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	NRM2006457917
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # *(assigned by OCD)*
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.270511 Longitude -103.937329
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Remuda 500 Battery	Site Type Tank Battery
Date Release Discovered 2/20/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	25	23S	29E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 15.82	Volume Recovered (bbls) 15
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
A worn seal on a transfer pump caused produced water to leak into an impermeable containment and surrounding caliche pad. Of the total fluid released, 13 bbls were recovered from impermeable containment, 2 bbls were recovered from caliche pad, and 0.82 bbl remain on caliche pad surface. A third party contractor was retained to complete remediation activities.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006457917
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped.

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

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

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

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

N/A

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 3/4/20

email: Kyle_Littrell@xtoenergy.com Telephone:

OCD Only

Received by: Ramona Marcus Date: 3/4/2020

NRM2006457917

Location:	**Remuda 500 Battery**	
Spill Date:	**2/20/2020**	

Area 1		
Approximate Area =	84.09	cu. ft.
VOLUME RECOVERED		
Total Produced Water =	15.00	bbls

Area 2		
Approximate Area =	3674.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches

Average Porosity Factor =	0.03	

VOLUME OF LEAK		
Total Produced Water =	0.82	bbls

TOTAL VOLUME OF LEAK		
Total Produced Water =	**15.82**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**15.00**	**bbls**

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006457917
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?	<50' (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006457917
District RP	
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 05/19/2020

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

OCD Only

Received by: Cristina Eads Date: 05/19/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006457917
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: 05/19/2020

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

OCD Only

Received by: Cristina Eads Date: 05/19/2020

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: 08/05/2020

Printed Name: Cristina Eads Title: Environmental Specialist

A proud member of WSP

LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

May 19, 2020

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

RE: Closure Request
Remuda 500 Battery
Incident Number NRM2006457917
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Remuda 500 Battery (Site) in Unit O, Section 25, Township 23 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to confirm the presence or absence of impacts to soil following the release of produced water at the Site. Based on field observations, field screening, and laboratory analytical results from soil sampling activities, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NRM2006457917.

RELEASE BACKGROUND

On February 20, 2020, a seal on a transfer pump malfunctioned, resulting in the release of approximately 15.28 barrels (bbls) of produced water into an impermeable containment and onto the surrounding caliche well pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, of which approximately 13 bbls of produced water were recovered from within the impermeable containment, and approximately 2 bbls of produced water were recovered from the caliche pad. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on March 4, 2020 and subsequently assigned Incident Number NRM2006457917.

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 less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 321717103561001, located approximately 1.22 miles north of the Site. The groundwater well has

a reported depth to groundwater of 50 feet bgs, total depth is undetermined. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash, located approximately 176 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). The 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): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT, DELINEATION, AND EXCAVATION ACTIVITIES

On April 8, 2020, LTE personnel inspected the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. LTE personnel collected three preliminary soil samples (SS01 through SS03) within the release extent at a depth of approximately 0.5 feet bgs to assess the lateral extent of affected surface soil. Soil from the preliminary soil samples was 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 Positing System (GPS) unit and are depicted on Figure 2. Photo documentation of the release was conducted, and a photographic log of the Site and the remediation work is included as Attachment 1.

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.

Based on the laboratory analytical results, benzene, BTEX, TPH-GRO, TPH-DRO, and TPH concentrations were compliant with the Closure Criteria. However, chloride concentrations did appear to exceed the Closure Criteria in preliminary soil samples SS01 through SS03. Additional assessment activities were scheduled to further confirm the presence or absence of impacted soil at depth. Laboratory analytical results for the preliminary soil samples are presented on Figure 2 and summarized in Table 1. The Laboratory analytical report is included in Attachment 2.

On May 5, 2020, LTE personnel returned to the Site to oversee additional soil assessment activities. Six delineation pothole samples (PH01 through PH06) were advanced via track-mounted backhoe within the release extent to a depth of approximately 0.5 feet to 1-foot bgs. Soil from the potholes was field screened utilizing a PID and Hach® chloride QuanTab® test strips. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation soil sample locations are depicted on Figure 3. The delineation soil samples were collected, handled and analyzed for chloride as described above and submitted to Xenco in Carlsbad, New Mexico. All potholes were backfilled with the soil removed.

LTE oversaw three small excavations with a track-mounted backhoe on May 5, 2020 to address the chloride impacts in preliminary soil samples SS01 through SS03. Preliminary soil samples SS01 through SS03 within the release extent was excavated to a depth of approximately 1-foot bgs. LTE collected 5-point composite soil samples every 200 square feet from the floor of the excavations. The 5-point composite samples were collected by depositing five aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. A total of 3 floor soil samples (FS01 through FS03) were collected from the excavations. The excavation soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Carlsbad, New Mexico. The excavation extent and excavation soil sample locations are depicted on Figure 4 and summarized in Table 1. The complete laboratory analytical reports are included as Attachment 2.

Overall, impacted caliche from the three excavations encompassed an area of approximately 141 square feet on pad. A total volume of approximately 5 cubic yards of impacted caliche was removed from the Site. The impacted material was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated benzene, BTEX, TPH-GRO, TPH-DRO, and TPH concentrations were compliant with the Closure Criteria in preliminary soil samples. Chloride concentrations did appear to exceed the Closure Criteria in preliminary soil samples SS01 through SS03 collected at approximately 0.5 feet bgs. Delineation soil samples PH01 through PH06

collected at approximately 0.5 feet bgs and 1-foot bgs indicated concentrations of benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride were compliant with the Closure Criteria.

Following an initial excavation event, LTE collected confirmation soil samples within the three small excavation extents at preliminary soil sample locations (SS01 through SS03). Laboratory analytical results indicated that benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in excavation soil samples FS01 through FS03 collected at approximately 1-foot bgs. Laboratory analytical results are presented in Table 1. The complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Initial and follow-up response efforts as a result of the produced water release included removal of freestanding fluid via hydrovac truck, collection of delineation soil samples, and excavation and removal of impacted soils. Preliminary soil samples SS01 through SS03 and delineation soil samples PH01 through PH06 were collected from within the release area from depths ranging from 0.5 feet to 1-foot bgs to assess for the presence or absence of soil impacts as a result of the February 20, 2020, release. Soil samples SS01 through SS03 indicated that chloride concentrations exceeded the Closure Criteria. Based on the analytical results, the areas were excavated, removing impacted soils from the surface to a depth of 1-foot bgs. Laboratory analytical results for the delineation and final confirmation soil samples collected within the final excavation extent (FS01 through FS03) indicated that benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the NMOCD Closure Criteria. XTO respectfully requests NFA for Incident Number NRM200645.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Kalei Jennings
Project Environmental Scientist

Ashley L. Ager, P.G.
Senior Geologist

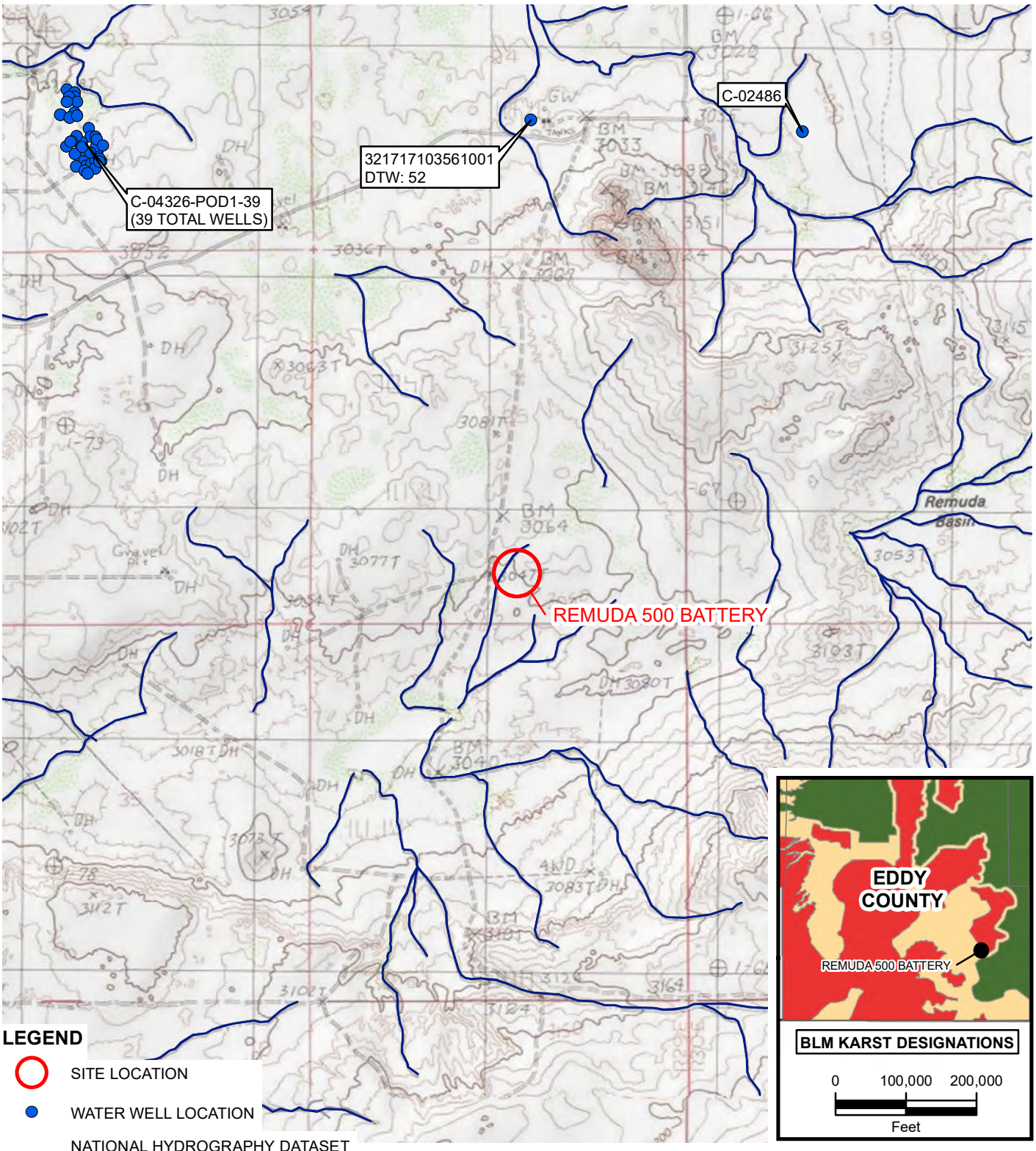
cc: Kyle Littrell, XTO
Ryan Mann, State Land Office

Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Appendices:

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	Photographic Logs
Attachment 2	Laboratory Analytical Reports
Attachment 3	Lithologic/Soil Sampling Logs

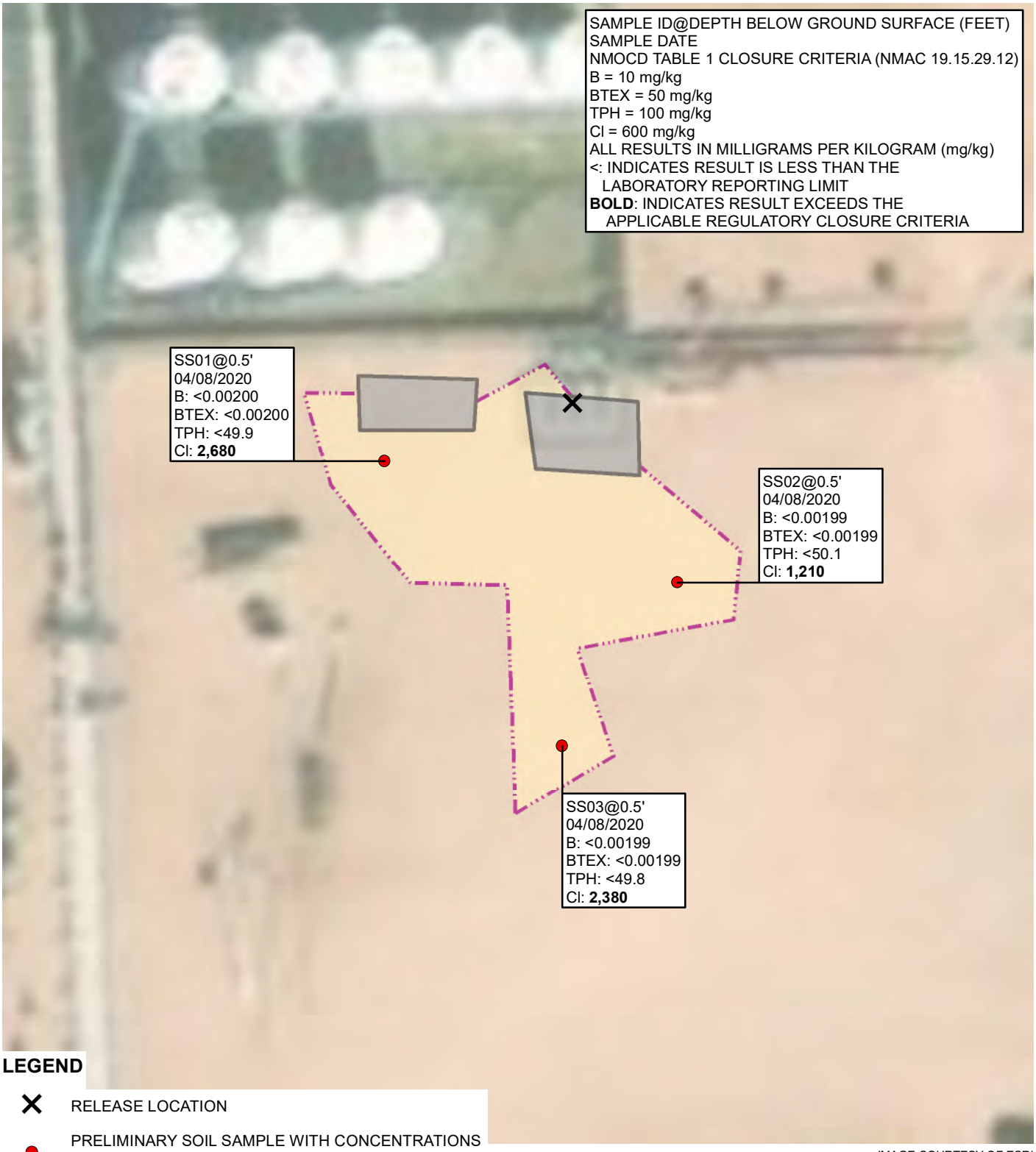
FIGURES



NOTE: INCIDENT NUMBER NRM2006457917
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT

FIGURE 1
SITE LOCATION MAP
REMUDA 500 BATTERY
UNIT O SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

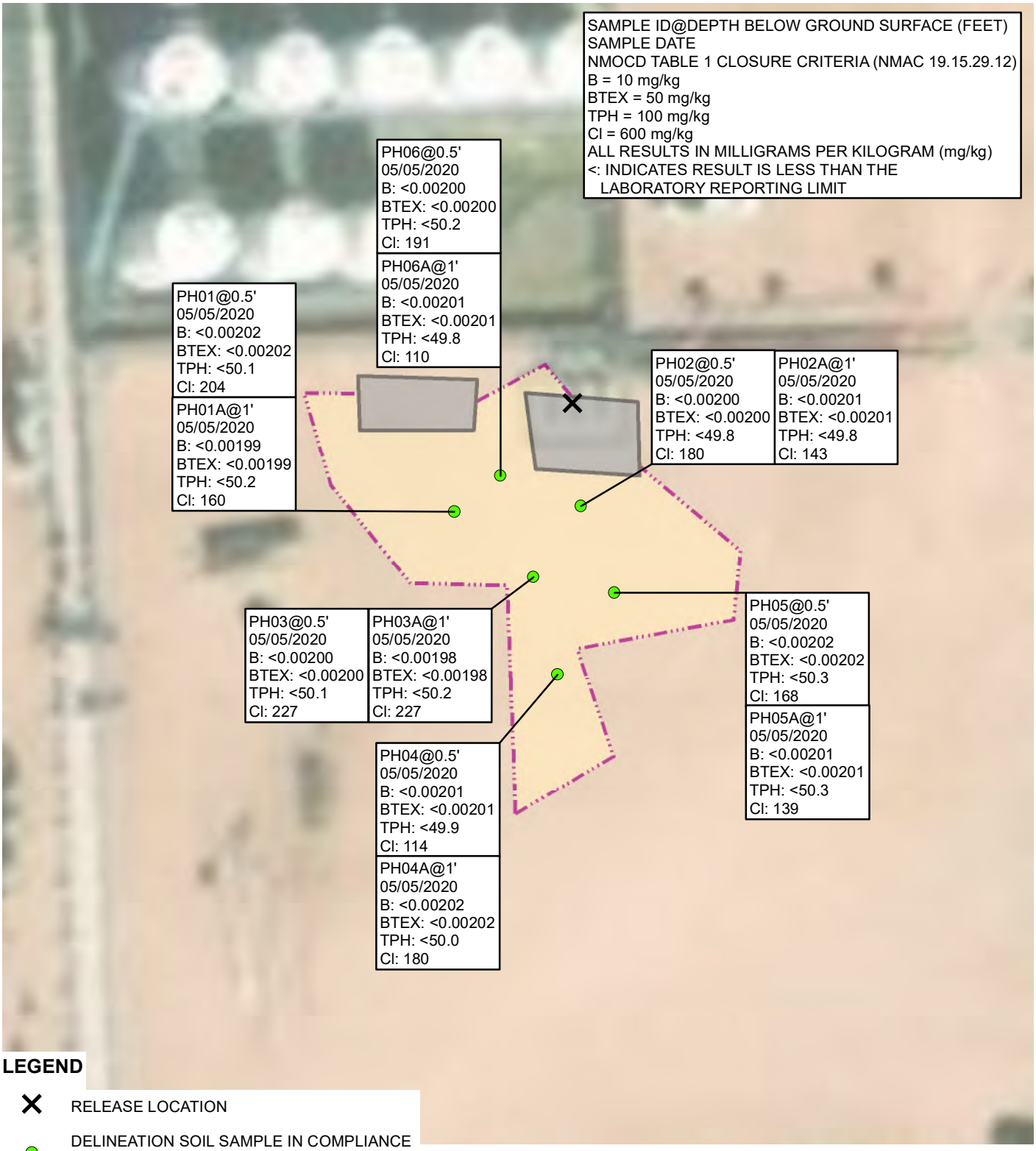
P:\XTO Energy\GIS\MXD\012920055_REMUDA 500 BATTERY\012920055_FIG01_SL_RECEPTOR_2020.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NRM2006457917

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
REMUDA 500 BATTERY
UNIT O SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920055_REMUDA 500 BATTERY\012920055_FIG02_PRELIMINARY_2020.mxd



LEGEND

- RELEASE LOCATION
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT
- ACTIVE INFRASTRUCTURE

IMAGE COURTESY OF ESRI

0 30 60
Feet

N

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NRM2006457917

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
REMUDA 500 BATTERY
UNIT O SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920055_REMUDA 500 BATTERY\012920055_FIG03_DELINEATION_2020.mxd

LEGEND

- RELEASE LOCATION
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- EXCAVATION EXTENT
- ACTIVE INFRASTRUCTURE

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NRM2006457917

IMAGE COURTESY OF ESRI

0 30 60
Feet

N

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
REMUDA 500 BATTERY
UNIT O SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920055_REMUDA 500 BATTERY\012920055_FIG04_EXCAVATION_2020.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

REMUDA 500 BATTERY
INCIDENT NUMBER NRM2006457917
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	NE	**100**	**600**
SS01	0.5	04/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	**2,680**
SS02	0.5	04/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	**1,210**
SS03	0.5	04/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	**2,380**
PH01	0.5	05/05/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	204
PH01A	1	05/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	160
PH02	0.5	05/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	180
PH02A	1	05/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	143
PH03	0.5	05/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	227
PH03A	1	05/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	227
PH04	0.5	05/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	114
PH04A	1	05/05/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	180
PH05	0.5	05/05/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	168
PH05A	1	05/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	139
PH06	0.5	05/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	191
PH06A	1	05/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	110
FS01	1	05/05/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	255
FS02	1	05/05/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	196
FS03	1	05/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.7	<49.7	<49.7	<49.7	<49.7	113

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
NMOCD - 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

A proud member of WSP

ATTACHMENT 1: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of release facing West.

Photograph 2: View of release facing North.

Photograph 3: View of location of FS02 facing North.

Photograph 4: View of backfilled excavations facing North.

Photograph 5: View of FS02 and FS03 facing south.

Photograph 6: View of backfilled excavations facing west.

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 658608

for

LT Environmental, Inc.

Project Manager: Dan Moir

Remuda 500

Cost Center:1067601001

04.13.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04.13.2020

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

Reference: XENCO Report No(s): **658608**
Remuda 500
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 658608. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 658608 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	04.08.2020 10:25	0.5 ft	658608-001
SS02	S	04.08.2020 10:34	0.5 ft	658608-002
SS03	S	04.08.2020 10:41	0.5 ft	658608-003

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Remuda 500

Project ID: *Cost Center:1067601001*
Work Order Number(s): *658608*

Report Date: *04.13.2020*
Date Received: *04.10.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3122766 BTEX by EPA 8021B

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

Certificate of Analysis Summary 658608

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 500

Project Id: Cost Center:1067601001
Contact: Dan Moir
Project Location:

Date Received in Lab: Fri 04.10.2020 13:25
Report Date: 04.13.2020 12:21
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	658608-001		658608-002		658608-003					
	Field Id:	SS01		SS02		SS03					
	Depth:	0.5- ft		0.5- ft		0.5- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	04.08.2020 10:25		04.08.2020 10:34		04.08.2020 10:41					
BTEX by EPA 8021B	***Extracted:***	04.10.2020 20:27		04.10.2020 20:27		04.10.2020 20:27					
	Analyzed:	04.11.2020 10:25		04.11.2020 10:45		04.11.2020 11:06					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199				
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199				
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199				
m,p-Xylenes		<0.00400	0.00400	<0.00398	0.00398	<0.00398	0.00398				
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199				
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199				
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	04.10.2020 15:00		04.10.2020 15:00		04.10.2020 15:00					
	Analyzed:	04.10.2020 16:27		04.10.2020 16:43		04.10.2020 16:49					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		2680	49.6	1210	9.98	2380	49.7				
TPH by SW8015 Mod	***Extracted:***	04.10.2020 15:30		04.10.2020 15:30		04.10.2020 15:30					
	Analyzed:	04.10.2020 19:25		04.10.2020 19:46		04.10.2020 20:26					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.1	50.1	<49.8	49.8				
Diesel Range Organics (DRO)		<49.9	49.9	<50.1	50.1	<49.8	49.8				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.1	50.1	<49.8	49.8				
Total GRO-DRO		<49.9	49.9	<50.1	50.1	<49.8	49.8				
Total TPH		<49.9	49.9	<50.1	50.1	<49.8	49.8				

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

Jessica Kramer
Project Manager

Certificate of Analytical Results 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.10.2020 13:25
Lab Sample Id:	658608-001	Date Collected:	04.08.2020 10:25	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.10.2020 15:00	Basis:	Wet Weight
Seq Number:	3122768				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2680**	49.6	mg/kg	04.10.2020 16:27		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.10.2020 15:30	Basis:	Wet Weight
Seq Number:	3122702				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.10.2020 19:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.10.2020 19:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.10.2020 19:25	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.10.2020 19:25	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.10.2020 19:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	04.10.2020 19:25	
o-Terphenyl	84-15-1	130	%	70-135	04.10.2020 19:25	

Certificate of Analytical Results 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.10.2020 13:25
Lab Sample Id:	658608-001	Date Collected:	04.08.2020 10:25	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.10.2020 20:27	Basis:	Wet Weight
Seq Number:	3122766				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.11.2020 10:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.11.2020 10:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.11.2020 10:25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.11.2020 10:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.11.2020 10:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.11.2020 10:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.11.2020 10:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.11.2020 10:25	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.11.2020 10:25	

Certificate of Analytical Results 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.10.2020 13:25
Lab Sample Id:	658608-002	Date Collected:	04.08.2020 10:34	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.10.2020 15:00	Basis:	Wet Weight
Seq Number:	3122768				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1210**	9.98	mg/kg	04.10.2020 16:43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.10.2020 15:30	Basis:	Wet Weight
Seq Number:	3122702				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.10.2020 19:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.10.2020 19:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.10.2020 19:46	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.10.2020 19:46	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.10.2020 19:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	04.10.2020 19:46	
o-Terphenyl	84-15-1	130	%	70-135	04.10.2020 19:46	

Certificate of Analytical Results 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.10.2020 13:25
Lab Sample Id:	658608-002	Date Collected:	04.08.2020 10:34	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.10.2020 20:27	Basis:	Wet Weight
Seq Number:	3122766				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.11.2020 10:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.11.2020 10:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.11.2020 10:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.11.2020 10:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.11.2020 10:45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.11.2020 10:45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.11.2020 10:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.11.2020 10:45	
1,4-Difluorobenzene	540-36-3	106	%	70-130	04.11.2020 10:45	

Certificate of Analytical Results 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.10.2020 13:25
Lab Sample Id:	658608-003	Date Collected:	04.08.2020 10:41	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.10.2020 15:00	Basis:	Wet Weight
Seq Number:	3122768				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2380**	49.7	mg/kg	04.10.2020 16:49		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.10.2020 15:30	Basis:	Wet Weight
Seq Number:	3122702				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.10.2020 20:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.10.2020 20:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.10.2020 20:26	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.10.2020 20:26	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.10.2020 20:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	04.10.2020 20:26	
o-Terphenyl	84-15-1	132	%	70-135	04.10.2020 20:26	

Certificate of Analytical Results 658608

LT Environmental, Inc., Arvada, CO

Remuda 500

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.10.2020 13:25
Lab Sample Id:	658608-003	Date Collected:	04.08.2020 10:41	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.10.2020 20:27	Basis:	Wet Weight
Seq Number:	3122766				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.11.2020 11:06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.11.2020 11:06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.11.2020 11:06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.11.2020 11:06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.11.2020 11:06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.11.2020 11:06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.11.2020 11:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	04.11.2020 11:06	
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.11.2020 11:06	

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

QC Summary 658608

LT Environmental, Inc.

Remuda 500

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3122768 — Matrix: Solid — Date Prep: 04.10.2020
MB Sample Id: 7701102-1-BLK — LCS Sample Id: 7701102-1-BKS — LCSD Sample Id: 7701102-1-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	247	99	90-110	4	20	mg/kg	04.10.2020 16:10	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3122768 — Matrix: Soil — Date Prep: 04.10.2020
Parent Sample Id: 658608-001 — MS Sample Id: 658608-001 S — MSD Sample Id: 658608-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2680	199	2870	95	2890	104	90-110	1	20	mg/kg	04.10.2020 16:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3122768 — Matrix: Soil — Date Prep: 04.10.2020
Parent Sample Id: 658610-001 — MS Sample Id: 658610-001 S — MSD Sample Id: 658610-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	157	200	365	104	369	106	90-110	1	20	mg/kg	04.10.2020 17:43	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3122702 — Matrix: Solid — Date Prep: 04.10.2020
MB Sample Id: 7701065-1-BLK — LCS Sample Id: 7701065-1-BKS — LCSD Sample Id: 7701065-1-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	957	96	980	98	70-135	2	35	mg/kg	04.10.2020 15:21	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1130	113	70-135	2	35	mg/kg	04.10.2020 15:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		128		122		70-135	%	04.10.2020 15:21
o-Terphenyl	122		129		129		70-135	%	04.10.2020 15:21

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3122702 — Matrix: Solid — Date Prep: 04.10.2020
MB Sample Id: 7701065-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.10.2020 15:00	

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

QC Summary 658608

LT Environmental, Inc.

Remuda 500

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3122702 Matrix: Soil Date Prep: 04.10.2020
Parent Sample Id: 658522-007 MS Sample Id: 658522-007 S MSD Sample Id: 658522-007 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)	<49.8	995	1020	103	1040	104	70-135	2	35	mg/kg	04.10.2020 16:22	
Diesel Range Organics (DRO)	<49.8	995	1180	119	1200	120	70-135	2	35	mg/kg	04.10.2020 16:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		134		70-135	%	04.10.2020 16:22
o-Terphenyl	120		132		70-135	%	04.10.2020 16:22

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122766 Matrix: Solid Date Prep: 04.10.2020
MB Sample Id: 7701117-1-BLK LCS Sample Id: 7701117-1-BKS LCSD Sample Id: 7701117-1-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	0.102	102	0.0941	94	70-130	8	35	mg/kg	04.11.2020 07:01	
Toluene	<0.00200	0.100	0.0962	96	0.0888	89	70-130	8	35	mg/kg	04.11.2020 07:01	
Ethylbenzene	<0.00200	0.100	0.0906	91	0.0830	83	71-129	9	35	mg/kg	04.11.2020 07:01	
m,p-Xylenes	<0.00400	0.200	0.187	94	0.172	86	70-135	8	35	mg/kg	04.11.2020 07:01	
o-Xylene	<0.00200	0.100	0.0955	96	0.0879	88	71-133	8	35	mg/kg	04.11.2020 07:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		105		104		70-130	%	04.11.2020 07:01
4-Bromofluorobenzene	94		93		93		70-130	%	04.11.2020 07:01

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122766 Matrix: Soil Date Prep: 04.10.2020
Parent Sample Id: 658616-061 MS Sample Id: 658616-061 S MSD Sample Id: 658616-061 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	0.105	104	0.102	101	70-130	3	35	mg/kg	04.11.2020 07:42	
Toluene	<0.00201	0.101	0.0991	98	0.0949	94	70-130	4	35	mg/kg	04.11.2020 07:42	
Ethylbenzene	<0.00201	0.101	0.0928	92	0.0870	86	71-129	6	35	mg/kg	04.11.2020 07:42	
m,p-Xylenes	<0.00402	0.201	0.189	94	0.178	89	70-135	6	35	mg/kg	04.11.2020 07:42	
o-Xylene	<0.00201	0.101	0.0960	95	0.0906	90	71-133	6	35	mg/kg	04.11.2020 07:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		104		70-130	%	04.11.2020 07:42
4-Bromofluorobenzene	94		92		70-130	%	04.11.2020 07:42

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

Chain of Custody

Work Order No: 1058608

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

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 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	ldelval@ltenv.com

Work Order Comments

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

Project Name:	Remuda 500	Turn Around	
Project Number:	Cost Center: 106766001	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	~~Benjamin Belill~~ Luis Del Val	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	3.8	Thermometer ID		
Received Intact:	(Yes) No	TNM007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	4/9/2020	1025	0.5'	1	X	X	X
SS02	↓	↓	1034	↓	↓	↓	↓	↓
SS03	↓	↓	1041	↓	↓	↓	↓	↓

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Luis Del Val		4/10/20 13:25	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04.10.2020 01.25.00 PM

Work Order #: 658608

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)?	3.8
#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**

*** 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: 04.10.2020

Checklist reviewed by: Jessica Kramer Date: 04.13.2020

Jessica Kramer

Certificate of Analysis Summary 660710

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 500 Battery

Project Id: 012920055
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 05.05.2020 17:02
Report Date: 05.07.2020 15:36
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	660710-001		660710-002		660710-003					
	Field Id:	FS01		FS02		FS03					
	Depth:	1- ft		1- ft		1- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	05.05.2020 10:15		05.05.2020 10:45		05.05.2020 11:15					
BTEX by EPA 8021B	***Extracted:***	05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00					
	Analyzed:	05.06.2020 17:03		05.06.2020 17:24		05.06.2020 17:46					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200				
Toluene		<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200				
Ethylbenzene		<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200				
m,p-Xylenes		<0.00403	0.00403	<0.00404	0.00404	<0.00400	0.00400				
o-Xylene		<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200				
Total Xylenes		<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200				
Total BTEX		<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00					
	Analyzed:	05.06.2020 17:58		05.06.2020 18:03		05.06.2020 18:09					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		255	9.92	196	9.98	113	9.96				
TPH by SW8015 Mod	***Extracted:***	05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00					
	Analyzed:	05.06.2020 18:14		05.06.2020 18:34		05.06.2020 18:54					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<49.7	49.7				
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<49.7	49.7				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<49.7	49.7				
Total GRO-DRO		<50.0	50.0	<49.8	49.8	<49.7	49.7				
Total TPH		<50.0	50.0	<49.8	49.8	<49.7	49.7				

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

Jessica Kramer
Project Manager

Analytical Report 660710

for

LT Environmental, Inc.

Project Manager: Dan Moir

Remuda 500 Battery

012920055

05.07.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

05.07.2020

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

Reference: XENCO Report No(s): **660710**
Remuda 500 Battery
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 660710. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 660710 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	05.05.2020 10:15	1 ft	660710-001
FS02	S	05.05.2020 10:45	1 ft	660710-002
FS03	S	05.05.2020 11:15	1 ft	660710-003

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Remuda 500 Battery

Project ID: *012920055*
Work Order Number(s): *660710*

Report Date: *05.07.2020*
Date Received: *05.05.2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660710-001	Date Collected:	05.05.2020 10:15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**255**	9.92	mg/kg	05.06.2020 17:58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125289				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.06.2020 18:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.06.2020 18:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.06.2020 18:14	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.06.2020 18:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.06.2020 18:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.06.2020 18:14	
o-Terphenyl	84-15-1	95	%	70-135	05.06.2020 18:14	

Certificate of Analytical Results 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660710-001	Date Collected:	05.05.2020 10:15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125244				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.06.2020 17:03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.06.2020 17:03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.06.2020 17:03	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.06.2020 17:03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.06.2020 17:03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.06.2020 17:03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.06.2020 17:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.06.2020 17:03	
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.06.2020 17:03	

Certificate of Analytical Results 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660710-002	Date Collected:	05.05.2020 10:45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**196**	9.98	mg/kg	05.06.2020 18:03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125289				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.06.2020 18:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.06.2020 18:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.06.2020 18:34	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.06.2020 18:34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.06.2020 18:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.06.2020 18:34	
o-Terphenyl	84-15-1	98	%	70-135	05.06.2020 18:34	

Certificate of Analytical Results 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660710-002	Date Collected:	05.05.2020 10:45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125244				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.06.2020 17:24	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.06.2020 17:24	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.06.2020 17:24	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.06.2020 17:24	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.06.2020 17:24	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.06.2020 17:24	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.06.2020 17:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.06.2020 17:24	
1,4-Difluorobenzene	540-36-3	115	%	70-130	05.06.2020 17:24	

Certificate of Analytical Results 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660710-003	Date Collected:	05.05.2020 11:15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**113**	9.96	mg/kg	05.06.2020 18:09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125289				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.7	49.7	mg/kg	05.06.2020 18:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.7	49.7	mg/kg	05.06.2020 18:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.7	49.7	mg/kg	05.06.2020 18:54	U	1
Total GRO-DRO	PHC628	<49.7	49.7	mg/kg	05.06.2020 18:54	U	1
Total TPH	PHC635	<49.7	49.7	mg/kg	05.06.2020 18:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.06.2020 18:54	
o-Terphenyl	84-15-1	93	%	70-135	05.06.2020 18:54	

Certificate of Analytical Results 660710

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660710-003	Date Collected:	05.05.2020 11:15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125244				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.06.2020 17:46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.06.2020 17:46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.06.2020 17:46	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.06.2020 17:46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.06.2020 17:46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.06.2020 17:46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.06.2020 17:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.06.2020 17:46	
1,4-Difluorobenzene	540-36-3	112	%	70-130	05.06.2020 17:46	

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

QC Summary 660710

LT Environmental, Inc.

Remuda 500 Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3125246 — Matrix: Solid — Date Prep: 05.06.2020
MB Sample Id: 7702827-1-BLK — LCS Sample Id: 7702827-1-BKS — LCSD Sample Id: 7702827-1-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	251	100	250	100	90-110	0	20	mg/kg	05.06.2020 15:33	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3125246 — Matrix: Soil — Date Prep: 05.06.2020
Parent Sample Id: 660711-008 — MS Sample Id: 660711-008 S — MSD Sample Id: 660711-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	180	199	369	95	369	95	90-110	0	20	mg/kg	05.06.2020 17:11	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3125246 — Matrix: Soil — Date Prep: 05.06.2020
Parent Sample Id: 660732-001 — MS Sample Id: 660732-001 S — MSD Sample Id: 660732-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	475	200	661	93	659	92	90-110	0	20	mg/kg	05.06.2020 15:51	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3125289 — Matrix: Solid — Date Prep: 05.06.2020
MB Sample Id: 7702864-1-BLK — LCS Sample Id: 7702864-1-BKS — LCSD Sample Id: 7702864-1-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	1140	114	1100	110	70-135	4	35	mg/kg	05.06.2020 16:11	
Diesel Range Organics (DRO)	<50.0	1000	1230	123	1140	114	70-135	8	35	mg/kg	05.06.2020 16:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		117		128		70-135	%	05.06.2020 16:11
o-Terphenyl	90		107		101		70-135	%	05.06.2020 16:11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3125289 — Matrix: Solid — Date Prep: 05.06.2020
MB Sample Id: 7702864-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.06.2020 15:51	

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

QC Summary 660710

LT Environmental, Inc.

Remuda 500 Battery

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3125289 Matrix: Soil Date Prep: 05.06.2020
Parent Sample Id: 660733-001 MS Sample Id: 660733-001 S MSD Sample Id: 660733-001 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	1070	107	1040	104	70-135	3	35	mg/kg	05.06.2020 17:12	
Diesel Range Organics (DRO)	<50.1	1000	1140	114	1190	119	70-135	4	35	mg/kg	05.06.2020 17:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		71		70-135	%	05.06.2020 17:12
o-Terphenyl	100		76		70-135	%	05.06.2020 17:12

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3125244 Matrix: Solid Date Prep: 05.06.2020
MB Sample Id: 7702855-1-BLK LCS Sample Id: 7702855-1-BKS LCSD Sample Id: 7702855-1-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	0.120	120	0.122	122	70-130	2	35	mg/kg	05.06.2020 14:12	
Toluene	<0.00200	0.100	0.110	110	0.112	112	70-130	2	35	mg/kg	05.06.2020 14:12	
Ethylbenzene	<0.00200	0.100	0.104	104	0.107	107	71-129	3	35	mg/kg	05.06.2020 14:12	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.208	104	70-135	2	35	mg/kg	05.06.2020 14:12	
o-Xylene	<0.00200	0.100	0.102	102	0.105	105	71-133	3	35	mg/kg	05.06.2020 14:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		107		108		70-130	%	05.06.2020 14:12
4-Bromofluorobenzene	106		100		99		70-130	%	05.06.2020 14:12

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3125244 Matrix: Soil Date Prep: 05.06.2020
Parent Sample Id: 660566-004 MS Sample Id: 660566-004 S MSD Sample Id: 660566-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.120	121	0.125	124	70-130	4	35	mg/kg	05.06.2020 14:54	
Toluene	<0.00198	0.0992	0.117	118	0.112	111	70-130	4	35	mg/kg	05.06.2020 14:54	
Ethylbenzene	<0.00198	0.0992	0.109	110	0.101	100	71-129	8	35	mg/kg	05.06.2020 14:54	
m,p-Xylenes	<0.00397	0.198	0.211	107	0.195	97	70-135	8	35	mg/kg	05.06.2020 14:54	
o-Xylene	<0.00198	0.0992	0.107	108	0.0990	98	71-133	8	35	mg/kg	05.06.2020 14:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	05.06.2020 14:54
4-Bromofluorobenzene	102		101		70-130	%	05.06.2020 14:54

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

Chain of Custody

Work Order No: 6e710

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

Work Order Comments

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

Project Name:	Remuda 500 Battery	Turn Around	
Project Number:	012920055	Routine	☑
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	4.0	Thermometer ID		
Received Intact:	(Yes) No	TNM007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS01	S	5.5.20	1015	1'	1	X	X	X
FS02	S	5.5.20	1045	1'	1	X	X	X
FS03	S	5.5.20	1115	1'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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
		5/5/20 17:02	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

Certificate of Analysis Summary 660711

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 500 Battery

Project Id: 012920055
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 05.05.2020 17:02
Report Date: 05.08.2020 12:55
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	660711-001		660711-002		660711-003		660711-004		660711-005		660711-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	0.5- ft		1- ft		0.5- ft		1- ft		0.5- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	05.05.2020 12:45		05.05.2020 13:55		05.05.2020 12:55		05.05.2020 14:05		05.05.2020 13:05		05.05.2020 14:15	
BTEX by EPA 8021B	***Extracted:***	05.07.2020 09:50		05.07.2020 09:50		05.07.2020 09:50		05.07.2020 09:50		05.06.2020 17:00		05.06.2020 17:00	
	Analyzed:	05.07.2020 14:27		05.07.2020 14:48		05.07.2020 13:44		05.07.2020 15:31		05.07.2020 07:18		05.07.2020 07:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00404	0.00404	<0.00398	0.00398	<0.00399	0.00399	<0.00402	0.00402	<0.00399	0.00399	<0.00397	0.00397
o-Xylene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00	
	Analyzed:	05.06.2020 16:14		05.06.2020 16:31		05.06.2020 16:37		05.06.2020 16:42		05.06.2020 16:48		05.06.2020 16:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		204	10.0	160	10.0	180	9.98	143	9.90	227	10.0	227	9.88
TPH by SW8015 Mod	***Extracted:***	05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00	
	Analyzed:	05.06.2020 19:15		05.06.2020 19:35		05.06.2020 19:55		05.06.2020 20:15		05.06.2020 20:36		05.06.2020 21:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<50.2	50.2
Diesel Range Organics (DRO)		<50.1	50.1	<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<50.2	50.2
Total GRO-DRO		<50.1	50.1	<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<50.2	50.2
Total TPH		<50.1	50.1	<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<50.2	50.2

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

Jessica Kramer
Project Manager

Certificate of Analysis Summary 660711

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 500 Battery

Project Id: 012920055
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 05.05.2020 17:02
Report Date: 05.08.2020 12:55
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	660711-007		660711-008		660711-009		660711-010		660711-011		660711-012	
	Field Id:	PH04		PH04A		PH05		PH05A		PH06		PH06A	
	Depth:	0.5- ft		1- ft		0.5- ft		1- ft		0.5- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	05.05.2020 13:15		05.05.2020 14:25		05.05.2020 13:30		05.05.2020 13:35		05.05.2020 13:40		05.05.2020 13:45	
BTEX by EPA 8021B	***Extracted:***	05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00	
	Analyzed:	05.07.2020 08:01		05.07.2020 08:23		05.07.2020 08:44		05.07.2020 09:05		05.07.2020 09:27		05.07.2020 09:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00402	0.00402	<0.00404	0.00404	<0.00404	0.00404	<0.00402	0.00402	<0.00400	0.00400	<0.00402	0.00402
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00		05.06.2020 14:00	
	Analyzed:	05.06.2020 17:00		05.06.2020 17:05		05.06.2020 17:23		05.06.2020 17:29		05.06.2020 17:46		05.06.2020 17:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		114	9.92	180	9.94	168	10.1	139	10.0	191	10.0	110	10.1
TPH by SW8015 Mod	***Extracted:***	05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00		05.06.2020 17:00	
	Analyzed:	05.06.2020 21:36		05.06.2020 21:57		05.06.2020 22:17		05.06.2020 22:37		05.06.2020 22:58		05.06.2020 23:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.3	50.3	<50.2	50.2	<49.8	49.8
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.3	50.3	<50.2	50.2	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.3	50.3	<50.2	50.2	<49.8	49.8
Total GRO-DRO		<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.3	50.3	<50.2	50.2	<49.8	49.8
Total TPH		<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.3	50.3	<50.2	50.2	<49.8	49.8

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

Jessica Kramer
Project Manager

Analytical Report 660711

for

LT Environmental, Inc.

Project Manager: Dan Moir

Remuda 500 Battery

012920055

05.08.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

05.08.2020

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

Reference: XENCO Report No(s): **660711**
Remuda 500 Battery
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 660711. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 660711 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	05.05.2020 12:45	0.5 ft	660711-001
PH01A	S	05.05.2020 13:55	1 ft	660711-002
PH02	S	05.05.2020 12:55	0.5 ft	660711-003
PH02A	S	05.05.2020 14:05	1 ft	660711-004
PH03	S	05.05.2020 13:05	0.5 ft	660711-005
PH03A	S	05.05.2020 14:15	1 ft	660711-006
PH04	S	05.05.2020 13:15	0.5 ft	660711-007
PH04A	S	05.05.2020 14:25	1 ft	660711-008
PH05	S	05.05.2020 13:30	0.5 ft	660711-009
PH05A	S	05.05.2020 13:35	1 ft	660711-010
PH06	S	05.05.2020 13:40	0.5 ft	660711-011
PH06A	S	05.05.2020 13:45	1 ft	660711-012

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Remuda 500 Battery

Project ID: *012920055*
Work Order Number(s): *660711*

Report Date: *05.08.2020*
Date Received: *05.05.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH01** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-001 Date Collected: 05.05.2020 12:45 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**204**	10.0	mg/kg	05.06.2020 16:14		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.06.2020 19:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.06.2020 19:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.06.2020 19:15	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.06.2020 19:15	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.06.2020 19:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.06.2020 19:15	
o-Terphenyl	84-15-1	90	%	70-135	05.06.2020 19:15	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-001	Date Collected:	05.05.2020 12:45	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.07.2020 09:50	Basis:	Wet Weight
Seq Number:	3125400				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.07.2020 14:27	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.07.2020 14:27	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.07.2020 14:27	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.07.2020 14:27	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.07.2020 14:27	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.07.2020 14:27	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.07.2020 14:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.07.2020 14:27	
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.07.2020 14:27	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH01A** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-002 Date Collected: 05.05.2020 13:55 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**160**	10.0	mg/kg	05.06.2020 16:31		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.06.2020 19:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.06.2020 19:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.06.2020 19:35	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.06.2020 19:35	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.06.2020 19:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.06.2020 19:35	
o-Terphenyl	84-15-1	94	%	70-135	05.06.2020 19:35	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-002	Date Collected:	05.05.2020 13:55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.07.2020 09:50	Basis:	Wet Weight
Seq Number:	3125400				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.07.2020 14:48	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.07.2020 14:48	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.07.2020 14:48	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.07.2020 14:48	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.07.2020 14:48	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.07.2020 14:48	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.07.2020 14:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.07.2020 14:48	
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.07.2020 14:48	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-003	Date Collected:	05.05.2020 12:55	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**180**	9.98	mg/kg	05.06.2020 16:37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125289				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.06.2020 19:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.06.2020 19:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.06.2020 19:55	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.06.2020 19:55	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.06.2020 19:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.06.2020 19:55	
o-Terphenyl	84-15-1	93	%	70-135	05.06.2020 19:55	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-003	Date Collected:	05.05.2020 12:55	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.07.2020 09:50	Basis:	Wet Weight
Seq Number:	3125400				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.07.2020 13:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.07.2020 13:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.07.2020 13:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.07.2020 13:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.07.2020 13:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.07.2020 13:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.07.2020 13:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.07.2020 13:44	
1,4-Difluorobenzene	540-36-3	112	%	70-130	05.07.2020 13:44	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH02A** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-004 Date Collected: 05.05.2020 14:05 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**143**	9.90	mg/kg	05.06.2020 16:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.06.2020 20:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.06.2020 20:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.06.2020 20:15	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.06.2020 20:15	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.06.2020 20:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.06.2020 20:15	
o-Terphenyl	84-15-1	92	%	70-135	05.06.2020 20:15	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-004	Date Collected:	05.05.2020 14:05	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.07.2020 09:50	Basis:	Wet Weight
Seq Number:	3125400				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.07.2020 15:31	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.07.2020 15:31	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.07.2020 15:31	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.07.2020 15:31	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.07.2020 15:31	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.07.2020 15:31	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.07.2020 15:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.07.2020 15:31	
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.07.2020 15:31	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH03** Matrix: Soil Date Received:05.05.2020 17:02
Lab Sample Id: 660711-005 Date Collected: 05.05.2020 13:05 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight
Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**227**	10.0	mg/kg	05.06.2020 16:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight
Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.06.2020 20:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.06.2020 20:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.06.2020 20:36	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.06.2020 20:36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.06.2020 20:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.06.2020 20:36	
o-Terphenyl	84-15-1	89	%	70-135	05.06.2020 20:36	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-005	Date Collected:	05.05.2020 13:05	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.07.2020 07:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.07.2020 07:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.07.2020 07:18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.07.2020 07:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.07.2020 07:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.07.2020 07:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.07.2020 07:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.07.2020 07:18	
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.07.2020 07:18	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH03A** Matrix: Soil Date Received:05.05.2020 17:02
Lab Sample Id: 660711-006 Date Collected: 05.05.2020 14:15 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight
Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**227**	9.88	mg/kg	05.06.2020 16:54		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight
Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.06.2020 21:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.06.2020 21:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.06.2020 21:16	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.06.2020 21:16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.06.2020 21:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.06.2020 21:16	
o-Terphenyl	84-15-1	94	%	70-135	05.06.2020 21:16	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-006	Date Collected:	05.05.2020 14:15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.07.2020 07:40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.07.2020 07:40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.07.2020 07:40	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.07.2020 07:40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.07.2020 07:40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.07.2020 07:40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.07.2020 07:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	05.07.2020 07:40	
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.07.2020 07:40	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH04** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-007 Date Collected: 05.05.2020 13:15 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**114**	9.92	mg/kg	05.06.2020 17:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.06.2020 21:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.06.2020 21:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.06.2020 21:36	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	05.06.2020 21:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.06.2020 21:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.06.2020 21:36	
o-Terphenyl	84-15-1	95	%	70-135	05.06.2020 21:36	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-007	Date Collected:	05.05.2020 13:15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.07.2020 08:01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.07.2020 08:01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.07.2020 08:01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.07.2020 08:01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.07.2020 08:01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.07.2020 08:01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.07.2020 08:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.07.2020 08:01	
4-Bromofluorobenzene	460-00-4	109	%	70-130	05.07.2020 08:01	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-008	Date Collected:	05.05.2020 14:25	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 14:00	Basis:	Wet Weight
Seq Number:	3125246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**180**	9.94	mg/kg	05.06.2020 17:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125289				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.06.2020 21:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.06.2020 21:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.06.2020 21:57	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.06.2020 21:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.06.2020 21:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	05.06.2020 21:57	
o-Terphenyl	84-15-1	89	%	70-135	05.06.2020 21:57	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-008	Date Collected:	05.05.2020 14:25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.07.2020 08:23	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.07.2020 08:23	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.07.2020 08:23	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.07.2020 08:23	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.07.2020 08:23	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.07.2020 08:23	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.07.2020 08:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	05.07.2020 08:23	
4-Bromofluorobenzene	460-00-4	108	%	70-130	05.07.2020 08:23	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH05** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-009 Date Collected: 05.05.2020 13:30 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**168**	10.1	mg/kg	05.06.2020 17:23		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	05.06.2020 22:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	05.06.2020 22:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	05.06.2020 22:17	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	05.06.2020 22:17	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	05.06.2020 22:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.06.2020 22:17	
o-Terphenyl	84-15-1	92	%	70-135	05.06.2020 22:17	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-009	Date Collected:	05.05.2020 13:30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.07.2020 08:44	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.07.2020 08:44	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.07.2020 08:44	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.07.2020 08:44	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.07.2020 08:44	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.07.2020 08:44	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.07.2020 08:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.07.2020 08:44	
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.07.2020 08:44	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH05A** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-010 Date Collected: 05.05.2020 13:35 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**139**	10.0	mg/kg	05.06.2020 17:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	05.06.2020 22:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	05.06.2020 22:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	05.06.2020 22:37	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	05.06.2020 22:37	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	05.06.2020 22:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	05.06.2020 22:37	
o-Terphenyl	84-15-1	88	%	70-135	05.06.2020 22:37	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-010	Date Collected:	05.05.2020 13:35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.07.2020 09:05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.07.2020 09:05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.07.2020 09:05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.07.2020 09:05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.07.2020 09:05	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.07.2020 09:05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.07.2020 09:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.07.2020 09:05	
4-Bromofluorobenzene	460-00-4	102	%	70-130	05.07.2020 09:05	

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LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH06** Matrix: Soil Date Received:05.05.2020 17:02

Lab Sample Id: 660711-011 Date Collected: 05.05.2020 13:40 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight

Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**191**	10.0	mg/kg	05.06.2020 17:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight

Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.06.2020 22:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.06.2020 22:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.06.2020 22:58	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.06.2020 22:58	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.06.2020 22:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.06.2020 22:58	
o-Terphenyl	84-15-1	91	%	70-135	05.06.2020 22:58	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-011	Date Collected:	05.05.2020 13:40	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.07.2020 09:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.07.2020 09:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.07.2020 09:27	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.07.2020 09:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.07.2020 09:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.07.2020 09:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.07.2020 09:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.07.2020 09:27	
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.07.2020 09:27	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id: **PH06A** Matrix: Soil Date Received:05.05.2020 17:02
Lab Sample Id: 660711-012 Date Collected: 05.05.2020 13:45 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 05.06.2020 14:00 Basis: Wet Weight
Seq Number: 3125246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**110**	10.1	mg/kg	05.06.2020 17:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 05.06.2020 17:00 Basis: Wet Weight
Seq Number: 3125289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.06.2020 23:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.06.2020 23:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.06.2020 23:18	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.06.2020 23:18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.06.2020 23:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.06.2020 23:18	
o-Terphenyl	84-15-1	92	%	70-135	05.06.2020 23:18	

Certificate of Analytical Results 660711

LT Environmental, Inc., Arvada, CO

Remuda 500 Battery

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	05.05.2020 17:02
Lab Sample Id:	660711-012	Date Collected:	05.05.2020 13:45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.06.2020 17:00	Basis:	Wet Weight
Seq Number:	3125297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.07.2020 09:48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.07.2020 09:48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.07.2020 09:48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.07.2020 09:48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.07.2020 09:48	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.07.2020 09:48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.07.2020 09:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.07.2020 09:48	
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.07.2020 09:48	

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

QC Summary 660711

LT Environmental, Inc.

Remuda 500 Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3125246 — Matrix: Solid — Date Prep: 05.06.2020
MB Sample Id: 7702827-1-BLK — LCS Sample Id: 7702827-1-BKS — LCSD Sample Id: 7702827-1-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	251	100	250	100	90-110	0	20	mg/kg	05.06.2020 15:33	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3125246 — Matrix: Soil — Date Prep: 05.06.2020
Parent Sample Id: 660711-008 — MS Sample Id: 660711-008 S — MSD Sample Id: 660711-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	180	199	369	95	369	95	90-110	0	20	mg/kg	05.06.2020 17:11	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3125246 — Matrix: Soil — Date Prep: 05.06.2020
Parent Sample Id: 660732-001 — MS Sample Id: 660732-001 S — MSD Sample Id: 660732-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	475	200	661	93	659	92	90-110	0	20	mg/kg	05.06.2020 15:51	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3125289 — Matrix: Solid — Date Prep: 05.06.2020
MB Sample Id: 7702864-1-BLK — LCS Sample Id: 7702864-1-BKS — LCSD Sample Id: 7702864-1-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	1140	114	1100	110	70-135	4	35	mg/kg	05.06.2020 16:11	
Diesel Range Organics (DRO)	<50.0	1000	1230	123	1140	114	70-135	8	35	mg/kg	05.06.2020 16:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		117		128		70-135	%	05.06.2020 16:11
o-Terphenyl	90		107		101		70-135	%	05.06.2020 16:11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3125289 — Matrix: Solid — Date Prep: 05.06.2020
MB Sample Id: 7702864-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.06.2020 15:51	

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

QC Summary 660711

LT Environmental, Inc.

Remuda 500 Battery

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3125289 Matrix: Soil Date Prep: 05.06.2020
Parent Sample Id: 660733-001 MS Sample Id: 660733-001 S MSD Sample Id: 660733-001 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	1070	107	1040	104	70-135	3	35	mg/kg	05.06.2020 17:12	
Diesel Range Organics (DRO)	<50.1	1000	1140	114	1190	119	70-135	4	35	mg/kg	05.06.2020 17:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		71		70-135	%	05.06.2020 17:12
o-Terphenyl	100		76		70-135	%	05.06.2020 17:12

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3125297 Matrix: Solid Date Prep: 05.06.2020
MB Sample Id: 7702857-1-BLK LCS Sample Id: 7702857-1-BKS LCSD Sample Id: 7702857-1-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	0.118	118	0.117	117	70-130	1	35	mg/kg	05.07.2020 00:32	
Toluene	<0.00200	0.100	0.107	107	0.105	105	70-130	2	35	mg/kg	05.07.2020 00:32	
Ethylbenzene	<0.00200	0.100	0.0994	99	0.0983	98	71-129	1	35	mg/kg	05.07.2020 00:32	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.191	96	70-135	1	35	mg/kg	05.07.2020 00:32	
o-Xylene	<0.00200	0.100	0.101	101	0.0988	99	71-133	2	35	mg/kg	05.07.2020 00:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		109		109		70-130	%	05.07.2020 00:32
4-Bromofluorobenzene	106		100		99		70-130	%	05.07.2020 00:32

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3125400 Matrix: Solid Date Prep: 05.07.2020
MB Sample Id: 7702858-1-BLK LCS Sample Id: 7702858-1-BKS LCSD Sample Id: 7702858-1-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	0.114	114	0.115	115	70-130	1	35	mg/kg	05.07.2020 14:05	
Toluene	<0.00200	0.100	0.105	105	0.103	103	70-130	2	35	mg/kg	05.07.2020 14:05	
Ethylbenzene	<0.00200	0.100	0.0974	97	0.0962	96	71-129	1	35	mg/kg	05.07.2020 14:05	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.186	93	70-135	2	35	mg/kg	05.07.2020 14:05	
o-Xylene	<0.00200	0.100	0.0965	97	0.0964	96	71-133	0	35	mg/kg	05.07.2020 14:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		109		108		70-130	%	05.07.2020 14:05
4-Bromofluorobenzene	107		100		98		70-130	%	05.07.2020 14:05

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

QC Summary 660711

LT Environmental, Inc.

Remuda 500 Battery

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3125297 Matrix: Soil Date Prep: 05.06.2020
Parent Sample Id: 660708-001 MS Sample Id: 660708-001 S MSD Sample Id: 660708-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.120	121	0.117	118	70-130	3	35	mg/kg	05.07.2020 10:10	
Toluene	<0.00199	0.0994	0.108	109	0.106	107	70-130	2	35	mg/kg	05.07.2020 10:10	
Ethylbenzene	<0.00199	0.0994	0.101	102	0.0984	99	71-129	3	35	mg/kg	05.07.2020 10:10	
m,p-Xylenes	<0.00398	0.199	0.195	98	0.191	96	70-135	2	35	mg/kg	05.07.2020 10:10	
o-Xylene	<0.00199	0.0994	0.100	101	0.0984	99	71-133	2	35	mg/kg	05.07.2020 10:10	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		70-130	%	05.07.2020 10:10
4-Bromofluorobenzene	98		100		70-130	%	05.07.2020 10:10

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3125400 Matrix: Soil Date Prep: 05.07.2020
Parent Sample Id: 660711-001 MS Sample Id: 660711-001 S MSD Sample Id: 660711-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.114	113	0.112	111	70-130	2	35	mg/kg	05.07.2020 12:40	
Toluene	<0.00202	0.101	0.0994	98	0.0954	94	70-130	4	35	mg/kg	05.07.2020 12:40	
Ethylbenzene	<0.00202	0.101	0.0886	88	0.0843	83	71-129	5	35	mg/kg	05.07.2020 12:40	
m,p-Xylenes	<0.00404	0.202	0.167	83	0.162	80	70-135	3	35	mg/kg	05.07.2020 12:40	
o-Xylene	<0.00202	0.101	0.0881	87	0.0842	83	71-133	5	35	mg/kg	05.07.2020 12:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		110		70-130	%	05.07.2020 12:40
4-Bromofluorobenzene	101		103		70-130	%	05.07.2020 12:40

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference 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

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

Work Order No: 620711

Page 1 of 2

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

Work Order Comments

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

Project Name:	Remuda 500 Battery	Turn Around	
Project Number:	01292005S	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	4.0	Thermometer ID		
Received Intact:	(Yes) No		NM007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	12	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	5.5.20	1245	0.5'	1	x	x	x
PH01A			1355	1'				
PH02			1255	0.5'				
PH02A			1405	1'				
PH03			1305	0.5'				
PH03A			1415	1'				
PH04			1315	0.5'				
PH04A			1425	1'				
PH05			1330	0.5'				
PH05A			1335	1'				

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Spencer Lo		5/5/20 17:02	2		
			4		
			6		

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 20E0711

www.xenco.com Page 2 of 2

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

Work Order Comments

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

Project Name:	Remuda 500 Battery	Turn Around	
Project Number:	0129 20055	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	2.2	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH06	S	5.5.20	1340	0.5'	1	X	X	X
PH06A	S	5.5.20	1345	1'	1	X	X	X

Work Order Notes

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

Sample Comments

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

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

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
1		5/5/20 17:02	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05.05.2020 05.02.00 PM

Work Order #: 660711

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**	Samples recieved in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 05.06.2020

Checklist reviewed by: Jessica Kramer Date: 05.08.2020

Jessica Kramer

ATTACHMENT 2: LITHOLOGIC / SOIL SAMPLING LOG

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

A proud member of WSP

BH or PH Name: PH01	Date: 5.5.20
Site Name: Remuda 500 Battery	
RP or Incident Number:	
LTE Job Number: 01292005S	
Logged By: SL	Method: Trackhoe
Hole Diameter: —	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: HACH Chloride strips, PID

Comments: TD @ 1'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	124	0.0	N	PH01	.5	0	SP	0-1 Sand, Brown, no odor, no stain, m-f, poorly graded, Some caliche
D	268	0.2	N	PH01A	1	1	SM	
								TD @ 1'
						2		
						3		
						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: 5.5.20
Site Name: Remuda 500 Battery	
RP or Incident Number:	
LTE Job Number: 012920055	
Logged By: SL	Method: Trackhoe
Lat/Long:	Field Screening: HACH Chloride strips, PID
Hole Diameter: —	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: TD @ 1'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-1
D	<186	0.3	N	PH02	0.5		SP	Sand, Brown, no odor, no stain, m-f,
D	320	0.1	N	PH02A	1	1	SM	Poorly graded, some caliche
								TD @ 1'
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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

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BH or PH Name: PH03	Date: 5.5.20
Site Name: Remuda 500 Battery	
RP or Incident Number:	
LTE Job Number: 01292055	
Logged By: SL	Method: Trackhoe
Hole Diameter: —	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: HACH Chloride strips, PID

Comments: TD @ 1'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-1
D	268	0.1	N	PH03	0.5		SP	Sand, Brown, no odor, no stain, m-f, poorly
D	320	0.1	N	PH03A	1	1	SM	graded, some caliche
								TD @ 1'
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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

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BH or PH Name: PH04	Date: 5.5.20
Site Name: Remuda 500 Battery	
RP or Incident Number:	
LTE Job Number: 01129 00055	
Logged By: SL	Method: Trackhoe
Hole Diameter: —	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: HACH Chloride strips, PID

Comments: TD @ 1'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	186	0.2	N	PH04	0.5	0	SP	
D	224	0.0	N	PH04A	1	1	SM	
						2		TD @ 1'
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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

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BH or PH Name: PH05	Date: 5.5.20
Site Name: Remuda 500 Battery	
RP or Incident Number:	
LTE Job Number: 01292005S	
Logged By: SL	Method: Trackhoe
Hole Diameter:	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: HACH Chloride strips, PID

Comments: TD @ 1'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	320	0.0	N	PH05	0.5	0	SP	0-1 Sand, Brown, no odor, no stain, m-f, poorly graded, some caliche
D	<186	0.1	N	PH05A	1	1	SM	
						2		TD @ 1'
						3		
						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: PH06	Date: 5-5-20
Site Name: Remuda 500 Battery	
RP or Incident Number:	
LTE Job Number: 01292055	
Logged By: SL	Method: Trackhoe
Hole Diameter: —	Total Depth: 1'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: HACH Chloride strips, PID

Comments: TD @ 1'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	268	0.1	N	PH06	0.5	0	SP	0-1
D	224	0.0	N	PH06A	1	1	SM	Sand, Brown, no odor, no stain, m-f, poorly graded, some caliche
								TD @ 1'
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		