25.2020 15:27	
m,p-Xylenes	<0.00400	0.200	0.210	105	0.205	103	70-135	2	35	mg/kg	08.25.2020 15:27	
o-Xylene	<0.00200	0.100	0.105	105	0.103	103	71-133	2	35	mg/kg	08.25.2020 15:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		95		70-130	%	08.25.2020 15:27
4-Bromofluorobenzene	108		97		97		70-130	%	08.25.2020 15:27

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135561

Parent Sample Id: 670903-009

Matrix: Soil

MS Sample Id: 670903-009 S

Prep Method: SW5035A

Date Prep: 08.25.2020

MSD Sample Id: 670903-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.116	116	0.0918	92	70-130	23	35	mg/kg	08.25.2020 16:08	
Toluene	<0.00200	0.100	0.109	109	0.0823	82	70-130	28	35	mg/kg	08.25.2020 16:08	
Ethylbenzene	<0.00200	0.100	0.108	108	0.0770	77	71-129	34	35	mg/kg	08.25.2020 16:08	
m,p-Xylenes	<0.00400	0.200	0.216	108	0.151	76	70-135	35	35	mg/kg	08.25.2020 16:08	
o-Xylene	<0.00200	0.100	0.106	106	0.0784	78	71-133	30	35	mg/kg	08.25.2020 16:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		95		70-130	%	08.25.2020 16:08
4-Bromofluorobenzene	94		104		70-130	%	08.25.2020 16:08

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 6070859

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3534

Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crasibad, NM (432) 704-5440

Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Page _____ of _____
www.xenco.com

Page

Of

Project Manager:	Don Moor	Bill to: (if different)	Eyle L.Hill
Company Name:	LT Environmental, Inc., Reservation office	Company Name:	X70
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432-236-3649	Email:	slong@env.com dmoor@env.com klemm@env.com

1) 689-6701 www.xendo.com Page _____ of _____
Work Order Comments
 Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
 State of Project:
 Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
 Deliverables: EDD ☐ ADAPT ☐ Other: _____

Project Name:	PLU 213 Battery	Turn Around
Project Number:	012420106	Routine ☒
Project Location		Rush:
Sampler's Name:	Spencer Co	Due Date:
PO #:		Quote #:

ANALYSIS REQUEST								Preservative Codes
Pres. Code								MeOH; Me None; NO HNO ₃ ; HN

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	4.2/4.0						
Received intact:	Yes No	Thermometer ID					
Cooler Custody Seals:	Yes N/A	T-NM-007					
Sample Custody Seals:	Yes N/A	Correction Factor: -0.2					
		Total Containers:					

H2SO4: H2	
HCL: HL	
NaOH: Na	
Zn Acetate+ NaOH: Zn	

TAT starts the day received by the lab. if

[illegible]

Total	200.7 / 6010	200.8 / 6020;
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Circle method(s) and Metal(s) to be analyzed

8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U																														
1631 / 245.1 / 7470 / 7471 : Hd																														

signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	4-25-20 5:00 PM	<i>[Signature]</i>	<i>[Signature]</i>	5-25-20 09:53

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.25.2020 09.53.00 AM

Work Order #: 670859

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)?	4
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 08.25.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.26.2020

Certificate of Analysis Summary 670861



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Date Received in Lab: Tue 08.25.2020 09:53

Contact: Dan Moir

Report Date: 08.28.2020 10:43

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670861-001					
	Field Id:	SW25					
	Depth:	0-2 ft					
	Matrix:	SOIL					
	Sampled:	08.24.2020 16:00					
BTEX by EPA 8021B	Extracted:	08.25.2020 15:07					
	Analyzed:	08.25.2020 22:45					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00400 0.00400					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Chloride by EPA 300	Extracted:	08.25.2020 14:46					
	Analyzed:	08.25.2020 20:49					
	Units/RL:	mg/kg RL					
Chloride		689 9.98					
TPH by SW8015 Mod	Extracted:	08.26.2020 12:15					
	Analyzed:	08.26.2020 14:40					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1					
Diesel Range Organics (DRO)		<50.1 50.1					
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1					
Total GRO-DRO		<50.1 50.1					
Total TPH		<50.1 50.1					

BRL - Below Reporting Limit

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



Analytical Report 670861

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

08.28.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.28.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **670861**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 670861. 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 Eurofins Xenco, LLC. 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. 670861 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 670861

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW25	S	08.24.2020 16:00	0 - 2 ft	670861-001



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 670861

Report Date: 08.28.2020
Date Received: 08.25.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 670861

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW25** Matrix: Soil Date Received: 08.25.2020 09:53
 Lab Sample Id: 670861-001 Date Collected: 08.24.2020 16:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.25.2020 14:46 Basis: Wet Weight
 Seq Number: 3135562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	689	9.98	mg/kg	08.25.2020 20:49		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.26.2020 12:15 Basis: Wet Weight
 Seq Number: 3135668

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.26.2020 14:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.26.2020 14:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.26.2020 14:40	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.26.2020 14:40	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.26.2020 14:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.26.2020 14:40	
o-Terphenyl	84-15-1	111	%	70-135	08.26.2020 14:40	



Certificate of Analytical Results 670861

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SW25**
 Lab Sample Id: 670861-001

Matrix: Soil
 Date Collected: 08.24.2020 16:00

Date Received: 08.25.2020 09:53
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.25.2020 15:07

Basis: Wet Weight

Seq Number: 3135561

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.25.2020 22:45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.25.2020 22:45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.25.2020 22:45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.25.2020 22:45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.25.2020 22:45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.25.2020 22:45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.25.2020 22:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.25.2020 22:45		
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.25.2020 22:45		



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

MB Sample Id: 7710133-1-BLK

Matrix: Solid

LCS Sample Id: 7710133-1-BKS

Prep Method: E300P

Date Prep: 08.25.2020

LCSD Sample Id: 7710133-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	254	102	90-110	0	20	mg/kg	08.25.2020 16:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

Parent Sample Id: 670827-001

Matrix: Soil

MS Sample Id: 670827-001 S

Prep Method: E300P

Date Prep: 08.25.2020

MSD Sample Id: 670827-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	77.9	200	283	103	283	103	90-110	0	20	mg/kg	08.25.2020 17:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135562

Parent Sample Id: 670849-001

Matrix: Soil

MS Sample Id: 670849-001 S

Prep Method: E300P

Date Prep: 08.25.2020

MSD Sample Id: 670849-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.3	198	214	102	215	103	90-110	0	20	mg/kg	08.25.2020 19:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

MB Sample Id: 7710216-1-BLK

Matrix: Solid

LCS Sample Id: 7710216-1-BKS

Prep Method: SW8015P

Date Prep: 08.26.2020

LCSD Sample Id: 7710216-1-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	940	94	961	96	70-135	2	35	mg/kg	08.26.2020 11:59	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1030	103	70-135	1	35	mg/kg	08.26.2020 11:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		129		130		70-135	%	08.26.2020 11:59
o-Terphenyl	112		122		115		70-135	%	08.26.2020 11:59

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

Matrix: Solid

MB Sample Id: 7710216-1-BLK

Prep Method: SW8015P

Date Prep: 08.26.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 11:38	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135668

Parent Sample Id: 670983-001

Matrix: Soil

MS Sample Id: 670983-001 S

Prep Method: SW8015P

Date Prep: 08.26.2020

MSD Sample Id: 670983-001 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)	<50.0	999	931	93	956	96	70-135	3	35	mg/kg	08.26.2020 12:59	
Diesel Range Organics (DRO)	<50.0	999	990	99	1040	104	70-135	5	35	mg/kg	08.26.2020 12:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		129		70-135	%	08.26.2020 12:59
o-Terphenyl	117		122		70-135	%	08.26.2020 12:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135561

MB Sample Id: 7710128-1-BLK

Matrix: Solid

LCS Sample Id: 7710128-1-BKS

Prep Method: SW5035A

Date Prep: 08.25.2020

LCSD Sample Id: 7710128-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	08.25.2020 15:27	
Toluene	<0.00200	0.100	0.0990	99	0.0987	99	70-130	0	35	mg/kg	08.25.2020 15:27	
Ethylbenzene	<0.00200	0.100	0.105	105	0.101	101	71-129	4	35	mg/kg	08.25.2020 15:27	
m,p-Xylenes	<0.00400	0.200	0.210	105	0.205	103	70-135	2	35	mg/kg	08.25.2020 15:27	
o-Xylene	<0.00200	0.100	0.105	105	0.103	103	71-133	2	35	mg/kg	08.25.2020 15:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		95		70-130	%	08.25.2020 15:27
4-Bromofluorobenzene	108		97		97		70-130	%	08.25.2020 15:27

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135561

Parent Sample Id: 670903-009

Matrix: Soil

MS Sample Id: 670903-009 S

Prep Method: SW5035A

Date Prep: 08.25.2020

MSD Sample Id: 670903-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.116	116	0.0918	92	70-130	23	35	mg/kg	08.25.2020 16:08	
Toluene	<0.00200	0.100	0.109	109	0.0823	82	70-130	28	35	mg/kg	08.25.2020 16:08	
Ethylbenzene	<0.00200	0.100	0.108	108	0.0770	77	71-129	34	35	mg/kg	08.25.2020 16:08	
m,p-Xylenes	<0.00400	0.200	0.216	108	0.151	76	70-135	35	35	mg/kg	08.25.2020 16:08	
o-Xylene	<0.00200	0.100	0.106	106	0.0784	78	71-133	30	35	mg/kg	08.25.2020 16:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		95		70-130	%	08.25.2020 16:08
4-Bromofluorobenzene	94		104		70-130	%	08.25.2020 16:08

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 1676861

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 Crashpad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com

Page 1 of 1

Project Manager:	Dan Mair	Bill to: (if different)	Kyle Little
Company Name:	LT Environmental, Inc. Peruvian office	Company Name:	RTD
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88520
Phone:	432.236.3849	Email:	slm@xenco.com, dmair@xenco.com, klenndye@xenco.com

Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level: ☐ Level I ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:	PLV 213 Battery	Turn Around	☒
Project Number:	0129 20106	Routine	☒
Project Location:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temperature (°C):	4.2/4.0	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No			
	Received intact:	☒ Yes ☐ No	Thermometer ID	T-NM-007					
	Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:	-0.2					
	Sample Custody Seals:	☒ Yes ☐ No	Total Containers:	1					
	Lab ID	SWL5	Matrix	S	Date Sampled	8-24-20	Time Sampled	1400	Depth

Number of Containers	Pres. Code	Analysis Request	Preservative Codes
1	X	TPH (EPA 8015)	MeOH: Me
X	X	BTEX (EPA 8021)	None: NO
X	X	Chloride (EPA 300)	HNO3: HN
			H2SO4: H2
			HCL: HL
			NaOH: Na
			Zn Acetate + NaOH: Zn
			TAT starts the day received by the lab, if received by 4:00pm
			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 Ti 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 Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	4-25-20 15:00	<i>[Signature]</i>	<i>[Signature]</i>	8-25-20 10:15

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.25.2020 09.53.00 AM

Work Order #: 670861

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)?	4
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 08.25.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.26.2020

Certificate of Analysis Summary 672613



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 09.15.2020 16:48

Report Date: 09.17.2020 14:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672613-001	672613-002	672613-003	672613-004		
	<i>Field Id:</i>	FS29A	FS27A	FS26A	FS22A		
	<i>Depth:</i>	1.0- ft	1.5- ft	1.0- ft	1.5- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	09.15.2020 13:10	09.15.2020 13:15	09.15.2020 13:25	09.15.2020 13:35		
BTEX by EPA 8021B	<i>Extracted:</i>	09.16.2020 10:00	09.16.2020 10:00	09.16.2020 10:00	09.16.2020 10:00		
	<i>Analyzed:</i>	09.16.2020 17:53	09.16.2020 18:15	09.16.2020 18:37	09.16.2020 19:00		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402	<0.00403 0.00403		
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Chloride by EPA 300	<i>Extracted:</i>	09.16.2020 09:02	09.16.2020 09:02	09.16.2020 09:02	09.16.2020 09:02		
	<i>Analyzed:</i>	09.16.2020 11:43	09.16.2020 12:16	09.16.2020 12:21	09.16.2020 12:26		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		79.1 10.0	88.8 10.1	89.9 10.1	82.8 10.1		
TPH by SW8015 Mod	<i>Extracted:</i>	09.16.2020 11:50	09.16.2020 11:50	09.16.2020 11:50	09.16.2020 11:50		
	<i>Analyzed:</i>	09.16.2020 13:51	09.16.2020 19:13	09.16.2020 19:33	09.16.2020 19:53		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.1 50.1		
Diesel Range Organics (DRO)		<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.1 50.1		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.1 50.1		
Total GRO-DRO		<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.1 50.1		
Total TPH		<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.1 50.1		

BRL - Below Reporting Limit

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



Analytical Report 672613

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

09.17.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.17.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **672613**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 672613. 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 Eurofins Xenco, LLC. 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. 672613 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS29A	S	09.15.2020 13:10	1.0 ft	672613-001
FS27A	S	09.15.2020 13:15	1.5 ft	672613-002
FS26A	S	09.15.2020 13:25	1.0 ft	672613-003
FS22A	S	09.15.2020 13:35	1.5 ft	672613-004



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 213 Battery

Project ID: 012920106
Work Order Number(s): 672613

Report Date: 09.17.2020
Date Received: 09.15.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS29A** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672613-001 Date Collected: 09.15.2020 13:10 Sample Depth: 1.0 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.1	10.0	mg/kg	09.16.2020 11:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.16.2020 13:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.16.2020 13:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.16.2020 13:51	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	09.16.2020 13:51	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.16.2020 13:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	133	%	70-135	09.16.2020 13:51	
o-Terphenyl	84-15-1	130	%	70-135	09.16.2020 13:51	



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS29A**
Lab Sample Id: 672613-001

Matrix: Soil
Date Collected: 09.15.2020 13:10

Date Received: 09.15.2020 16:48
Sample Depth: 1.0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.16.2020 17:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.16.2020 17:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.16.2020 17:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.16.2020 17:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.16.2020 17:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.16.2020 17:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.16.2020 17:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.16.2020 17:53		
4-Bromofluorobenzene	460-00-4	94	%	70-130	09.16.2020 17:53		



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS27A** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672613-002 Date Collected: 09.15.2020 13:15 Sample Depth: 1.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	88.8	10.1	mg/kg	09.16.2020 12:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.16.2020 19:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.16.2020 19:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.16.2020 19:13	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	09.16.2020 19:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.16.2020 19:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	09.16.2020 19:13	
o-Terphenyl	84-15-1	105	%	70-135	09.16.2020 19:13	



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS27A**
 Lab Sample Id: 672613-002

Matrix: Soil
 Date Collected: 09.15.2020 13:15

Date Received: 09.15.2020 16:48
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.16.2020 18:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.16.2020 18:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.16.2020 18:15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.16.2020 18:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.16.2020 18:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.16.2020 18:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.16.2020 18:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.16.2020 18:15		
4-Bromofluorobenzene	460-00-4	96	%	70-130	09.16.2020 18:15		



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS26A** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672613-003 Date Collected: 09.15.2020 13:25 Sample Depth: 1.0 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	89.9	10.1	mg/kg	09.16.2020 12:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.16.2020 19:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.16.2020 19:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.16.2020 19:33	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	09.16.2020 19:33	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.16.2020 19:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	09.16.2020 19:33	
o-Terphenyl	84-15-1	106	%	70-135	09.16.2020 19:33	



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS26A**
 Lab Sample Id: 672613-003

Matrix: Soil
 Date Collected: 09.15.2020 13:25

Date Received: 09.15.2020 16:48
 Sample Depth: 1.0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.16.2020 18:37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.16.2020 18:37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.16.2020 18:37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.16.2020 18:37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.16.2020 18:37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.16.2020 18:37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.16.2020 18:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.16.2020 18:37		
4-Bromofluorobenzene	460-00-4	94	%	70-130	09.16.2020 18:37		



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS22A** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672613-004 Date Collected: 09.15.2020 13:35 Sample Depth: 1.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.8	10.1	mg/kg	09.16.2020 12:26		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.16.2020 19:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.16.2020 19:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.16.2020 19:53	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	09.16.2020 19:53	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.16.2020 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	09.16.2020 19:53	
o-Terphenyl	84-15-1	104	%	70-135	09.16.2020 19:53	



Certificate of Analytical Results 672613

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS22A**
 Lab Sample Id: 672613-004

Matrix: Soil
 Date Collected: 09.15.2020 13:35

Date Received: 09.15.2020 16:48
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.16.2020 19:00	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.16.2020 19:00	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.16.2020 19:00	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.16.2020 19:00	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.16.2020 19:00	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.16.2020 19:00	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.16.2020 19:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	09.16.2020 19:00	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.16.2020 19:00	

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. **ND** Not Detected.

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



LT Environmental, Inc.
PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3137283

MB Sample Id: 7711423-1-BLK

Matrix: Solid

LCS Sample Id: 7711423-1-BKS

Prep Method: E300P

Date Prep: 09.16.2020

LCSD Sample Id: 7711423-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	258	103	257	103	90-110	0	20	mg/kg	09.16.2020 10:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3137283

Parent Sample Id: 672613-001

Matrix: Soil

MS Sample Id: 672613-001 S

Prep Method: E300P

Date Prep: 09.16.2020

MSD Sample Id: 672613-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	79.1	200	287	104	287	103	90-110	0	20	mg/kg	09.16.2020 11:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3137283

Parent Sample Id: 672623-001

Matrix: Soil

MS Sample Id: 672623-001 S

Prep Method: E300P

Date Prep: 09.16.2020

MSD Sample Id: 672623-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	344	198	559	109	546	101	90-110	2	20	mg/kg	09.16.2020 10:20	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3137309

MB Sample Id: 7711431-1-BLK

Matrix: Solid

LCS Sample Id: 7711431-1-BKS

Prep Method: SW8015P

Date Prep: 09.16.2020

LCSD Sample Id: 7711431-1-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	775	78	771	77	70-135	1	35	mg/kg	09.16.2020 12:01	
Diesel Range Organics (DRO)	<50.0	1000	869	87	884	88	70-135	2	35	mg/kg	09.16.2020 12:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		113		113		70-135	%	09.16.2020 12:01
o-Terphenyl	126		110		111		70-135	%	09.16.2020 12:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3137309

Matrix: Solid

MB Sample Id: 7711431-1-BLK

Prep Method: SW8015P

Date Prep: 09.16.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.16.2020 11:42	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3137309

Parent Sample Id: 672613-001

Matrix: Soil

MS Sample Id: 672613-001 S

Prep Method: SW8015P

Date Prep: 09.16.2020

MSD Sample Id: 672613-001 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)	<50.0	1000	898	90	795	80	70-135	12	35	mg/kg	09.16.2020 14:11	
Diesel Range Organics (DRO)	<50.0	1000	781	78	817	82	70-135	5	35	mg/kg	09.16.2020 14:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		128		70-135	%	09.16.2020 14:11
o-Terphenyl	132		114		70-135	%	09.16.2020 14:11

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137315

MB Sample Id: 7711417-1-BLK

Matrix: Solid

LCS Sample Id: 7711417-1-BKS

Prep Method: SW5035A

Date Prep: 09.16.2020

LCSD Sample Id: 7711417-1-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	0.0938	94	0.0974	97	70-130	4	35	mg/kg	09.16.2020 10:24	
Toluene	<0.00200	0.100	0.0913	91	0.100	100	70-130	9	35	mg/kg	09.16.2020 10:24	
Ethylbenzene	<0.00200	0.100	0.0853	85	0.0940	94	71-129	10	35	mg/kg	09.16.2020 10:24	
m,p-Xylenes	<0.00400	0.200	0.170	85	0.190	95	70-135	11	35	mg/kg	09.16.2020 10:24	
o-Xylene	<0.00200	0.100	0.0837	84	0.0947	95	71-133	12	35	mg/kg	09.16.2020 10:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		96		95		70-130	%	09.16.2020 10:24
4-Bromofluorobenzene	94		84		89		70-130	%	09.16.2020 10:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137315

Parent Sample Id: 672623-001

Matrix: Soil

MS Sample Id: 672623-001 S

Prep Method: SW5035A

Date Prep: 09.16.2020

MSD Sample Id: 672623-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.108	108	0.105	105	70-130	3	35	mg/kg	09.16.2020 11:54	
Toluene	<0.00200	0.100	0.105	105	0.101	101	70-130	4	35	mg/kg	09.16.2020 11:54	
Ethylbenzene	<0.00200	0.100	0.0963	96	0.0904	91	71-129	6	35	mg/kg	09.16.2020 11:54	
m,p-Xylenes	<0.00401	0.200	0.193	97	0.180	90	70-135	7	35	mg/kg	09.16.2020 11:54	
o-Xylene	<0.00200	0.100	0.0948	95	0.0888	89	71-133	7	35	mg/kg	09.16.2020 11:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	09.16.2020 11:54
4-Bromofluorobenzene	94		89		70-130	%	09.16.2020 11:54

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 672613

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)

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of

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
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:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

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 213 BATTERY	Turn Around	
Project Number:	012920106	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	☒ Yes	No	Wet Ice:	☒ Yes	No
Temperature (°C):	2.6/2.4	Thermometer ID				
Received In tact:	☒ Yes	No	TUM-007			
Cooler Custody Seals:	Yes	☒ No	N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes	☒ No	N/A	Total Containers:	4	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA 8015)	BTEX (EPA 8015)	Chloride (EPA 8015)												Sample Comments
FS29A	S	9.15.20	1310	1.0'	1	X	X	X												
FS27A	S	9.15.20	1315	1.5'	1	X	X	X												
FS26A	S	9.15.20	1325	1.0'	1	X	X	X												
FS22A	S	9.15.20	1335	1.5'	1	X	X	X												

Total 200.7 / 6010	200.8 / 6020:	BRORA 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	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U											

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Spencer Lo</i>	<i>Carey</i>	9.15.20 16:48			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09.15.2020 04.48.00 PM

Work Order #: 672613

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)?	2.4
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 09.15.2020

Checklist reviewed by:



Jessica Kramer

Date: 09.16.2020

Certificate of Analysis Summary 672614



LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 09.15.2020 16:48

Report Date: 09.17.2020 14:24

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	672614-001	672614-002	672614-003	672614-004		
	Field Id:	SS08	SS09	SS10	SS11		
	Depth:	0.5- ft	0.5- ft	0.5- ft	0.5- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	09.15.2020 10:40	09.15.2020 10:50	09.15.2020 11:00	09.15.2020 11:10		
BTEX by EPA 8021B	Extracted:	09.16.2020 10:00	09.16.2020 10:00	09.16.2020 10:00	09.16.2020 10:00		
	Analyzed:	09.16.2020 19:22	09.16.2020 19:45	09.16.2020 20:07	09.16.2020 20:30		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
Toluene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
Ethylbenzene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
m,p-Xylenes		<0.00403 0.00403	<0.00402 0.00402	<0.00400 0.00400	<0.00402 0.00402		
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
Total Xylenes		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
Total BTEX		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201		
Chloride by EPA 300	Extracted:	09.16.2020 09:02	09.16.2020 09:02	09.16.2020 09:02	09.16.2020 09:02		
	Analyzed:	09.16.2020 12:32	09.16.2020 12:37	09.16.2020 12:43	09.16.2020 12:48		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
		<9.92 9.92	<10.1 10.1	<9.90 9.90	<9.92 9.92		
Chloride		<9.92 9.92	<10.1 10.1	<9.90 9.90	<9.92 9.92		
TPH by SW8015 Mod	Extracted:	09.16.2020 11:50	09.16.2020 11:50	09.16.2020 11:50	09.16.2020 11:50		
	Analyzed:	09.16.2020 20:13	09.16.2020 20:33	09.16.2020 18:33	09.16.2020 18:53		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.2 50.2		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.2 50.2		
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.2 50.2		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.2 50.2		
Total GRO-DRO		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.2 50.2		
Total TPH		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.2 50.2		

BRL - Below Reporting Limit

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



Analytical Report 672614

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

09.17.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.17.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **672614**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 672614. 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 Eurofins Xenco, LLC. 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. 672614 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS08	S	09.15.2020 10:40	0.5 ft	672614-001
SS09	S	09.15.2020 10:50	0.5 ft	672614-002
SS10	S	09.15.2020 11:00	0.5 ft	672614-003
SS11	S	09.15.2020 11:10	0.5 ft	672614-004



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 672614

Report Date: 09.17.2020
Date Received: 09.15.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS08** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672614-001 Date Collected: 09.15.2020 10:40 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	09.16.2020 12:32	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.16.2020 20:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.16.2020 20:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.16.2020 20:13	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	09.16.2020 20:13	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.16.2020 20:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	09.16.2020 20:13	
o-Terphenyl	84-15-1	106	%	70-135	09.16.2020 20:13	



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS08**
Lab Sample Id: 672614-001

Matrix: Soil
Date Collected: 09.15.2020 10:40

Date Received: 09.15.2020 16:48
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.16.2020 19:22	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.16.2020 19:22	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.16.2020 19:22	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.16.2020 19:22	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.16.2020 19:22	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.16.2020 19:22	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.16.2020 19:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.16.2020 19:22	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.16.2020 19:22	



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS09** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672614-002 Date Collected: 09.15.2020 10:50 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 12:37	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.16.2020 20:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.16.2020 20:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.16.2020 20:33	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	09.16.2020 20:33	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.16.2020 20:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	09.16.2020 20:33	
o-Terphenyl	84-15-1	101	%	70-135	09.16.2020 20:33	



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS09**
 Lab Sample Id: 672614-002

Matrix: Soil
 Date Collected: 09.15.2020 10:50

Date Received: 09.15.2020 16:48
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.16.2020 19:45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.16.2020 19:45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.16.2020 19:45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.16.2020 19:45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.16.2020 19:45	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.16.2020 19:45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.16.2020 19:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.16.2020 19:45	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.16.2020 19:45	



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS10** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672614-003 Date Collected: 09.15.2020 11:00 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	09.16.2020 12:43	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.16.2020 18:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.16.2020 18:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.16.2020 18:33	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	09.16.2020 18:33	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.16.2020 18:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	09.16.2020 18:33	
o-Terphenyl	84-15-1	106	%	70-135	09.16.2020 18:33	



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS10** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672614-003 Date Collected: 09.15.2020 11:00 Sample Depth: 0.5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 10:00 Basis: Wet Weight
 Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.16.2020 20:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.16.2020 20:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.16.2020 20:07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.16.2020 20:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.16.2020 20:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.16.2020 20:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.16.2020 20:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	09.16.2020 20:07		
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.16.2020 20:07		



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS11** Matrix: Soil Date Received: 09.15.2020 16:48
 Lab Sample Id: 672614-004 Date Collected: 09.15.2020 11:10 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 09:02 Basis: Wet Weight
 Seq Number: 3137283

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	09.16.2020 12:48	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 11:50 Basis: Wet Weight
 Seq Number: 3137309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.16.2020 18:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.16.2020 18:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.16.2020 18:53	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	09.16.2020 18:53	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.16.2020 18:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	09.16.2020 18:53	
o-Terphenyl	84-15-1	104	%	70-135	09.16.2020 18:53	



Certificate of Analytical Results 672614

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **SS11**
 Lab Sample Id: 672614-004

Matrix: Soil
 Date Collected: 09.15.2020 11:10

Date Received: 09.15.2020 16:48
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 10:00

Basis: Wet Weight

Seq Number: 3137315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.16.2020 20:30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.16.2020 20:30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.16.2020 20:30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.16.2020 20:30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.16.2020 20:30	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.16.2020 20:30	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.16.2020 20:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.16.2020 20:30		
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.16.2020 20:30		

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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3137283

MB Sample Id: 7711423-1-BLK

Matrix: Solid

LCS Sample Id: 7711423-1-BKS

Prep Method: E300P

Date Prep: 09.16.2020

LCSD Sample Id: 7711423-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	258	103	257	103	90-110	0	20	mg/kg	09.16.2020 10:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3137283

Parent Sample Id: 672613-001

Matrix: Soil

MS Sample Id: 672613-001 S

Prep Method: E300P

Date Prep: 09.16.2020

MSD Sample Id: 672613-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	79.1	200	287	104	287	103	90-110	0	20	mg/kg	09.16.2020 11:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3137283

Parent Sample Id: 672623-001

Matrix: Soil

MS Sample Id: 672623-001 S

Prep Method: E300P

Date Prep: 09.16.2020

MSD Sample Id: 672623-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	344	198	559	109	546	101	90-110	2	20	mg/kg	09.16.2020 10:20	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3137309

MB Sample Id: 7711431-1-BLK

Matrix: Solid

LCS Sample Id: 7711431-1-BKS

Prep Method: SW8015P

Date Prep: 09.16.2020

LCSD Sample Id: 7711431-1-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	775	78	771	77	70-135	1	35	mg/kg	09.16.2020 12:01	
Diesel Range Organics (DRO)	<50.0	1000	869	87	884	88	70-135	2	35	mg/kg	09.16.2020 12:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		113		113		70-135	%	09.16.2020 12:01
o-Terphenyl	126		110		111		70-135	%	09.16.2020 12:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3137309

Matrix: Solid

MB Sample Id: 7711431-1-BLK

Prep Method: SW8015P

Date Prep: 09.16.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.16.2020 11:42	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3137309

Parent Sample Id: 672613-001

Matrix: Soil

MS Sample Id: 672613-001 S

Prep Method: SW8015P

Date Prep: 09.16.2020

MSD Sample Id: 672613-001 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)	<50.0	1000	898	90	795	80	70-135	12	35	mg/kg	09.16.2020 14:11	
Diesel Range Organics (DRO)	<50.0	1000	781	78	817	82	70-135	5	35	mg/kg	09.16.2020 14:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		128		70-135	%	09.16.2020 14:11
o-Terphenyl	132		114		70-135	%	09.16.2020 14:11

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137315

MB Sample Id: 7711417-1-BLK

Matrix: Solid

LCS Sample Id: 7711417-1-BKS

Prep Method: SW5035A

Date Prep: 09.16.2020

LCSD Sample Id: 7711417-1-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	0.0938	94	0.0974	97	70-130	4	35	mg/kg	09.16.2020 10:24	
Toluene	<0.00200	0.100	0.0913	91	0.100	100	70-130	9	35	mg/kg	09.16.2020 10:24	
Ethylbenzene	<0.00200	0.100	0.0853	85	0.0940	94	71-129	10	35	mg/kg	09.16.2020 10:24	
m,p-Xylenes	<0.00400	0.200	0.170	85	0.190	95	70-135	11	35	mg/kg	09.16.2020 10:24	
o-Xylene	<0.00200	0.100	0.0837	84	0.0947	95	71-133	12	35	mg/kg	09.16.2020 10:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		96		95		70-130	%	09.16.2020 10:24
4-Bromofluorobenzene	94		84		89		70-130	%	09.16.2020 10:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137315

Parent Sample Id: 672623-001

Matrix: Soil

MS Sample Id: 672623-001 S

Prep Method: SW5035A

Date Prep: 09.16.2020

MSD Sample Id: 672623-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.108	108	0.105	105	70-130	3	35	mg/kg	09.16.2020 11:54	
Toluene	<0.00200	0.100	0.105	105	0.101	101	70-130	4	35	mg/kg	09.16.2020 11:54	
Ethylbenzene	<0.00200	0.100	0.0963	96	0.0904	91	71-129	6	35	mg/kg	09.16.2020 11:54	
m,p-Xylenes	<0.00401	0.200	0.193	97	0.180	90	70-135	7	35	mg/kg	09.16.2020 11:54	
o-Xylene	<0.00200	0.100	0.0948	95	0.0888	89	71-133	7	35	mg/kg	09.16.2020 11:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	09.16.2020 11:54
4-Bromofluorobenzene	94		89		70-130	%	09.16.2020 11:54

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 672614

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

www.xenco.com Page 1 of 1

Project Manager:	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:	slg@ltenv.com, dmoir@ltenv.com, kkennedy@ltenv.com

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

Project Name:	PLU 213 Baffly	Turn Around	
Project Number:	012920106	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	26.2.4	Thermometer ID			
Received Intact:	☒ Yes ☐ No	Correction Factor:	-0.2		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	4		
Sample Custody Seals:	☒ Yes ☐ No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			ANALYSIS REQUEST										Work Order Notes
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)											
SS08	S	9-15-20	1040	0.5'	1	X	X	X										
SS09	S	9-15-20	1050	0.5'	1	X	X	X										
SS10	S	9-15-20	1100	0.5'	1	X	X	X										
SS11	S	9-15-20	1110	0.5'	1	X	X	X										

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>SL</i>	<i>Cler Duffie</i>	9-15-20 16:48			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09.15.2020 04.48.00 PM

Work Order #: 672614

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)?	2.4
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 09.16.2020

Checklist reviewed by:



Jessica Kramer

Date: 09.16.2020

Certificate of Analysis Summary 675902

LT Environmental, Inc., Arvada, CO

Project Name: PLU 213 Battery

Project Id: 012920106

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 10.22.2020 14:37

Report Date: 10.26.2020 14:37

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	675902-001					
	Field Id:	FS28 A					
	Depth:	1.5- ft					
	Matrix:	SOIL					
	Sampled:	10.22.2020 09:55					
BTEX by EPA 8021B	Extracted:	10.22.2020 15:16					
	Analyzed:	10.23.2020 20:06					
	Units/RL:	mg/kg RL					
Benzene		<0.00201 0.00201					
Toluene		<0.00201 0.00201					
Ethylbenzene		<0.00201 0.00201					
m,p-Xylenes		<0.00402 0.00402					
o-Xylene		<0.00201 0.00201					
Total Xylenes		<0.00201 0.00201					
Total BTEX		<0.00201 0.00201					
Chloride by EPA 300	Extracted:	10.22.2020 15:54					
	Analyzed:	10.22.2020 17:10					
	Units/RL:	mg/kg RL					
Chloride		96.4 10.1					
TPH by SW8015 Mod	Extracted:	10.22.2020 17:00					
	Analyzed:	10.23.2020 13:40					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.4 50.4					
Diesel Range Organics (DRO)		97.6 50.4					
Motor Oil Range Hydrocarbons (MRO)		<50.4 50.4					
Total GRO-DRO		97.6 50.4					
Total TPH		97.6 50.4					

BRL - Below Reporting Limit

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





Analytical Report 675902

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 213 Battery

012920106

10.26.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.26.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **675902**

PLU 213 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 Eurofins Xenco, LLC Report Number(s) 675902. 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 Eurofins Xenco, LLC. 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. 675902 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 675902

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS28 A	S	10.22.2020 09:55	1.5 ft	675902-001



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *PLU 213 Battery*

Project ID: 012920106
Work Order Number(s): 675902

Report Date: 10.26.2020
Date Received: 10.22.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 675902

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS28 A** Matrix: Soil Date Received: 10.22.2020 14:37
 Lab Sample Id: 675902-001 Date Collected: 10.22.2020 09:55 Sample Depth: 1.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.22.2020 15:54 % Moisture:
 Seq Number: 3140528 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	96.4	10.1	mg/kg	10.22.2020 17:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 10.22.2020 17:00 % Moisture:
 Seq Number: 3140536 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.4	50.4	mg/kg	10.23.2020 13:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	97.6	50.4	mg/kg	10.23.2020 13:40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.4	50.4	mg/kg	10.23.2020 13:40	U	1
Total GRO-DRO	PHC628	97.6	50.4	mg/kg	10.23.2020 13:40		1
Total TPH	PHC635	97.6	50.4	mg/kg	10.23.2020 13:40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.23.2020 13:40	
o-Terphenyl	84-15-1	106	%	70-135	10.23.2020 13:40	



Certificate of Analytical Results 675902

LT Environmental, Inc., Arvada, CO

PLU 213 Battery

Sample Id: **FS28 A**
Lab Sample Id: 675902-001

Matrix: Soil
Date Collected: 10.22.2020 09:55

Date Received: 10.22.2020 14:37
Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.22.2020 15:16

% Moisture:
Basis: Wet Weight

Seq Number: 3140546

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.23.2020 20:06	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.23.2020 20:06	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.23.2020 20:06	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.23.2020 20:06	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.23.2020 20:06	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.23.2020 20:06	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.23.2020 20:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.23.2020 20:06	
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.23.2020 20:06	



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. **ND** Not Detected.

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3140528

MB Sample Id: 7713727-1-BLK

Matrix: Solid

LCS Sample Id: 7713727-1-BKS

Prep Method: E300P

Date Prep: 10.22.2020

LCSD Sample Id: 7713727-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	249	100	90-110	2	20	mg/kg	10.22.2020 14:46	

Analytical Method: Chloride by EPA 300

Seq Number: 3140528

Parent Sample Id: 675753-001

Matrix: Soil

MS Sample Id: 675753-001 S

Prep Method: E300P

Date Prep: 10.22.2020

MSD Sample Id: 675753-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	520	200	699	90	713	97	90-110	2	20	mg/kg	10.22.2020 15:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3140528

Parent Sample Id: 675674-016

Matrix: Soil

MS Sample Id: 675674-016 S

Prep Method: E300P

Date Prep: 10.22.2020

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	24.1	200	235	105	90-110	mg/kg	10.22.2020 16:40	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3140536

MB Sample Id: 7713812-1-BLK

Matrix: Solid

LCS Sample Id: 7713812-1-BKS

Prep Method: SW8015P

Date Prep: 10.22.2020

LCSD Sample Id: 7713812-1-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	1160	116	1070	107	70-135	8	35	mg/kg	10.23.2020 11:18	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1100	110	70-135	1	35	mg/kg	10.23.2020 11:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		133		128		70-135	%	10.23.2020 11:18
o-Terphenyl	116		123		105		70-135	%	10.23.2020 11:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3140536

Matrix: Solid

MB Sample Id: 7713812-1-BLK

Prep Method: SW8015P

Date Prep: 10.22.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.23.2020 10:58	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 213 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3140536

Parent Sample Id: 675810-001

Matrix: Soil

MS Sample Id: 675810-001 S

Prep Method: SW8015P

Date Prep: 10.22.2020

MSD Sample Id: 675810-001 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)	<50.1	1000	800	80	849	85	70-135	6	35	mg/kg	10.23.2020 12:39	
Diesel Range Organics (DRO)	<50.1	1000	875	88	895	90	70-135	2	35	mg/kg	10.23.2020 12:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		129		70-135	%	10.23.2020 12:39
o-Terphenyl	99		101		70-135	%	10.23.2020 12:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3140546

MB Sample Id: 7713744-1-BLK

Matrix: Solid

LCS Sample Id: 7713744-1-BKS

Prep Method: SW5035A

Date Prep: 10.22.2020

LCSD Sample Id: 7713744-1-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	0.0926	93	0.0939	94	70-130	1	35	mg/kg	10.23.2020 14:14	
Toluene	<0.00200	0.100	0.104	104	0.101	101	70-130	3	35	mg/kg	10.23.2020 14:14	
Ethylbenzene	<0.00200	0.100	0.0875	88	0.0900	90	71-129	3	35	mg/kg	10.23.2020 14:14	
m,p-Xylenes	<0.00400	0.200	0.178	89	0.178	89	70-135	0	35	mg/kg	10.23.2020 14:14	
o-Xylene	<0.00200	0.100	0.0889	89	0.0905	91	71-133	2	35	mg/kg	10.23.2020 14:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		100		98		70-130	%	10.23.2020 14:14
4-Bromofluorobenzene	116		108		104		70-130	%	10.23.2020 14:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3140546

Parent Sample Id: 675674-016

Matrix: Soil

MS Sample Id: 675674-016 S

Prep Method: SW5035A

Date Prep: 10.22.2020

MSD Sample Id: 675674-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.0943	94	70-130	13	35	mg/kg	10.23.2020 14:59	
Toluene	0.0142	0.100	0.117	103	0.103	89	70-130	13	35	mg/kg	10.23.2020 14:59	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0900	90	71-129	12	35	mg/kg	10.23.2020 14:59	
m,p-Xylenes	<0.00401	0.200	0.204	102	0.180	90	70-135	13	35	mg/kg	10.23.2020 14:59	
o-Xylene	<0.00200	0.100	0.0999	100	0.0916	92	71-133	9	35	mg/kg	10.23.2020 14:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		105		70-130	%	10.23.2020 14:59
4-Bromofluorobenzene	109		109		70-130	%	10.23.2020 14:59

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Chain of Custody

Work Order No: 675902

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3333
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-592-7550)
Hobbs, NM (575-392-7550)

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:	slilo@ltenv.com, dmoir@ltenv.com
Project Name:	PLU 21-2 B-H, etc.		

Work Order Comments	
Program: UST/PST	☐ RP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD	☐ ADAPT ☐ Other: ☐

[illegible]

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10.22.2020 02:37.00 PM

Work Order #: 675902

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)?	.8
#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?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Sample received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 10.22.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.23.2020

Incident ID	NRM2017437201
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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: _____

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

OCD Only

Received by: Robert Hamlet Date: 3/31/2021

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: Robert Hamlet Date: 3/31/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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 11052

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707	5380	11052	C-141

OCD Reviewer	Condition
rhamlet	We have received your closure report and final C-141 for Incident #NRM2017437201 PLU 213 BATTERY, thank you. This closure is approved.