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	NRM1928434706
District RP	1RP-5741
Facility ID	
Application ID	pRM1928435009

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 32.543400 Longitude -103.299068
(NAD 83 in decimal degrees to 5 decimal places)

Site Name EMSU Satellite Battery #1	Site Type Header site
Date Release Discovered 09/30/2019	API# *(if applicable)* 30-025-29396 (EMSU #117)

Unit Letter	Section	Township	Range	County
L	30	20S	37E	LEA

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) 0.88	Volume Recovered (bbls) 0.80
☒ Produced Water	Volume Released (bbls) 43.35	Volume Recovered (bbls) 39.20
	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: Tank overflowed due to electrical issues from storm event. Additional third party resources have been retained to assist in the remediation.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM1928434706
District RP	1RP-5741
Facility ID	
Application ID	pRM1928435009

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? An unauthorized release of a volume of 25 barrels or more
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice provided by Adrian Baker to emrd-ocd-district1spills@state.nm.us and Ryan Mann on 9/30/19 at 5:12 PM by email.	

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: 10/10/2019

email: Kyle_Littrell@xtoenergy.com Telephone:

OCD Only

Received by: Ramona Marcus Date: 10/11/2019

Incident ID	NRM1928434706
District RP	1RP-5741
Facility ID	
Application ID	pRM1928435009

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	NRM1928434706
District RP	1RP-5741
Facility ID	
Application ID	pRM1928435009

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: 03/18/2020

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

OCD Only

Received by: Cristina Eads Date: 03/20/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM1928434706
District RP	1RP-5741
Facility ID	
Application ID	pRM1928435009

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: 03/18/2020

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

OCD Only

Received by: Cristina Eads Date: 03/20/2020

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: 04/21/2020

Printed Name: Cristina Eads Title: Environmental Specialist

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

March 18, 2020

New Mexico Oil Conservation Division
District 1
1625 North French Drive
Hobbs, New Mexico 88240

RE: Closure Request
EMSU Satellite Battery #1
Remediation Permit Number 1RP-5741
Incident Number NRM1928434706
Lea County, New Mexico

To Whom It May Concern:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the EMSU Satellite Battery #1 (Site) in Unit L, Section 30, Township 20 South, Range 37 East, in Lea 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 and crude oil at the Site. Based on field observations, field screenings, and laboratory analytical results following excavation activities, XTO is submitting this Closure Request and requesting no further action (NFA) for Remediation Permit (RP) Number 1RP-5741 and Incident Number NRM1928434706.

RELEASE BACKGROUND

On September 30, 2019, a tank overflowed due to electrical issues from a storm event, resulting in the release of 43.35 barrels (bbls) of produced water and 0.88 bbls of crude oil. A hydro-vacuum (hydrovac) truck was dispatched to the Site to recover freestanding fluids. Approximately 39.20 bbls of produced water and 0.80 bbls of crude oil were recovered. 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 October 10, 2019 and was assigned Remediation Permit (RP) Number 1RP-5741 and Incident Number NRM1928434706.

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 nearest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well number

323256103180001, located approximately 0.67 miles northeast from the Site. The groundwater well has a depth to groundwater of 36 feet bgs and a total depth of 42 feet bgs. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash located approximately 3.92 miles southeast 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 located within an unstable geological area (low-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 ACTIVITIES

On October 15, 2019, 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 seven preliminary soil samples (SS01 through SS07) from within the release extent at a depth of approximately 0.5 feet bgs to assess the lateral extent of impacted surface soil. Preliminary soil sample SS01 was collected near the release location while preliminary soil samples SS02 through SS07 were collected along the lease road, which was within the flow path of the produced water and crude oil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped, utilizing a handheld Global Positioning System (GPS) unit, and are depicted on Figure 2. 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-gasoline range

organics (GRO),TPH-diesel range organics (DRO), TPH-oil range organics (ORO) following EPA Method 8015M/D, and chloride following EPA Method 300.0.

Laboratory analytical results indicated TPH concentrations exceeded the Closure Criteria in all preliminary soil samples (SS01 through SS07) and chloride concentrations exceeded in preliminary soil samples SS03 through SS05. Based on the laboratory analytical results, visual observations of surficial staining, and field screening results, excavation activities appeared to be warranted. Laboratory analytical results are depicted on Figure 2 and summarized in Table 1. The laboratory analytical report is included as Attachment 2.

EXCAVATION ACTIVITIES

From January 3, 2020 to January 8, 2020, LTE personnel returned to the Site to oversee excavation of impacted soil. The release extent was excavated to a depth of approximately 0.5 feet bgs. To direct excavation activities, LTE screened soil for volatile aromatic hydrocarbons and chloride. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the floor of the excavation. 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. Composite soil samples FS01 through FS53 were collected from the floor of the excavation at a depth of approximately 0.5 feet bgs. 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 3. Laboratory analytical results are summarized in Table 1. Photographic documentation was conducted during excavation activities. Photographic logs are included in Attachment 1.

LTE personnel returned to the Site on February 10, 2020 to address soil in the vicinity of composite floor samples FS28, FS31, FS42 through FS52, and FS54, which exceeded the Closure Criteria. Those areas exceeding the Closure Criteria were excavated to a depth of approximately 1 foot bgs.

On March 17, 2020, LTE returned to the Site to address failing composite floor samples FS43 and FS51 by excavating residual impacted soil to approximately2 feet bgs. LTE collected 5-point composite soil samples every 200 square feet from the floor of the excavation. Analytical results indicated all confirmation floor samples were compliant with the Closure Criteria and reclamation requirements for off pad areas impacted.

Overall, excavation of impacted soil encompassed an area of approximately 10,970 square feet on pad and along the lease road to depths ranging from approximately 0.5 feet to 2 feet bgs, for a total volume of approximately 310 cubic yards.

CONCLUSIONS

Initial and follow-up response efforts as a result of the produced water and crude oil release included removal of freestanding fluid by a hydrovac truck, collection of soil samples, and excavation and removal of impacted soils. Preliminary soil samples were collected from within the release extent. Soil samples indicated TPH concentrations exceeded the Closure Criteria throughout the release extent and soil samples SS03 through SS05 indicated chloride concentrations exceeded the Closure Criteria along the northwest portion of the lease road. Based on the analytical results, the area was excavated, removing impacted soils from the surface to depths ranging between 0.5 feet to 2 foot bgs. Laboratory analytical results for the final confirmation soil samples collected within the final excavation extent indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Overall, the excavation encompassed an area of approximately 10,970 square feet and a total volume of approximately 310 cubic yards. Based on field activities and laboratory analytical results of confirmation samples within the release extent, XTO respectfully requests NFA for RP Number 1RP 5741 and Incident Number NRM1928434706.

If you have any questions or comments, please contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

Kalei Jennings
Project Environmental Scientist

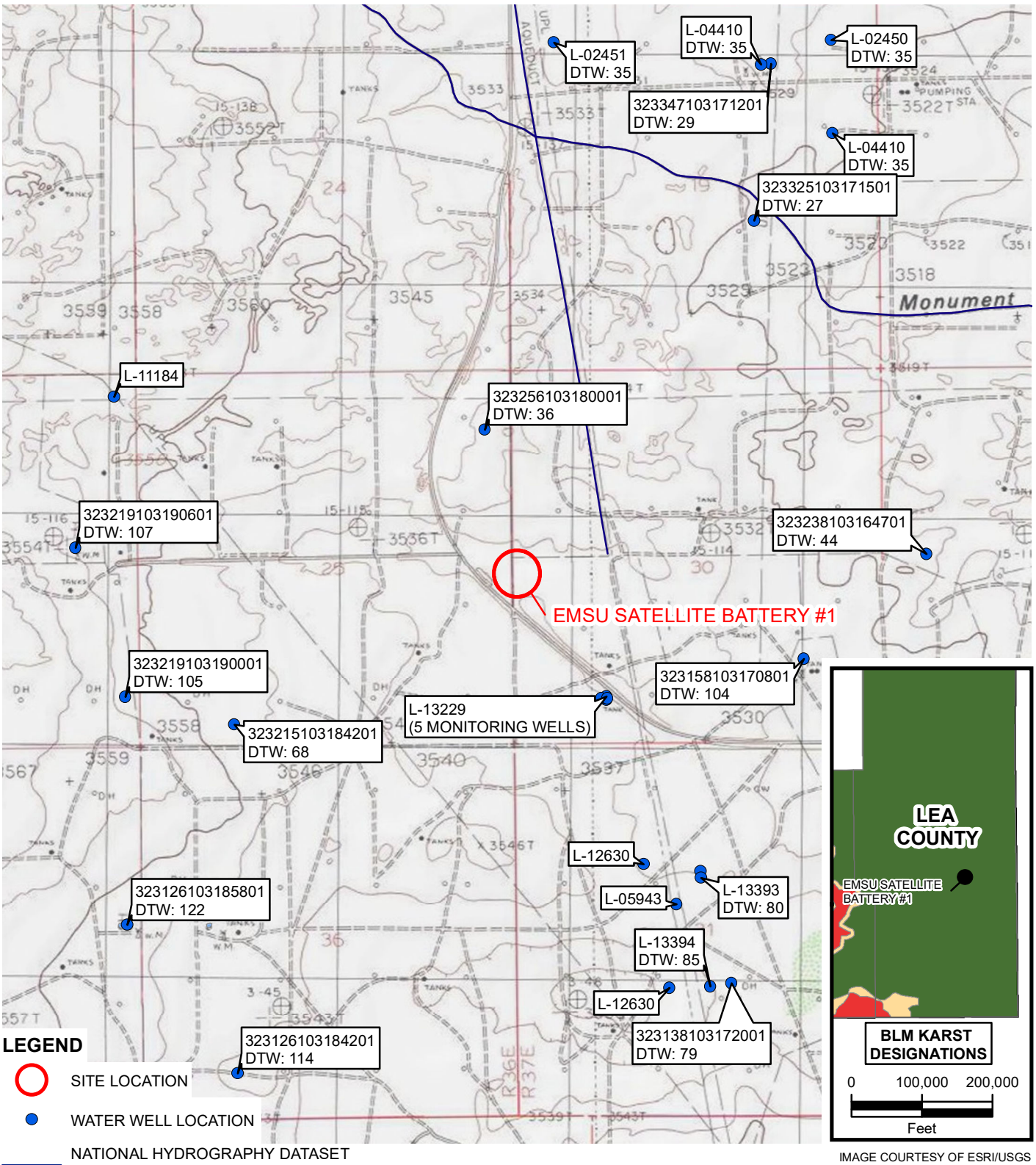
Ashley L. Ager, P.G.
Senior Geologist

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

Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Photographic Logs
Attachment 2	Laboratory Analytical Reports

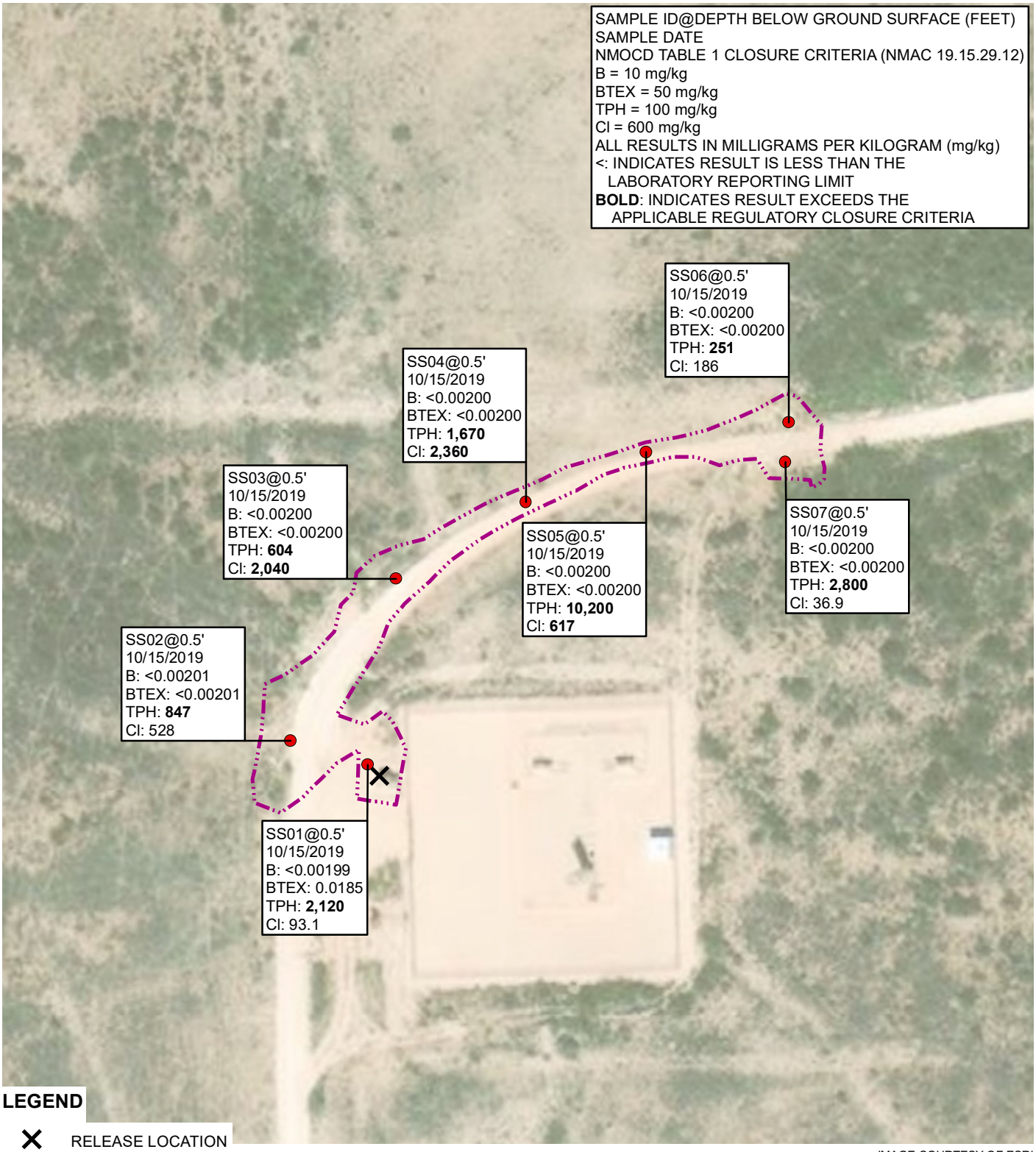
FIGURES



NOTE: REMEDIATION PERMIT NUMBER 1RP-5741
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT

FIGURE 1
SITE LOCATION MAP
EMSU SATELLITE BATTERY #1
UNIT L SEC 30 T20S R37E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

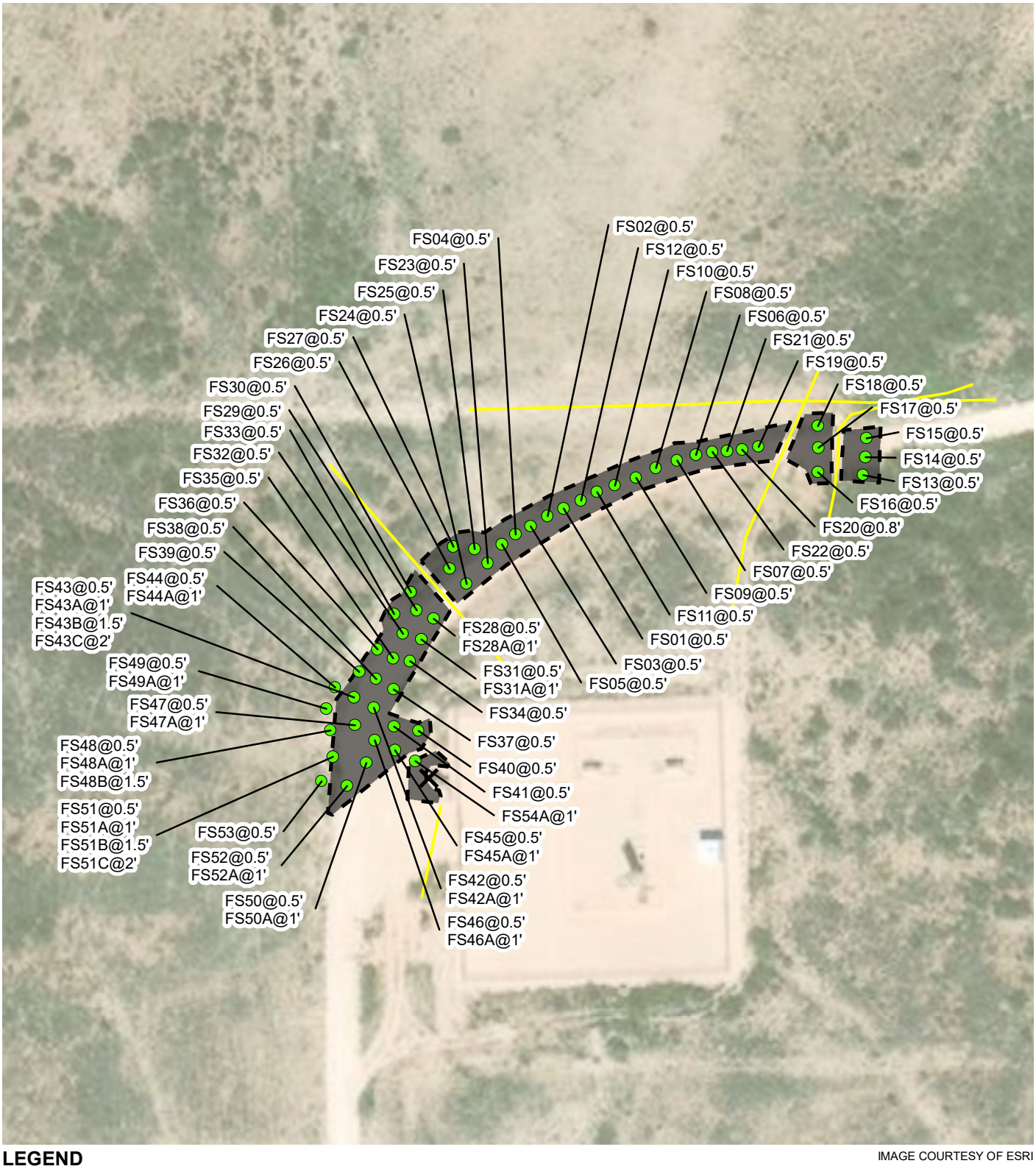
P:\XTO Energy\GIS\MXD\012919255_EMSU SATELLITE BATTERY #1\012919255_FIG01_SL_5741.mxd



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: REMEDIATION PERMIT NUMBER 1RP-5741

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
EMSU SATELLITE BATTERY #1
UNIT L SEC 30 T20S R37E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919255_EMSU SATELLITE BATTERY #1\012919255_FIG02_PRELIMINARY_5741.mxd



LEGEND

IMAGE COURTESY OF ESRI

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

0 80 160
Feet

N

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBER 1RP-5741

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
EMSU SATELLITE BATTERY #1
UNIT L SEC 30 T20S R37E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919255_EMSU SATELLITE BATTERY #1\012919255_FIG03_EXCAVATION_5741.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

EMSU SATELLITE BATTERY #1
REMEDIATION PERMIT NUMBER 1RP-5741
LEA 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	10/15/2019	<0.00199	<0.00199	<0.00199	0.0185	0.0185	86.1	1,630	402	1,720	2,120	93.1
SS02	0.5	10/15/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	664	183	664	847	528
SS03	0.5	10/15/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	493	111	493	604	2,040
SS04	0.5	10/15/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	1,370	297	1,370	1,670	2,360
SS05	0.5	10/15/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	4,100	501	4,100	10,200	617
SS06	0.5	10/15/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	192	58.7	192	251	186
SS07	0.5	10/15/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	2,440	357	2,440	2,800	36.9
FS01	0.5	01/03/2020	<0.000488	<0.000531	<0.000409	0.000775	0.000775	<13.8	<11.4	<11.4	<13.8	<11.4	112
FS02	0.5	01/03/2020	<0.000487	<0.000530	<0.000408	<0.000405	<0.000405	<13.9	12.1	<11.5	12.1	12.1	157
FS03	0.5	01/03/2020	<0.000488	<0.000531	<0.000409	<0.000406	<0.000406	<14.0	13.8	<11.5	13.8	13.8	18.2
FS04	0.5	01/03/2020	<0.000490	<0.000533	<0.000410	<0.000407	<0.000407	<13.9	<11.5	<11.4	<13.9	<11.4	43.7
FS05	0.5	01/03/2020	<0.000490	<0.000533	<0.000410	<0.000407	<0.000407	<13.9	11.6	<11.5	11.6	11.6	143
FS06	0.5	01/03/2020	<0.000489	<0.000532	<0.000409	<0.000406	<0.000406	<13.9	<11.5	<11.5	<13.9	<11.5	131
FS07	0.5	01/03/2020	<0.000487	<0.000530	<0.000408	<0.000405	<0.000405	<13.9	<11.5	<11.5	<13.9	<11.5	42.5
FS08	0.5	01/03/2020	<0.000488	<0.000531	<0.000409	<0.000406	<0.000406	<13.9	<11.5	<11.5	<13.9	<11.5	37.5
FS09	0.5	01/03/2020	<0.000490	<0.000533	<0.000410	<0.000407	<0.000407	<13.9	12.8	<11.5	12.8	12.8	176
FS10	0.5	01/03/2020	<0.000490	<0.000533	<0.000410	<0.000407	<0.000407	<13.9	<11.5	<11.5	<13.9	<11.5	222
FS11	0.5	01/03/2020	<0.000487	<0.000530	<0.000408	<0.000405	<0.000405	<13.9	14.3	<11.5	14.3	14.3	134
FS12	0.5	01/03/2020	<0.000488	<0.000531	<0.000409	<0.000406	<0.000406	<13.9	<11.5	<11.5	<13.9	<11.5	145
FS13	0.5	01/07/2020	<0.000489	<0.000532	<0.000409	<0.000406	<0.000406	<13.9	13.9	<11.5	13.9	13.9	540
FS14	0.5	01/07/2020	<0.000487	<0.000530	<0.000408	<0.000405	<0.000405	<13.8	<11.4	<11.4	<13.9	<11.4	335
FS15	0.5	01/07/2020	<0.000486	<0.000529	<0.000407	<0.000404	<0.000404	<13.9	59.6	<11.5	59.6	59.6	280
FS16	0.5	01/07/2020	<0.000483	<0.000525	<0.000404	<0.000401	<0.000401	<14.0	13.7	<11.5	13.7	13.7	48.2

A proud member of WSP

TABLE 1
SOIL ANALYTICAL RESULTS

EMSU SATELLITE BATTERY #1
REMEDIATION PERMIT NUMBER 1RP-5741
LEA 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**
FS17	0.5	01/07/2020	<0.000479	<0.000520	<0.000401	<0.000398	<0.000398	<13.8	20.7	<11.4	20.7	20.7	280
FS18	0.5	01/07/2020	<0.000489	<0.000532	<0.000409	<0.000406	<0.000406	<13.9	54.4	<11.5	54.4	54.4	528
FS19	0.5	01/07/2020	<0.000483	<0.000525	<0.000404	<0.000401	<0.000401	<13.9	16.2	<11.4	16.2	16.2	537
FS20	0.8	01/07/2020	<0.000481	<0.000522	<0.000402	<0.000399	<0.000399	<13.9	<11.5	<11.5	<13.9	<11.5	403
FS21	0.5	01/07/2020	<0.000486	<0.000529	<0.000407	<0.000404	<0.000404	<13.9	23.7	<11.5	23.7	23.7	425
FS22	0.5	01/07/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	23.1	<11.5	23.1	23.1	538
FS23	0.5	01/07/2020	<0.000479	<0.000520	<0.000401	<0.000398	<0.000398	<14.0	<11.5	<11.5	<13.9	<11.5	7.07
FS24	0.5	01/07/2020	<0.000489	<0.000532	<0.000409	<0.000406	<0.000406	<13.9	<11.5	<11.5	<13.9	<11.5	10.6
FS25	0.5	01/07/2020	<0.000486	<0.000528	<0.000406	<0.000403	<0.000403	<13.8	15.3	<11.4	15.3	15.3	19.3
FS26	0.5	01/07/2020	<0.000483	<0.000525	<0.000404	<0.000401	<0.000401	<13.9	<11.5	<11.5	<13.9	<11.5	99.6
FS27	0.5	01/07/2020	<0.000480	<0.000521	<0.000401	<0.000398	<0.000398	15.5	12.8	<11.5	28.3	28.3	8.67
FS28	0.5	01/07/2020	<0.000486	<0.000528	<0.000406	<0.000403	<0.000403	<14.0	<11.5	<11.5	<13.9	<11.5	1,730
FS28A	1	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	316
FS29	0.5	01/07/2020	<0.000488	<0.000531	<0.000409	<0.000406	<0.000406	16.6	13.4	<11.5	30	30.0	112
FS30	0.5	01/07/2020	<0.000486	<0.000528	<0.000406	<0.000403	<0.000403	<13.9	<11.5	<11.5	<13.9	<11.5	395
FS31	0.5	01/07/2020	<0.000482	<0.000524	<0.000403	<0.000400	<0.000400	15.6	<11.5	<11.5	15.6	15.6	810
FS31A	1	02/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	248
FS32	0.5	01/07/2020	<0.000480	<0.000521	<0.000401	<0.000398	<0.000398	<13.9	<11.5	<11.5	<13.9	<11.5	21.4
FS33	0.5	01/07/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	15.8	<11.5	<11.5	15.8	15.8	26.9
FS34	0.5	01/08/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	43.6
FS35	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	<9.96
FS36	0.5	01/08/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	16.5
FS37	0.5	01/08/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	90.8

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TABLE 1
SOIL ANALYTICAL RESULTS

EMSU SATELLITE BATTERY #1
REMEDIATION PERMIT NUMBER 1RP-5741
LEA 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**
FS38	0.5	01/08/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	49.3
FS39	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	89.4	<50.2	89.4	89.4	10.4
FS40	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	66.1	<50.3	66.1	66.1	37.8
FS41	0.5	01/08/2020	<0.00201	<0.00201	<0.00201	0.00302	0.00302	<50.2	<50.2	<50.2	<50.2	<50.2	173
FS42	0.5	01/08/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	305	67.7	305	**373**	142
FS42A	1	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	259
FS43	0.5	01/08/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	755	144	755	**899**	166
FS43A	1	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	146	<50.0	146	**146**	190
FS43B	1.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	107	<49.9	107	**107**	478
FS43C	2	03/17/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	36.9
FS44	0.5	01/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	128	<50.3	128	**128**	14.5
FS44A	1	02/10/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	9.33
FS45	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	101	<49.8	101	**101**	164
F45A	1	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	195
FS46	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	751	94.5	751	**846**	263
FS46A	1	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	182
FS47	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	735	115	735	**850**	88.2
FS47A	1	02/10/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	286
FS48	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	1,960	326	1,960	**2,290**	278
FS48A	1	02/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	344	94.4	344	**438**	308
FS48B	1.5	02/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	269

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TABLE 1
SOIL ANALYTICAL RESULTS

EMSU SATELLITE BATTERY #1
REMEDIATION PERMIT NUMBER 1RP-5741
LEA 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**
FS49	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	414	111	414	**525**	18.3
FS49A	1	02/10/2020	<0.00200	<0.00200	0.00413	0.0234	0.0275	<49.9	93.8	<49.9	93.8	93.8	98.9
FS50	0.5	01/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	906	157	906	**1,060**	120
FS50A	1	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	186
FS51	0.5	01/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	236	54.8	236	**291**	150
FS51A	1	02/10/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	107	<50.0	107	**107**	297
FS51B	1.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	116	<49.9	116	**116**	108
FS51C	2	03/17/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	13.4
FS52	0.5	01/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	148	51.0	148	**199**	106
FS52A	1	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	295
FS53	0.5	01/08/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	16.2
FS54A	1	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	82.4	<50.0	82.4	82.4	408

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
Text - Indicates removal of impacted soil

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ATTACHMENT 1: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of point of release.

Photograph 2: View release along lease road.

Photograph 3: View east of road excavation.

Photograph 4: View west of road excavation.

EMSU Satalite Battery #1
32.543400, -103.299068
Photographs Taken: October 15, 2019 through January 7, 2020

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 640104

for

LT Environmental, Inc.

Project Manager: Dan Moir

EMSU Satellite Battery #1

012919255

22-OCT-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

22-OCT-19

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

Reference: XENCO Report No(s): **640104**
EMSU Satellite Battery #1
Project Address: Lee County

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) 640104. 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. 640104 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

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

Sample Cross Reference 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	10-15-19 11:26	0.5 ft	640104-001
SS02	S	10-15-19 11:27	0.5 ft	640104-002
SS03	S	10-15-19 11:28	0.5 ft	640104-003
SS04	S	10-15-19 11:29	0.5 ft	640104-004
SS05	S	10-15-19 11:30	0.5 ft	640104-005
SS06	S	10-15-19 11:31	0.5 ft	640104-006
SS07	S	10-15-19 11:32	0.5 ft	640104-007

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: EMSU Satellite Battery #1

Project ID: *012919255*
Work Order Number(s): *640104*

Report Date: *22-OCT-19*
Date Received: *10/15/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104670 Inorganic Anions by EPA 300
Lab Sample ID 640104-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 640104-001, -002, -003, -004, -005, -006, -007.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3104843 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104855 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104858 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104981 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 640104-001.

Certificate of Analysis Summary 640104

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Battery #1

Project Id: 012919255
Contact: Dan Moir
Project Location: Lee County

Date Received in Lab: Tue Oct-15-19 04:46 pm
Report Date: 22-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640104-001		640104-002		640104-003		640104-004		640104-005		640104-006	
	Field Id:	SS01		SS02		SS03		SS04		SS05		SS06	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-15-19 11:26		Oct-15-19 11:27		Oct-15-19 11:28		Oct-15-19 11:29		Oct-15-19 11:30		Oct-15-19 11:31	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-21-19 16:00		Oct-18-19 09:00		Oct-18-19 17:00		Oct-18-19 17:00		Oct-18-19 16:30		Oct-18-19 16:30	
	Analyzed:	Oct-21-19 21:04		Oct-18-19 19:28		Oct-19-19 16:43		Oct-19-19 16:23		Oct-19-19 12:36		Oct-19-19 12:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00402	0.00402	<0.00400	0.00400	<0.00399	0.00399	<0.00399	0.00399	<0.00400	0.00400
o-Xylene		0.0185	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		0.0185	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		0.0185	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-17-19 13:45		Oct-17-19 13:45		Oct-17-19 13:45		Oct-17-19 13:45		Oct-17-19 13:45		Oct-17-19 13:45	
	Analyzed:	Oct-17-19 17:20		Oct-17-19 17:28		Oct-17-19 17:52		Oct-17-19 18:00		Oct-17-19 18:24		Oct-17-19 18:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		93.1	4.99	528	5.00	2040	24.9	2360	24.8	617	5.01	186	5.05
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-17-19 12:00		Oct-17-19 12:00		Oct-17-19 12:00		Oct-17-19 12:00		Oct-17-19 12:00		Oct-17-19 12:00	
	Analyzed:	Oct-17-19 18:25		Oct-17-19 18:43		Oct-17-19 19:02		Oct-17-19 19:21		Oct-17-19 19:40		Oct-17-19 19:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		86.1	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0
Diesel Range Organics (DRO)		1630	50.0	664	49.9	493	50.0	1370	49.9	4100	49.8	192	50.0
Motor Oil Range Hydrocarbons (MRO)		402	50.0	183	49.9	111	50.0	297	49.9	501	49.8	58.7	50.0
Total GRO-DRO		1720	50.0	664	49.9	493	50.0	1370	49.9	4100	49.8	192	50.0
Total TPH		2120	50.0	847	49.9	604	50.0	1670	49.9	10200	49.8	251	50.0

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640104

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Battery #1

Project Id: 012919255
Contact: Dan Moir
Project Location: Lee County

Date Received in Lab: Tue Oct-15-19 04:46 pm
Report Date: 22-OCT-19
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	640104-007					
	Field Id:	SS07					
	Depth:	0.5- ft					
	Matrix:	SOIL					
	Sampled:	Oct-15-19 11:32					
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-18-19 16:30					
	Analyzed:	Oct-19-19 01:36					
	Units/RL:	mg/kg	RL				
Benzene		<0.00200	0.00200				
Toluene		<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200				
m,p-Xylenes		<0.00401	0.00401				
o-Xylene		<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200				
Total BTEX		<0.00200	0.00200				
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-17-19 13:45					
	Analyzed:	Oct-17-19 18:35					
	Units/RL:	mg/kg	RL				
Chloride		36.9	4.99				
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-17-19 12:00					
	Analyzed:	Oct-17-19 20:17					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0				
Diesel Range Organics (DRO)		2440	50.0				
Motor Oil Range Hydrocarbons (MRO)		357	50.0				
Total GRO-DRO		2440	50.0				
Total TPH		2800	50.0				

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-001	Date Collected:	10.15.19 11.26	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**93.1**	4.99	mg/kg	10.17.19 17.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**86.1**	50.0	mg/kg	10.17.19 18.25		1
Diesel Range Organics (DRO)	C10C28DRO	**1630**	50.0	mg/kg	10.17.19 18.25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**402**	50.0	mg/kg	10.17.19 18.25		1
Total GRO-DRO	PHC628	**1720**	50.0	mg/kg	10.17.19 18.25		1
Total TPH	PHC635	**2120**	50.0	mg/kg	10.17.19 18.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.17.19 18.25	
o-Terphenyl	84-15-1	120	%	70-135	10.17.19 18.25	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-001	Date Collected:	10.15.19 11.26	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.21.19 21.04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.21.19 21.04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.21.19 21.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.21.19 21.04	U	1
o-Xylene	95-47-6	**0.0185**	0.00199	mg/kg	10.21.19 21.04		1
Total Xylenes	1330-20-7	**0.0185**	0.00199	mg/kg	10.21.19 21.04		1
Total BTEX		**0.0185**	0.00199	mg/kg	10.21.19 21.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	135	%	70-130	10.21.19 21.04	**
1,4-Difluorobenzene	540-36-3	85	%	70-130	10.21.19 21.04	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-002	Date Collected:	10.15.19 11.27	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**528**	5.00	mg/kg	10.17.19 17.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.17.19 18.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	**664**	49.9	mg/kg	10.17.19 18.43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**183**	49.9	mg/kg	10.17.19 18.43		1
Total GRO-DRO	PHC628	**664**	49.9	mg/kg	10.17.19 18.43		1
Total TPH	PHC635	**847**	49.9	mg/kg	10.17.19 18.43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.17.19 18.43	
o-Terphenyl	84-15-1	102	%	70-135	10.17.19 18.43	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-002	Date Collected:	10.15.19 11.27	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.18.19 09.00	Basis:	Wet Weight
Seq Number:	3104843			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.18.19 19.28	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.18.19 19.28	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.18.19 19.28	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.18.19 19.28	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.18.19 19.28	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.18.19 19.28	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.18.19 19.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.18.19 19.28	
1,4-Difluorobenzene	540-36-3	91	%	70-130	10.18.19 19.28	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-003	Date Collected:	10.15.19 11.28	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2040**	24.9	mg/kg	10.17.19 17.52		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 19.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	**493**	50.0	mg/kg	10.17.19 19.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**111**	50.0	mg/kg	10.17.19 19.02		1
Total GRO-DRO	PHC628	**493**	50.0	mg/kg	10.17.19 19.02		1
Total TPH	PHC635	**604**	50.0	mg/kg	10.17.19 19.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.17.19 19.02	
o-Terphenyl	84-15-1	103	%	70-135	10.17.19 19.02	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-003	Date Collected:	10.15.19 11.28	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.18.19 17.00	Basis:	Wet Weight
Seq Number:	3104858			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.19.19 16.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.19.19 16.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.19.19 16.43	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.19.19 16.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.19.19 16.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.19.19 16.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.19.19 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.19.19 16.43	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.19.19 16.43	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-004	Date Collected:	10.15.19 11.29	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2360**	24.8	mg/kg	10.17.19 18.00		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.17.19 19.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1370**	49.9	mg/kg	10.17.19 19.21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**297**	49.9	mg/kg	10.17.19 19.21		1
Total GRO-DRO	PHC628	**1370**	49.9	mg/kg	10.17.19 19.21		1
Total TPH	PHC635	**1670**	49.9	mg/kg	10.17.19 19.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.17.19 19.21	
o-Terphenyl	84-15-1	112	%	70-135	10.17.19 19.21	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-004	Date Collected:	10.15.19 11.29	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.18.19 17.00	Basis:	Wet Weight
Seq Number:	3104858			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.19.19 16.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.19.19 16.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.19.19 16.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.19.19 16.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.19.19 16.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.19.19 16.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.19.19 16.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.19.19 16.23	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.19.19 16.23	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-005	Date Collected:	10.15.19 11.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**617**	5.01	mg/kg	10.17.19 18.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.17.19 19.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	**4100**	49.8	mg/kg	10.17.19 19.40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**501**	49.8	mg/kg	10.17.19 19.40		1
Total GRO-DRO	PHC628	**4100**	49.8	mg/kg	10.17.19 19.40		1
Total TPH	PHC635	**10200**	49.8	mg/kg	10.17.19 19.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.17.19 19.40	
o-Terphenyl	84-15-1	126	%	70-135	10.17.19 19.40	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-005	Date Collected:	10.15.19 11.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.18.19 16.30	Basis:	Wet Weight
Seq Number:	3104855			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.19.19 12.36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.19.19 12.36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.19.19 12.36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.19.19 12.36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.19.19 12.36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.19.19 12.36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.19.19 12.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	10.19.19 12.36	
1,4-Difluorobenzene	540-36-3	85	%	70-130	10.19.19 12.36	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-006	Date Collected:	10.15.19 11.31	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**186**	5.05	mg/kg	10.17.19 18.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 19.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	**192**	50.0	mg/kg	10.17.19 19.58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**58.7**	50.0	mg/kg	10.17.19 19.58		1
Total GRO-DRO	PHC628	**192**	50.0	mg/kg	10.17.19 19.58		1
Total TPH	PHC635	**251**	50.0	mg/kg	10.17.19 19.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	10.17.19 19.58	
o-Terphenyl	84-15-1	99	%	70-135	10.17.19 19.58	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-006	Date Collected:	10.15.19 11.31	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.18.19 16.30	Basis:	Wet Weight
Seq Number:	3104855			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.19.19 12.16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.19.19 12.16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.19.19 12.16	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.19.19 12.16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.19.19 12.16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.19.19 12.16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.19.19 12.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.19.19 12.16	
4-Bromofluorobenzene	460-00-4	96	%	70-130	10.19.19 12.16	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS07**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-007	Date Collected:	10.15.19 11.32	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.17.19 13.45	Basis:	Wet Weight
Seq Number:	3104670			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.9**	4.99	mg/kg	10.17.19 18.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.17.19 12.00	Basis:	Wet Weight
Seq Number:	3104730			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 20.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**2440**	50.0	mg/kg	10.17.19 20.17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**357**	50.0	mg/kg	10.17.19 20.17		1
Total GRO-DRO	PHC628	**2440**	50.0	mg/kg	10.17.19 20.17		1
Total TPH	PHC635	**2800**	50.0	mg/kg	10.17.19 20.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.17.19 20.17	
o-Terphenyl	84-15-1	119	%	70-135	10.17.19 20.17	

Certificate of Analytical Results 640104

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**SS07**	Matrix:	Soil	Date Received:	10.15.19 16.46
Lab Sample Id:	640104-007	Date Collected:	10.15.19 11.32	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.18.19 16.30	Basis:	Wet Weight
Seq Number:	3104855			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.19.19 01.36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.19.19 01.36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.19.19 01.36	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.19.19 01.36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.19.19 01.36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.19.19 01.36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.19.19 01.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.19.19 01.36	
1,4-Difluorobenzene	540-36-3	80	%	70-130	10.19.19 01.36	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 640104

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104670 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688364-1-BLK — LCS Sample Id: 7688364-1-BKS — LCSD Sample Id: 7688364-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	255	102	254	102	90-110	0	20	mg/kg	10.17.19 15:24	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104670 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 639881-001 — MS Sample Id: 639881-001 S — MSD Sample Id: 639881-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.12	252	262	101	258	99	90-110	2	20	mg/kg	10.17.19 15:47	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104670 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640104-002 — MS Sample Id: 640104-002 S — MSD Sample Id: 640104-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	528	250	759	92	734	82	90-110	3	20	mg/kg	10.17.19 17:36	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104730 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688340-1-BLK — LCS Sample Id: 7688340-1-BKS — LCSD Sample Id: 7688340-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1060	106	1190	119	70-135	12	20	mg/kg	10.17.19 13:06	
Diesel Range Organics (DRO)	<15.0	1000	945	95	1060	106	70-135	11	20	mg/kg	10.17.19 13:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	84		115		125		70-135	%	10.17.19 13:06
o-Terphenyl	85		101		107		70-135	%	10.17.19 13:06

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104730 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688340-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.17.19 12:47	

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

QC Summary 640104

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3104730 | Matrix: Soil | Date Prep: 10.17.19
Parent Sample Id: 640096-001 | MS Sample Id: 640096-001 S | MSD Sample Id: 640096-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	1160	116	1190	119	70-135	3	20	mg/kg	10.17.19 14:21	
Diesel Range Organics (DRO)	<15.0	998	1110	111	1120	112	70-135	1	20	mg/kg	10.17.19 14:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		129		70-135	%	10.17.19 14:21
o-Terphenyl	105		107		70-135	%	10.17.19 14:21

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104843 | Matrix: Solid | Date Prep: 10.18.19
MB Sample Id: 7688505-1-BLK | LCS Sample Id: 7688505-1-BKS | LCSD Sample Id: 7688505-1-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	0.0884	88	0.0886	89	70-130	0	35	mg/kg	10.18.19 10:28	
Toluene	<0.00200	0.100	0.0909	91	0.0912	91	70-130	0	35	mg/kg	10.18.19 10:28	
Ethylbenzene	<0.00200	0.100	0.0998	100	0.100	100	70-130	0	35	mg/kg	10.18.19 10:28	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.198	99	70-130	1	35	mg/kg	10.18.19 10:28	
o-Xylene	<0.00200	0.100	0.105	105	0.107	107	70-130	2	35	mg/kg	10.18.19 10:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		90		91		70-130	%	10.18.19 10:28
4-Bromofluorobenzene	99		118		118		70-130	%	10.18.19 10:28

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104855 | Matrix: Solid | Date Prep: 10.18.19
MB Sample Id: 7688520-1-BLK | LCS Sample Id: 7688520-1-BKS | LCSD Sample Id: 7688520-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000730	0.100	0.0978	98	0.103	103	70-130	5	35	mg/kg	10.18.19 04:15	
Toluene	<0.00200	0.100	0.109	109	0.105	105	70-130	4	35	mg/kg	10.18.19 04:15	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.104	104	70-130	4	35	mg/kg	10.18.19 04:15	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.204	102	70-130	3	35	mg/kg	10.18.19 04:15	
o-Xylene	<0.00200	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	10.18.19 04:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		88		93		70-130	%	10.18.19 04:15
4-Bromofluorobenzene	70		98		102		70-130	%	10.18.19 04:15

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

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

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

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

Final 1.000

QC Summary 640104

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104858 — Matrix: Solid — Date Prep: 10.18.19
MB Sample Id: 7688521-1-BLK — LCS Sample Id: 7688521-1-BKS — LCSD Sample Id: 7688521-1-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	0.103	103	0.0838	84	70-130	21	35	mg/kg	10.19.19 12:03	
Toluene	<0.00200	0.100	0.105	105	0.0835	84	70-130	23	35	mg/kg	10.19.19 12:03	
Ethylbenzene	<0.00200	0.100	0.118	118	0.0902	90	70-130	27	35	mg/kg	10.19.19 12:03	
m,p-Xylenes	<0.00400	0.200	0.239	120	0.180	90	70-130	28	35	mg/kg	10.19.19 12:03	
o-Xylene	<0.00200	0.100	0.123	123	0.0964	96	70-130	24	35	mg/kg	10.19.19 12:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		88		88		70-130	%	10.19.19 12:03
4-Bromofluorobenzene	101		122		115		70-130	%	10.19.19 12:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104981 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688612-1-BLK — LCS Sample Id: 7688612-1-BKS — LCSD Sample Id: 7688612-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.104	104	70-130	5	35	mg/kg	10.21.19 16:03	
Toluene	<0.00200	0.100	0.110	110	0.107	107	70-130	3	35	mg/kg	10.21.19 16:03	
Ethylbenzene	<0.00200	0.100	0.123	123	0.120	120	70-130	2	35	mg/kg	10.21.19 16:03	
m,p-Xylenes	<0.00400	0.200	0.248	124	0.242	121	70-130	2	35	mg/kg	10.21.19 16:03	
o-Xylene	<0.00200	0.100	0.126	126	0.125	125	70-130	1	35	mg/kg	10.21.19 16:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		90		88		70-130	%	10.21.19 16:03
4-Bromofluorobenzene	103		125		124		70-130	%	10.21.19 16:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104843 — Matrix: Soil — Date Prep: 10.18.19
Parent Sample Id: 640162-001 — MS Sample Id: 640162-001 S — MSD Sample Id: 640162-001 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	0.0996	0.0757	76	0.0618	62	70-130	20	35	mg/kg	10.18.19 11:08	X
Toluene	<0.00199	0.0996	0.0778	78	0.0636	64	70-130	20	35	mg/kg	10.18.19 11:08	X
Ethylbenzene	<0.00199	0.0996	0.0861	86	0.0702	70	70-130	20	35	mg/kg	10.18.19 11:08	
m,p-Xylenes	<0.00398	0.199	0.169	85	0.139	70	70-130	19	35	mg/kg	10.18.19 11:08	
o-Xylene	<0.00199	0.0996	0.0911	91	0.0757	76	70-130	18	35	mg/kg	10.18.19 11:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		91		70-130	%	10.18.19 11:08
4-Bromofluorobenzene	119		115		70-130	%	10.18.19 11:08

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

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

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

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

QC Summary 640104

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104855 — Matrix: Soil — Date Prep: 10.18.19
Parent Sample Id: 640269-001 — MS Sample Id: 640269-001 S — MSD Sample Id: 640269-001 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	0.0996	0.0716	72	0.0727	73	70-130	2	35	mg/kg	10.18.19 04:55	
Toluene	<0.00199	0.0996	0.0797	80	0.0782	78	70-130	2	35	mg/kg	10.18.19 04:55	
Ethylbenzene	<0.00199	0.0996	0.0846	85	0.0813	81	70-130	4	35	mg/kg	10.18.19 04:55	
m,p-Xylenes	<0.00398	0.199	0.157	79	0.161	81	70-130	3	35	mg/kg	10.18.19 04:55	
o-Xylene	<0.00199	0.0996	0.0819	82	0.0871	87	70-130	6	35	mg/kg	10.18.19 04:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		92		70-130	%	10.18.19 04:55
4-Bromofluorobenzene	107		96		70-130	%	10.18.19 04:55

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104858 — Matrix: Soil — Date Prep: 10.18.19
Parent Sample Id: 640388-001 — MS Sample Id: 640388-001 S — MSD Sample Id: 640388-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0801	80	0.0801	80	70-130	0	35	mg/kg	10.19.19 12:43	
Toluene	<0.00200	0.0998	0.0748	75	0.0785	79	70-130	5	35	mg/kg	10.19.19 12:43	
Ethylbenzene	<0.00200	0.0998	0.0756	76	0.0812	81	70-130	7	35	mg/kg	10.19.19 12:43	
m,p-Xylenes	<0.00399	0.200	0.129	65	0.130	65	70-130	1	35	mg/kg	10.19.19 12:43	X
o-Xylene	<0.00200	0.0998	0.0841	84	0.0919	92	70-130	9	35	mg/kg	10.19.19 12:43	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		89		70-130	%	10.19.19 12:43
4-Bromofluorobenzene	113		121		70-130	%	10.19.19 12:43

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104981 — Matrix: Soil — Date Prep: 10.21.19
Parent Sample Id: 640553-001 — MS Sample Id: 640553-001 S — MSD Sample Id: 640553-001 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	0.0907	91	0.0870	87	70-130	4	35	mg/kg	10.21.19 16:44	
Toluene	<0.00199	0.0994	0.0895	90	0.0865	87	70-130	3	35	mg/kg	10.21.19 16:44	
Ethylbenzene	<0.00199	0.0994	0.0976	98	0.0946	95	70-130	3	35	mg/kg	10.21.19 16:44	
m,p-Xylenes	<0.00398	0.199	0.196	98	0.190	95	70-130	3	35	mg/kg	10.21.19 16:44	
o-Xylene	<0.00199	0.0994	0.0999	101	0.0970	97	70-130	3	35	mg/kg	10.21.19 16:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		90		70-130	%	10.21.19 16:44
4-Bromofluorobenzene	117		117		70-130	%	10.21.19 16:44

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

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: 640104

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:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	wmather@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	EMSU Satellite Battery #1	Turn Around	
Project Number:	012919255	Routine	☑
P.O. Number:	Lee County	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	7

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	s	10/15/2019	11:26	0.5'	1	x	x	x
SS02	s	10/15/2019	11:27	0.5'	1	x	x	x
SS03	s	10/15/2019	11:28	0.5'	1	x	x	x
SS04	s	10/15/2019	11:29	0.5'	1	x	x	x
SS05	s	10/15/2019	11:30	0.5'	1	x	x	x
SS06	s	10/15/2019	11:31	0.5'	1	x	x	x
SS07	s	10/15/2019	11:32	0.5'	1	x	x	x

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

Sample Comments
discrete
discrete
discrete
discrete
discrete
discrete
discrete

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
		10/15/19 16:46	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **50233**

Date/Time: 10/16/19 10:37
Created by: Elizabeth Mcclellan
Please send report to: Jessica Kramer

Lab# From: **Carlsbad**
Delivery Priority:
Address: 1089 N Canal Street

Lab# To: **Midland**
Air Bill No.: 776737745954
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
640104-001	S	SS01	10/15/19 11:26	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	
640104-001	S	SS01	10/15/19 11:26	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-001	S	SS01	10/15/19 11:26	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-002	S	SS02	10/15/19 11:27	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-002	S	SS02	10/15/19 11:27	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	
640104-002	S	SS02	10/15/19 11:27	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-003	S	SS03	10/15/19 11:28	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-003	S	SS03	10/15/19 11:28	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	
640104-003	S	SS03	10/15/19 11:28	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-004	S	SS04	10/15/19 11:29	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-004	S	SS04	10/15/19 11:29	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	
640104-004	S	SS04	10/15/19 11:29	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-005	S	SS05	10/15/19 11:30	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-005	S	SS05	10/15/19 11:30	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	
640104-005	S	SS05	10/15/19 11:30	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-006	S	SS06	10/15/19 11:31	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-006	S	SS06	10/15/19 11:31	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-006	S	SS06	10/15/19 11:31	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	
640104-007	S	SS07	10/15/19 11:32	E300_CL	Chloride by EPA 300	10/21/19	04/12/20	JKR	CL	
640104-007	S	SS07	10/15/19 11:32	SW8015MOD_NM	TPH by SW8015 Mod	10/21/19	10/29/19	JKR	GRO-DRO PHCC10C28 PI	
640104-007	S	SS07	10/15/19 11:32	SW8021B	BTEX by EPA 8021B	10/21/19	10/29/19	JKR	BR4FBZ BZ BZME EBZ X	

Inter-Office Shipment

IOS Number **50233**

Date/Time: 10/16/19 10:37
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.: 776737745954

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

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 10/16/2019

Received By: Amanda Levario

Date Received: 10/17/2019 11:19

Cooler Temperature: 3.3

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 50233

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

Sent By: Elizabeth McClellan **Date Sent:** 10/16/2019 10:37 AM

Received By: Amanda Levario **Date Received:** 10/17/2019 11:19 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 *Custody Seals Signed and dated for Containers/coolers	**N/A**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: _____ Date: 10/17/2019

Amanda Levario

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/15/2019 04:46:00 PM

Work Order #: 640104

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)?	3.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Subbed to Midland.
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 10/16/2019

Checklist reviewed by: Jessica Kramer Date: 10/17/2019

Jessica Kramer

Analytical Report 648229

for

LT Environmental, Inc.

Project Manager: Dan Moir

EMSU Sat Battery

012919255

09-JAN-20

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)

09-JAN-20

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

Reference: XENCO Report No(s): **648229**
EMSU Sat 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) 648229. 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. 648229 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

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

Sample Cross Reference 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	01-03-20 13:32	0.5 ft	648229-001
FS02	S	01-03-20 13:41	0.5 ft	648229-002
FS03	S	01-03-20 13:44	0.5 ft	648229-003
FS04	S	01-03-20 13:59	0.5 ft	648229-004
FS05	S	01-03-20 14:01	0.5 ft	648229-005
FS06	S	01-03-20 14:42	0.5 ft	648229-006
FS07	S	01-03-20 14:45	0.5 ft	648229-007
FS08	S	01-03-20 14:56	0.5 ft	648229-008
FS09	S	01-03-20 14:59	0.5 ft	648229-009
FS10	S	01-03-20 15:02	0.5 ft	648229-010
FS11	S	01-03-20 15:04	0.5 ft	648229-011
FS12	S	01-03-20 15:06	0.5 ft	648229-012
FS13	S	01-07-20 09:54	0.5 ft	648229-013
FS14	S	01-07-20 09:57	0.5 ft	648229-014
FS15	S	01-07-20 10:00	0.5 ft	648229-015
FS16	S	01-07-20 10:30	0.5 ft	648229-016
FS17	S	01-07-20 10:33	0.5 ft	648229-017
FS18	S	01-07-20 10:43	0.5 ft	648229-018
FS19	S	01-07-20 11:09	0.5 ft	648229-019
FS20	S	01-07-20 13:11	0.8 ft	648229-020
FS21	S	01-07-20 11:31	0.5 ft	648229-021
FS22	S	01-07-20 11:35	0.5 ft	648229-022
FS23	S	01-07-20 12:22	0.5 ft	648229-023
FS24	S	01-07-20 12:25	0.5 ft	648229-024
FS25	S	01-07-20 12:29	0.5 ft	648229-025
FS26	S	01-07-20 12:32	0.5 ft	648229-026
FS27	S	01-07-20 13:01	0.5 ft	648229-027
FS28	S	01-07-20 15:35	0.5 ft	648229-028
FS29	S	01-07-20 15:39	0.5 ft	648229-029
FS30	S	01-07-20 15:42	0.5 ft	648229-030
FS31	S	01-07-20 15:59	0.5 ft	648229-031
FS32	S	01-07-20 16:02	0.5 ft	648229-032
FS33	S	01-07-20 16:07	0.5 ft	648229-033

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: EMSU Sat Battery

Project ID: *012919255*
Work Order Number(s): *648229*

Report Date: *09-JAN-20*
Date Received: *01/08/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3112684 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3112686 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3112702 Chloride by EPA 300
Lab Sample ID 648229-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 648229-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 648229

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 09:46 am
Report Date: 09-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648229-001		648229-002		648229-003		648229-004		648229-005		648229-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-03-20 13:32		Jan-03-20 13:41		Jan-03-20 13:44		Jan-03-20 13:59		Jan-03-20 14:01		Jan-03-20 14:42	
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19	
	Analyzed:	Jan-08-20 14:19		Jan-08-20 14:38		Jan-08-20 14:57		Jan-08-20 15:17		Jan-08-20 15:36		Jan-08-20 15:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000488	0.000488	<0.000487	0.000487	<0.000488	0.000488	<0.000490	0.000490	<0.000490	0.000490	<0.000489	0.000489
Toluene		<0.000531	0.000531	<0.000530	0.000530	<0.000531	0.000531	<0.000533	0.000533	<0.000533	0.000533	<0.000532	0.000532
Ethylbenzene		<0.000409	0.000409	<0.000408	0.000408	<0.000409	0.000409	<0.000410	0.000410	<0.000410	0.000410	<0.000409	0.000409
m,p-Xylenes		0.000775 J	0.000758	<0.000757	0.000757	<0.000758	0.000758	<0.000761	0.000761	<0.000761	0.000761	<0.000760	0.000760
o-Xylene		<0.000406	0.000406	<0.000405	0.000405	<0.000406	0.000406	<0.000407	0.000407	<0.000407	0.000407	<0.000406	0.000406
Total Xylenes		0.000775 J	0.000406	<0.000405	0.000405	<0.000406	0.000406	<0.000407	0.000407	<0.000407	0.000407	<0.000406	0.000406
Total BTEX		0.000775 J	0.000406	<0.000405	0.000405	<0.000406	0.000406	<0.000407	0.000407	<0.000407	0.000407	<0.000406	0.000406
Chloride by EPA 300	***Extracted:***	Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39	
	Analyzed:	Jan-08-20 14:24		Jan-08-20 14:41		Jan-08-20 14:47		Jan-08-20 14:52		Jan-08-20 14:58		Jan-08-20 15:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		112	0.355	157	0.352	18.2	0.353	43.7	0.353	143	0.351	131	0.353
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45	
	Analyzed:	Jan-08-20 19:08		Jan-08-20 19:28		Jan-08-20 19:47		Jan-08-20 19:47		Jan-08-20 20:07		Jan-08-20 20:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.8	13.8	<13.9	13.9	<14.0	14.0	<13.9	13.9	<13.9	13.9	<13.9	13.9
Diesel Range Organics (DRO)		<11.4	11.4	12.1 J	11.5	13.8 J	11.5	<11.5	11.5	11.6 J	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.4	11.4	<11.5	11.5	<11.5	11.5
Total TPH		<11.4	11.4	12.1 J	11.5	13.8 J	11.5	<11.4	11.4	11.6 J	11.5	<11.5	11.5

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648229

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 09:46 am
Report Date: 09-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648229-007		648229-008		648229-009		648229-010		648229-011		648229-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-03-20 14:45		Jan-03-20 14:56		Jan-03-20 14:59		Jan-03-20 15:02		Jan-03-20 15:04		Jan-03-20 15:06	
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19	
	Analyzed:	Jan-08-20 16:14		Jan-08-20 16:33		Jan-08-20 16:52		Jan-08-20 17:11		Jan-08-20 18:15		Jan-08-20 18:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000487	0.000487	<0.000488	0.000488	<0.000490	0.000490	<0.000490	0.000490	<0.000487	0.000487	<0.000488	0.000488
Toluene		<0.000530	0.000530	<0.000531	0.000531	<0.000533	0.000533	<0.000533	0.000533	<0.000530	0.000530	<0.000531	0.000531
Ethylbenzene		<0.000408	0.000408	<0.000409	0.000409	<0.000410	0.000410	<0.000410	0.000410	<0.000408	0.000408	<0.000409	0.000409
m,p-Xylenes		<0.000757	0.000757	<0.000758	0.000758	<0.000761	0.000761	<0.000761	0.000761	<0.000757	0.000757	<0.000758	0.000758
o-Xylene		<0.000405	0.000405	<0.000406	0.000406	<0.000407	0.000407	<0.000407	0.000407	<0.000405	0.000405	<0.000406	0.000406
Total Xylenes		<0.000405	0.000405	<0.000406	0.000406	<0.000407	0.000407	<0.000407	0.000407	<0.000405	0.000405	<0.000406	0.000406
Total BTEX		<0.000405	0.000405	<0.000406	0.000406	<0.000407	0.000407	<0.000407	0.000407	<0.000405	0.000405	<0.000406	0.000406
Chloride by EPA 300	***Extracted:***	Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39	
	Analyzed:	Jan-08-20 15:32		Jan-08-20 15:38		Jan-08-20 15:43		Jan-08-20 15:49		Jan-08-20 15:55		Jan-08-20 16:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		42.5	0.353	37.5	0.350	176	0.353	222	0.355	134	0.355	145	0.353
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45		Jan-08-20 12:45	
	Analyzed:	Jan-08-20 20:27		Jan-08-20 20:27		Jan-08-20 20:47		Jan-08-20 20:47		Jan-08-20 21:07		Jan-08-20 21:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.9	13.9	<13.9	13.9	<13.9	13.9	<13.9	13.9	<13.9	13.9
Diesel Range Organics (DRO)		<11.5	11.5	<11.5	11.5	12.8 J	11.5	<11.5	11.5	14.3 J	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		<11.5	11.5	<11.5	11.5	12.8 J	11.5	<11.5	11.5	14.3 J	11.5	<11.5	11.5

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648229

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 09:46 am
Report Date: 09-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648229-013		648229-014		648229-015		648229-016		648229-017		648229-018	
	Field Id:	FS13		FS14		FS15		FS16		FS17		FS18	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-07-20 09:54		Jan-07-20 09:57		Jan-07-20 10:00		Jan-07-20 10:30		Jan-07-20 10:33		Jan-07-20 10:43	
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:19	
	Analyzed:	Jan-08-20 18:53		Jan-08-20 19:13		Jan-08-20 19:32		Jan-08-20 19:51		Jan-08-20 20:10		Jan-08-20 20:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000489	0.000489	<0.000487	0.000487	<0.000486	0.000486	<0.000483	0.000483	<0.000479	0.000479	<0.000489	0.000489
Toluene		<0.000532	0.000532	<0.000530	0.000530	<0.000529	0.000529	<0.000525	0.000525	<0.000520	0.000520	<0.000532	0.000532
Ethylbenzene		<0.000409	0.000409	<0.000408	0.000408	<0.000407	0.000407	<0.000404	0.000404	<0.000401	0.000401	<0.000409	0.000409
m,p-Xylenes		<0.000760	0.000760	<0.000757	0.000757	<0.000755	0.000755	<0.000749	0.000749	<0.000743	0.000743	<0.000760	0.000760
o-Xylene		<0.000406	0.000406	<0.000405	0.000405	<0.000404	0.000404	<0.000401	0.000401	<0.000398	0.000398	<0.000406	0.000406
Total Xylenes		<0.000406	0.000406	<0.000405	0.000405	<0.000404	0.000404	<0.000401	0.000401	<0.000398	0.000398	<0.000406	0.000406
Total BTEX		<0.000406	0.000406	<0.000405	0.000405	<0.000404	0.000404	<0.000401	0.000401	<0.000398	0.000398	<0.000406	0.000406
Chloride by EPA 300	***Extracted:***	Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 11:39	
	Analyzed:	Jan-08-20 16:17		Jan-08-20 16:34		Jan-08-20 16:39		Jan-08-20 16:45		Jan-08-20 16:50		Jan-08-20 16:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		540	0.354	335	0.353	280	0.350	48.2	0.352	280	0.357	528	0.355
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50	
	Analyzed:	Jan-08-20 22:46		Jan-08-20 22:46		Jan-08-20 23:06		Jan-08-20 23:06		Jan-08-20 23:26		Jan-08-20 23:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.8	13.8	<13.9	13.9	<14.0	14.0	<13.8	13.8	<13.9	13.9
Diesel Range Organics (DRO)		13.9 J	11.5	<11.4	11.4	59.6 J	11.5	13.7 j	11.5	20.7 J	11.4	54.4 J	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.5	11.5	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.4	11.4	<11.5	11.5
Total TPH		13.9 J	11.5	<11.4	11.4	59.6	11.5	13.7 J	11.5	20.7 J	11.4	54.4	11.5

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648229

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 09:46 am
Report Date: 09-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648229-019		648229-020		648229-021		648229-022		648229-023		648229-024	
	Field Id:	FS19		FS20		FS21		FS22		FS23		FS24	
	Depth:	0.5- ft		0.8- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-07-20 11:09		Jan-07-20 13:11		Jan-07-20 11:31		Jan-07-20 11:35		Jan-07-20 12:22		Jan-07-20 12:25	
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 11:19		Jan-08-20 11:19		Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00	
	Analyzed:	Jan-08-20 20:48		Jan-08-20 21:07		Jan-08-20 14:20		Jan-08-20 14:37		Jan-08-20 14:55		Jan-08-20 15:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000483	0.000483	<0.000481	0.000481	<0.000486	0.000486	<0.000484	0.000484	<0.000479	0.000479	<0.000489	0.000489
Toluene		<0.000525	0.000525	<0.000522	0.000522	<0.000529	0.000529	<0.000526	0.000526	<0.000520	0.000520	<0.000532	0.000532
Ethylbenzene		<0.000404	0.000404	<0.000402	0.000402	<0.000407	0.000407	<0.000405	0.000405	<0.000401	0.000401	<0.000409	0.000409
m,p-Xylenes		<0.000749	0.000749	<0.000746	0.000746	<0.000755	0.000755	<0.000751	0.000751	<0.000743	0.000743	<0.000760	0.000760
o-Xylene		<0.000401	0.000401	<0.000399	0.000399	<0.000404	0.000404	<0.000401	0.000401	<0.000398	0.000398	<0.000406	0.000406
Total Xylenes		<0.000401	0.000401	<0.000399	0.000399	<0.000404	0.000404	<0.000401	0.000401	<0.000398	0.000398	<0.000406	0.000406
Total BTEX		<0.000401	0.000401	<0.000399	0.000399	<0.000404	0.000404	<0.000401	0.000401	<0.000398	0.000398	<0.000406	0.000406
Chloride by EPA 300	***Extracted:***	Jan-08-20 11:39		Jan-08-20 11:39		Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10	
	Analyzed:	Jan-08-20 17:02		Jan-08-20 17:07		Jan-08-20 17:44		Jan-08-20 18:02		Jan-08-20 18:08		Jan-08-20 18:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		537	0.350	403	0.353	425	0.353	538	0.355	7.07 J	0.357	10.6	0.355
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50	
	Analyzed:	Jan-08-20 23:46		Jan-08-20 22:07		Jan-08-20 23:46		Jan-09-20 00:05		Jan-09-20 00:25		Jan-09-20 00:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.9	13.9	<13.9	13.9	<13.9	13.9	<14.0	14.0	<13.9	13.9
Diesel Range Organics (DRO)		16.2 J	11.4	<11.5	11.5	23.7 J	11.5	23.1 J	11.5	<11.5	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		16.2 J	11.4	<11.5	11.5	23.7 J	11.5	23.1 J	11.5	<11.5	11.5	<11.5	11.5

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648229

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 09:46 am
Report Date: 09-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648229-025		648229-026		648229-027		648229-028		648229-029		648229-030	
	Field Id:	FS25		FS26		FS27		FS28		FS29		FS30	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-07-20 12:29		Jan-07-20 12:32		Jan-07-20 13:01		Jan-07-20 15:35		Jan-07-20 15:39		Jan-07-20 15:42	
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00	
	Analyzed:	Jan-08-20 15:29		Jan-08-20 15:47		Jan-08-20 16:04		Jan-08-20 16:22		Jan-08-20 16:39		Jan-08-20 16:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000486	0.000486	<0.000483	0.000483	<0.000480	0.000480	<0.000486	0.000486	<0.000488	0.000488	<0.000486	0.000486
Toluene		<0.000528	0.000528	<0.000525	0.000525	<0.000521	0.000521	<0.000528	0.000528	<0.000531	0.000531	<0.000528	0.000528
Ethylbenzene		<0.000406	0.000406	<0.000404	0.000404	<0.000401	0.000401	<0.000406	0.000406	<0.000409	0.000409	<0.000406	0.000406
m,p-Xylenes		<0.000754	0.000754	<0.000749	0.000749	<0.000745	0.000745	<0.000754	0.000754	<0.000758	0.000758	<0.000754	0.000754
o-Xylene		<0.000403	0.000403	<0.000401	0.000401	<0.000398	0.000398	<0.000403	0.000403	<0.000406	0.000406	<0.000403	0.000403
Total Xylenes		<0.000403	0.000403	<0.000401	0.000401	<0.000398	0.000398	<0.000403	0.000403	<0.000406	0.000406	<0.000403	0.000403
Total BTEX		<0.000403	0.000403	<0.000401	0.000401	<0.000398	0.000398	<0.000403	0.000403	<0.000406	0.000406	<0.000403	0.000403
Chloride by EPA 300	***Extracted:***	Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10	
	Analyzed:	Jan-08-20 18:20		Jan-08-20 18:38		Jan-08-20 18:44		Jan-08-20 18:51		Jan-08-20 18:57		Jan-08-20 19:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		19.3	0.351	99.6	0.350	8.67 J	0.353	1730	1.75	112	1.76	395	1.78
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 14:50	
	Analyzed:	Jan-09-20 00:45		Jan-09-20 00:45		Jan-09-20 01:05		Jan-09-20 01:05		Jan-09-20 01:24		Jan-09-20 01:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.8	13.8	<13.9	13.9	15.5 J	14.0	<14.0	14.0	16.6 J	13.9	<13.9	13.9
Diesel Range Organics (DRO)		15.3 J	11.4	<11.5	11.5	12.8 J	11.5	<11.5	11.5	13.4 J	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		15.3 J	11.4	<11.5	11.5	28.3 J	11.5	<11.5	11.5	30.0 J	11.5	<11.5	11.5

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648229

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 09:46 am
Report Date: 09-JAN-20
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	648229-031		648229-032		648229-033					
	Field Id:	FS31		FS32		FS33					
	Depth:	0.5- ft		0.5- ft		0.5- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Jan-07-20 15:59		Jan-07-20 16:02		Jan-07-20 16:07					
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 11:00		Jan-08-20 11:00		Jan-08-20 11:00					
	Analyzed:	Jan-08-20 18:05		Jan-08-20 18:23		Jan-08-20 18:40					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.000482	0.000482	<0.000480	0.000480	<0.000484	0.000484				
Toluene		<0.000524	0.000524	<0.000521	0.000521	<0.000526	0.000526				
Ethylbenzene		<0.000403	0.000403	<0.000401	0.000401	<0.000405	0.000405				
m,p-Xylenes		<0.000748	0.000748	<0.000745	0.000745	<0.000751	0.000751				
o-Xylene		<0.000400	0.000400	<0.000398	0.000398	<0.000401	0.000401				
Total Xylenes		<0.000400	0.000400	<0.000398	0.000398	<0.000401	0.000401				
Total BTEX		<0.000400	0.000400	<0.000398	0.000398	<0.000401	0.000401				
Chloride by EPA 300	***Extracted:***	Jan-08-20 14:10		Jan-08-20 14:10		Jan-08-20 14:10					
	Analyzed:	Jan-08-20 19:09		Jan-08-20 19:27		Jan-08-20 19:33					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		810	1.79	21.4	0.353	26.9	0.353				
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 14:50		Jan-08-20 14:50		Jan-08-20 15:50					
	Analyzed:	Jan-09-20 01:44		Jan-09-20 01:44		Jan-09-20 05:40					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		15.6 J	13.9	<13.9	13.9	15.8 J	13.9				
Diesel Range Organics (DRO)		<11.5	11.5	<11.5	11.5	<11.5	11.5				
Motor Oil Range Hydrocarbons (MRO)		<11.5	11.5	<11.5	11.5	<11.5	11.5				
Total TPH		15.6 J	11.5	<11.5	11.5	15.8 J	11.5				

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-001	Date Collected:	01.03.20 13.32	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**112**	10.0	0.355	mg/kg	01.08.20 14.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	01.08.20 19.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	01.08.20 19.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	01.08.20 19.08	U	1
Total TPH	PHC635	<11.4	49.8	11.4	mg/kg	01.08.20 19.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	01.08.20 19.08	
o-Terphenyl	84-15-1	118	%	70-135	01.08.20 19.08	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-001	Date Collected:	01.03.20 13.32	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	01.08.20 14.19	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	01.08.20 14.19	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	01.08.20 14.19	U	1
m,p-Xylenes	179601-23-1	**0.000775**	0.00402	0.000758	mg/kg	01.08.20 14.19	J	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	01.08.20 14.19	U	1
Total Xylenes	1330-20-7	**0.000775**	0.00201	0.000406	mg/kg	01.08.20 14.19	J	1
Total BTEX		**0.000775**	0.00201	0.000406	mg/kg	01.08.20 14.19	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.08.20 14.19	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.08.20 14.19	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-002	Date Collected:	01.03.20 13.41	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**157**	9.94	0.352	mg/kg	01.08.20 14.41		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	01.08.20 19.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	**12.1**	50.0	11.5	mg/kg	01.08.20 19.28	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	01.08.20 19.28	U	1
Total TPH	PHC635	**12.1**	50.0	11.5	mg/kg	01.08.20 19.28	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	01.08.20 19.28	
o-Terphenyl	84-15-1	123	%	70-135	01.08.20 19.28	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-002	Date Collected:	01.03.20 13.41	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000487	0.00201	0.000487	mg/kg	01.08.20 14.38	U	1
Toluene	108-88-3	<0.000530	0.00201	0.000530	mg/kg	01.08.20 14.38	U	1
Ethylbenzene	100-41-4	<0.000408	0.00201	0.000408	mg/kg	01.08.20 14.38	U	1
m,p-Xylenes	179601-23-1	<0.000757	0.00402	0.000757	mg/kg	01.08.20 14.38	U	1
o-Xylene	95-47-6	<0.000405	0.00201	0.000405	mg/kg	01.08.20 14.38	U	1
Total Xylenes	1330-20-7	<0.000405	0.00201	0.000405	mg/kg	01.08.20 14.38	U	1
Total BTEX		<0.000405	0.00201	0.000405	mg/kg	01.08.20 14.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.08.20 14.38	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.08.20 14.38	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-003	Date Collected:	01.03.20 13.44	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.2**	9.98	0.353	mg/kg	01.08.20 14.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	01.08.20 19.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**13.8**	50.3	11.5	mg/kg	01.08.20 19.47	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	01.08.20 19.47	U	1
Total TPH	PHC635	**13.8**	50.3	11.5	mg/kg	01.08.20 19.47	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	01.08.20 19.47	
o-Terphenyl	84-15-1	129	%	70-135	01.08.20 19.47	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS03**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-003	Date Collected:	01.03.20 13.44	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	01.08.20 14.57	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	01.08.20 14.57	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	01.08.20 14.57	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	01.08.20 14.57	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	01.08.20 14.57	U	1
Total Xylenes	1330-20-7	<0.000406	0.00201	0.000406	mg/kg	01.08.20 14.57	U	1
Total BTEX		<0.000406	0.00201	0.000406	mg/kg	01.08.20 14.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.08.20 14.57	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.08.20 14.57	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-004	Date Collected:	01.03.20 13.59	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.7**	9.96	0.353	mg/kg	01.08.20 14.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	01.08.20 19.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	01.08.20 19.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	50.0	11.4	mg/kg	01.08.20 19.47	U	1
Total TPH	PHC635	<11.4	50.0	11.4	mg/kg	01.08.20 19.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	01.08.20 19.47	
o-Terphenyl	84-15-1	117	%	70-135	01.08.20 19.47	

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EMSU Sat Battery

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-004	Date Collected:	01.03.20 13.59	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	01.08.20 15.17	U	1
Toluene	108-88-3	<0.000533	0.00202	0.000533	mg/kg	01.08.20 15.17	U	1
Ethylbenzene	100-41-4	<0.000410	0.00202	0.000410	mg/kg	01.08.20 15.17	U	1
m,p-Xylenes	179601-23-1	<0.000761	0.00404	0.000761	mg/kg	01.08.20 15.17	U	1
o-Xylene	95-47-6	<0.000407	0.00202	0.000407	mg/kg	01.08.20 15.17	U	1
Total Xylenes	1330-20-7	<0.000407	0.00202	0.000407	mg/kg	01.08.20 15.17	U	1
Total BTEX		<0.000407	0.00202	0.000407	mg/kg	01.08.20 15.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.08.20 15.17	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.08.20 15.17	

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Sample Id:	**FS05**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-005	Date Collected:	01.03.20 14.01	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**143**	9.92	0.351	mg/kg	01.08.20 14.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.08.20 20.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	**11.6**	50.2	11.5	mg/kg	01.08.20 20.07	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.08.20 20.07	U	1
Total TPH	PHC635	**11.6**	50.2	11.5	mg/kg	01.08.20 20.07	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	01.08.20 20.07	
o-Terphenyl	84-15-1	124	%	70-135	01.08.20 20.07	

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Sample Id:	**FS05**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-005	Date Collected:	01.03.20 14.01	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	01.08.20 15.36	U	1
Toluene	108-88-3	<0.000533	0.00202	0.000533	mg/kg	01.08.20 15.36	U	1
Ethylbenzene	100-41-4	<0.000410	0.00202	0.000410	mg/kg	01.08.20 15.36	U	1
m,p-Xylenes	179601-23-1	<0.000761	0.00404	0.000761	mg/kg	01.08.20 15.36	U	1
o-Xylene	95-47-6	<0.000407	0.00202	0.000407	mg/kg	01.08.20 15.36	U	1
Total Xylenes	1330-20-7	<0.000407	0.00202	0.000407	mg/kg	01.08.20 15.36	U	1
Total BTEX		<0.000407	0.00202	0.000407	mg/kg	01.08.20 15.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.08.20 15.36	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.08.20 15.36	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-006	Date Collected:	01.03.20 14.42	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**131**	9.96	0.353	mg/kg	01.08.20 15.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	01.08.20 20.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	01.08.20 20.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	01.08.20 20.07	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	01.08.20 20.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	01.08.20 20.07	
o-Terphenyl	84-15-1	116	%	70-135	01.08.20 20.07	

Certificate of Analytical Results 648229

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EMSU Sat Battery

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-006	Date Collected:	01.03.20 14.42	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	01.08.20 15.55	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	01.08.20 15.55	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	01.08.20 15.55	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	01.08.20 15.55	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	01.08.20 15.55	U	1
Total Xylenes	1330-20-7	<0.000406	0.00202	0.000406	mg/kg	01.08.20 15.55	U	1
Total BTEX		<0.000406	0.00202	0.000406	mg/kg	01.08.20 15.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.08.20 15.55	
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.08.20 15.55	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-007	Date Collected:	01.03.20 14.45	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**42.5**	9.96	0.353	mg/kg	01.08.20 15.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	01.08.20 20.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	01.08.20 20.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	01.08.20 20.27	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	01.08.20 20.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	01.08.20 20.27	
o-Terphenyl	84-15-1	126	%	70-135	01.08.20 20.27	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-007	Date Collected:	01.03.20 14.45	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000487	0.00201	0.000487	mg/kg	01.08.20 16.14	U	1
Toluene	108-88-3	<0.000530	0.00201	0.000530	mg/kg	01.08.20 16.14	U	1
Ethylbenzene	100-41-4	<0.000408	0.00201	0.000408	mg/kg	01.08.20 16.14	U	1
m,p-Xylenes	179601-23-1	<0.000757	0.00402	0.000757	mg/kg	01.08.20 16.14	U	1
o-Xylene	95-47-6	<0.000405	0.00201	0.000405	mg/kg	01.08.20 16.14	U	1
Total Xylenes	1330-20-7	<0.000405	0.00201	0.000405	mg/kg	01.08.20 16.14	U	1
Total BTEX		<0.000405	0.00201	0.000405	mg/kg	01.08.20 16.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.08.20 16.14	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.08.20 16.14	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-008	Date Collected:	01.03.20 14.56	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.5**	9.88	0.350	mg/kg	01.08.20 15.38		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	01.08.20 20.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	01.08.20 20.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	01.08.20 20.27	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	01.08.20 20.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	01.08.20 20.27	
o-Terphenyl	84-15-1	125	%	70-135	01.08.20 20.27	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-008	Date Collected:	01.03.20 14.56	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	01.08.20 16.33	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	01.08.20 16.33	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	01.08.20 16.33	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	01.08.20 16.33	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	01.08.20 16.33	U	1
Total Xylenes	1330-20-7	<0.000406	0.00201	0.000406	mg/kg	01.08.20 16.33	U	1
Total BTEX		<0.000406	0.00201	0.000406	mg/kg	01.08.20 16.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 16.33	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.08.20 16.33	

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EMSU Sat Battery

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-009	Date Collected:	01.03.20 14.59	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**176**	9.98	0.353	mg/kg	01.08.20 15.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.08.20 20.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**12.8**	50.2	11.5	mg/kg	01.08.20 20.47	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.08.20 20.47	U	1
Total TPH	PHC635	**12.8**	50.2	11.5	mg/kg	01.08.20 20.47	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	01.08.20 20.47	
o-Terphenyl	84-15-1	125	%	70-135	01.08.20 20.47	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-009	Date Collected:	01.03.20 14.59	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	01.08.20 16.52	U	1
Toluene	108-88-3	<0.000533	0.00202	0.000533	mg/kg	01.08.20 16.52	U	1
Ethylbenzene	100-41-4	<0.000410	0.00202	0.000410	mg/kg	01.08.20 16.52	U	1
m,p-Xylenes	179601-23-1	<0.000761	0.00404	0.000761	mg/kg	01.08.20 16.52	U	1
o-Xylene	95-47-6	<0.000407	0.00202	0.000407	mg/kg	01.08.20 16.52	U	1
Total Xylenes	1330-20-7	<0.000407	0.00202	0.000407	mg/kg	01.08.20 16.52	U	1
Total BTEX		<0.000407	0.00202	0.000407	mg/kg	01.08.20 16.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.08.20 16.52	
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.08.20 16.52	

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EMSU Sat Battery

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-010	Date Collected:	01.03.20 15.02	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**222**	10.0	0.355	mg/kg	01.08.20 15.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	01.08.20 20.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	01.08.20 20.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	01.08.20 20.47	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	01.08.20 20.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	01.08.20 20.47	
o-Terphenyl	84-15-1	134	%	70-135	01.08.20 20.47	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-010	Date Collected:	01.03.20 15.02	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	01.08.20 17.11	U	1
Toluene	108-88-3	<0.000533	0.00202	0.000533	mg/kg	01.08.20 17.11	U	1
Ethylbenzene	100-41-4	<0.000410	0.00202	0.000410	mg/kg	01.08.20 17.11	U	1
m,p-Xylenes	179601-23-1	<0.000761	0.00404	0.000761	mg/kg	01.08.20 17.11	U	1
o-Xylene	95-47-6	<0.000407	0.00202	0.000407	mg/kg	01.08.20 17.11	U	1
Total Xylenes	1330-20-7	<0.000407	0.00202	0.000407	mg/kg	01.08.20 17.11	U	1
Total BTEX		<0.000407	0.00202	0.000407	mg/kg	01.08.20 17.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.08.20 17.11	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.08.20 17.11	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-011	Date Collected:	01.03.20 15.04	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**134**	10.0	0.355	mg/kg	01.08.20 15.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.08.20 21.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	**14.3**	50.2	11.5	mg/kg	01.08.20 21.07	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.08.20 21.07	U	1
Total TPH	PHC635	**14.3**	50.2	11.5	mg/kg	01.08.20 21.07	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	01.08.20 21.07	
o-Terphenyl	84-15-1	125	%	70-135	01.08.20 21.07	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-011	Date Collected:	01.03.20 15.04	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000487	0.00201	0.000487	mg/kg	01.08.20 18.15	U	1
Toluene	108-88-3	<0.000530	0.00201	0.000530	mg/kg	01.08.20 18.15	U	1
Ethylbenzene	100-41-4	<0.000408	0.00201	0.000408	mg/kg	01.08.20 18.15	U	1
m,p-Xylenes	179601-23-1	<0.000757	0.00402	0.000757	mg/kg	01.08.20 18.15	U	1
o-Xylene	95-47-6	<0.000405	0.00201	0.000405	mg/kg	01.08.20 18.15	U	1
Total Xylenes	1330-20-7	<0.000405	0.00201	0.000405	mg/kg	01.08.20 18.15	U	1
Total BTEX		<0.000405	0.00201	0.000405	mg/kg	01.08.20 18.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 18.15	
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.08.20 18.15	

Certificate of Analytical Results 648229

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Sample Id:	**FS12**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-012	Date Collected:	01.03.20 15.06	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**145**	9.98	0.353	mg/kg	01.08.20 16.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 12.45	Basis:	Wet Weight
Seq Number:	3112706				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.08.20 21.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	01.08.20 21.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.08.20 21.07	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	01.08.20 21.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	01.08.20 21.07	
o-Terphenyl	84-15-1	121	%	70-135	01.08.20 21.07	

Certificate of Analytical Results 648229

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EMSU Sat Battery

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-012	Date Collected:	01.03.20 15.06	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	01.08.20 18.34	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	01.08.20 18.34	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	01.08.20 18.34	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	01.08.20 18.34	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	01.08.20 18.34	U	1
Total Xylenes	1330-20-7	<0.000406	0.00201	0.000406	mg/kg	01.08.20 18.34	U	1
Total BTEX		<0.000406	0.00201	0.000406	mg/kg	01.08.20 18.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.08.20 18.34	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 18.34	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-013	Date Collected:	01.07.20 09.54	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**540**	10.0	0.354	mg/kg	01.08.20 16.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	01.08.20 22.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	**13.9**	50.1	11.5	mg/kg	01.08.20 22.46	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	01.08.20 22.46	U	1
Total TPH	PHC635	**13.9**	50.1	11.5	mg/kg	01.08.20 22.46	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	01.08.20 22.46	
o-Terphenyl	84-15-1	128	%	70-135	01.08.20 22.46	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-013	Date Collected:	01.07.20 09.54	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	01.08.20 18.53	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	01.08.20 18.53	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	01.08.20 18.53	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	01.08.20 18.53	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	01.08.20 18.53	U	1
Total Xylenes	1330-20-7	<0.000406	0.00202	0.000406	mg/kg	01.08.20 18.53	U	1
Total BTEX		<0.000406	0.00202	0.000406	mg/kg	01.08.20 18.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.08.20 18.53	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.08.20 18.53	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-014	Date Collected:	01.07.20 09.57	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**335**	9.98	0.353	mg/kg	01.08.20 16.34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	01.08.20 22.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	01.08.20 22.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	01.08.20 22.46	U	1
Total TPH	PHC635	<11.4	49.8	11.4	mg/kg	01.08.20 22.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	01.08.20 22.46	
o-Terphenyl	84-15-1	120	%	70-135	01.08.20 22.46	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-014	Date Collected:	01.07.20 09.57	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000487	0.00201	0.000487	mg/kg	01.08.20 19.13	U	1
Toluene	108-88-3	<0.000530	0.00201	0.000530	mg/kg	01.08.20 19.13	U	1
Ethylbenzene	100-41-4	<0.000408	0.00201	0.000408	mg/kg	01.08.20 19.13	U	1
m,p-Xylenes	179601-23-1	<0.000757	0.00402	0.000757	mg/kg	01.08.20 19.13	U	1
o-Xylene	95-47-6	<0.000405	0.00201	0.000405	mg/kg	01.08.20 19.13	U	1
Total Xylenes	1330-20-7	<0.000405	0.00201	0.000405	mg/kg	01.08.20 19.13	U	1
Total BTEX		<0.000405	0.00201	0.000405	mg/kg	01.08.20 19.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.08.20 19.13	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.08.20 19.13	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-015	Date Collected:	01.07.20 10.00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**280**	9.88	0.350	mg/kg	01.08.20 16.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.08.20 23.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	**59.6**	50.2	11.5	mg/kg	01.08.20 23.06	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.08.20 23.06	U	1
Total TPH	PHC635	**59.6**	50.2	11.5	mg/kg	01.08.20 23.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	01.08.20 23.06	
o-Terphenyl	84-15-1	127	%	70-135	01.08.20 23.06	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-015	Date Collected:	01.07.20 10.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.08.20 19.32	U	1
Toluene	108-88-3	<0.000529	0.00200	0.000529	mg/kg	01.08.20 19.32	U	1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	01.08.20 19.32	U	1
m,p-Xylenes	179601-23-1	<0.000755	0.00401	0.000755	mg/kg	01.08.20 19.32	U	1
o-Xylene	95-47-6	<0.000404	0.00200	0.000404	mg/kg	01.08.20 19.32	U	1
Total Xylenes	1330-20-7	<0.000404	0.00200	0.000404	mg/kg	01.08.20 19.32	U	1
Total BTEX		<0.000404	0.00200	0.000404	mg/kg	01.08.20 19.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.08.20 19.32	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.08.20 19.32	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-016	Date Collected:	01.07.20 10.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**48.2**	9.94	0.352	mg/kg	01.08.20 16.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	01.08.20 23.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	**13.7**	50.3	11.5	mg/kg	01.08.20 23.06	j	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	01.08.20 23.06	U	1
Total TPH	PHC635	**13.7**	50.3	11.5	mg/kg	01.08.20 23.06	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	01.08.20 23.06	
o-Terphenyl	84-15-1	117	%	70-135	01.08.20 23.06	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-016	Date Collected:	01.07.20 10.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	01.08.20 19.51	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	01.08.20 19.51	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	01.08.20 19.51	U	1
m,p-Xylenes	179601-23-1	<0.000749	0.00398	0.000749	mg/kg	01.08.20 19.51	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	01.08.20 19.51	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	01.08.20 19.51	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	01.08.20 19.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 19.51	
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.08.20 19.51	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-017	Date Collected:	01.07.20 10.33	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**280**	10.1	0.357	mg/kg	01.08.20 16.50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.9	13.8	mg/kg	01.08.20 23.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	**20.7**	49.9	11.4	mg/kg	01.08.20 23.26	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	01.08.20 23.26	U	1
Total TPH	PHC635	**20.7**	49.9	11.4	mg/kg	01.08.20 23.26	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	01.08.20 23.26	
o-Terphenyl	84-15-1	125	%	70-135	01.08.20 23.26	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-017	Date Collected:	01.07.20 10.33	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000479	0.00197	0.000479	mg/kg	01.08.20 20.10	U	1
Toluene	108-88-3	<0.000520	0.00197	0.000520	mg/kg	01.08.20 20.10	U	1
Ethylbenzene	100-41-4	<0.000401	0.00197	0.000401	mg/kg	01.08.20 20.10	U	1
m,p-Xylenes	179601-23-1	<0.000743	0.00394	0.000743	mg/kg	01.08.20 20.10	U	1
o-Xylene	95-47-6	<0.000398	0.00197	0.000398	mg/kg	01.08.20 20.10	U	1
Total Xylenes	1330-20-7	<0.000398	0.00197	0.000398	mg/kg	01.08.20 20.10	U	1
Total BTEX		<0.000398	0.00197	0.000398	mg/kg	01.08.20 20.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.08.20 20.10	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.08.20 20.10	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-018	Date Collected:	01.07.20 10.43	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**528**	10.0	0.355	mg/kg	01.08.20 16.56		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.08.20 23.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	**54.4**	50.2	11.5	mg/kg	01.08.20 23.26	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.08.20 23.26	U	1
Total TPH	PHC635	**54.4**	50.2	11.5	mg/kg	01.08.20 23.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	01.08.20 23.26	
o-Terphenyl	84-15-1	118	%	70-135	01.08.20 23.26	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-018	Date Collected:	01.07.20 10.43	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	01.08.20 20.29	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	01.08.20 20.29	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	01.08.20 20.29	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	01.08.20 20.29	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	01.08.20 20.29	U	1
Total Xylenes	1330-20-7	<0.000406	0.00202	0.000406	mg/kg	01.08.20 20.29	U	1
Total BTEX		<0.000406	0.00202	0.000406	mg/kg	01.08.20 20.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.08.20 20.29	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.08.20 20.29	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS19**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-019	Date Collected:	01.07.20 11.09	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**537**	9.88	0.350	mg/kg	01.08.20 17.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	49.9	13.9	mg/kg	01.08.20 23.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	**16.2**	49.9	11.4	mg/kg	01.08.20 23.46	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	01.08.20 23.46	U	1
Total TPH	PHC635	**16.2**	49.9	11.4	mg/kg	01.08.20 23.46	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	01.08.20 23.46	
o-Terphenyl	84-15-1	128	%	70-135	01.08.20 23.46	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS19**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-019	Date Collected:	01.07.20 11.09	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	01.08.20 20.48	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	01.08.20 20.48	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	01.08.20 20.48	U	1
m,p-Xylenes	179601-23-1	<0.000749	0.00398	0.000749	mg/kg	01.08.20 20.48	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	01.08.20 20.48	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	01.08.20 20.48	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	01.08.20 20.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.08.20 20.48	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 20.48	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS20**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-020	Date Collected:	01.07.20 13.11	Sample Depth:	0.8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.39	Basis:	Wet Weight
Seq Number:	3112702				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**403**	9.98	0.353	mg/kg	01.08.20 17.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	01.08.20 22.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	01.08.20 22.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	01.08.20 22.07	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	01.08.20 22.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	01.08.20 22.07	
o-Terphenyl	84-15-1	119	%	70-135	01.08.20 22.07	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS20**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-020	Date Collected:	01.07.20 13.11	Sample Depth:	0.8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.19	Basis:	Wet Weight
Seq Number:	3112684				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000481	0.00198	0.000481	mg/kg	01.08.20 21.07	U	1
Toluene	108-88-3	<0.000522	0.00198	0.000522	mg/kg	01.08.20 21.07	U	1
Ethylbenzene	100-41-4	<0.000402	0.00198	0.000402	mg/kg	01.08.20 21.07	U	1
m,p-Xylenes	179601-23-1	<0.000746	0.00396	0.000746	mg/kg	01.08.20 21.07	U	1
o-Xylene	95-47-6	<0.000399	0.00198	0.000399	mg/kg	01.08.20 21.07	U	1
Total Xylenes	1330-20-7	<0.000399	0.00198	0.000399	mg/kg	01.08.20 21.07	U	1
Total BTEX		<0.000399	0.00198	0.000399	mg/kg	01.08.20 21.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.08.20 21.07	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 21.07	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS21**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-021	Date Collected:	01.07.20 11.31	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**425**	9.98	0.353	mg/kg	01.08.20 17.44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	01.08.20 23.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	**23.7**	50.1	11.5	mg/kg	01.08.20 23.46	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	01.08.20 23.46	U	1
Total TPH	PHC635	**23.7**	50.1	11.5	mg/kg	01.08.20 23.46	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	01.08.20 23.46	
o-Terphenyl	84-15-1	118	%	70-135	01.08.20 23.46	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS21**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-021	Date Collected:	01.07.20 11.31	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.08.20 14.20	U	1
Toluene	108-88-3	<0.000529	0.00200	0.000529	mg/kg	01.08.20 14.20	U	1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	01.08.20 14.20	U	1
m,p-Xylenes	179601-23-1	<0.000755	0.00401	0.000755	mg/kg	01.08.20 14.20	U	1
o-Xylene	95-47-6	<0.000404	0.00200	0.000404	mg/kg	01.08.20 14.20	U	1
Total Xylenes	1330-20-7	<0.000404	0.00200	0.000404	mg/kg	01.08.20 14.20	U	1
Total BTEX		<0.000404	0.00200	0.000404	mg/kg	01.08.20 14.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.08.20 14.20	
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.08.20 14.20	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS22**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-022	Date Collected:	01.07.20 11.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**538**	10.0	0.355	mg/kg	01.08.20 18.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.09.20 00.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	**23.1**	50.2	11.5	mg/kg	01.09.20 00.05	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.09.20 00.05	U	1
Total TPH	PHC635	**23.1**	50.2	11.5	mg/kg	01.09.20 00.05	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	01.09.20 00.05	
o-Terphenyl	84-15-1	128	%	70-135	01.09.20 00.05	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS22**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-022	Date Collected:	01.07.20 11.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	01.08.20 14.37	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	01.08.20 14.37	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	01.08.20 14.37	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	01.08.20 14.37	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	01.08.20 14.37	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	01.08.20 14.37	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	01.08.20 14.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.08.20 14.37	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.08.20 14.37	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id: **FS23** Matrix: Soil Date Received:01.08.20 09.46
Lab Sample Id: 648229-023 Date Collected: 01.07.20 12.22 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 01.08.20 14.10 Basis: Wet Weight
Seq Number: 3112708

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.07**	10.1	0.357	mg/kg	01.08.20 18.08	J	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 01.08.20 14.50 Basis: Wet Weight
Seq Number: 3112718

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	01.09.20 00.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	01.09.20 00.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	01.09.20 00.25	U	1
Total TPH	PHC635	<11.5	50.3	11.5	mg/kg	01.09.20 00.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	01.09.20 00.25	
o-Terphenyl	84-15-1	125	%	70-135	01.09.20 00.25	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS23**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-023	Date Collected:	01.07.20 12.22	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000479	0.00197	0.000479	mg/kg	01.08.20 14.55	U	1
Toluene	108-88-3	<0.000520	0.00197	0.000520	mg/kg	01.08.20 14.55	U	1
Ethylbenzene	100-41-4	<0.000401	0.00197	0.000401	mg/kg	01.08.20 14.55	U	1
m,p-Xylenes	179601-23-1	<0.000743	0.00394	0.000743	mg/kg	01.08.20 14.55	U	1
o-Xylene	95-47-6	<0.000398	0.00197	0.000398	mg/kg	01.08.20 14.55	U	1
Total Xylenes	1330-20-7	<0.000398	0.00197	0.000398	mg/kg	01.08.20 14.55	U	1
Total BTEX		<0.000398	0.00197	0.000398	mg/kg	01.08.20 14.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.08.20 14.55	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.08.20 14.55	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS24**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-024	Date Collected:	01.07.20 12.25	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.6**	10.0	0.355	mg/kg	01.08.20 18.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.09.20 00.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	01.09.20 00.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.09.20 00.25	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	01.09.20 00.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	01.09.20 00.25	
o-Terphenyl	84-15-1	117	%	70-135	01.09.20 00.25	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS24**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-024	Date Collected:	01.07.20 12.25	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	01.08.20 15.12	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	01.08.20 15.12	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	01.08.20 15.12	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	01.08.20 15.12	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	01.08.20 15.12	U	1
Total Xylenes	1330-20-7	<0.000406	0.00202	0.000406	mg/kg	01.08.20 15.12	U	1
Total BTEX		<0.000406	0.00202	0.000406	mg/kg	01.08.20 15.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.08.20 15.12	
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.08.20 15.12	

Certificate of Analytical Results 648229

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EMSU Sat Battery

Sample Id:	**FS25**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-025	Date Collected:	01.07.20 12.29	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.3**	9.92	0.351	mg/kg	01.08.20 18.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	01.09.20 00.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.3**	49.8	11.4	mg/kg	01.09.20 00.45	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	01.09.20 00.45	U	1
Total TPH	PHC635	**15.3**	49.8	11.4	mg/kg	01.09.20 00.45	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	01.09.20 00.45	
o-Terphenyl	84-15-1	128	%	70-135	01.09.20 00.45	

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EMSU Sat Battery

Sample Id:	**FS25**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-025	Date Collected:	01.07.20 12.29	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.08.20 15.29	U	1
Toluene	108-88-3	<0.000528	0.00200	0.000528	mg/kg	01.08.20 15.29	U	1
Ethylbenzene	100-41-4	<0.000406	0.00200	0.000406	mg/kg	01.08.20 15.29	U	1
m,p-Xylenes	179601-23-1	<0.000754	0.00400	0.000754	mg/kg	01.08.20 15.29	U	1
o-Xylene	95-47-6	<0.000403	0.00200	0.000403	mg/kg	01.08.20 15.29	U	1
Total Xylenes	1330-20-7	<0.000403	0.00200	0.000403	mg/kg	01.08.20 15.29	U	1
Total BTEX		<0.000403	0.00200	0.000403	mg/kg	01.08.20 15.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.08.20 15.29	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 15.29	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS26**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-026	Date Collected:	01.07.20 12.32	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.6**	9.88	0.350	mg/kg	01.08.20 18.38		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.09.20 00.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	01.09.20 00.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.09.20 00.45	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	01.09.20 00.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	01.09.20 00.45	
o-Terphenyl	84-15-1	118	%	70-135	01.09.20 00.45	

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EMSU Sat Battery

Sample Id:	**FS26**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-026	Date Collected:	01.07.20 12.32	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	01.08.20 15.47	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	01.08.20 15.47	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	01.08.20 15.47	U	1
m,p-Xylenes	179601-23-1	<0.000749	0.00398	0.000749	mg/kg	01.08.20 15.47	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	01.08.20 15.47	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	01.08.20 15.47	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	01.08.20 15.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.08.20 15.47	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.08.20 15.47	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS27**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-027	Date Collected:	01.07.20 13.01	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.67**	9.98	0.353	mg/kg	01.08.20 18.44	J	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**15.5**	50.3	14.0	mg/kg	01.09.20 01.05	J	1
Diesel Range Organics (DRO)	C10C28DRO	**12.8**	50.3	11.5	mg/kg	01.09.20 01.05	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	01.09.20 01.05	U	1
Total TPH	PHC635	**28.3**	50.3	11.5	mg/kg	01.09.20 01.05	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	01.09.20 01.05	
o-Terphenyl	84-15-1	123	%	70-135	01.09.20 01.05	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS27**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-027	Date Collected:	01.07.20 13.01	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000480	0.00198	0.000480	mg/kg	01.08.20 16.04	U	1
Toluene	108-88-3	<0.000521	0.00198	0.000521	mg/kg	01.08.20 16.04	U	1
Ethylbenzene	100-41-4	<0.000401	0.00198	0.000401	mg/kg	01.08.20 16.04	U	1
m,p-Xylenes	179601-23-1	<0.000745	0.00395	0.000745	mg/kg	01.08.20 16.04	U	1
o-Xylene	95-47-6	<0.000398	0.00198	0.000398	mg/kg	01.08.20 16.04	U	1
Total Xylenes	1330-20-7	<0.000398	0.00198	0.000398	mg/kg	01.08.20 16.04	U	1
Total BTEX		<0.000398	0.00198	0.000398	mg/kg	01.08.20 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.08.20 16.04	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.08.20 16.04	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS28**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-028	Date Collected:	01.07.20 15.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1730**	49.4	1.75	mg/kg	01.08.20 18.51		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	01.09.20 01.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	01.09.20 01.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	01.09.20 01.05	U	1
Total TPH	PHC635	<11.5	50.3	11.5	mg/kg	01.09.20 01.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	01.09.20 01.05	
o-Terphenyl	84-15-1	114	%	70-135	01.09.20 01.05	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS28**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-028	Date Collected:	01.07.20 15.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.08.20 16.22	U	1
Toluene	108-88-3	<0.000528	0.00200	0.000528	mg/kg	01.08.20 16.22	U	1
Ethylbenzene	100-41-4	<0.000406	0.00200	0.000406	mg/kg	01.08.20 16.22	U	1
m,p-Xylenes	179601-23-1	<0.000754	0.00400	0.000754	mg/kg	01.08.20 16.22	U	1
o-Xylene	95-47-6	<0.000403	0.00200	0.000403	mg/kg	01.08.20 16.22	U	1
Total Xylenes	1330-20-7	<0.000403	0.00200	0.000403	mg/kg	01.08.20 16.22	U	1
Total BTEX		<0.000403	0.00200	0.000403	mg/kg	01.08.20 16.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.08.20 16.22	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.08.20 16.22	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id: **FS29** Matrix: Soil Date Received:01.08.20 09.46
Lab Sample Id: 648229-029 Date Collected: 01.07.20 15.39 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 01.08.20 14.10 Basis: Wet Weight
Seq Number: 3112708

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**112**	49.6	1.76	mg/kg	01.08.20 18.57		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 01.08.20 14.50 Basis: Wet Weight
Seq Number: 3112718

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.6**	50.2	13.9	mg/kg	01.09.20 01.24	J	1
Diesel Range Organics (DRO)	C10C28DRO	**13.4**	50.2	11.5	mg/kg	01.09.20 01.24	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.09.20 01.24	U	1
Total TPH	PHC635	**30.0**	50.2	11.5	mg/kg	01.09.20 01.24	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	01.09.20 01.24	
o-Terphenyl	84-15-1	125	%	70-135	01.09.20 01.24	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS29**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-029	Date Collected:	01.07.20 15.39	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	01.08.20 16.39	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	01.08.20 16.39	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	01.08.20 16.39	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	01.08.20 16.39	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	01.08.20 16.39	U	1
Total Xylenes	1330-20-7	<0.000406	0.00201	0.000406	mg/kg	01.08.20 16.39	U	1
Total BTEX		<0.000406	0.00201	0.000406	mg/kg	01.08.20 16.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.08.20 16.39	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.08.20 16.39	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS30**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-030	Date Collected:	01.07.20 15.42	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**395**	50.4	1.78	mg/kg	01.08.20 19.03		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	01.09.20 01.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	01.09.20 01.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.09.20 01.24	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	01.09.20 01.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	01.09.20 01.24	
o-Terphenyl	84-15-1	115	%	70-135	01.09.20 01.24	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS30**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-030	Date Collected:	01.07.20 15.42	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.08.20 16.56	U	1
Toluene	108-88-3	<0.000528	0.00200	0.000528	mg/kg	01.08.20 16.56	U	1
Ethylbenzene	100-41-4	<0.000406	0.00200	0.000406	mg/kg	01.08.20 16.56	U	1
m,p-Xylenes	179601-23-1	<0.000754	0.00400	0.000754	mg/kg	01.08.20 16.56	U	1
o-Xylene	95-47-6	<0.000403	0.00200	0.000403	mg/kg	01.08.20 16.56	U	1
Total Xylenes	1330-20-7	<0.000403	0.00200	0.000403	mg/kg	01.08.20 16.56	U	1
Total BTEX		<0.000403	0.00200	0.000403	mg/kg	01.08.20 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.08.20 16.56	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.08.20 16.56	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS31**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-031	Date Collected:	01.07.20 15.59	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**810**	50.5	1.79	mg/kg	01.08.20 19.09		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**15.6**	50.1	13.9	mg/kg	01.09.20 01.44	J	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	01.09.20 01.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	01.09.20 01.44	U	1
Total TPH	PHC635	**15.6**	50.1	11.5	mg/kg	01.09.20 01.44	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	01.09.20 01.44	
o-Terphenyl	84-15-1	124	%	70-135	01.09.20 01.44	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS31**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-031	Date Collected:	01.07.20 15.59	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000482	0.00198	0.000482	mg/kg	01.08.20 18.05	U	1
Toluene	108-88-3	<0.000524	0.00198	0.000524	mg/kg	01.08.20 18.05	U	1
Ethylbenzene	100-41-4	<0.000403	0.00198	0.000403	mg/kg	01.08.20 18.05	U	1
m,p-Xylenes	179601-23-1	<0.000748	0.00397	0.000748	mg/kg	01.08.20 18.05	U	1
o-Xylene	95-47-6	<0.000400	0.00198	0.000400	mg/kg	01.08.20 18.05	U	1
Total Xylenes	1330-20-7	<0.000400	0.00198	0.000400	mg/kg	01.08.20 18.05	U	1
Total BTEX		<0.000400	0.00198	0.000400	mg/kg	01.08.20 18.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.08.20 18.05	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.08.20 18.05	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS32**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-032	Date Collected:	01.07.20 16.02	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.4**	9.98	0.353	mg/kg	01.08.20 19.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 14.50	Basis:	Wet Weight
Seq Number:	3112718				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	01.09.20 01.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	01.09.20 01.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	01.09.20 01.44	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	01.09.20 01.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	01.09.20 01.44	
o-Terphenyl	84-15-1	115	%	70-135	01.09.20 01.44	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS32**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-032	Date Collected:	01.07.20 16.02	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000480	0.00198	0.000480	mg/kg	01.08.20 18.23	U	1
Toluene	108-88-3	<0.000521	0.00198	0.000521	mg/kg	01.08.20 18.23	U	1
Ethylbenzene	100-41-4	<0.000401	0.00198	0.000401	mg/kg	01.08.20 18.23	U	1
m,p-Xylenes	179601-23-1	<0.000745	0.00395	0.000745	mg/kg	01.08.20 18.23	U	1
o-Xylene	95-47-6	<0.000398	0.00198	0.000398	mg/kg	01.08.20 18.23	U	1
Total Xylenes	1330-20-7	<0.000398	0.00198	0.000398	mg/kg	01.08.20 18.23	U	1
Total BTEX		<0.000398	0.00198	0.000398	mg/kg	01.08.20 18.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.08.20 18.23	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.08.20 18.23	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS33**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-033	Date Collected:	01.07.20 16.07	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.10	Basis:	Wet Weight
Seq Number:	3112708				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**26.9**	9.98	0.353	mg/kg	01.08.20 19.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 15.50	Basis:	Wet Weight
Seq Number:	3112724				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**15.8**	50.2	13.9	mg/kg	01.09.20 05.40	J	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	01.09.20 05.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	01.09.20 05.40	U	1
Total TPH	PHC635	**15.8**	50.2	11.5	mg/kg	01.09.20 05.40	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	01.09.20 05.40	
o-Terphenyl	84-15-1	114	%	70-135	01.09.20 05.40	

Certificate of Analytical Results 648229

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS33**	Matrix:	Soil	Date Received:	01.08.20 09.46
Lab Sample Id:	648229-033	Date Collected:	01.07.20 16.07	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 11.00	Basis:	Wet Weight
Seq Number:	3112686				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	01.08.20 18.40	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	01.08.20 18.40	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	01.08.20 18.40	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	01.08.20 18.40	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	01.08.20 18.40	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	01.08.20 18.40	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	01.08.20 18.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.08.20 18.40	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.08.20 18.40	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 648229

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112702 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693905-1-BLK — LCS Sample Id: 7693905-1-BKS — LCSD Sample Id: 7693905-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	251	100	251	100	90-110	0	20	mg/kg	01.08.20 13:22	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112708 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693907-1-BLK — LCS Sample Id: 7693907-1-BKS — LCSD Sample Id: 7693907-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	254	102	257	103	90-110	1	20	mg/kg	01.08.20 17:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112702 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648229-001 — MS Sample Id: 648229-001 S — MSD Sample Id: 648229-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	112	201	338	112	340	114	90-110	1	20	mg/kg	01.08.20 14:30	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112702 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648229-011 — MS Sample Id: 648229-011 S — MSD Sample Id: 648229-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	134	200	343	105	345	106	90-110	1	20	mg/kg	01.08.20 16:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112708 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648229-021 — MS Sample Id: 648229-021 S — MSD Sample Id: 648229-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	425	199	633	105	633	104	90-110	0	20	mg/kg	01.08.20 17:50	

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

QC Summary 648229

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3112708 Matrix: Soil Date Prep: 01.08.20
Parent Sample Id: 648229-031 MS Sample Id: 648229-031 S MSD Sample Id: 648229-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	810	1010	1910	109	1880	108	90-110	2	20	mg/kg	01.08.20 19:15	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3112706 Matrix: Solid Date Prep: 01.08.20
MB Sample Id: 7693906-1-BLK LCS Sample Id: 7693906-1-BKS LCSD Sample Id: 7693906-1-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)	<13.9	1000	1280	128	1160	116	70-135	10	35	mg/kg	01.08.20 17:09	
Diesel Range Organics (DRO)	<11.5	1000	1240	124	1040	104	70-135	18	35	mg/kg	01.08.20 17:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		130		118		70-135	%	01.08.20 17:09
o-Terphenyl	124		127		90		70-135	%	01.08.20 17:09

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3112718 Matrix: Solid Date Prep: 01.08.20
MB Sample Id: 7693936-1-BLK LCS Sample Id: 7693936-1-BKS LCSD Sample Id: 7693936-1-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)	<13.9	1000	1320	132	1120	112	70-135	16	35	mg/kg	01.08.20 21:47	
Diesel Range Organics (DRO)	<11.5	1000	1250	125	1010	101	70-135	21	35	mg/kg	01.08.20 21:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		134		115		70-135	%	01.08.20 21:47
o-Terphenyl	124		123		89		70-135	%	01.08.20 21:47

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3112724 Matrix: Solid Date Prep: 01.08.20
MB Sample Id: 7693951-1-BLK LCS Sample Id: 7693951-1-BKS LCSD Sample Id: 7693951-1-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)	<13.9	1000	1140	114	1200	120	70-135	5	35	mg/kg	01.09.20 02:23	
Diesel Range Organics (DRO)	<11.5	1000	1100	110	1100	110	70-135	0	35	mg/kg	01.09.20 02:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		108		129		70-135	%	01.09.20 02:23
o-Terphenyl	118		100		101		70-135	%	01.09.20 02:23

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 648229

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112706 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693906-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	01.08.20 17:09	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112718 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693936-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	01.08.20 17:09	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112724 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693951-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	01.09.20 02:23	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112706 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648193-019 — MS Sample Id: 648193-019 S — MSD Sample Id: 648193-019 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)	<13.9	1000	1240	124	1340	135	70-135	8	35	mg/kg	01.09.20 10:17	
Diesel Range Organics (DRO)	<11.5	1000	1170	117	1270	128	70-135	8	35	mg/kg	01.09.20 10:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		135		70-135	%	01.09.20 10:17
o-Terphenyl	100		133		70-135	%	01.09.20 10:17

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

QC Summary 648229

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3112718 | Matrix: Soil | Date Prep: 01.08.20
Parent Sample Id: 648229-020 | MS Sample Id: 648229-020 S | MSD Sample Id: 648229-020 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)	<13.9	1000	1210	121	1230	123	70-135	2	35	mg/kg	01.09.20 10:57	
Diesel Range Organics (DRO)	<11.5	1000	1140	114	1140	114	70-135	0	35	mg/kg	01.09.20 10:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		108		70-135	%	01.09.20 10:57
o-Terphenyl	115		99		70-135	%	01.09.20 10:57

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3112724 | Matrix: Soil | Date Prep: 01.08.20
Parent Sample Id: 648245-002 | MS Sample Id: 648245-002 S | MSD Sample Id: 648245-002 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)	<13.9	998	1200	120	1220	122	70-135	2	35	mg/kg	01.09.20 11:36	
Diesel Range Organics (DRO)	<11.4	998	1110	111	1120	112	70-135	1	35	mg/kg	01.09.20 11:36	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		129		70-135	%	01.09.20 11:36
o-Terphenyl	101		99		70-135	%	01.09.20 11:36

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3112686 | Matrix: Solid | Date Prep: 01.08.20
MB Sample Id: 7693911-1-BLK | LCS Sample Id: 7693911-1-BKS | LCSD Sample Id: 7693911-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.0938	94	0.0920	92	70-130	2	35	mg/kg	01.08.20 12:36	
Toluene	<0.000528	0.100	0.0942	94	0.0921	92	70-130	2	35	mg/kg	01.08.20 12:36	
Ethylbenzene	<0.000406	0.100	0.0924	92	0.0906	91	71-129	2	35	mg/kg	01.08.20 12:36	
m,p-Xylenes	<0.000754	0.200	0.191	96	0.187	94	70-135	2	35	mg/kg	01.08.20 12:36	
o-Xylene	<0.000403	0.100	0.0929	93	0.0910	91	71-133	2	35	mg/kg	01.08.20 12:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		98		98		70-130	%	01.08.20 12:36
4-Bromofluorobenzene	104		97		98		70-130	%	01.08.20 12:36

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

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

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

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

QC Summary 648229

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3112684 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693909-1-BLK — LCS Sample Id: 7693909-1-BKS — LCSD Sample Id: 7693909-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.117	117	0.120	120	70-130	3	35	mg/kg	01.08.20 12:37	
Toluene	<0.000528	0.100	0.117	117	0.117	117	70-130	0	35	mg/kg	01.08.20 12:37	
Ethylbenzene	<0.000406	0.100	0.120	120	0.119	119	71-129	1	35	mg/kg	01.08.20 12:37	
m,p-Xylenes	<0.000754	0.200	0.243	122	0.238	119	70-135	2	35	mg/kg	01.08.20 12:37	
o-Xylene	<0.000403	0.100	0.120	120	0.118	118	71-133	2	35	mg/kg	01.08.20 12:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		105		70-130	%	01.08.20 12:37
4-Bromofluorobenzene	100		108		106		70-130	%	01.08.20 12:37

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3112686 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648229-021 — MS Sample Id: 648229-021 S — MSD Sample Id: 648229-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000490	0.101	0.115	114	0.119	119	70-130	3	35	mg/kg	01.08.20 13:10	
Toluene	<0.000533	0.101	0.115	114	0.120	120	70-130	4	35	mg/kg	01.08.20 13:10	
Ethylbenzene	<0.000410	0.101	0.112	111	0.116	116	71-129	4	35	mg/kg	01.08.20 13:10	
m,p-Xylenes	<0.000761	0.202	0.230	114	0.240	120	70-135	4	35	mg/kg	01.08.20 13:10	
o-Xylene	<0.000407	0.101	0.112	111	0.117	117	71-133	4	35	mg/kg	01.08.20 13:10	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		70-130	%	01.08.20 13:10
4-Bromofluorobenzene	105		106		70-130	%	01.08.20 13:10

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3112684 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648229-001 — MS Sample Id: 648229-001 S — MSD Sample Id: 648229-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.101	101	0.0995	101	70-130	1	35	mg/kg	01.09.20 03:04	
Toluene	<0.000528	0.100	0.0988	99	0.0960	97	70-130	3	35	mg/kg	01.09.20 03:04	
Ethylbenzene	<0.000406	0.100	0.0973	97	0.0922	93	71-129	5	35	mg/kg	01.09.20 03:04	
m,p-Xylenes	0.000775	0.200	0.194	97	0.184	93	70-135	5	35	mg/kg	01.09.20 03:04	
o-Xylene	<0.000403	0.100	0.0986	99	0.0933	94	71-133	6	35	mg/kg	01.09.20 03:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		104		70-130	%	01.09.20 03:04
4-Bromofluorobenzene	111		113		70-130	%	01.09.20 03:04

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: 648229

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

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

Work Order Comments

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

Project Name:	EMSU Sat Battery	Turn Around	
Project Number:	012919256	Routine: ☐	
PO #:	IRP-5741	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.4	Thermometer ID	T-NM-007
Received Intact:	(Yes) No	Correction Factor:	-0.2
Cooler Custody Seals:	Yes (No) N/A	Total Containers:	33
Sample Custody Seals:	Yes (No) N/A		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS01	S	1/3/20	1332	0.5	1	X	X	X
FS02			1341					
FS03			1344					
FS04			1359					
FS05			1401					
FS06			1442					
FS07			1445					
FS08			1456					
FS09			1459					
FS10	↓	↓	1502	↓	↓	↓	↓	↓

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			01/08/20 @ 0910	2		1/8/20 9416
3				4		
5				6		

Revised Date101419 Rev. 2019.1

Chain of Custody

Work Order No: 648229

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

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

Work Order Comments

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

Project Name:	EMSU Sat Battery	Turn Around	
Project Number:	012919255	Routine: ☐	
PO #:	IRP-5741	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID	See Pg 1
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS11	S	1/3/20	1504	0.5	1	X	X	X	
FS12		1/3/20	1506	0.5					
FS13		1/7/20	0954	0.5					
FS14		1/7/20	0957	0.5					
FS15		1/7/20	1000	0.5					
FS16			1030	0.5					
FS17			1033	0.5					
FS18			1043	0.5					
FS19			1109	0.5					
FS20	↓	↓	1311	0.5	↓	↓	↓	↓	

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	Fatima Smith	Robert Murphy	01/08/20 @ 0910	2 Robert Murphy		1/8/20 944
3				4		
5				6		

Revised Date101419 Rev. 2019.1

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 648229

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

Work Order Comments

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

Project Name:	EMSU Sat Battery	Turn Around	
Project Number:	01291925S	Routine: ☐	
PO #:	IRP-5741	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):		Temp Blank: Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID	See 99
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS21	S	1/7/20	1131	0.5	1	X	X	X
FS22			1135					
FS23			1222					
FS24			1225					
FS25			1229					
FS26			1232					
FS27			1301					
FS28			1535					
FS29			1539					
FS30			1542					

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			01/08/20 @0910	2		1/8/20 946
3				4		
5				6		

Revised Date101419 Rev. 2019.1

XENCO LABORATORIES

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 648229

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

Work Order Comments

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

Project Name:	EMSU Sat Battery	Turn Around	
Project Number:	012919255	Routine: ☐	
PO #:	IRP-5741	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS31	S	1/7/20	1559	0.5	1	X	X	X	
FS32	S	1/7/20	1602	0.5	1	X	X	X	
FS33	S	1/7/20	1607	0.5	1	X	X	X	

Work Order Notes

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

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	[signature]	[signature]	01/08/20 @ 0910	2	[signature]	[signature]	1/8/20 740
3				4			
5				6			

Revised Date101419 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 01/08/2020 09:46:00 AM

Work Order #: 648229

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

Temperature Measuring device used : T-NM-007

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

*** 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: 01/08/2020

Checklist reviewed by: Jessica Kramer Date: 01/09/2020

Jessica Kramer

Analytical Report 648380

for

LT Environmental, Inc.

Project Manager: Dan Moir

EMSU Sat Battery

012919155

10-JAN-20

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)

10-JAN-20

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

Reference: XENCO Report No(s): **648380**
EMSU Sat 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) 648380. 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. 648380 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Sample Cross Reference 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS34	S	01-08-20 08:52	0.5 ft	648380-001
FS35	S	01-08-20 08:56	0.5 ft	648380-002
FS36	S	01-08-20 09:00	0.5 ft	648380-003
FS37	S	01-08-20 09:03	0.5 ft	648380-004
FS38	S	01-08-20 09:07	0.5 ft	648380-005
FS39	S	01-08-20 09:12	0.5 ft	648380-006
FS40	S	01-08-20 09:50	0.5 ft	648380-007
FS41	S	01-08-20 09:52	0.5 ft	648380-008
FS42	S	01-08-20 09:55	0.5 ft	648380-009
FS43	S	01-08-20 10:00	0.5 ft	648380-010
FS44	S	01-08-20 10:02	0.5 ft	648380-011
FS45	S	01-08-20 10:32	0.5 ft	648380-012
FS46	S	01-08-20 10:35	0.5 ft	648380-013
FS47	S	01-08-20 10:38	0.5 ft	648380-014
FS48	S	01-08-20 10:42	0.5 ft	648380-015
FS49	S	01-08-20 10:46	0.5 ft	648380-016
FS50	S	01-08-20 11:13	0.5 ft	648380-017
FS51	S	01-08-20 11:17	0.5 ft	648380-018
FS52	S	01-08-20 11:21	0.5 ft	648380-019
FS53	S	01-08-20 11:23	0.5 ft	648380-020

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: EMSU Sat Battery

Project ID: *012919155*
Work Order Number(s): *648380*

Report Date: *10-JAN-20*
Date Received: *01/08/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3112691 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3112697 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 648380-020 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, o-Xylene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 648380-014, -015, -016, -017, -018, -019, -020.
The Laboratory Control Sample for Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3112716 Chloride by EPA 300
Lab Sample ID 648380-017 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 648380-007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 648380

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919155
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 03:22 pm
Report Date: 10-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648380-001		648380-002		648380-003		648380-004		648380-005		648380-006	
	Field Id:	FS34		FS35		FS36		FS37		FS38		FS39	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-08-20 08:52		Jan-08-20 08:56		Jan-08-20 09:00		Jan-08-20 09:03		Jan-08-20 09:07		Jan-08-20 09:12	
BTEX by EPA 8021B	***Extracted:***	** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **	
	Analyzed:	Jan-09-20 02:26		Jan-09-20 02:45		Jan-09-20 04:47		Jan-09-20 05:06		Jan-09-20 05:25		Jan-09-20 05:44	
	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	<0.00198	0.00198	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Toluene		<0.00201	0.00201	<0.00202	0.00202	<0.00198	0.00198	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202	<0.00198	0.00198	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
m,p-Xylenes		<0.00402	0.00402	<0.00405	0.00405	<0.00396	0.00396	<0.00396	0.00396	<0.00402	0.00402	<0.00404	0.00404
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00198	0.00198	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00198	0.00198	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Total BTEX		<0.00201	0.00201	<0.00202	0.00202	<0.00198	0.00198	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202
Chloride by EPA 300	***Extracted:***	Jan-08-20 16:00		Jan-08-20 16:00		Jan-08-20 16:00		Jan-08-20 16:00		Jan-08-20 16:00		Jan-08-20 16:00	
	Analyzed:	Jan-08-20 23:09		Jan-08-20 23:14		Jan-08-20 23:20		Jan-08-20 23:25		Jan-08-20 23:30		Jan-08-20 23:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		43.6	10.0	<9.96	9.96	16.5	9.90	90.8	9.98	49.3	9.94	10.4	10.0
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 15:50		Jan-08-20 15:50		Jan-08-20 15:50		Jan-08-20 15:50		Jan-08-20 15:50		Jan-08-20 18:00	
	Analyzed:	Jan-09-20 05:40		Jan-09-20 06:00		Jan-09-20 06:00		Jan-09-20 06:20		Jan-09-20 06:20		Jan-09-20 15:57	
	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	<50.3	50.3	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.2	50.2
Diesel Range Organics (DRO)		<50.1	50.1	<50.3	50.3	<50.0	50.0	<49.9	49.9	<49.8	49.8	89.4	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.3	50.3	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.2	50.2
Total GRO-DRO		<50.1	50.1	<50.3	50.3	<50.0	50.0	<49.9	49.9	<49.8	49.8	89.4	50.2
Total TPH		<50.1	50.1	<50.3	50.3	<50.0	50.0	<49.9	49.9	<49.8	49.8	89.4	50.2

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648380

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919155
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 03:22 pm
Report Date: 10-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648380-007		648380-008		648380-009		648380-010		648380-011		648380-012	
	Field Id:	FS40		FS41		FS42		FS43		FS44		FS45	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-08-20 09:50		Jan-08-20 09:52		Jan-08-20 09:55		Jan-08-20 10:00		Jan-08-20 10:02		Jan-08-20 10:32	
BTEX by EPA 8021B	***Extracted:***	** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **	
	Analyzed:	Jan-09-20 06:03		Jan-09-20 06:22		Jan-09-20 06:41		Jan-09-20 07:00		Jan-09-20 07:20		Jan-09-20 07:39	
	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	<0.00201	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Toluene		<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
m,p-Xylenes		<0.00404	0.00404	<0.00402	0.00402	<0.00402	0.00402	<0.00402	0.00402	<0.00400	0.00400	<0.00404	0.00404
o-Xylene		<0.00202	0.00202	0.00302	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Total Xylenes		<0.00202	0.00202	0.00302	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Total BTEX		<0.00202	0.00202	0.00302	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Chloride by EPA 300	***Extracted:***	Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13	
	Analyzed:	Jan-09-20 00:08		Jan-09-20 00:24		Jan-09-20 00:30		Jan-09-20 00:35		Jan-09-20 00:40		Jan-09-20 00:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		37.8	10.1	173	9.88	142	9.88	166	9.96	14.5	9.82	164	9.94
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00	
	Analyzed:	Jan-09-20 07:19		Jan-09-20 07:58		Jan-09-20 08:18		Jan-09-20 08:18		Jan-09-20 08:38		Jan-09-20 08:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<50.2	50.2	<50.0	50.0	<49.8	49.8	<50.3	50.3	<49.8	49.8
Diesel Range Organics (DRO)		66.1	50.3	<50.2	50.2	305	50.0	755	49.8	128	50.3	101	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.2	50.2	67.7	50.0	144	49.8	<50.3	50.3	<49.8	49.8
Total GRO-DRO		66.1	50.3	<50.2	50.2	305	50.0	755	49.8	128	50.3	101	49.8
Total TPH		66.1	50.3	<50.2	50.2	373	50.0	899	49.8	128	50.3	101	49.8

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648380

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919155
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 03:22 pm
Report Date: 10-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648380-013		648380-014		648380-015		648380-016		648380-017		648380-018	
	Field Id:	FS46		FS47		FS48		FS49		FS50		FS51	
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-08-20 10:35		Jan-08-20 10:38		Jan-08-20 10:42		Jan-08-20 10:46		Jan-08-20 11:13		Jan-08-20 11:17	
BTEX by EPA 8021B	***Extracted:***	** ** ** **		Jan-08-20 17:01		Jan-08-20 17:01		Jan-08-20 17:01		Jan-08-20 17:01		Jan-08-20 17:01	
	Analyzed:	Jan-09-20 07:58		Jan-09-20 00:20		Jan-09-20 01:47		Jan-09-20 00:38		Jan-09-20 00:55		Jan-09-20 01:12	
	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	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00404	0.00404	<0.00404	0.00404	<0.00403	0.00403	<0.00404	0.00404	<0.00401	0.00401	<0.00398	0.00398
o-Xylene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199
Total Xylenes		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199
Chloride by EPA 300	***Extracted:***	Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13		Jan-08-20 17:13	
	Analyzed:	Jan-09-20 01:02		Jan-09-20 01:07		Jan-09-20 01:13		Jan-09-20 01:18		Jan-09-20 01:23		Jan-09-20 01:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		263	9.92	88.2	9.88	278	9.94	18.3	9.96	120	9.98	150	10.1
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00		Jan-08-20 18:00	
	Analyzed:	Jan-09-20 08:57		Jan-09-20 08:57		Jan-09-20 09:17		Jan-09-20 09:37		Jan-09-20 09:37		Jan-09-20 09:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<50.2	50.2
Diesel Range Organics (DRO)		751	50.2	735	50.0	1960	50.0	414	50.0	906	49.8	236	50.2
Motor Oil Range Hydrocarbons (MRO)		94.5	50.2	115	50.0	326	50.0	111	50.0	157	49.8	54.8	50.2
Total GRO-DRO		751	50.2	735	50.0	1960	50.0	414	50.0	906	49.8	236	50.2
Total TPH		846	50.2	850	50.0	2290	50.0	525	50.0	1060	49.8	291	50.2

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648380

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Sat Battery

Project Id: 012919155
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Jan-08-20 03:22 pm
Report Date: 10-JAN-20
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	648380-019		648380-020					
	Field Id:	FS52		FS53					
	Depth:	0.5- ft		0.5- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jan-08-20 11:21		Jan-08-20 11:23					
BTEX by EPA 8021B	***Extracted:***	Jan-08-20 17:01		Jan-08-20 17:01					
	Analyzed:	Jan-09-20 01:30		Jan-09-20 00:03					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00202	0.00202				
Toluene		<0.00200	0.00200	<0.00202	0.00202				
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202				
m,p-Xylenes		<0.00400	0.00400	<0.00404	0.00404				
o-Xylene		<0.00200	0.00200	<0.00202	0.00202				
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202				
Total BTEX		<0.00200	0.00200	<0.00202	0.00202				
Chloride by EPA 300	***Extracted:***	Jan-08-20 17:13		Jan-08-20 17:13					
	Analyzed:	Jan-09-20 01:45		Jan-09-20 01:50					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		106	9.82	16.2	9.92				
TPH by SW8015 Mod	***Extracted:***	Jan-08-20 18:00		Jan-08-20 18:00					
	Analyzed:	Jan-09-20 09:57		Jan-09-20 12:16					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.1	50.1				
Diesel Range Organics (DRO)		148	49.8	<50.1	50.1				
Motor Oil Range Hydrocarbons (MRO)		51.0	49.8	<50.1	50.1				
Total GRO-DRO		148	49.8	<50.1	50.1				
Total TPH		199	49.8	<50.1	50.1				

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS34**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-001	Date Collected:	01.08.20 08.52	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 16.00	Basis:	Wet Weight
Seq Number:	3112712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.6**	10.0	mg/kg	01.08.20 23.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 15.50	Basis:	Wet Weight
Seq Number:	3112724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	01.09.20 05.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	01.09.20 05.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	01.09.20 05.40	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	01.09.20 05.40	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	01.09.20 05.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	01.09.20 05.40	
o-Terphenyl	84-15-1	124	%	70-135	01.09.20 05.40	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS34**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-001	Date Collected:	01.08.20 08.52	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.09.20 02.26	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.09.20 02.26	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.09.20 02.26	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.09.20 02.26	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.09.20 02.26	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.09.20 02.26	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.09.20 02.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.09.20 02.26	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.09.20 02.26	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS35**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-002	Date Collected:	01.08.20 08.56	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 16.00	Basis:	Wet Weight
Seq Number:	3112712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.96	9.96	mg/kg	01.08.20 23.14	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 15.50	Basis:	Wet Weight
Seq Number:	3112724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.09.20 06.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	01.09.20 06.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.09.20 06.00	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	01.09.20 06.00	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	01.09.20 06.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	01.09.20 06.00	
o-Terphenyl	84-15-1	134	%	70-135	01.09.20 06.00	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS35**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-002	Date Collected:	01.08.20 08.56	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 02.45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 02.45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 02.45	U	1
m,p-Xylenes	179601-23-1	<0.00405	0.00405	mg/kg	01.09.20 02.45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 02.45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 02.45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 02.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.09.20 02.45	
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.09.20 02.45	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS36**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-003	Date Collected:	01.08.20 09.00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 16.00	Basis:	Wet Weight
Seq Number:	3112712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.5**	9.90	mg/kg	01.08.20 23.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 15.50	Basis:	Wet Weight
Seq Number:	3112724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.09.20 06.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.09.20 06.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.09.20 06.00	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	01.09.20 06.00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.09.20 06.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	01.09.20 06.00	
o-Terphenyl	84-15-1	124	%	70-135	01.09.20 06.00	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS36**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-003	Date Collected:	01.08.20 09.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.09.20 04.47	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.09.20 04.47	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.09.20 04.47	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.09.20 04.47	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.09.20 04.47	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.09.20 04.47	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.09.20 04.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.09.20 04.47	
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.09.20 04.47	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS37**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-004	Date Collected:	01.08.20 09.03	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 16.00	Basis:	Wet Weight
Seq Number:	3112712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**90.8**	9.98	mg/kg	01.08.20 23.25		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 15.50	Basis:	Wet Weight
Seq Number:	3112724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.09.20 06.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.09.20 06.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.09.20 06.20	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	01.09.20 06.20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.09.20 06.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	01.09.20 06.20	
o-Terphenyl	84-15-1	118	%	70-135	01.09.20 06.20	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS37**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-004	Date Collected:	01.08.20 09.03	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.09.20 05.06	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.09.20 05.06	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.09.20 05.06	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.09.20 05.06	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.09.20 05.06	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.09.20 05.06	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.09.20 05.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.09.20 05.06	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.09.20 05.06	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS38**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-005	Date Collected:	01.08.20 09.07	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 16.00	Basis:	Wet Weight
Seq Number:	3112712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.3**	9.94	mg/kg	01.08.20 23.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 15.50	Basis:	Wet Weight
Seq Number:	3112724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.09.20 06.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.09.20 06.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.09.20 06.20	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	01.09.20 06.20	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.09.20 06.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	01.09.20 06.20	
o-Terphenyl	84-15-1	125	%	70-135	01.09.20 06.20	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS38**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-005	Date Collected:	01.08.20 09.07	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.09.20 05.25	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.09.20 05.25	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.09.20 05.25	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.09.20 05.25	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.09.20 05.25	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.09.20 05.25	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.09.20 05.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.09.20 05.25	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.09.20 05.25	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS39**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-006	Date Collected:	01.08.20 09.12	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 16.00	Basis:	Wet Weight
Seq Number:	3112712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.4**	10.0	mg/kg	01.08.20 23.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.09.20 15.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**89.4**	50.2	mg/kg	01.09.20 15.57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.09.20 15.57	U	1
Total GRO-DRO	PHC628	**89.4**	50.2	mg/kg	01.09.20 15.57		1
Total TPH	PHC635	**89.4**	50.2	mg/kg	01.09.20 15.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	01.09.20 15.57	
o-Terphenyl	84-15-1	105	%	70-135	01.09.20 15.57	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS39**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-006	Date Collected:	01.08.20 09.12	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 05.44	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 05.44	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 05.44	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 05.44	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 05.44	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 05.44	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 05.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.09.20 05.44	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.09.20 05.44	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS40**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-007	Date Collected:	01.08.20 09.50	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.8**	10.1	mg/kg	01.09.20 00.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.09.20 07.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	**66.1**	50.3	mg/kg	01.09.20 07.19		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.09.20 07.19	U	1
Total GRO-DRO	PHC628	**66.1**	50.3	mg/kg	01.09.20 07.19		1
Total TPH	PHC635	**66.1**	50.3	mg/kg	01.09.20 07.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	01.09.20 07.19	
o-Terphenyl	84-15-1	127	%	70-135	01.09.20 07.19	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS40**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-007	Date Collected:	01.08.20 09.50	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 06.03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 06.03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 06.03	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 06.03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 06.03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 06.03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.09.20 06.03	
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.09.20 06.03	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS41**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-008	Date Collected:	01.08.20 09.52	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	9.88	mg/kg	01.09.20 00.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.09.20 07.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.09.20 07.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.09.20 07.58	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.09.20 07.58	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.09.20 07.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	01.09.20 07.58	
o-Terphenyl	84-15-1	125	%	70-135	01.09.20 07.58	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS41**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-008	Date Collected:	01.08.20 09.52	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.09.20 06.22	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.09.20 06.22	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.09.20 06.22	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.09.20 06.22	U	1
o-Xylene	95-47-6	**0.00302**	0.00201	mg/kg	01.09.20 06.22		1
Total Xylenes	1330-20-7	**0.00302**	0.00201	mg/kg	01.09.20 06.22		1
Total BTEX		**0.00302**	0.00201	mg/kg	01.09.20 06.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.09.20 06.22	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.09.20 06.22	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS42**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-009	Date Collected:	01.08.20 09.55	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	9.88	mg/kg	01.09.20 00.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.09.20 08.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	**305**	50.0	mg/kg	01.09.20 08.18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**67.7**	50.0	mg/kg	01.09.20 08.18		1
Total GRO-DRO	PHC628	**305**	50.0	mg/kg	01.09.20 08.18		1
Total TPH	PHC635	**373**	50.0	mg/kg	01.09.20 08.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	01.09.20 08.18	
o-Terphenyl	84-15-1	133	%	70-135	01.09.20 08.18	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS42**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-009	Date Collected:	01.08.20 09.55	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.09.20 06.41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.09.20 06.41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.09.20 06.41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.09.20 06.41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.09.20 06.41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.09.20 06.41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.09.20 06.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.09.20 06.41	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.09.20 06.41	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS43**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-010	Date Collected:	01.08.20 10.00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**166**	9.96	mg/kg	01.09.20 00.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.09.20 08.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	**755**	49.8	mg/kg	01.09.20 08.18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**144**	49.8	mg/kg	01.09.20 08.18		1
Total GRO-DRO	PHC628	**755**	49.8	mg/kg	01.09.20 08.18		1
Total TPH	PHC635	**899**	49.8	mg/kg	01.09.20 08.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	01.09.20 08.18	
o-Terphenyl	84-15-1	126	%	70-135	01.09.20 08.18	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS43**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-010	Date Collected:	01.08.20 10.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.09.20 07.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.09.20 07.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.09.20 07.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.09.20 07.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.09.20 07.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.09.20 07.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.09.20 07.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.09.20 07.00	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.09.20 07.00	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS44**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-011	Date Collected:	01.08.20 10.02	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.5**	9.82	mg/kg	01.09.20 00.40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.09.20 08.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	**128**	50.3	mg/kg	01.09.20 08.38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.09.20 08.38	U	1
Total GRO-DRO	PHC628	**128**	50.3	mg/kg	01.09.20 08.38		1
Total TPH	PHC635	**128**	50.3	mg/kg	01.09.20 08.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	01.09.20 08.38	
o-Terphenyl	84-15-1	116	%	70-135	01.09.20 08.38	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS44**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-011	Date Collected:	01.08.20 10.02	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.09.20 07.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.09.20 07.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.09.20 07.20	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.09.20 07.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.09.20 07.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.09.20 07.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.09.20 07.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.09.20 07.20	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.09.20 07.20	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS45**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-012	Date Collected:	01.08.20 10.32	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**164**	9.94	mg/kg	01.09.20 00.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.09.20 08.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	**101**	49.8	mg/kg	01.09.20 08.38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.09.20 08.38	U	1
Total GRO-DRO	PHC628	**101**	49.8	mg/kg	01.09.20 08.38		1
Total TPH	PHC635	**101**	49.8	mg/kg	01.09.20 08.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	01.09.20 08.38	
o-Terphenyl	84-15-1	126	%	70-135	01.09.20 08.38	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS45**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-012	Date Collected:	01.08.20 10.32	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 07.39	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 07.39	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 07.39	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 07.39	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 07.39	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 07.39	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 07.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.09.20 07.39	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.09.20 07.39	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS46**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-013	Date Collected:	01.08.20 10.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**263**	9.92	mg/kg	01.09.20 01.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.09.20 08.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**751**	50.2	mg/kg	01.09.20 08.57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**94.5**	50.2	mg/kg	01.09.20 08.57		1
Total GRO-DRO	PHC628	**751**	50.2	mg/kg	01.09.20 08.57		1
Total TPH	PHC635	**846**	50.2	mg/kg	01.09.20 08.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	01.09.20 08.57	
o-Terphenyl	84-15-1	114	%	70-135	01.09.20 08.57	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS46**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-013	Date Collected:	01.08.20 10.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 14.00	Basis:	Wet Weight
Seq Number:	3112691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 07.58	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 07.58	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 07.58	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 07.58	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 07.58	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 07.58	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 07.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.09.20 07.58	
1,4-Difluorobenzene	540-36-3	108	%	70-130	01.09.20 07.58	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS47**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-014	Date Collected:	01.08.20 10.38	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**88.2**	9.88	mg/kg	01.09.20 01.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.09.20 08.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**735**	50.0	mg/kg	01.09.20 08.57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**115**	50.0	mg/kg	01.09.20 08.57		1
Total GRO-DRO	PHC628	**735**	50.0	mg/kg	01.09.20 08.57		1
Total TPH	PHC635	**850**	50.0	mg/kg	01.09.20 08.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	01.09.20 08.57	
o-Terphenyl	84-15-1	124	%	70-135	01.09.20 08.57	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS47**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-014	Date Collected:	01.08.20 10.38	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 00.20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 00.20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 00.20	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 00.20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 00.20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 00.20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 00.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.09.20 00.20	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.09.20 00.20	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS48**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-015	Date Collected:	01.08.20 10.42	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**278**	9.94	mg/kg	01.09.20 01.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.09.20 09.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1960**	50.0	mg/kg	01.09.20 09.17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**326**	50.0	mg/kg	01.09.20 09.17		1
Total GRO-DRO	PHC628	**1960**	50.0	mg/kg	01.09.20 09.17		1
Total TPH	PHC635	**2290**	50.0	mg/kg	01.09.20 09.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	01.09.20 09.17	
o-Terphenyl	84-15-1	114	%	70-135	01.09.20 09.17	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS48**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-015	Date Collected:	01.08.20 10.42	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 01.47	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 01.47	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 01.47	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.09.20 01.47	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 01.47	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 01.47	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 01.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.09.20 01.47	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.09.20 01.47	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS49**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-016	Date Collected:	01.08.20 10.46	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.3**	9.96	mg/kg	01.09.20 01.18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.09.20 09.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	**414**	50.0	mg/kg	01.09.20 09.37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**111**	50.0	mg/kg	01.09.20 09.37		1
Total GRO-DRO	PHC628	**414**	50.0	mg/kg	01.09.20 09.37		1
Total TPH	PHC635	**525**	50.0	mg/kg	01.09.20 09.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	01.09.20 09.37	
o-Terphenyl	84-15-1	133	%	70-135	01.09.20 09.37	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS49**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-016	Date Collected:	01.08.20 10.46	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 00.38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 00.38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 00.38	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 00.38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 00.38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 00.38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 00.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.09.20 00.38	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.09.20 00.38	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS50**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-017	Date Collected:	01.08.20 11.13	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**120**	9.98	mg/kg	01.09.20 01.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.09.20 09.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	**906**	49.8	mg/kg	01.09.20 09.37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**157**	49.8	mg/kg	01.09.20 09.37		1
Total GRO-DRO	PHC628	**906**	49.8	mg/kg	01.09.20 09.37		1
Total TPH	PHC635	**1060**	49.8	mg/kg	01.09.20 09.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	01.09.20 09.37	
o-Terphenyl	84-15-1	123	%	70-135	01.09.20 09.37	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS50**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-017	Date Collected:	01.08.20 11.13	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.09.20 00.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.09.20 00.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.09.20 00.55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.09.20 00.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.09.20 00.55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.09.20 00.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.09.20 00.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.09.20 00.55	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.09.20 00.55	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS51**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-018	Date Collected:	01.08.20 11.17	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**150**	10.1	mg/kg	01.09.20 01.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.09.20 09.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**236**	50.2	mg/kg	01.09.20 09.57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**54.8**	50.2	mg/kg	01.09.20 09.57		1
Total GRO-DRO	PHC628	**236**	50.2	mg/kg	01.09.20 09.57		1
Total TPH	PHC635	**291**	50.2	mg/kg	01.09.20 09.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	01.09.20 09.57	
o-Terphenyl	84-15-1	133	%	70-135	01.09.20 09.57	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS51**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-018	Date Collected:	01.08.20 11.17	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.09.20 01.12	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.09.20 01.12	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.09.20 01.12	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.09.20 01.12	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.09.20 01.12	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.09.20 01.12	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.09.20 01.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.09.20 01.12	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.09.20 01.12	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS52**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-019	Date Collected:	01.08.20 11.21	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	9.82	mg/kg	01.09.20 01.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.09.20 09.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**148**	49.8	mg/kg	01.09.20 09.57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**51.0**	49.8	mg/kg	01.09.20 09.57		1
Total GRO-DRO	PHC628	**148**	49.8	mg/kg	01.09.20 09.57		1
Total TPH	PHC635	**199**	49.8	mg/kg	01.09.20 09.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	01.09.20 09.57	
o-Terphenyl	84-15-1	124	%	70-135	01.09.20 09.57	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS52**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-019	Date Collected:	01.08.20 11.21	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.09.20 01.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.09.20 01.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.09.20 01.30	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.09.20 01.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.09.20 01.30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.09.20 01.30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.09.20 01.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.09.20 01.30	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.09.20 01.30	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS53**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-020	Date Collected:	01.08.20 11.23	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.13	Basis:	Wet Weight
Seq Number:	3112716				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.2**	9.92	mg/kg	01.09.20 01.50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.08.20 18.00	Basis:	Wet Weight
Seq Number:	3112748				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	01.09.20 12.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	01.09.20 12.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	01.09.20 12.16	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	01.09.20 12.16	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	01.09.20 12.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	01.09.20 12.16	
o-Terphenyl	84-15-1	114	%	70-135	01.09.20 12.16	

Certificate of Analytical Results 648380

LT Environmental, Inc., Arvada, CO

EMSU Sat Battery

Sample Id:	**FS53**	Matrix:	Soil	Date Received:	01.08.20 15.22
Lab Sample Id:	648380-020	Date Collected:	01.08.20 11.23	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.08.20 17.01	Basis:	Wet Weight
Seq Number:	3112697				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.09.20 00.03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.09.20 00.03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.09.20 00.03	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.09.20 00.03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.09.20 00.03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.09.20 00.03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.09.20 00.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.09.20 00.03	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.09.20 00.03	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 648380

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112712 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693933-1-BLK — LCS Sample Id: 7693933-1-BKS — LCSD Sample Id: 7693933-1-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	256	102	257	103	90-110	0	20	mg/kg	01.08.20 20:51	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112716 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693957-1-BLK — LCS Sample Id: 7693957-1-BKS — LCSD Sample Id: 7693957-1-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	255	102	259	104	90-110	2	20	mg/kg	01.08.20 23:57	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112712 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648245-003 — MS Sample Id: 648245-003 S — MSD Sample Id: 648245-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	755	199	929	87	941	93	90-110	1	20	mg/kg	01.08.20 21:09	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112712 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648372-002 — MS Sample Id: 648372-002 S — MSD Sample Id: 648372-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	149	197	355	105	356	105	90-110	0	20	mg/kg	01.08.20 22:31	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112716 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648380-007 — MS Sample Id: 648380-007 S — MSD Sample Id: 648380-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	37.8	201	248	105	248	105	90-110	0	20	mg/kg	01.09.20 00:13	

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 648380

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3112716 Matrix: Soil Date Prep: 01.08.20
Parent Sample Id: 648380-017 MS Sample Id: 648380-017 S MSD Sample Id: 648380-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	199	339	110	345	111	90-110	2	20	mg/kg	01.09.20 01:29	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3112724 Matrix: Solid Date Prep: 01.08.20
MB Sample Id: 7693951-1-BLK LCS Sample Id: 7693951-1-BKS LCSD Sample Id: 7693951-1-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)	<13.9	1000	1140	114	1200	120	70-135	5	35	mg/kg	01.09.20 02:23	
Diesel Range Organics (DRO)	<11.5	1000	1100	110	1100	110	70-135	0	35	mg/kg	01.09.20 02:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		108		129		70-135	%	01.09.20 02:23
o-Terphenyl	118		100		101		70-135	%	01.09.20 02:23

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3112748 Matrix: Solid Date Prep: 01.08.20
MB Sample Id: 7693953-1-BLK LCS Sample Id: 7693953-1-BKS LCSD Sample Id: 7693953-1-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	1190	119	1130	113	70-135	5	35	mg/kg	01.09.20 06:59	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1100	110	70-135	0	35	mg/kg	01.09.20 06:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		128		123		70-135	%	01.09.20 06:59
o-Terphenyl	116		100		105		70-135	%	01.09.20 06:59

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3112724 Matrix: Solid Date Prep: 01.08.20
MB Sample Id: 7693951-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.09.20 02:23	

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 648380

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112748 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693953-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.09.20 06:59	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112724 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648245-002 — MS Sample Id: 648245-002 S — MSD Sample Id: 648245-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1200	120	1220	122	70-135	2	35	mg/kg	01.09.20 11:36	
Diesel Range Organics (DRO)	<49.9	998	1110	111	1120	112	70-135	1	35	mg/kg	01.09.20 11:36	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		129		70-135	%	01.09.20 11:36
o-Terphenyl	101		99		70-135	%	01.09.20 11:36

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3112748 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648380-007 — MS Sample Id: 648380-007 S — MSD Sample Id: 648380-007 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	996	1110	111	1140	114	70-135	3	35	mg/kg	01.09.20 15:37	
Diesel Range Organics (DRO)	66.1	996	1090	103	1080	102	70-135	1	35	mg/kg	01.09.20 15:37	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	126		128		70-135	%	01.09.20 15:37
o-Terphenyl	102		100		70-135	%	01.09.20 15:37

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

QC Summary 648380

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3112691 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693938-1-BLK — LCS Sample Id: 7693938-1-BKS — LCSD Sample Id: 7693938-1-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	0.107	107	0.114	114	70-130	6	35	mg/kg	01.08.20 22:30	
Toluene	<0.00200	0.100	0.105	105	0.112	112	70-130	6	35	mg/kg	01.08.20 22:30	
Ethylbenzene	<0.00200	0.100	0.106	106	0.113	113	71-129	6	35	mg/kg	01.08.20 22:30	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.227	114	70-135	7	35	mg/kg	01.08.20 22:30	
o-Xylene	<0.00200	0.100	0.105	105	0.115	115	71-133	9	35	mg/kg	01.08.20 22:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		102		106		70-130	%	01.08.20 22:30
4-Bromofluorobenzene	101		101		111		70-130	%	01.08.20 22:30

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3112697 — Matrix: Solid — Date Prep: 01.08.20
MB Sample Id: 7693954-1-BLK — LCS Sample Id: 7693954-1-BKS — LCSD Sample Id: 7693954-1-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	0.0921	92	0.0906	91	70-130	2	35	mg/kg	01.08.20 22:18	
Toluene	<0.00200	0.100	0.0937	94	0.0917	92	70-130	2	35	mg/kg	01.08.20 22:18	
Ethylbenzene	<0.00200	0.100	0.0922	92	0.0901	90	71-129	2	35	mg/kg	01.08.20 22:18	
m,p-Xylenes	<0.00400	0.200	0.191	96	0.186	93	70-135	3	35	mg/kg	01.08.20 22:18	
o-Xylene	<0.00200	0.100	0.0938	94	0.0916	92	71-133	2	35	mg/kg	01.08.20 22:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		98		98		70-130	%	01.08.20 22:18
4-Bromofluorobenzene	98		100		99		70-130	%	01.08.20 22:18

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3112691 — Matrix: Soil — Date Prep: 01.08.20
Parent Sample Id: 648245-004 — MS Sample Id: 648245-004 S — MSD Sample Id: 648245-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.108	108	0.0988	99	70-130	9	35	mg/kg	01.08.20 23:08	
Toluene	<0.00200	0.100	0.105	105	0.0947	95	70-130	10	35	mg/kg	01.08.20 23:08	
Ethylbenzene	<0.00200	0.100	0.104	104	0.0909	91	71-129	13	35	mg/kg	01.08.20 23:08	
m,p-Xylenes	<0.00400	0.200	0.207	104	0.180	90	70-135	14	35	mg/kg	01.08.20 23:08	
o-Xylene	<0.00200	0.100	0.104	104	0.0912	91	71-133	13	35	mg/kg	01.08.20 23:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		70-130	%	01.08.20 23:08
4-Bromofluorobenzene	112		113		70-130	%	01.08.20 23:08

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 648380

LT Environmental, Inc.

EMSU Sat Battery

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3112697 Matrix: Soil Date Prep: 01.08.20

Parent Sample Id: 648380-020 MS Sample Id: 648380-020 S MSD Sample Id: 648380-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0774	77	0.0897	89	70-130	15	35	mg/kg	01.08.20 23:11	
Toluene	<0.00201	0.101	0.0749	74	0.0863	85	70-130	14	35	mg/kg	01.08.20 23:11	
Ethylbenzene	<0.00201	0.101	0.0697	69	0.0797	79	71-129	13	35	mg/kg	01.08.20 23:11	X
m,p-Xylenes	<0.00402	0.201	0.143	71	0.163	81	70-135	13	35	mg/kg	01.08.20 23:11	
o-Xylene	<0.00201	0.101	0.0697	69	0.0799	79	71-133	14	35	mg/kg	01.08.20 23:11	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		70-130	%	01.08.20 23:11
4-Bromofluorobenzene	105		101		70-130	%	01.08.20 23:11

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

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

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

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

Final 1.000

Chain of Custody

Work Order No: 648380

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

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

Work Order Comments

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

Project Name:	EMSU Sat Battery	Turn Around	
Project Number:	012919255	Routine: ☐	
PO #:	IRP-5741	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	2.0	Thermometer ID	T-NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	20

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS34	S	1/8/20	0852	0.5	1	X	X	X
FS35			0856					
FS36			0900					
FS37			0903					
FS38			0907					
FS39			0912					
FS40			0950					
FS41			0952					
FS42			0955					
FS43			1000					

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 Fatima		1/8/201522	2		
3			4		
5			6		

Revised 1419 Rev. 2019.1

Chain of Custody

Work Order No: 648380

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

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

Work Order Comments

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

Project Name:	EMSU Sat Battery	Turn Around	
Project Number:	012919255	Routine: ☐	
PO #:	IRP-5741	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS44	S	1/8/20	1002	0.5	1	X	X	X
FS45			1032					
FS46			1035					
FS47			1038					
FS48			1042					
FS49			1046					
FS50			1113					
FS51			1117					
FS52			1121					
FS53			1123					

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 Fatima		1/8/20 1522	2		
3			4		
5			6		

Analytical Report 651910

for

LT Environmental, Inc.

Project Manager: Dan Moir

EMSU Satellite Bat #1

012919255

12-FEB-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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)

12-FEB-20

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

Reference: XENCO Report No(s): **651910**
EMSU Satellite Bat #1
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) 651910. 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. 651910 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

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

Sample Cross Reference 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS28A	S	02-10-20 10:35	1 ft	651910-001
FS31A	S	02-10-20 10:37	1 ft	651910-002
FS42A	S	02-10-20 11:04	1 ft	651910-003
FS43A	S	02-10-20 11:06	1 ft	651910-004
FS44A	S	02-10-20 11:08	1 ft	651910-005
F45A	S	02-10-20 11:10	1 ft	651910-006
FS46A	S	02-10-20 11:13	1 ft	651910-007
FS47A	S	02-10-20 11:15	1 ft	651910-008
FS48A	S	02-10-20 11:17	1 ft	651910-009
FS49A	S	02-10-20 11:20	1 ft	651910-010
FS50A	S	02-10-20 11:22	1 ft	651910-011
FS51A	S	02-10-20 11:24	1 ft	651910-012
FS52A	S	02-10-20 11:28	1 ft	651910-013
FS54A	S	02-10-20 13:23	1 ft	651910-014

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: EMSU Satellite Bat #1

Project ID: *012919255*
Work Order Number(s): *651910*

Report Date: *12-FEB-20*
Date Received: *02/11/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116215 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116240 TPH by SW8015 Mod
Motor Oil Range Hydrocarbons (MRO) recovered below QC limits in the Blank Spike and Duplicate indicating bias low results. Samples in the analytical batch are: 651910-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014.

Certificate of Analysis Summary 651910

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Bat #1

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Feb-11-20 09:06 am
Report Date: 12-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651910-001		651910-002		651910-003		651910-004		651910-005		651910-006	
	Field Id:	FS28A		FS31A		FS42A		FS43A		FS44A		F45A	
	Depth:	1- ft		1- ft		1- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-10-20 10:35		Feb-10-20 10:37		Feb-10-20 11:04		Feb-10-20 11:06		Feb-10-20 11:08		Feb-10-20 11:10	
BTEX by EPA 8021B	***Extracted:***	Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30	
	Analyzed:	Feb-11-20 13:23		Feb-11-20 13:44		Feb-11-20 14:04		Feb-11-20 14:24		Feb-11-20 18:01		Feb-11-20 18:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Toluene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Ethylbenzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
m,p-Xylenes		<0.00398	0.00398	<0.00402	0.00402	<0.00399	0.00399	<0.00399	0.00399	<0.00397	0.00397	<0.00398	0.00398
o-Xylene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Total Xylenes		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Total BTEX		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Chloride by EPA 300	***Extracted:***	Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45	
	Analyzed:	Feb-12-20 12:17		Feb-12-20 12:33		Feb-12-20 12:38		Feb-12-20 12:44		Feb-12-20 12:49		Feb-12-20 13:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		316	5.02	248	5.02	259	4.96	190	4.96	9.33	5.02	195	4.98
TPH by SW8015 Mod	***Extracted:***	Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00	
	Analyzed:	Feb-11-20 18:39		Feb-11-20 19:42		Feb-11-20 20:04		Feb-11-20 20:25		Feb-11-20 20:47		Feb-11-20 21:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	146	50.0	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<49.8	49.8	<50.0	50.0	146	50.0	<49.9	49.9	<50.0	50.0
Total TPH		<50.0	50.0	<49.8	49.8	<50.0	50.0	146	50.0	<49.9	49.9	<50.0	50.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 651910

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Bat #1

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Feb-11-20 09:06 am
Report Date: 12-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651910-007		651910-008		651910-009		651910-010		651910-011		651910-012	
	Field Id:	FS46A		FS47A		FS48A		FS49A		FS50A		FS51A	
	Depth:	1- ft		1- ft		1- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-10-20 11:13		Feb-10-20 11:15		Feb-10-20 11:17		Feb-10-20 11:20		Feb-10-20 11:22		Feb-10-20 11:24	
BTEX by EPA 8021B	***Extracted:***	Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30	
	Analyzed:	Feb-11-20 18:42		Feb-11-20 19:02		Feb-11-20 19:22		Feb-11-20 19:42		Feb-11-20 20:02		Feb-11-20 20:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201	0.00413	0.00200	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00398	0.00398	<0.00403	0.00403	<0.00402	0.00402	0.0182	0.00401	<0.00400	0.00400	<0.00397	0.00397
o-Xylene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201	0.00517	0.00200	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201	0.0234	0.00200	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201	0.0275	0.00200	<0.00200	0.00200	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45		Feb-11-20 11:45	
	Analyzed:	Feb-12-20 13:10		Feb-12-20 13:15		Feb-12-20 13:21		Feb-12-20 13:26		Feb-12-20 13:31		Feb-12-20 13:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		182	4.97	286	5.04	308	4.99	98.9	5.00	186	4.98	297	4.98
TPH by SW8015 Mod	***Extracted:***	Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00		Feb-11-20 14:00	
	Analyzed:	Feb-11-20 21:29		Feb-11-20 21:51		Feb-11-20 22:12		Feb-11-20 22:33		Feb-11-20 23:16		Feb-11-20 23:37	
	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	<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	344	50.0	93.8	49.9	<50.0	50.0	107	50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	94.4	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0
Total GRO-DRO		<49.9	49.9	<50.0	50.0	344	50.0	93.8	49.9	<50.0	50.0	107	50.0
Total TPH		<49.9	49.9	<50.0	50.0	438	50.0	93.8	49.9	<50.0	50.0	107	50.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 651910

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Bat #1

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Feb-11-20 09:06 am
Report Date: 12-FEB-20
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	651910-013		651910-014					
	Field Id:	FS52A		FS54A					
	Depth:	1- ft		1- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Feb-10-20 11:28		Feb-10-20 13:23					
BTEX by EPA 8021B	***Extracted:***	Feb-11-20 10:30		Feb-11-20 10:30					
	Analyzed:	Feb-11-20 20:42		Feb-11-20 21:03					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00200	0.00200				
Toluene		<0.00199	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00398	0.00398	<0.00401	0.00401				
o-Xylene		<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		<0.00199	0.00199	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	Feb-11-20 11:45		Feb-11-20 11:45					
	Analyzed:	Feb-12-20 13:52		Feb-12-20 14:08					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		295	5.04	408	5.04				
TPH by SW8015 Mod	***Extracted:***	Feb-11-20 14:00		Feb-11-20 14:00					
	Analyzed:	Feb-11-20 23:59		Feb-12-20 00:20					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0				
Diesel Range Organics (DRO)		<49.8	49.8	82.4	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0				
Total GRO-DRO		<49.8	49.8	82.4	50.0				
Total TPH		<49.8	49.8	82.4	50.0				

Jessica Kramer
Project Assistant

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS28A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-001	Date Collected:	02.10.20 10.35	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**316**	5.02	mg/kg	02.12.20 12.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 18.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 18.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 18.39	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 18.39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 18.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.11.20 18.39	
o-Terphenyl	84-15-1	86	%	70-135	02.11.20 18.39	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS28A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-001	Date Collected:	02.10.20 10.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 13.23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 13.23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 13.23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 13.23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 13.23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 13.23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 13.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.11.20 13.23	
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.11.20 13.23	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS31A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-002	Date Collected:	02.10.20 10.37	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**248**	5.02	mg/kg	02.12.20 12.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 19.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 19.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 19.42	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 19.42	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 19.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	02.11.20 19.42	
o-Terphenyl	84-15-1	83	%	70-135	02.11.20 19.42	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS31A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-002	Date Collected:	02.10.20 10.37	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 13.44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 13.44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 13.44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 13.44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 13.44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 13.44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 13.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.11.20 13.44	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.11.20 13.44	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS42A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-003	Date Collected:	02.10.20 11.04	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**259**	4.96	mg/kg	02.12.20 12.38		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 20.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 20.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 20.04	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 20.04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 20.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.11.20 20.04	
o-Terphenyl	84-15-1	83	%	70-135	02.11.20 20.04	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS42A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-003	Date Collected:	02.10.20 11.04	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 14.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 14.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 14.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 14.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 14.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 14.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 14.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.11.20 14.04	
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.11.20 14.04	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS43A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-004	Date Collected:	02.10.20 11.06	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**190**	4.96	mg/kg	02.12.20 12.44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 20.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	**146**	50.0	mg/kg	02.11.20 20.25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 20.25	U	1
Total GRO-DRO	PHC628	**146**	50.0	mg/kg	02.11.20 20.25		1
Total TPH	PHC635	**146**	50.0	mg/kg	02.11.20 20.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	02.11.20 20.25	
o-Terphenyl	84-15-1	79	%	70-135	02.11.20 20.25	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS43A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-004	Date Collected:	02.10.20 11.06	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 14.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 14.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 14.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 14.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 14.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 14.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 14.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.11.20 14.24	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.11.20 14.24	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS44A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-005	Date Collected:	02.10.20 11.08	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.33**	5.02	mg/kg	02.12.20 12.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 20.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.11.20 20.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 20.47	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.11.20 20.47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.11.20 20.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.11.20 20.47	
o-Terphenyl	84-15-1	84	%	70-135	02.11.20 20.47	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS44A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-005	Date Collected:	02.10.20 11.08	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 18.01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 18.01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 18.01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.11.20 18.01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 18.01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 18.01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 18.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.11.20 18.01	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.01	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**F45A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-006	Date Collected:	02.10.20 11.10	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**195**	4.98	mg/kg	02.12.20 13.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 21.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 21.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 21.08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 21.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	02.11.20 21.08	
o-Terphenyl	84-15-1	84	%	70-135	02.11.20 21.08	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**F45A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-006	Date Collected:	02.10.20 11.10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.11.20 18.22	
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.11.20 18.22	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS46A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-007	Date Collected:	02.10.20 11.13	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**182**	4.97	mg/kg	02.12.20 13.10		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 21.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.11.20 21.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 21.29	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.11.20 21.29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.11.20 21.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	02.11.20 21.29	
o-Terphenyl	84-15-1	83	%	70-135	02.11.20 21.29	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS46A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-007	Date Collected:	02.10.20 11.13	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.11.20 18.42	
4-Bromofluorobenzene	460-00-4	83	%	70-130	02.11.20 18.42	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS47A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-008	Date Collected:	02.10.20 11.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**286**	5.04	mg/kg	02.12.20 13.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 21.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 21.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 21.51	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 21.51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 21.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	02.11.20 21.51	
o-Terphenyl	84-15-1	84	%	70-135	02.11.20 21.51	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS47A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-008	Date Collected:	02.10.20 11.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 19.02	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 19.02	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 19.02	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 19.02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 19.02	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 19.02	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 19.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.11.20 19.02	
4-Bromofluorobenzene	460-00-4	79	%	70-130	02.11.20 19.02	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS48A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-009	Date Collected:	02.10.20 11.17	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**308**	4.99	mg/kg	02.12.20 13.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 22.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	**344**	50.0	mg/kg	02.11.20 22.12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**94.4**	50.0	mg/kg	02.11.20 22.12		1
Total GRO-DRO	PHC628	**344**	50.0	mg/kg	02.11.20 22.12		1
Total TPH	PHC635	**438**	50.0	mg/kg	02.11.20 22.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.11.20 22.12	
o-Terphenyl	84-15-1	89	%	70-135	02.11.20 22.12	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS48A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-009	Date Collected:	02.10.20 11.17	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 19.22	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 19.22	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 19.22	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 19.22	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 19.22	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 19.22	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 19.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	77	%	70-130	02.11.20 19.22	
1,4-Difluorobenzene	540-36-3	109	%	70-130	02.11.20 19.22	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS49A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-010	Date Collected:	02.10.20 11.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**98.9**	5.00	mg/kg	02.12.20 13.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 22.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	**93.8**	49.9	mg/kg	02.11.20 22.33		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 22.33	U	1
Total GRO-DRO	PHC628	**93.8**	49.9	mg/kg	02.11.20 22.33		1
Total TPH	PHC635	**93.8**	49.9	mg/kg	02.11.20 22.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	02.11.20 22.33	
o-Terphenyl	84-15-1	86	%	70-135	02.11.20 22.33	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS49A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-010	Date Collected:	02.10.20 11.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 19.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 19.42	U	1
Ethylbenzene	100-41-4	**0.00413**	0.00200	mg/kg	02.11.20 19.42		1
m,p-Xylenes	179601-23-1	**0.0182**	0.00401	mg/kg	02.11.20 19.42		1
o-Xylene	95-47-6	**0.00517**	0.00200	mg/kg	02.11.20 19.42		1
Total Xylenes	1330-20-7	**0.0234**	0.00200	mg/kg	02.11.20 19.42		1
Total BTEX		**0.0275**	0.00200	mg/kg	02.11.20 19.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	119	%	70-130	02.11.20 19.42	
4-Bromofluorobenzene	460-00-4	78	%	70-130	02.11.20 19.42	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS50A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-011	Date Collected:	02.10.20 11.22	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**186**	4.98	mg/kg	02.12.20 13.31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 23.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 23.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 23.16	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 23.16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 23.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	02.11.20 23.16	
o-Terphenyl	84-15-1	82	%	70-135	02.11.20 23.16	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS50A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-011	Date Collected:	02.10.20 11.22	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 20.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 20.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 20.02	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.11.20 20.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 20.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 20.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 20.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	02.11.20 20.02	
4-Bromofluorobenzene	460-00-4	81	%	70-130	02.11.20 20.02	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS51A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-012	Date Collected:	02.10.20 11.24	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**297**	4.98	mg/kg	02.12.20 13.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 23.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	**107**	50.0	mg/kg	02.11.20 23.37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 23.37	U	1
Total GRO-DRO	PHC628	**107**	50.0	mg/kg	02.11.20 23.37		1
Total TPH	PHC635	**107**	50.0	mg/kg	02.11.20 23.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.11.20 23.37	
o-Terphenyl	84-15-1	85	%	70-135	02.11.20 23.37	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS51A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-012	Date Collected:	02.10.20 11.24	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 20.22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 20.22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 20.22	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.11.20 20.22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 20.22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 20.22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 20.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	79	%	70-130	02.11.20 20.22	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.11.20 20.22	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS52A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-013	Date Collected:	02.10.20 11.28	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**295**	5.04	mg/kg	02.12.20 13.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 23.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 23.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 23.59	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 23.59	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 23.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	02.11.20 23.59	
o-Terphenyl	84-15-1	84	%	70-135	02.11.20 23.59	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS52A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-013	Date Collected:	02.10.20 11.28	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 20.42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 20.42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 20.42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 20.42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 20.42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 20.42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 20.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	118	%	70-130	02.11.20 20.42	
4-Bromofluorobenzene	460-00-4	84	%	70-130	02.11.20 20.42	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS54A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-014	Date Collected:	02.10.20 13.23	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	02.11.20 11.45	Basis:	Wet Weight
Seq Number:	3116306				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**408**	5.04	mg/kg	02.12.20 14.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.11.20 14.00	Basis:	Wet Weight
Seq Number:	3116240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.12.20 00.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	**82.4**	50.0	mg/kg	02.12.20 00.20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.12.20 00.20	U	1
Total GRO-DRO	PHC628	**82.4**	50.0	mg/kg	02.12.20 00.20		1
Total TPH	PHC635	**82.4**	50.0	mg/kg	02.12.20 00.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.12.20 00.20	
o-Terphenyl	84-15-1	86	%	70-135	02.12.20 00.20	

Certificate of Analytical Results 651910

LT Environmental, Inc., Arvada, CO

EMSU Satellite Bat #1

Sample Id:	**FS54A**	Matrix:	Soil	Date Received:	02.11.20 09.06
Lab Sample Id:	651910-014	Date Collected:	02.10.20 13.23	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116215				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 21.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 21.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 21.03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 21.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 21.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 21.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 21.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.11.20 21.03	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.11.20 21.03	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 651910

LT Environmental, Inc.

EMSU Satellite Bat #1

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116306 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696400-1-BLK — LCS Sample Id: 7696400-1-BKS — LCSD Sample Id: 7696400-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	265	106	267	107	90-110	1	20	mg/kg	02.12.20 12:07	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116306 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651910-001 — MS Sample Id: 651910-001 S — MSD Sample Id: 651910-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	316	251	570	101	571	102	90-110	0	20	mg/kg	02.12.20 12:23	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116306 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651910-011 — MS Sample Id: 651910-011 S — MSD Sample Id: 651910-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	186	249	432	99	429	98	90-110	1	20	mg/kg	02.12.20 13:36	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116240 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696418-1-BLK — LCS Sample Id: 7696418-1-BKS — LCSD Sample Id: 7696418-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	901	90	896	90	70-135	1	20	mg/kg	02.11.20 17:56	
Diesel Range Organics (DRO)	<15.0	1000	974	97	948	95	70-135	3	20	mg/kg	02.11.20 17:56	
Motor Oil Range Hydrocarbons (MRO)	<15.0	1000	<50.0	0	<50.0	0	70-135	NC	20	mg/kg	02.11.20 17:56	L

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		102		102		70-135	%	02.11.20 17:56
o-Terphenyl	86		101		97		70-135	%	02.11.20 17:56

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 651910

LT Environmental, Inc.

EMSU Satellite Bat #1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116240 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651910-001 — MS Sample Id: 651910-001 S — MSD Sample Id: 651910-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	920	92	907	91	70-135	1	20	mg/kg	02.11.20 19:00	
Diesel Range Organics (DRO)	<15.0	997	985	99	978	98	70-135	1	20	mg/kg	02.11.20 19:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		94		70-135	%	02.11.20 19:00
o-Terphenyl	91		92		70-135	%	02.11.20 19:00

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116215 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696381-1-BLK — LCS Sample Id: 7696381-1-BKS — LCSD Sample Id: 7696381-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.110	110	0.112	112	70-130	2	35	mg/kg	02.11.20 11:04	
Toluene	<0.000456	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	02.11.20 11:04	
Ethylbenzene	<0.000565	0.100	0.105	105	0.104	104	70-130	1	35	mg/kg	02.11.20 11:04	
m,p-Xylenes	<0.00101	0.200	0.209	105	0.205	103	70-130	2	35	mg/kg	02.11.20 11:04	
o-Xylene	<0.000344	0.100	0.102	102	0.101	101	70-130	1	35	mg/kg	02.11.20 11:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		110		110		70-130	%	02.11.20 11:04
4-Bromofluorobenzene	72		87		89		70-130	%	02.11.20 11:04

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116215 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651910-001 — MS Sample Id: 651910-001 S — MSD Sample Id: 651910-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.102	102	0.105	106	70-130	3	35	mg/kg	02.11.20 11:44	
Toluene	0.000797	0.100	0.0999	99	0.100	100	70-130	0	35	mg/kg	02.11.20 11:44	
Ethylbenzene	<0.000565	0.100	0.0956	96	0.0971	98	70-130	2	35	mg/kg	02.11.20 11:44	
m,p-Xylenes	<0.00101	0.200	0.187	94	0.191	96	70-130	2	35	mg/kg	02.11.20 11:44	
o-Xylene	0.000528	0.100	0.0911	91	0.0933	93	70-130	2	35	mg/kg	02.11.20 11:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		110		70-130	%	02.11.20 11:44
4-Bromofluorobenzene	83		88		70-130	%	02.11.20 11:44

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: 651910

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 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:	khenry@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	EMSU Satellite bat. #1	Turn Around	
Project Number:	012919255	Routine	☐
P.O. Number:		Rush:	24h
Sampler's Name:	Kaleb Henry	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):	3.0	Temp Blank: Yes (No)	Wet Ice: (Yes) No
Received Intact:	(Yes) No	Thermometer ID:	85
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS28A	S	2/10/20	1035	1'	1	X	X	X
FS31A			1037					
FS42A			1104					
FS43A			1106					
FS44A			1108					
FS45A			1110					
FS46A			1113					
FS47A			1115					
FS48A			1117					
FS49A	↓	↓	1120	↓	↓	↓	↓	↓

Work Order Notes

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

Sample Comments

Composite ↓

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			2/14/20	2		
3			900	4		
5				6		

Revised Date 051418 Rev. 2018.1

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: 605190

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:	khenry@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	EMSU Satellite bat. #1	Turn Around	
Project Number:	01291925S	Routine	☐
P.O. Number:		Rush:	24h
Sampler's Name:	Kaleb Henry	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS50A	S	2/10/20	1122	1'	1	X	X	X
FS51A			1124					
FS52A			1128					
FS54			1323					

Work Order Notes

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

Sample Comments

Composite

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			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: 02.11.2020 09.06.00 AM

Work Order #: 651910

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 02.11.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 02.11.2020
Jessica Kramer

Analytical Report 652881

for

LT Environmental, Inc.

Project Manager: Dan Moir

EMSU Satellite Battery #1

012919255

06-MAR-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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)

06-MAR-20

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

Reference: XENCO Report No(s): **652881**
EMSU Satellite Battery #1
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) 652881. 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. 652881 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

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

Sample Cross Reference 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS43B	S	02-18-20 11:56	1.5 ft	652881-001
FS48B	S	02-18-20 12:10	1.5 ft	652881-003
FFS51B	S	02-18-20 12:22	1.5 ft	652881-005
FS43C	S	02-18-20 12:02	2.0 ft	Not Analyzed
FS48C	S	02-18-20 12:13	2.0 ft	Not Analyzed
FS51C	S	02-18-20 12:26	2.0 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: EMSU Satellite Battery #1

Project ID: *012919255*
Work Order Number(s): *652881*

Report Date: *06-MAR-20*
Date Received: *02/19/2020*

Sample receipt non conformances and comments:

V1.001 Revision (client email) Corrected project name and number. JK 03/06/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3117071 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 652881

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Battery #1

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Feb-19-20 11:23 am
Report Date: 06-MAR-20
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	652881-001		652881-003		652881-005			
	Field Id:	FS43B		FS48B		FFS51B			
	Depth:	1.5- ft		1.5- ft		1.5- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Feb-18-20 11:56		Feb-18-20 12:10		Feb-18-20 12:22			
BTEX by EPA 8021B	***Extracted:***	Feb-19-20 14:00		Feb-19-20 14:00		Feb-19-20 14:00			
	Analyzed:	Feb-19-20 21:43		Feb-19-20 22:04		Feb-19-20 23:45			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200		
Toluene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200		
Ethylbenzene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200		
m,p-Xylenes		<0.00399	0.00399	<0.00397	0.00397	<0.00400	0.00400		
o-Xylene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200		
Total Xylenes		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200		
Total BTEX		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200		
Chloride by EPA 300	***Extracted:***	Feb-19-20 17:45		Feb-19-20 17:45		Feb-19-20 17:45			
	Analyzed:	Feb-19-20 19:02		Feb-19-20 19:07		Feb-19-20 19:12			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		478	5.00	269	4.98	108	4.97		
TPH by SW8015 Mod	***Extracted:***	Feb-19-20 15:00		Feb-19-20 15:00		Feb-19-20 15:00			
	Analyzed:	Feb-19-20 15:44		Feb-19-20 16:02		Feb-19-20 16:21			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9		
Diesel Range Organics (DRO)		107	49.9	<50.0	50.0	116	49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9		
Total GRO-DRO		107	49.9	<50.0	50.0	116	49.9		
Total TPH		107	49.9	<50.0	50.0	116	49.9		

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS43B**	Matrix:	Soil	Date Received:	02.19.20 11.23
Lab Sample Id:	652881-001	Date Collected:	02.18.20 11.56	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.19.20 17.45	Basis:	Wet Weight
Seq Number:	3117058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**478**	5.00	mg/kg	02.19.20 19.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.19.20 15.00	Basis:	Wet Weight
Seq Number:	3117094				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.19.20 15.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	**107**	49.9	mg/kg	02.19.20 15.44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.19.20 15.44	U	1
Total GRO-DRO	PHC628	**107**	49.9	mg/kg	02.19.20 15.44		1
Total TPH	PHC635	**107**	49.9	mg/kg	02.19.20 15.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.19.20 15.44	
o-Terphenyl	84-15-1	86	%	70-135	02.19.20 15.44	

Certificate of Analytical Results 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS43B**	Matrix:	Soil	Date Received:	02.19.20 11.23
Lab Sample Id:	652881-001	Date Collected:	02.18.20 11.56	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.19.20 14.00	Basis:	Wet Weight
Seq Number:	3117071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 21.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 21.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 21.43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.19.20 21.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 21.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 21.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.19.20 21.43	
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.19.20 21.43	

Certificate of Analytical Results 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS48B**	Matrix:	Soil	Date Received:	02.19.20 11.23
Lab Sample Id:	652881-003	Date Collected:	02.18.20 12.10	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.19.20 17.45	Basis:	Wet Weight
Seq Number:	3117058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**269**	4.98	mg/kg	02.19.20 19.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.19.20 15.00	Basis:	Wet Weight
Seq Number:	3117094				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.19.20 16.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.19.20 16.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.19.20 16.02	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.19.20 16.02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.19.20 16.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	02.19.20 16.02	
o-Terphenyl	84-15-1	82	%	70-135	02.19.20 16.02	

Certificate of Analytical Results 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS48B**	Matrix:	Soil	Date Received:	02.19.20 11.23
Lab Sample Id:	652881-003	Date Collected:	02.18.20 12.10	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.19.20 14.00	Basis:	Wet Weight
Seq Number:	3117071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.19.20 22.04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.19.20 22.04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.19.20 22.04	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.19.20 22.04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.19.20 22.04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.19.20 22.04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.19.20 22.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	02.19.20 22.04	
4-Bromofluorobenzene	460-00-4	90	%	70-130	02.19.20 22.04	

Certificate of Analytical Results 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FFS51B**	Matrix:	Soil	Date Received:	02.19.20 11.23
Lab Sample Id:	652881-005	Date Collected:	02.18.20 12.22	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.19.20 17.45	Basis:	Wet Weight
Seq Number:	3117058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**108**	4.97	mg/kg	02.19.20 19.12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.19.20 15.00	Basis:	Wet Weight
Seq Number:	3117094				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.19.20 16.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	**116**	49.9	mg/kg	02.19.20 16.21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.19.20 16.21	U	1
Total GRO-DRO	PHC628	**116**	49.9	mg/kg	02.19.20 16.21		1
Total TPH	PHC635	**116**	49.9	mg/kg	02.19.20 16.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.19.20 16.21	
o-Terphenyl	84-15-1	85	%	70-135	02.19.20 16.21	

Certificate of Analytical Results 652881

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FFS51B**	Matrix:	Soil	Date Received:	02.19.20 11.23
Lab Sample Id:	652881-005	Date Collected:	02.18.20 12.22	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.19.20 14.00	Basis:	Wet Weight
Seq Number:	3117071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 23.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 23.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 23.45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.19.20 23.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 23.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 23.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 23.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.19.20 23.45	
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.19.20 23.45	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

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 652881

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3117058 — Matrix: Solid — Date Prep: 02.19.20
MB Sample Id: 7697028-1-BLK — LCS Sample Id: 7697028-1-BKS — LCSD Sample Id: 7697028-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	250	100	90-110	0	20	mg/kg	02.19.20 18:35	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3117058 — Matrix: Soil — Date Prep: 02.19.20
Parent Sample Id: 652873-008 — MS Sample Id: 652873-008 S — MSD Sample Id: 652873-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	144	250	384	96	395	100	90-110	3	20	mg/kg	02.19.20 20:05	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3117058 — Matrix: Soil — Date Prep: 02.19.20
Parent Sample Id: 652880-001 — MS Sample Id: 652880-001 S — MSD Sample Id: 652880-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.32	249	262	102	260	101	90-110	1	20	mg/kg	02.19.20 18:51	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3117094 — Matrix: Solid — Date Prep: 02.19.20
MB Sample Id: 7697019-1-BLK — LCS Sample Id: 7697019-1-BKS — LCSD Sample Id: 7697019-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	825	83	887	89	70-135	7	20	mg/kg	02.19.20 14:11	
Diesel Range Organics (DRO)	<15.0	1000	912	91	985	99	70-135	8	20	mg/kg	02.19.20 14:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	81		100		113		70-135	%	02.19.20 14:11
o-Terphenyl	82		95		101		70-135	%	02.19.20 14:11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3117094 — Matrix: Solid — Date Prep: 02.19.20
MB Sample Id: 7697019-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.19.20 13:52	

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 652881

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3117094 | Matrix: Soil | Date Prep: 02.19.20
Parent Sample Id: 652880-001 | MS Sample Id: 652880-001 S | MSD Sample Id: 652880-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	829	83	820	82	70-135	1	20	mg/kg	02.19.20 15:07	
Diesel Range Organics (DRO)	20.0	997	910	89	905	89	70-135	1	20	mg/kg	02.19.20 15:07	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		97		70-135	%	02.19.20 15:07
o-Terphenyl	90		86		70-135	%	02.19.20 15:07

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3117071 | Matrix: Solid | Date Prep: 02.19.20
MB Sample Id: 7697062-1-BLK | LCS Sample Id: 7697062-1-BKS | LCSD Sample Id: 7697062-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.106	106	0.102	102	70-130	4	35	mg/kg	02.19.20 18:09	
Toluene	<0.00200	0.100	0.0951	95	0.0973	97	70-130	2	35	mg/kg	02.19.20 18:09	
Ethylbenzene	<0.00200	0.100	0.0922	92	0.100	100	70-130	8	35	mg/kg	02.19.20 18:09	
m,p-Xylenes	<0.00400	0.200	0.171	86	0.193	97	70-130	12	35	mg/kg	02.19.20 18:09	
o-Xylene	<0.00200	0.100	0.0843	84	0.0961	96	70-130	13	35	mg/kg	02.19.20 18:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		99		95		70-130	%	02.19.20 18:09
4-Bromofluorobenzene	96		87		100		70-130	%	02.19.20 18:09

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3117071 | Matrix: Soil | Date Prep: 02.19.20
Parent Sample Id: 652560-039 | MS Sample Id: 652560-039 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.105	106	70-130	mg/kg	02.19.20 18:50	
Toluene	<0.00199	0.0994	0.0919	92	70-130	mg/kg	02.19.20 18:50	
Ethylbenzene	<0.00199	0.0994	0.0871	88	70-130	mg/kg	02.19.20 18:50	
m,p-Xylenes	<0.00398	0.199	0.160	80	70-130	mg/kg	02.19.20 18:50	
o-Xylene	<0.00199	0.0994	0.0800	80	70-130	mg/kg	02.19.20 18:50	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		70-130	%	02.19.20 18:50
4-Bromofluorobenzene	83		70-130	%	02.19.20 18:50

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

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

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

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

XENCO LABORATORIES

Chain of Custody

Work Order No: 653881

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:	khenry@ltenv.com, dmoir@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:	EMSU Satellite bat. #1	Turn Around	
Project Number:	012919255	Routine ☐	
P.O. Number:		Rush: 24h	
Sampler's Name:	Kaleb Henry	Due Date:	

SAMPLE RECEIPT	Temp Blank: Yes (No)	Wet Ice: (Yes) No
Temperature (°C):	3.4	Thermometer ID: DE
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)	Sample Comments
FS43B	S	2/18/20	1156	1.5'	1	X	X	X	Composite
FS43C	↓	↓	1202	2.0'	↓	↓	↓	↓	↓
FS48B			1210	1.5'					, HOLD
FS48C			1213	2.0'					
FS51B			1222	1.5'					, HOLD
FS51C	↓	↓	1226	2.0'	↓	↓	↓	↓	↓ , HOLD

Work Order Notes

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

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 [signature]	[signature]	2/19/20 11:21	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: 02.19.2020 11.23.17 AM

Work Order #: 652881

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 02.19.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 02.19.2020
Jessica Kramer

Analytical Report 655954

for

LT Environmental, Inc.

Project Manager: Dan Moir

EMSU Satellite Battery #1

012919255

18-MAR-20

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)

18-MAR-20

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

Reference: XENCO Report No(s): **655954**
EMSU Satellite Battery #1
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) 655954. 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. 655954 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

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

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

Sample Cross Reference 655954

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS51C	S	03-17-20 10:45	2 ft	655954-001
FS43C	S	03-17-20 10:50	2 ft	655954-002

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: EMSU Satellite Battery #1

Project ID: *012919255*
Work Order Number(s): *655954*

Report Date: *18-MAR-20*
Date Received: *03/17/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3120001 BTEX by EPA 8021B

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

Certificate of Analysis Summary 655954

LT Environmental, Inc., Arvada, CO

Project Name: EMSU Satellite Battery #1

Project Id: 012919255
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Mar-17-20 12:58 pm
Report Date: 18-MAR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	655954-001		655954-002									
	Field Id:	FS51C		FS43C									
	Depth:	2- ft		2- ft									
	Matrix:	SOIL		SOIL									
	Sampled:	Mar-17-20 10:45		Mar-17-20 10:50									
BTEX by EPA 8021B	***Extracted:***	Mar-17-20 15:15		Mar-17-20 15:15									
	Analyzed:	Mar-17-20 18:54		Mar-17-20 19:14									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00202	0.00202	<0.00200	0.00200								
Toluene		<0.00202	0.00202	<0.00200	0.00200								
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200								
m,p-Xylenes		<0.00404	0.00404	<0.00401	0.00401								
o-Xylene		<0.00202	0.00202	<0.00200	0.00200								
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200								
Total BTEX		<0.00202	0.00202	<0.00200	0.00200								
Chloride by EPA 300	***Extracted:***	Mar-17-20 17:00		Mar-17-20 17:00									
	Analyzed:	Mar-17-20 17:46		Mar-17-20 18:03									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		13.4	9.98	36.9	10.1								
TPH by SW8015 Mod	***Extracted:***	Mar-17-20 14:00		Mar-17-20 14:00									
	Analyzed:	Mar-17-20 15:00		Mar-17-20 15:00									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.1	50.1								
Diesel Range Organics (DRO)		<49.8	49.8	<50.1	50.1								
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.1	50.1								
Total GRO-DRO		<49.8	49.8	<50.1	50.1								
Total TPH		<49.8	49.8	<50.1	50.1								

Version: 1.%

Jessica Kramer
Project Manager

Certificate of Analytical Results 655954

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS51C**	Matrix:	Soil	Date Received:	03.17.20 12.58
Lab Sample Id:	655954-001	Date Collected:	03.17.20 10.45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	03.17.20 17.00	Basis:	Wet Weight
Seq Number:	3120039				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.4**	9.98	mg/kg	03.17.20 17.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	03.17.20 14.00	Basis:	Wet Weight
Seq Number:	3120026				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.17.20 15.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.17.20 15.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.17.20 15.00	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.17.20 15.00	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.17.20 15.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	03.17.20 15.00	
o-Terphenyl	84-15-1	96	%	70-135	03.17.20 15.00	

Certificate of Analytical Results 655954

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS51C**	Matrix:	Soil	Date Received:	03.17.20 12.58
Lab Sample Id:	655954-001	Date Collected:	03.17.20 10.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	03.17.20 15.15	Basis:	Wet Weight
Seq Number:	3120001				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.17.20 18.54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.17.20 18.54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.17.20 18.54	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.17.20 18.54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.17.20 18.54	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.17.20 18.54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.17.20 18.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.17.20 18.54	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.17.20 18.54	

Certificate of Analytical Results 655954

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS43C**	Matrix:	Soil	Date Received:	03.17.20 12.58
Lab Sample Id:	655954-002	Date Collected:	03.17.20 10.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	03.17.20 17.00	Basis:	Wet Weight
Seq Number:	3120039				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.9**	10.1	mg/kg	03.17.20 18.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	03.17.20 14.00	Basis:	Wet Weight
Seq Number:	3120049				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.17.20 15.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.17.20 15.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.17.20 15.00	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.17.20 15.00	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.17.20 15.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	03.17.20 15.00	
o-Terphenyl	84-15-1	119	%	70-135	03.17.20 15.00	

Certificate of Analytical Results 655954

LT Environmental, Inc., Arvada, CO

EMSU Satellite Battery #1

Sample Id:	**FS43C**	Matrix:	Soil	Date Received:	03.17.20 12.58
Lab Sample Id:	655954-002	Date Collected:	03.17.20 10.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	03.17.20 15.15	Basis:	Wet Weight
Seq Number:	3120001				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.17.20 19.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.17.20 19.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.17.20 19.14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.17.20 19.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.17.20 19.14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.17.20 19.14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.17.20 19.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	03.17.20 19.14	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.17.20 19.14	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 655954

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120039 — Matrix: Solid — Date Prep: 03.17.20
MB Sample Id: 7699128-1-BLK — LCS Sample Id: 7699128-1-BKS — LCSD Sample Id: 7699128-1-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	259	104	261	104	90-110	1	20	mg/kg	03.17.20 17:34	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120039 — Matrix: Soil — Date Prep: 03.17.20
Parent Sample Id: 655954-001 — MS Sample Id: 655954-001 S — MSD Sample Id: 655954-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.4	200	211	99	215	101	90-110	2	20	mg/kg	03.17.20 17:51	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120039 — Matrix: Soil — Date Prep: 03.17.20
Parent Sample Id: 655975-009 — MS Sample Id: 655975-009 S — MSD Sample Id: 655975-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	241	200	452	106	450	105	90-110	0	20	mg/kg	03.17.20 19:18	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120026 — Matrix: Solid — Date Prep: 03.17.20
MB Sample Id: 7699135-1-BLK — LCS Sample Id: 7699135-1-BKS — LCSD Sample Id: 7699135-1-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	918	92	892	89	70-135	3	35	mg/kg	03.17.20 14:20	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	1000	100	70-135	3	35	mg/kg	03.17.20 14:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		110		109		70-135	%	03.17.20 14:20
o-Terphenyl	99		112		110		70-135	%	03.17.20 14:20

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 655954

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120049 — Matrix: Solid — Date Prep: 03.17.20
MB Sample Id: 7699137-1-BLK — LCS Sample Id: 7699137-1-BKS — LCSD Sample Id: 7699137-1-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	946	95	844	84	70-135	11	35	mg/kg	03.17.20 14:20	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	918	92	70-135	11	35	mg/kg	03.17.20 14:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		127		113		70-135	%	03.17.20 14:20
o-Terphenyl	93		111		100		70-135	%	03.17.20 14:20

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120026 — Matrix: Solid — Date Prep: 03.17.20
MB Sample Id: 7699135-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.17.20 13:59	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120049 — Matrix: Solid — Date Prep: 03.17.20
MB Sample Id: 7699137-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.17.20 13:59	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120026 — Matrix: Soil — Date Prep: 03.17.20
Parent Sample Id: 655954-001 — MS Sample Id: 655954-001 S — MSD Sample Id: 655954-001 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)	<50.2	1000	956	96	944	94	70-135	1	35	mg/kg	03.17.20 15:21	
Diesel Range Organics (DRO)	<50.2	1000	1110	111	1100	110	70-135	1	35	mg/kg	03.17.20 15:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		115		70-135	%	03.17.20 15:21
o-Terphenyl	118		115		70-135	%	03.17.20 15:21

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 655954

LT Environmental, Inc.

EMSU Satellite Battery #1

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3120049 | Matrix: Soil | Date Prep: 03.17.20
Parent Sample Id: 655954-002 | MS Sample Id: 655954-002 S | MSD Sample Id: 655954-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	869	87	848	85	70-135	2	35	mg/kg	03.17.20 15:21	
Diesel Range Organics (DRO)	<50.0	1000	949	95	930	93	70-135	2	35	mg/kg	03.17.20 15:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		116		70-135	%	03.17.20 15:21
o-Terphenyl	104		104		70-135	%	03.17.20 15:21

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3120001 | Matrix: Solid | Date Prep: 03.17.20
MB Sample Id: 7699108-1-BLK | LCS Sample Id: 7699108-1-BKS | LCSD Sample Id: 7699108-1-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	0.0995	100	0.0998	100	70-130	0	35	mg/kg	03.17.20 17:12	
Toluene	<0.00200	0.100	0.0968	97	0.0988	99	70-130	2	35	mg/kg	03.17.20 17:12	
Ethylbenzene	<0.00200	0.100	0.0939	94	0.0955	96	71-129	2	35	mg/kg	03.17.20 17:12	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.197	99	70-135	2	35	mg/kg	03.17.20 17:12	
o-Xylene	<0.00200	0.100	0.0970	97	0.0984	98	71-133	1	35	mg/kg	03.17.20 17:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		108		70-130	%	03.17.20 17:12
4-Bromofluorobenzene	97		91		92		70-130	%	03.17.20 17:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3120001 | Matrix: Soil | Date Prep: 03.17.20
Parent Sample Id: 655954-001 | MS Sample Id: 655954-001 S | MSD Sample Id: 655954-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0977	99	0.108	107	70-130	10	35	mg/kg	03.17.20 17:53	
Toluene	<0.00198	0.0990	0.0950	96	0.105	104	70-130	10	35	mg/kg	03.17.20 17:53	
Ethylbenzene	<0.00198	0.0990	0.0907	92	0.100	99	71-129	10	35	mg/kg	03.17.20 17:53	
m,p-Xylenes	<0.00396	0.198	0.186	94	0.204	101	70-135	9	35	mg/kg	03.17.20 17:53	
o-Xylene	<0.00198	0.0990	0.0947	96	0.104	103	71-133	9	35	mg/kg	03.17.20 17:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		70-130	%	03.17.20 17:53
4-Bromofluorobenzene	91		92		70-130	%	03.17.20 17:53

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

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 655954

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	dmoir@ltenv.com rmcafee@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:	EMSU Satellite Battery #1	Turn Around	
Project Number:	012919255	Routine	☐
P.O. Number:		Rush:	24 hr
Sampler's Name:	Robert McAfee	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	3.2	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	2	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
FS51C	S	03/17/20	1045	2'	1	X	X	X
FS43C	S	03/17/20	1050	2'	1	X	X	X

Work Order Notes

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

Sample Comments

composite
composite

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	Robert Mcafee		3/17/20 12:58	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: 03/17/2020 12:58:00 PM

Work Order #: 655954

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.2
#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: 03/17/2020

Checklist reviewed by: Jessica Kramer Date: 03/18/2020

Jessica Kramer