A proud member of WSP

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

February 28, 2020

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

RE: Closure Request
WPX Energy Permian, Inc.
Ross Draw Unit 38 (2RP-5679)
Incident ID NAB1929430314
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, Inc. (WPX), presents the following Closure Request detailing soil sampling and delineation activities at the Ross Draw Unit 38 (Site) in Unit F, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and delineation activities was to confirm the presence or absence of impact to soil following an event that resulted in the release of produced water and crude oil onto the well pad and adjacent pasture. Based on the delineation activities and results of the soil sampling events, WPX is submitting this report and requesting no further action for this release.

BACKGROUND

On October 2, 2019, high winds caused a cattle panel to strike the wellhead and resulted in the release of 40 barrels (bbls) of produced water and 10 bbls of crude oil to the well pad surface, which flowed through an erosional drainage feature to the west of the Site. Vacuum trucks were dispatched and recovered 30 bbls of produced water and 5 bbls of crude oil. The spill volume was calculated by averaging the saturated soil depth and estimating the percentage of liquids based on soil type. Any free liquids were added to the total volume. The average saturation depth of the soil was observed to be 0.5 inches within the release extent. The soil capping the pad surface is caliche, which is estimated to have an available space (i.e. porosity) of 15 percent (%) total volume. Based on these assumptions, the following equation was used to calculate total volume:

"saturated soil volume (cubic feet) x (4.21 cubic feet per bbl of liquid) x estimated soil porosity (%)"

WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) which was received by the NMOCD on October 9, 2019, and was assigned Remediation Permit Number 2RP-5679 and Incident ID NAB1929430314 (Attachment 1).

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on known aquifer properties and the elevation difference between the Site and an identified water well. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) water well 320125103514701, located approximately 3,372 ft southeast of the Site. Water well 320125103514701 has a reported depth to water of 117 feet bgs and is approximately 22 feet lower in elevation than the Site. The closest significant watercourse to the Site is an unnamed tributary located approximately 1,265 feet north of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland and greater than 1,000 feet to a freshwater well or spring. The Site is not within a 100-year floodplain or overlying a subsurface mine or unstable area. The Site is located in a medium-potential karst area.

Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride. However, the top 4 feet of the pasture release area is to be reclaimed immediately and therefore the reclamation standard of 600 mg/kg was applied to the top 4 feet of the subsurface in that area.

PRELIMINARY SOIL SAMPLING

On October 4, 2019, LTE personnel inspected the Site to evaluate the release extent. The release extent was mapped using a handheld Global Positioning System (GPS) unit and is shown on Figure 2. LTE personnel collected two samples (SS01 and SS02) within the areas that visually appeared to be most impacted within the small drainage ditch to depths of approximately 0.5 foot bgs and 1 foot bgs for each sample. The 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 sample was shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0.

DELINEATION SOIL SAMPLING

From October 10, 2019, through January 13, 2020, LTE personnel advanced seventeen potholes (PH01 through PH17) within and around the release footprint to verify the absence of soil impacts. Soil sample locations are presented in Figure 3. Field screening was conducted every foot for volatile aromatic hydrocarbons using a photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Two soil samples were collected from each pothole: the

most impacted sample based on field screening results and the terminus of the pothole. Soil samples were collected, handled, and analyzed as previously described. Based on laboratory analytical results for preliminary and delineation pothole soil samples, no further excavation was warranted. Photographic documentation was conducted during the site visit. Photographs are included in Attachment 2. Soil Sampling Lithologic Logs are included in Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results of all delineation confirmation soil samples indicate compliance with the Closure Criteria and the reclamation standard in the top four feet of soil in the pasture. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CONCLUSIONS

Laboratory analytical results of delineation soil samples indicate compliance with Closure Criteria, thus WPX is requesting no further action for RP number 2RP-5679 and Incident ID NAB1929430314..

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

Sincerely,

LT ENVIRONMENTAL, INC.

Anna Byers
Staff Geologist

Ashley L. Ager, M.S., P.G.
Senior Geologist

cc: Jim Raley, WPX
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, BLM

Attachments:

Figure 1 Site Location Map
Figure 2 Site Map

FIGURES

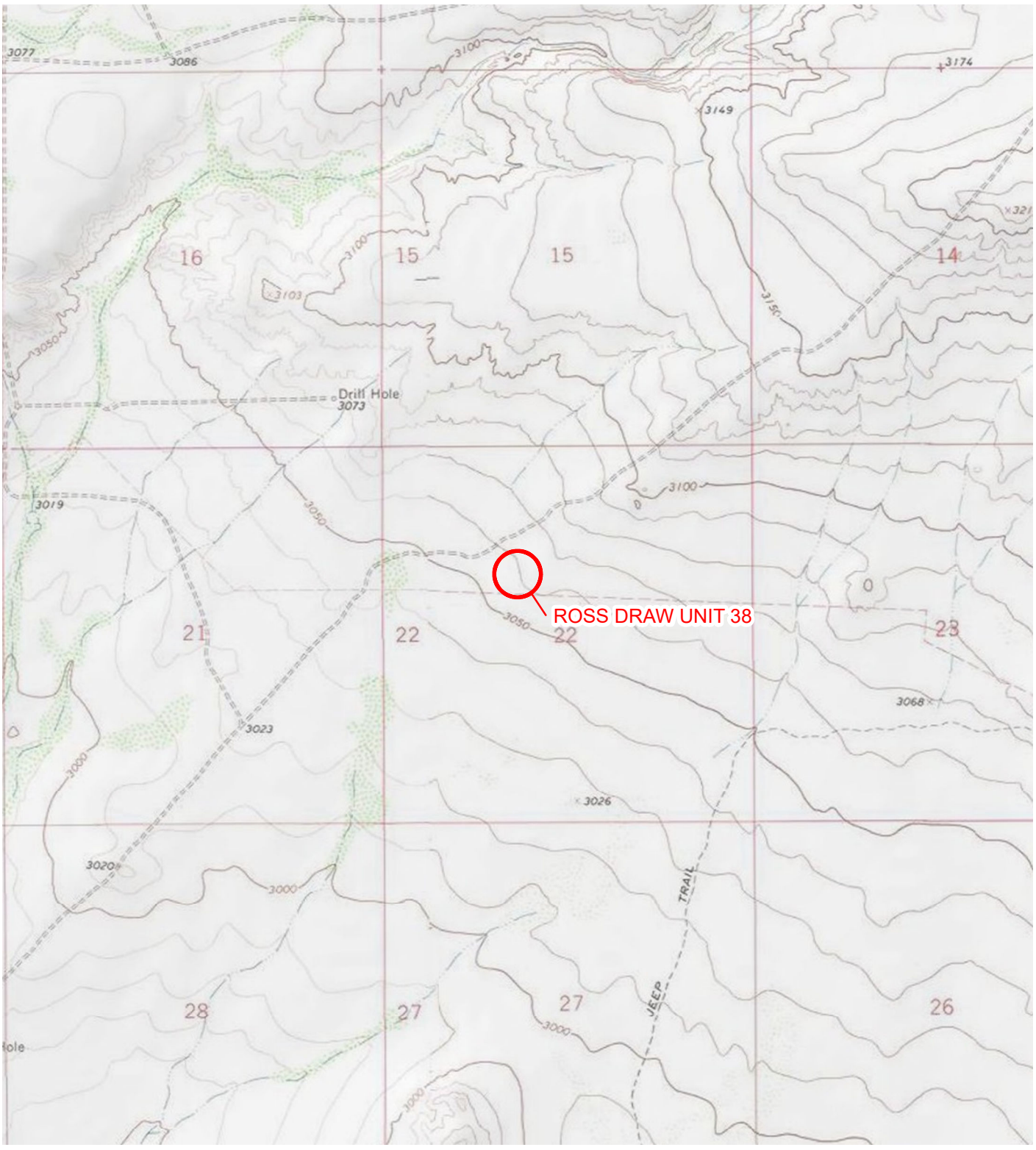


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
ROSS DRAW UNIT 38
UNIT F SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC

P:\WPX\GIS\MXD\034819066_RDU 38\034819066_FIG01_SL_2019.mxd

LEGEND

RELEASE LOCATION

RELEASE EXTENT (12,173 SQUARE FEET)

IMAGE COURTESY OF ESRI

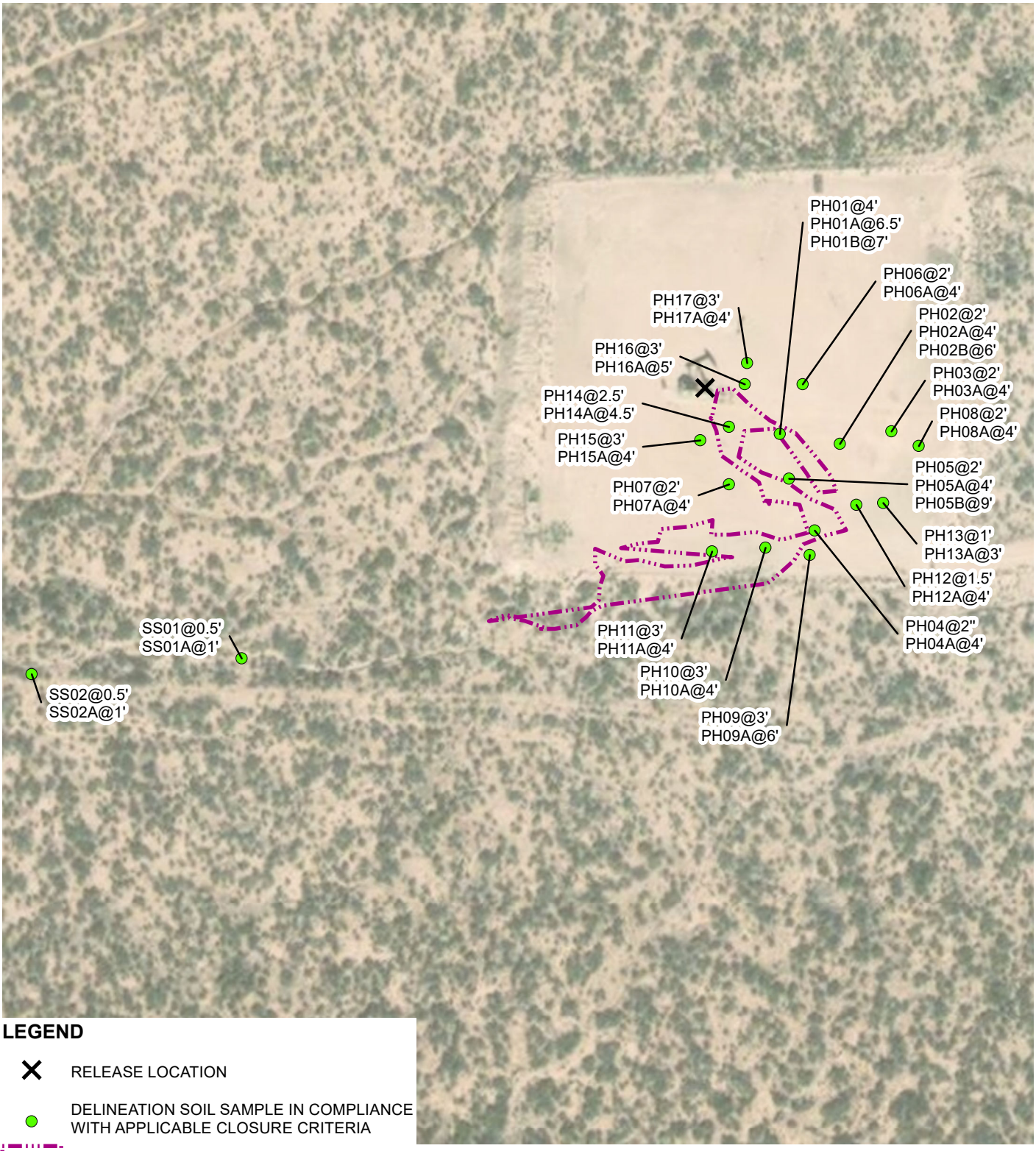
0 60 120

Feet

N

FIGURE 2
SITE MAP
ROSS DRAW UNIT 38
UNIT F SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034819066_RDU 38\034819066_FIG02_SITE_2019.mxd



LEGEND

- ✕ RELEASE LOCATION
- ● DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- ▭ RELEASE EXTENT (12,173 SQUARE FEET)

IMAGE COURTESY OF ESRI

NMOCD TABLE 1 CLOSURE CRITERIA (NMAC 19.15.29.12)
BENZENE = 10 mg/kg
TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES = 50 mg/kg
GASOLINE RANGE ORGANICS+DIESEL RANGE ORGANICS= 1,000 mg/kg
TOTAL PETROLEUM HYDROCARBONS = 2,500 mg/kg
CHLORIDE = 20,000 mg/kg
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: THERE WERE NO EXCEEDANCES PER THE NMOCD CLOSURE CRITERIA STANDARDS

0 120 240
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
ROSS DRAW UNIT 38
UNIT F SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034819066_RDU 38\034819066_FIG03_DELINEATION_2019.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS

Ross Draw Unit 38
REMEDIATION PERMIT NUMBER: 2RP-5679
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, 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)	MRO (mg/kg)	Sum of GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	10/04/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	20.9
SS01A	1	10/04/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	22.2
SS02	0.5	10/04/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	22.0
SS02A	1	10/04/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	23.0
PH01	4	10/10/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<25.0	<25.0	<25.0	<25.0	<25.0	5,270
PH01A	6.5	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	633
PH01B	7	1/10/2020	<0.00200	<0.00200	<0.00200	0.00233	0.00233	<49.9	<49.9	<49.9	<49.9	<49.9	380
PH02	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,970
PH02A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,170
PH02B	6	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	191
PH03	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,250
PH03A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160
PH04	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	942
PH04A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	572
PH05	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,480
PH05A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,170
PH05B	9	1/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	287
PH06	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	212
PH06A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	146
PH07	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	173
PH07A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
PH08	2	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	167
PH08A	4	10/10/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.0
PH09	3	1/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	234
PH09A	6	1/10/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	180
PH10	3	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	477
PH10A	4	1/13/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	70.2
PH11	3	1/13/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	392
PH11A	4	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	173
PH12	1.5	1/13/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	829
PH12A	4	1/13/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	150
PH13	1	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	19.5
PH13A	3	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	<9.94
PH14	2.5	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	645
PH14A	4.5	1/13/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	218
PH15	3	1/13/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	413
PH15A	4	1/13/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	50.8
PH16	3	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	649
PH16A	5	1/13/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	79.2
PH17	3	1/13/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	419
PH17A	4	1/13/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	345
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
NA - Not Applicable
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits
Bold- indicates result exceeds the applicable regulatory standard

ATTACHMENT 1: FORM C-141

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	NAB1929430314
District RP	2RP-5679
Facility ID	
Application ID	pAB1929430049

Release Notification SYKVY-191009-C-1410

Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: james.raley@wpxenergy.com	Incident # *(assigned by OCD)* NAB1929430314
Contact mailing address: 5315 Buena Vista Dr., Carlsbad, NM 88220	

Location of Release Source

Latitude 32.0302429 Longitude -103.8713455
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: ROSS DRAW UNIT #038	Site Type: Production Facility
Date Release Discovered: 10/2/2019	API# *(if applicable): 30-015-42295*

Unit Letter	Section	Township	Range	County
F	22	26S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private

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) 10	Volume Recovered (bbls) 5
☒ Produced Water	Volume Released (bbls) 40	Volume Recovered (bbls) 30
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: The wind caused a cattle panel to strike the wellhead causing damage and releasing approximately 50 BBL's of production fluids on location, fluids also impacted small drainage ditch off location.

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Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAB1929430314
District RP	2RP-5679
Facility ID	
Application ID	pAB1929430049

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? Volume exceeded 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Email sent to Mike Bratcher on 10/3/2019.	

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:

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: Jim Raley
Title: Environmental Specialist

Signature: Jim Raley
Date: 10/9/2019

email: james.raley@wpxenergy.com
Telephone: 575-689-7597

OCD Only

Received by: Amalia Bustamante
Date: 10/21/2019

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	**NAB1929430314**
District RP	2RP-5679
Facility ID	
Application ID	pAB1929430049

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: **Jim Raley** Title: **Environmental Specialist**

Signature: _____ Date: 2-27-2020

email: James.Raley@wpxenergy.com Telephone: **575-689-7597**

OCD Only

Received by: Cristina Eads Date: 03/23/2020

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	**NAB1929430314**
District RP	2RP-5679
Facility ID	
Application ID	pAB1929430049

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: **Jim Raley** Title: **Environmental Specialist**

Signature: _____ Date: 2-27-2020

email: James.Raley@wpxenergy.com Telephone: **575-689-7597**

OCD Only

Received by: Cristina Eads Date: 03/23/2020

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: 03/23/2020

Printed Name: Cristina Eads Title: Environmental Specialist

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View west to northwest of release extent.

Photograph 2: View north of release extent, south of pumpjack.

Photograph 3: Drainage ditch in pasture, most impacted area observed.

Photograph 4: View north at southeastern edge of the release extent

Site Name: Ross Draw Unit 38
Site Location: Rural Eddy County
Photographs Taken: October 4, 2019

PHOTOGRAPHIC LOG

Photograph 5: View northwest of pad.

Photograph 6: View northwest on pad around pumpjack.

Photograph 7: View north to northwest of pad.

Photograph 8: View north of eastern release extent.

Site Name: Ross Draw Unit 38
Site Location: Rural Eddy County
Photographs Taken: October 10, 2019

PHOTOGRAPHIC LOG

Photograph 9: View northeast around pumpjack.

Photograph 10: View East of pad area south of pumpack.

Photograph 11: View south to southeast of release extent

Photograph 12: View south of release extent

PHOTOGRAPHIC LOG

Photograph 13: Fluid flow of pad into pasture in southwest corner of pad.

Photograph 14: View south of pasture area release extent.

Photograph 15: View west of pasture area release extent.

Photograph 15: View south to southwest of pasture area release extent

Site Name: Ross Draw Unit 38
Site Location: Rural Eddy County
Photographs Taken: October 10, 2019

ATTACHMENT 3: Soil Sampling Logs

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
PH01	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Lynda Laumbach	Back hoe

Lat/Long: (Site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cr Test Strips	N/A	7'

Comments:
BDL: Below Detection Limit /* Lab Result

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	5270*	<25*	—	PH01	4	4'	SM	brown, poorly-graded sand (m.) with silt, no plasticity
D	633*	—	—	PH01A	7	6.5'	SM	brown, poorly-graded sand (m.), no plasticity, no odor
D	BDL	Ø	NO	PH01B		7'	SP	

TOTAL DEPTH

LL
AB → 1/10/20

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Identifier:	Date:
PH02	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: (Site)	Field Screening:	Logged By: Lynda Laumbach	Method: Back hoe
32.03025242, -103.8713213	PID & Hach Cr Test Strips	Hole Diameter: N/A	Total Depth: 6'

Comments:
BDL: Below Detection Limit /* Lab Result

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	4970*	—	—	PH02	2	2'	SM	brown sand (m.) with silt, poorly graded, no plasticity
D	2170*	—	—	PH02A	4	4'	SM	
D	191*	—	—	PH02B	6	6'	SM	
								TOTAL DEPTH

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Identifier:	Date:
PH03	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679
Logged By: Lynda Laumbach	**Method:** Back hoe
Lat/Long: (Site) 32.03025242, -103.8713213	**Field Screening:** PID & HACH Cr Test Strips
Hole Diameter: N/A	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL: Below Detection Limit / *Lab Result

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	2250*	—	—	PH03	2	2'	SM	brown, poorly graded silty sand (m.), no plasticity
D	160*	—	—	PH03A	4	4'	SM	
					5			TOTAL DEPTH

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Identifier:	Date:
PH04	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Lynda Laumbach / Method: Back hoe
Lat/Long: (Site) 32.03025242, -103.8713213	Field Screening: PID & HACH Cl Test Strips
Hole Diameter: N/A	Total Depth: 4'

Comments:
BDL: Below Detection Limit / *LAB RESULT

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	942*	—	—	PH04	2	2'	SM	brown, poorly-graded sand(cm.) with silt, no plasticity
D	572*	—	—	PH04A	4	4'	SM	
					5			TOTAL DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Carlsbad, New Mexico 88220

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Identifier:	Date:
PH05	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679
Logged By: Lynda Laumbach	**Method:** Back hoe
Lat/Long: (Site) 32.03025242, -103.5713213	**Field Screening:** PID & HACH Cr Test Strips
Hole Diameter: N/A	**Total Depth:** 9'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL: Below Detection Limit / * Lab Result

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
						0			
						1			
LL	D	4480*	—	—	PH05	2	2'	SM	brown, poorly graded sand (m.) with silt, no plasticity, no odor
						3			
LL	D	1170*	—	—	PH05A	4	4'	SM	
QB 1/10/20	D	608	Ø	ND		5	5'	SM	
	D	720	Ø			6	6'	SM	
	D	556	Ø			7	7'	SM	
	D	664	Ø			8	8'	SM	
QB 1/10/20	D	248	Ø		PH05B	9	9'	SM	
						10			TOT DEPTH
						11			QB
						12			

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Identifier:	Date:
PH06	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Lynda Laumbach / Method: Back hoe
Lat/Long: (Site) 32.03025242, -103.8713213	Field Screening: PID & HACH Cr Test Strips / Hole Diameter: N/A / Total Depth: 4'

Comments:
BDL: Below Detection Limit /* Lab Result

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	212*	—	—	PH06	2	2'	SM	brown, poorly-graded sand (m.), no plasticity, no odor
D	146*	—	—	PH06A	4	4'	SM	↓
								TOT DEPTH

0 1 2 3 4 5 6 7 8 9 10 11 12

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Identifier:	Date:
PH07	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Lynda Laumbach / Method: Back hoe
Lat/Long: (Site) 32.03025242, -103.5713213	Field Screening: PID & HACH Cl Test Strips / Hole Diameter: N/A / Total Depth: 4'

Comments: BDL: Below Detection Limit /* lab result

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	173*	—	—	PH07	2	2'	SM	brown, poorly-graded sand (m.) with silt, no plasticity or odor
D	100*	—	—	PH07A	4	4'	SM	
					5			TOT DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH08	10/10/19
Project Name:	**RP Number:**
Ross Draw Unit 38	RP-5679
Logged By: Lynda Laumbach	**Method:** Back hoe
Field Screening: PID & HACH Cr Test Strips	**Hole Diameter:** N/A
Total Depth: 4'	

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: (Site) 32.03025242, -103.5713213

Comments: BDL: Below Detection Limit /* Lab Data

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	167*	–	–	PH08	2	2'	sm	brown, poorly-graded sand (m.) with silt, no plasticity or odor
D	99*	–	–	PH08A	4	4'	sm	
					5			TOT DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH09	1/10/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Backhoe

Lat/Long: (site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	N/A	6'

Comments: BDL - Below Detection Limit

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1245	D	124	Ø	N		0	0.5'	SM	brown sand (m.) with silt (>15%), no plasticity, poorly-graded, no odor
1247	D	BDL	Ø			1	1'		
1250	D	168	Ø			2	2'		
1255	D	~~9920~~ QB 220	Ø		PH09	3	3'		
1257	D	556	Ø			4	4'		
1315	D	168	Ø			5	5'		
1312	D	168	Ø	↓	PH09A	6	6'	↓	↓
						7			TOT DEPTH
						8			
						9			
						10			
						11			
						12			

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Identifier:	Date:
PH10	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Backhoe

Lat/Long: (site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	N/A	4'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			EXCAVATED
					1			
D	BDL	Ø	NO		2	2'	SM	brown, poorly-graded sand (m.) with silt, no plasticity or odor
D	348	Ø	NO	PH10	3	3'	SM	
D	BDL	Ø	NO	PH10A	4	4'	SM	
					5			TOTAL DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH11	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Backhoe

Lat/Long: (site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	N/A	4'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	168	∅	NO		1	1'	SM	brown, poorly-graded sand (SM) with silt, no plasticity or odor
D	220	∅			2	2'	SM	
D	348	∅		PH11	3	3'	SM	
D	168	∅		PH11A	4	4'	SM	
					5			TOT DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH12	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Backhoe

Lat/Long: (site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	N/A	4'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	664	Ø	NO	PH12	2	1.5'	SM	brown poorly-graded sand (sm.) with silt, no plasticity or odor
D	464	Ø			3	3'	SM	"
D	148	Ø		PH12A	4	4'	SP	brown, poorly graded sand (sm.), no plasticity or odor
								TOT DEPTH

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Identifier:	Date:
PH13	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Backhoe

Lat/Long: (site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	N/A	3'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	BDL	Ø	NO	PH13	1	1'	SM	poorly graded sand (m.) with silt, brown, no plasticity, no odor
D	BDL	Ø			2	2'	SM	"
D	BDL	Ø	↓	PH13A	3	3'	SP	poorly graded sand (m.), brown, no plasticity or odor
					4			TOT DEPTH
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier:	Date:
PH14	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Backhoe

Lat/Long: (site)	Field Screening:	Hole Diameter:	Total Depth:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	N/A	4.5'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			EXCAVATED
348	D	Ø	NO		1	1.5'	SM	brown, poorly-graded sand (SM) with silt, no plasticity or odor
556	D	Ø		PH14	2	2.5'	SM	
556	D	Ø			3	3.5'	SM	
196	D	Ø		PH14A	4	4.5'	SM	
					5			TOT DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
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Carlsbad, New Mexico 88220
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Identifier:	Date:
PH1S	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers / Method: Backhoe
Lat/Long: (site) 32.03025242, -103.8713213	Field Screening: PID & HACH Cl⁻ Test Strips / Hole Diameter: N/A / Total Depth: 4'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	248	Ø	ND		1	1'	SM	brown, poorly-graded sand (m.) with silt, no plasticity or odor
D	312	Ø			2	2'	SM	"
D	384	Ø		PH1S	3	3'	SM	"
D	BDL	Ø		PH1SA	4	4'	SP-SM	brown, poorly-graded sand (m.) with gravel and silt, no plasticity or odor
					5			TOT DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
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Carlsbad, New Mexico 88220
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Identifier:	Date:
PH16	1/13/20
Project Name:	**RP Number:**
Ross Draw Unit 38	2RP-5679
Logged By: Anna Byers	**Method:** Backhoe
Lat/Long: (site) 32.03025242, -103.8713213	**Field Screening:** PID & HACH Cl⁻ Test Strips
Hole Diameter: N/A	**Total Depth:** 5'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	BDL	ϕ	NO		1	1'	SP-SM	poorly-graded, brown sand (fn.) with silt & gravel, no plasticity or odor
D	384	ϕ			2	2'	SM	poorly-graded brown sand (fn.) with silt, no plasticity or odor
D	556	ϕ		PH16	3	3'	SM	"
D	464	ϕ			4	4'	SM	"
D	BDL	ϕ	↓	PH16A	5	5'	SP	poorly-graded brown sand (fn.) ~~with silt~~, no plasticity or odor
					6			TOT DEPTH
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
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Identifier:	Date:
PH17	1/13/20
Project Name:	**RP Number:**
Ross DRAW Unit 38	2RP-5679

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: (site)	Field Screening:	Logged By:	Method:
32.03025242, -103.8713213	PID & HACH Cl⁻ Test Strips	Anna Byers	Backhoe
	Hole Diameter: N/A		Total Depth: 4'

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	220	Ø	No		1	1'	SM	brown, poorly-graded sand (m.) with silt, no plasticity and no odor
D	168	Ø			2	2'	SM	
D	348	Ø		PH17	3	3'	SM	
D	280	Ø		PH17A	4	4'	SM	
					5			TOT DEPTH
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 4: Laboratory Analytical Results

Analytical Report 639200

for

LT Environmental, Inc.

Project Manager: Dan Moir

RDU 38

034819066

14-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)

14-OCT-19

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

Reference: XENCO Report No(s): **639200**
RDU 38
Project Address: Eddy County, NM

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) 639200. 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. 639200 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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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	10-04-19 14:20	0.5 ft	639200-001
SS01A	S	10-04-19 14:25	1 ft	639200-002
SS02	S	10-04-19 14:35	0.5 ft	639200-003
SS02A	S	10-04-19 14:40	1 ft	639200-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 38

Project ID: *034819066*
Work Order Number(s): *639200*

Report Date: *14-OCT-19*
Date Received: *10/07/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104086 BTEX by EPA 8021B

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

Certificate of Analysis Summary 639200

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Dan Moir
Project Location: Eddy County, NM

Date Received in Lab: Mon Oct-07-19 12:50 pm
Report Date: 14-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639200-001		639200-002		639200-003		639200-004					
	Field Id:	SS01		SS01A		SS02		SS02A					
	Depth:	0.5- ft		1- ft		0.5- ft		1- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Oct-04-19 14:20		Oct-04-19 14:25		Oct-04-19 14:35		Oct-04-19 14:40					
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-10-19 16:15		Oct-10-19 16:15		Oct-10-19 16:15		Oct-10-19 16:15					
	Analyzed:	Oct-12-19 20:46		Oct-12-19 21:06		Oct-12-19 21:26		Oct-12-19 21:47					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201				
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201				
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201				
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399	<0.00399	0.00399	<0.00402	0.00402				
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201				
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201				
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201				
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-08-19 16:20		Oct-08-19 16:20		Oct-08-19 16:20		Oct-08-19 16:20					
	Analyzed:	Oct-08-19 22:04		Oct-08-19 22:10		Oct-08-19 22:15		Oct-08-19 22:20					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		20.9	4.99	22.2	4.95	22.0	5.02	23.0	5.05				
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-10-19 17:00		Oct-10-19 17:00		Oct-10-19 17:00		Oct-10-19 17:00					
	Analyzed:	Oct-11-19 02:01		Oct-11-19 02:44		Oct-11-19 03:06		Oct-11-19 03:27					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				
Total GRO-DRO		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				
Total TPH		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-001	Date Collected:	10.04.19 14.20	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 16.20	Basis:	Wet Weight
Seq Number:	3103713			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**20.9**	4.99	mg/kg	10.08.19 22.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 17.00	Basis:	Wet Weight
Seq Number:	3104059			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	10.11.19 02.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.11.19 02.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.11.19 02.01	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.11.19 02.01	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.11.19 02.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	10.11.19 02.01	
o-Terphenyl	84-15-1	88	%	70-135	10.11.19 02.01	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-001	Date Collected:	10.04.19 14.20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.10.19 16.15	Basis:	Wet Weight
Seq Number:	3104086			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.12.19 20.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.12.19 20.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.12.19 20.46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.12.19 20.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.12.19 20.46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.12.19 20.46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.12.19 20.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.12.19 20.46	
1,4-Difluorobenzene	540-36-3	83	%	70-130	10.12.19 20.46	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id: **SS01A** Matrix: Soil Date Received:10.07.19 12.50

Lab Sample Id: 639200-002 Date Collected: 10.04.19 14.25 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 10.08.19 16.20 Basis: Wet Weight

Seq Number: 3103713 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.2**	4.95	mg/kg	10.08.19 22.10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: DVM Date Prep: 10.10.19 17.00 Basis: Wet Weight

Seq Number: 3104059 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	10.11.19 02.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.11.19 02.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.11.19 02.44	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.11.19 02.44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.11.19 02.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	10.11.19 02.44	
o-Terphenyl	84-15-1	94	%	70-135	10.11.19 02.44	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS01A**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-002	Date Collected:	10.04.19 14.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.10.19 16.15	Basis:	Wet Weight
Seq Number:	3104086			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.12.19 21.06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.12.19 21.06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.12.19 21.06	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.12.19 21.06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.12.19 21.06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.12.19 21.06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.12.19 21.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	70-130	10.12.19 21.06	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.12.19 21.06	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-003	Date Collected:	10.04.19 14.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 16.20	Basis:	Wet Weight
Seq Number:	3103713			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.0**	5.02	mg/kg	10.08.19 22.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 17.00	Basis:	Wet Weight
Seq Number:	3104059			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	10.11.19 03.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.11.19 03.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.11.19 03.06	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.11.19 03.06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.11.19 03.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.11.19 03.06	
o-Terphenyl	84-15-1	92	%	70-135	10.11.19 03.06	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-003	Date Collected:	10.04.19 14.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.10.19 16.15	Basis:	Wet Weight
Seq Number:	3104086			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.12.19 21.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.12.19 21.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.12.19 21.26	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.12.19 21.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.12.19 21.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.12.19 21.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.12.19 21.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	76	%	70-130	10.12.19 21.26	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.12.19 21.26	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS02A**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-004	Date Collected:	10.04.19 14.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 16.20	Basis:	Wet Weight
Seq Number:	3103713			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.0**	5.05	mg/kg	10.08.19 22.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 17.00	Basis:	Wet Weight
Seq Number:	3104059			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	10.11.19 03.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.11.19 03.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.11.19 03.27	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.11.19 03.27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.11.19 03.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.11.19 03.27	
o-Terphenyl	84-15-1	93	%	70-135	10.11.19 03.27	

Certificate of Analytical Results 639200

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**SS02A**	Matrix:	Soil	Date Received:	10.07.19 12.50
Lab Sample Id:	639200-004	Date Collected:	10.04.19 14.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.10.19 16.15	Basis:	Wet Weight
Seq Number:	3104086			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.12.19 21.47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.12.19 21.47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.12.19 21.47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.12.19 21.47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.12.19 21.47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.12.19 21.47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.12.19 21.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	10.12.19 21.47	
1,4-Difluorobenzene	540-36-3	85	%	70-130	10.12.19 21.47	

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 639200

LT Environmental, Inc.

RDU 38

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103713 — Matrix: Solid — Date Prep: 10.08.19
MB Sample Id: 7687723-1-BLK — LCS Sample Id: 7687723-1-BKS — LCSD Sample Id: 7687723-1-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	252	101	241	96	90-110	4	20	mg/kg	10.08.19 19:47	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103713 — Matrix: Soil — Date Prep: 10.08.19
Parent Sample Id: 639118-004 — MS Sample Id: 639118-004 S — MSD Sample Id: 639118-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.29	248	248	97	250	98	90-110	1	20	mg/kg	10.08.19 20:03	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103713 — Matrix: Soil — Date Prep: 10.08.19
Parent Sample Id: 639155-002 — MS Sample Id: 639155-002 S — MSD Sample Id: 639155-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	358	249	586	92	582	90	90-110	1	20	mg/kg	10.08.19 21:17	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104059 — Matrix: Solid — Date Prep: 10.10.19
MB Sample Id: 7687890-1-BLK — LCS Sample Id: 7687890-1-BKS — LCSD Sample Id: 7687890-1-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	1080	108	1100	110	70-135	2	20	mg/kg	10.10.19 21:24	
Diesel Range Organics (DRO)	<15.0	1000	1040	104	1060	106	70-135	2	20	mg/kg	10.10.19 21:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		99		115		70-135	%	10.10.19 21:24
o-Terphenyl	96		97		101		70-135	%	10.10.19 21:24

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104059 — Matrix: Solid — Date Prep: 10.10.19
MB Sample Id: 7687890-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.10.19 21:03	

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 639200

LT Environmental, Inc.

RDU 38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104059 — Matrix: Soil — Date Prep: 10.10.19
Parent Sample Id: 639118-004 — MS Sample Id: 639118-004 S — MSD Sample Id: 639118-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	991	99	1000	100	70-135	1	20	mg/kg	10.10.19 22:29	
Diesel Range Organics (DRO)	<15.0	999	947	95	965	97	70-135	2	20	mg/kg	10.10.19 22:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		92		70-135	%	10.10.19 22:29
o-Terphenyl	87		90		70-135	%	10.10.19 22:29

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104086 — Matrix: Solid — Date Prep: 10.10.19
MB Sample Id: 7687878-1-BLK — LCS Sample Id: 7687878-1-BKS — LCSD Sample Id: 7687878-1-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	0.0815	82	0.0775	78	70-130	5	35	mg/kg	10.12.19 18:46	
Toluene	<0.00200	0.100	0.0878	88	0.0835	84	70-130	5	35	mg/kg	10.12.19 18:46	
Ethylbenzene	<0.00200	0.100	0.0955	96	0.0906	91	70-130	5	35	mg/kg	10.12.19 18:46	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.179	90	70-130	5	35	mg/kg	10.12.19 18:46	
o-Xylene	<0.00200	0.100	0.101	101	0.0968	97	70-130	4	35	mg/kg	10.12.19 18:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		90		91		70-130	%	10.12.19 18:46
4-Bromofluorobenzene	103		113		112		70-130	%	10.12.19 18:46

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104086 — Matrix: Soil — Date Prep: 10.10.19
Parent Sample Id: 639206-001 — MS Sample Id: 639206-001 S — MSD Sample Id: 639206-001 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	0.00757	8	0.0222	22	70-130	98	35	mg/kg	10.12.19 19:27	XF
Toluene	<0.00199	0.0996	0.00368	4	0.0176	18	70-130	131	35	mg/kg	10.12.19 19:27	XF
Ethylbenzene	<0.00199	0.0996	0.00426	4	0.0164	16	70-130	118	35	mg/kg	10.12.19 19:27	XF
m,p-Xylenes	<0.00398	0.199	0.00401	2	0.0132	7	70-130	107	35	mg/kg	10.12.19 19:27	XF
o-Xylene	<0.00199	0.0996	0.00985	10	0.0280	28	70-130	96	35	mg/kg	10.12.19 19:27	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		87		70-130	%	10.12.19 19:27
4-Bromofluorobenzene	120		122		70-130	%	10.12.19 19:27

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: 639200

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc.	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@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:	RDU 38	Turn Around	
Project Number:	034819066	Routine	X
P.O. Number:	Eddy County, NM/ Task #002	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2	Thermometer ID	T-NM-2007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	10/04/2019	14:20	0.5'	1	X	X	X
SS01A	S		14:25	1'	1	X	X	X
SS02	S		14:35	0.5'	1	X	X	X
SS02A	S		14:40	1'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10/07/2019 12:50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **49492**

Date/Time: 10/07/19 15:02
Lab# From: **Carlsbad**
Lab# To: **Midland**

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

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

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
639200-001	S	SS01	10/04/19 14:20	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639200-001	S	SS01	10/04/19 14:20	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639200-001	S	SS01	10/04/19 14:20	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639200-002	S	SS01A	10/04/19 14:25	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639200-002	S	SS01A	10/04/19 14:25	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639200-002	S	SS01A	10/04/19 14:25	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639200-003	S	SS02	10/04/19 14:35	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639200-003	S	SS02	10/04/19 14:35	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639200-003	S	SS02	10/04/19 14:35	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639200-004	S	SS02A	10/04/19 14:40	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639200-004	S	SS02A	10/04/19 14:40	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639200-004	S	SS02A	10/04/19 14:40	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 10/07/2019

Received By: Brianna Teel

Date Received: 10/08/2019 13:35

Cooler Temperature: 0.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 49492

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

Sent By: Elizabeth McClellan **Date Sent:** 10/07/2019 03:02 PM

Received By: Brianna Teel **Date Received:** 10/08/2019 01:35 PM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: Brianna Teel Date: 10/08/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/07/2019 12:50:00 PM

Work Order #: 639200

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?	**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)?	**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: 10/07/2019

Checklist reviewed by: Jessica Kramer Date: 10/09/2019

Analytical Report 639765

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 38

034819066

16-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)

16-OCT-19

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

Reference: XENCO Report No(s): **639765**
RDU 38
Project Address: Eddy County, NM

Chris McKisson:

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) 639765. 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. 639765 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 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	10-10-19 11:40	4 ft	639765-001
PH01A	S	10-10-19 11:50	6.5 ft	639765-002
PH02	S	10-10-19 12:00	2 ft	639765-003
PH02A	S	10-10-19 12:10	4 ft	639765-004
PH02B	S	10-10-19 12:15	6 ft	639765-005
PH03	S	10-10-19 12:30	2 ft	639765-006
PH03A	S	10-10-19 12:35	4 ft	639765-007
PH04	S	10-10-19 12:50	2 ft	639765-008
PH04A	S	10-10-19 13:00	4 ft	639765-009
PH05	S	10-10-19 13:10	2 ft	639765-010
PH05A	S	10-10-19 13:20	4 ft	639765-011
PH06	S	10-10-19 13:30	2 ft	639765-012
PH06A	S	10-10-19 13:35	4 ft	639765-013
PH07	S	10-10-19 13:45	2 ft	639765-014
PH07A	S	10-10-19 13:55	4 ft	639765-015
PH08	S	10-10-19 14:15	2 ft	639765-016
PH08A	S	10-10-19 14:35	4 ft	639765-017

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: RDU 38

Project ID: *034819066*
Work Order Number(s): *639765*

Report Date: *16-OCT-19*
Date Received: *10/11/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104253 Inorganic Anions by EPA 300
Lab Sample ID 639765-009 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: 639765-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3104315 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 639765

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Eddy County, NM

Date Received in Lab: Fri Oct-11-19 12:35 pm
Report Date: 16-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639765-001		639765-002		639765-003		639765-004		639765-005		639765-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH02B		PH03	
	Depth:	4- ft		6.5- ft		2- ft		4- ft		6- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-10-19 11:40		Oct-10-19 11:50		Oct-10-19 12:00		Oct-10-19 12:10		Oct-10-19 12:15		Oct-10-19 12:30	
BTEX by EPA 8021B SUB: T104704400-19-19	*Extracted:*	Oct-14-19 16:10											
	Analyzed:	Oct-14-19 23:18											
	Units/RL:	mg/kg	RL										
Benzene		<0.00101	0.00101										
Toluene		<0.00101	0.00101										
Ethylbenzene		<0.00101	0.00101										
m,p-Xylenes		<0.00202	0.00202										
o-Xylene		<0.00101	0.00101										
Total Xylenes		<0.00101	0.00101										
Total BTEX		<0.00101	0.00101										
Chloride by EPA 300 SUB: T104704400-19-19	*Extracted:*	Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18	
	Analyzed:	Oct-14-19 11:22		Oct-14-19 11:30		Oct-14-19 11:37		Oct-14-19 12:02		Oct-14-19 12:09		Oct-14-19 12:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		5270 D	101	633	101	4970 D	201	2170	101	191	10.0	2250	99.4
TPH by SW8015 Mod SUB: T104704400-19-19	*Extracted:*	Oct-14-19 11:00											
	Analyzed:	Oct-14-19 21:30											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons (GRO)		<25.0	25.0										
Diesel Range Organics (DRO)		<25.0	25.0										
Motor Oil Range Hydrocarbons (MRO)		<25.0	25.0										
Total TPH		<25.0	25.0										
Total GRO-DRO		<25.0	25.0										

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 639765

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Eddy County, NM

Date Received in Lab: Fri Oct-11-19 12:35 pm
Report Date: 16-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639765-007		639765-008		639765-009		639765-010		639765-011		639765-012	
	Field Id:	PH03A		PH04		PH04A		PH05		PH05A		PH06	
	Depth:	4- ft		2- ft		4- ft		2- ft		4- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-10-19 12:35		Oct-10-19 12:50		Oct-10-19 13:00		Oct-10-19 13:10		Oct-10-19 13:20		Oct-10-19 13:30	
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18	
	Analyzed:	Oct-14-19 12:23		Oct-14-19 12:31		Oct-14-19 12:38		Oct-14-19 12:59		Oct-14-19 13:06		Oct-14-19 13:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		160	9.96	942	49.1	572	49.1	4480	202	1170	50.2	212	100

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 639765

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Eddy County, NM

Date Received in Lab: Fri Oct-11-19 12:35 pm
Report Date: 16-OCT-19
Project Manager: Jessica Kramer

Analysis Requested												
	Lab Id:	639765-013		639765-014		639765-015		639765-016		639765-017		
	Field Id:	PH06A		PH07		PH07A		PH08		PH08A		
	Depth:	4- ft		2- ft		4- ft		2- ft		4- ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Oct-10-19 13:35		Oct-10-19 13:45		Oct-10-19 13:55		Oct-10-19 14:15		Oct-10-19 14:35		
Chloride by EPA 300 **SUB: T104704400-19-19**	***Extracted:***	Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		Oct-14-19 10:18		
	Analyzed:	Oct-14-19 13:35		Oct-14-19 13:42		Oct-14-19 13:49		Oct-14-19 13:57		Oct-14-19 14:04		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		146	10.1	173	10.1	100	49.8	167	9.98	99.0	49.9	

Jessica Kramer
Project Assistant

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-001	Date Collected:	10.10.19 11.40	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5270**	101	mg/kg	10.15.19 09.59	D	10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.14.19 11.00	Basis:	Wet Weight
Seq Number:	3104378			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	10.14.19 21.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	10.14.19 21.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	10.14.19 21.30	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	10.14.19 21.30	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	10.14.19 21.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.14.19 21.30	
o-Terphenyl	84-15-1	101	%	70-135	10.14.19 21.30	

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-001	Date Collected:	10.10.19 11.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 16.10	Basis:	Wet Weight
Seq Number:	3104315			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.14.19 23.18	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.14.19 23.18	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.14.19 23.18	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.14.19 23.18	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.14.19 23.18	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.14.19 23.18	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.14.19 23.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.14.19 23.18	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.14.19 23.18	

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-002	Date Collected:	10.10.19 11.50	Sample Depth:	6.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**633**	101	mg/kg	10.14.19 11.30		10

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-003	Date Collected:	10.10.19 12.00	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4970**	201	mg/kg	10.15.19 09.12	D	20

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-004	Date Collected:	10.10.19 12.10	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2170**	101	mg/kg	10.14.19 12.02		10

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH02B**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-005	Date Collected:	10.10.19 12.15	Sample Depth:	6 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**191**	10.0	mg/kg	10.14.19 12.09		1

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-006	Date Collected:	10.10.19 12.30	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2250**	99.4	mg/kg	10.14.19 12.16		10

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-007	Date Collected:	10.10.19 12.35	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**160**	9.96	mg/kg	10.14.19 12.23		1

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-008	Date Collected:	10.10.19 12.50	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**942**	49.1	mg/kg	10.14.19 12.31		5

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-009	Date Collected:	10.10.19 13.00	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**572**	49.1	mg/kg	10.14.19 12.38		5

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-010	Date Collected:	10.10.19 13.10	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4480**	202	mg/kg	10.14.19 12.59		20

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-011	Date Collected:	10.10.19 13.20	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1170**	50.2	mg/kg	10.14.19 13.06		5

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-012	Date Collected:	10.10.19 13.30	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**212**	100	mg/kg	10.14.19 13.28		10

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-013	Date Collected:	10.10.19 13.35	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**146**	10.1	mg/kg	10.14.19 13.35		1

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-014	Date Collected:	10.10.19 13.45	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	10.1	mg/kg	10.14.19 13.42		1

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-015	Date Collected:	10.10.19 13.55	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**100**	49.8	mg/kg	10.14.19 13.49		5

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-016	Date Collected:	10.10.19 14.15	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**167**	9.98	mg/kg	10.14.19 13.57		1

Certificate of Analytical Results 639765

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	10.11.19 12.35
Lab Sample Id:	639765-017	Date Collected:	10.10.19 14.35	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 10.18	Basis:	Wet Weight
Seq Number:	3104253			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.0**	49.9	mg/kg	10.14.19 14.04		5

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 639765

LT Environmental, Inc.

RDU 38

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104253 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688095-1-BLK — LCS Sample Id: 7688095-1-BKS — LCSD Sample Id: 7688095-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	266	106	90-110	0	20	mg/kg	10.14.19 10:39	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104253 — Matrix: Soil — Date Prep: 10.14.19
Parent Sample Id: 639720-001 — MS Sample Id: 639720-001 S — MSD Sample Id: 639720-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	221	3990	4440	106	4490	107	90-110	1	20	mg/kg	10.14.19 11:01	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104253 — Matrix: Solid — Date Prep: 10.14.19
Parent Sample Id: 639765-009 — MS Sample Id: 639765-009 S — MSD Sample Id: 639765-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	572	992	1830	127	1880	130	90-110	3	20	mg/kg	10.14.19 12:45	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104378 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688111-1-BLK — LCS Sample Id: 7688111-1-BKS — LCSD Sample Id: 7688111-1-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)	<25.0	1000	818	82	829	83	70-135	1	35	mg/kg	10.14.19 20:50	
Diesel Range Organics (DRO)	<25.0	1000	739	74	760	76	70-135	3	35	mg/kg	10.14.19 20:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		104		96		70-135	%	10.14.19 20:50
o-Terphenyl	85		93		94		70-135	%	10.14.19 20:50

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104378 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688111-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<25.0	mg/kg	10.14.19 20:30	

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 639765

LT Environmental, Inc.

RDU 38

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3104378 | Matrix: Soil | Date Prep: 10.14.19
Parent Sample Id: 639765-001 | MS Sample Id: 639765-001 S | MSD Sample Id: 639765-001 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)	<25.0	1000	990	99	978	98	70-135	1	35	mg/kg	10.14.19 21:50	
Diesel Range Organics (DRO)	<25.0	1000	854	85	822	83	70-135	4	35	mg/kg	10.14.19 21:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		110		70-135	%	10.14.19 21:50
o-Terphenyl	100		96		70-135	%	10.14.19 21:50

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104315 | Matrix: Solid | Date Prep: 10.14.19
MB Sample Id: 7688133-1-BLK | LCS Sample Id: 7688133-1-BKS | LCSD Sample Id: 7688133-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0948	95	0.0980	98	70-130	3	35	mg/kg	10.14.19 18:26	
Toluene	<0.00100	0.100	0.0936	94	0.0968	97	70-130	3	35	mg/kg	10.14.19 18:26	
Ethylbenzene	<0.00100	0.100	0.0972	97	0.101	101	71-129	4	35	mg/kg	10.14.19 18:26	
m,p-Xylenes	<0.00200	0.200	0.197	99	0.202	101	70-135	3	35	mg/kg	10.14.19 18:26	
o-Xylene	<0.00100	0.100	0.0968	97	0.0992	99	71-133	2	35	mg/kg	10.14.19 18:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		101		70-130	%	10.14.19 18:26
4-Bromofluorobenzene	98		103		102		70-130	%	10.14.19 18:26

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104315 | Matrix: Soil | Date Prep: 10.14.19
Parent Sample Id: 639886-001 | MS Sample Id: 639886-001 S | MSD Sample Id: 639886-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000994	0.0994	0.0965	97	0.0825	83	70-130	16	35	mg/kg	10.14.19 19:04	
Toluene	<0.000994	0.0994	0.0934	94	0.0792	80	70-130	16	35	mg/kg	10.14.19 19:04	
Ethylbenzene	<0.000994	0.0994	0.0955	96	0.0803	81	71-129	17	35	mg/kg	10.14.19 19:04	
m,p-Xylenes	<0.00199	0.199	0.192	96	0.161	81	70-135	18	35	mg/kg	10.14.19 19:04	
o-Xylene	<0.000994	0.0994	0.0969	97	0.0826	83	71-133	16	35	mg/kg	10.14.19 19:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	10.14.19 19:04
4-Bromofluorobenzene	111		110		70-130	%	10.14.19 19:04

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

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

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

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

Chain of Custody

Work Order No: 639765

XENCO LABORATORIES

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

www.xenco.com Page 1 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc.	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@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:	RDU 38	Turn Around	
Project Number:	034819066	Routine	X
P.O. Number:	Eddy County, NM/ Task #002	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2	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:	17

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	10/10/2019	11:40	4'	1	X	X	X
PH01A			11:50	6.5'	1			X
PH02			12:00	2'	1			X
PH02A			12:10	4'	1			X
PH02B			12:15	6'	1			X
PH03			12:30	2'	1			X
PH03A			12:35	4'	1			X
PH04			12:50	2'	1			X
PH04A			13:00	4'	1			X
PH05			13:10	2'	1			X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Anna Byers	10/11/2019 10:00	2 Anna Byers		11/11 12.35
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: e397605

XENCO LABORATORIES

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

www.xenco.com Page 2 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc.	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@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:	RDU 38	Turn Around	
Project Number:	34819066	Routine	X
P.O. Number:	Eddy County, NM/ Task #002	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	1.2	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:	17

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH5A	S	10/10/19	13:20	4'	1			X
PH06	S		13:30	2'	1			X
PH06A	S		13:35	4'	1			X
PH07	S		13:45	2'	1			X
PH07A	S		13:55	4'	1			X
PH08	S		14:15	2'	1			X
PH08A	S		14:35	4'	1			X

Work Order Notes

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

Sample Comments

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Anna Byers	10/11/2019 10:00	2 Anna Byers	10-11 12:35	
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number : 49949

Date/Time:	10.11.2019	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.:		E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
639765-001	S	PH01	10.10.2019 11:40	SW8015MOD_NM	TPH by SW8015 Mod	10.17.2019	10.24.2019	JKR	GRO-DRO PHCC10C28	
639765-001	S	PH01	10.10.2019 11:40	SW8021B	BTEX by EPA 8021B	10.17.2019	10.24.2019	JKR	BR4FBZ BZ BZME EBZ	
639765-001	S	PH01	10.10.2019 11:40	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-002	S	PH01A	10.10.2019 11:50	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-003	S	PH02	10.10.2019 12:00	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-004	S	PH02A	10.10.2019 12:10	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-005	S	PH02B	10.10.2019 12:15	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-006	S	PH03	10.10.2019 12:30	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-007	S	PH03A	10.10.2019 12:35	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-008	S	PH04	10.10.2019 12:50	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-009	S	PH04A	10.10.2019 13:00	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-010	S	PH05	10.10.2019 13:10	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-011	S	PH05A	10.10.2019 13:20	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-012	S	PH06	10.10.2019 13:30	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-013	S	PH06A	10.10.2019 13:35	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-014	S	PH07	10.10.2019 13:45	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-015	S	PH07A	10.10.2019 13:55	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-016	S	PH08	10.10.2019 14:15	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	
639765-017	S	PH08A	10.10.2019 14:35	E300_CL	Chloride by EPA 300	10.17.2019	04.07.2020	JKR	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: 

Elizabeth McClellan

Date Relinquished: 10.11.2019

Received By: _____

Date Received: _____

Cooler Temperature: _____

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/11/2019 12:35:00 PM

Work Order #: 639765

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**Yes**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**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: 10/11/2019

Checklist reviewed by: Jessica Kramer Date: 10/13/2019

Analytical Report 648849

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 38

034819066

16-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)

16-JAN-20

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

Reference: XENCO Report No(s): **648849**
RDU 38
Project Address: Rural Eddy County

Chris McKisson:

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) 648849. 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. 648849 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 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01B	S	01-10-20 10:55	7 ft	648849-001
PH05B	S	01-10-20 11:55	9 ft	648849-002
PH09	S	01-10-20 12:55	3 ft	648849-003
PH09A	S	01-10-20 13:20	6 ft	648849-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 38

Project ID: *034819066*
Work Order Number(s): *648849*

Report Date: *16-JAN-20*
Date Received: *01/13/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3113150 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3113153 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 648849

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Mon Jan-13-20 12:40 pm
Report Date: 16-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648849-001		648849-002		648849-003		648849-004					
	Field Id:	PH01B		PH05B		PH09		PH09A					
	Depth:	7- ft		9- ft		3- ft		6- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jan-10-20 10:55		Jan-10-20 11:55		Jan-10-20 12:55		Jan-10-20 13:20					
BTEX by EPA 8021B	***Extracted:***	Jan-13-20 17:30		Jan-13-20 17:30		Jan-13-20 17:30		Jan-13-20 17:30					
	Analyzed:	Jan-13-20 23:06		Jan-13-20 23:25		Jan-13-20 23:44		Jan-14-20 03:02					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
m,p-Xylenes		<0.00401	0.00401	<0.00400	0.00400	<0.00402	0.00402	<0.00403	0.00403				
o-Xylene		0.00233	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Xylenes, Total		0.00233	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Total BTEX		0.00233	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Chloride by EPA 300	***Extracted:***	Jan-13-20 18:00		Jan-13-20 18:00		Jan-13-20 18:00		Jan-13-20 18:00					
	Analyzed:	Jan-13-20 22:46		Jan-13-20 22:52		Jan-13-20 22:58		Jan-13-20 23:04					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		380	10.1	287	50.1	234	9.94	180	49.9				
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Jan-15-20 09:00		Jan-15-20 09:00		Jan-15-20 09:00		Jan-15-20 09:00					
	Analyzed:	Jan-15-20 17:40		Jan-15-20 17:59		Jan-15-20 18:18		Jan-15-20 18:37					
	Units/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	<50.0	50.0				
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0				
Total GRO-DRO		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0				
Total TPH		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0				

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH01B**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-001	Date Collected:	01.10.20 10.55	Sample Depth:	7 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 18.00	Basis:	Wet Weight
Seq Number:	3113141				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**380**	10.1	mg/kg	01.13.20 22.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.15.20 09.00	Basis:	Wet Weight
Seq Number:	3113462			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	01.15.20 17.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.15.20 17.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.15.20 17.40	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	01.15.20 17.40	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.15.20 17.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	01.15.20 17.40	
o-Terphenyl	84-15-1	82	%	70-135	01.15.20 17.40	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH01B**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-001	Date Collected:	01.10.20 10.55	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 17.30	Basis:	Wet Weight
Seq Number:	3113150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.13.20 23.06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.13.20 23.06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.13.20 23.06	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.13.20 23.06	U	1
o-Xylene	95-47-6	**0.00233**	0.00200	mg/kg	01.13.20 23.06		1
Xylenes, Total	1330-20-7	**0.00233**	0.00200	mg/kg	01.13.20 23.06		1
Total BTEX		**0.00233**	0.00200	mg/kg	01.13.20 23.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.13.20 23.06	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.13.20 23.06	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH05B**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-002	Date Collected:	01.10.20 11.55	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 18.00	Basis:	Wet Weight
Seq Number:	3113141				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**287**	50.1	mg/kg	01.13.20 22.52		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.15.20 09.00	Basis:	Wet Weight
Seq Number:	3113462			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	01.15.20 17.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.15.20 17.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.15.20 17.59	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	01.15.20 17.59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.15.20 17.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	01.15.20 17.59	
o-Terphenyl	84-15-1	78	%	70-135	01.15.20 17.59	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH05B**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-002	Date Collected:	01.10.20 11.55	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 17.30	Basis:	Wet Weight
Seq Number:	3113150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.13.20 23.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.13.20 23.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.13.20 23.25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.13.20 23.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.13.20 23.25	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	01.13.20 23.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.13.20 23.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.13.20 23.25	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.13.20 23.25	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-003	Date Collected:	01.10.20 12.55	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 18.00	Basis:	Wet Weight
Seq Number:	3113141				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**234**	9.94	mg/kg	01.13.20 22.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.15.20 09.00	Basis:	Wet Weight
Seq Number:	3113462			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	01.15.20 18.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.15.20 18.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.15.20 18.18	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	01.15.20 18.18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.15.20 18.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	01.15.20 18.18	
o-Terphenyl	84-15-1	80	%	70-135	01.15.20 18.18	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-003	Date Collected:	01.10.20 12.55	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 17.30	Basis:	Wet Weight
Seq Number:	3113150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.13.20 23.44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.13.20 23.44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.13.20 23.44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.13.20 23.44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.13.20 23.44	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	01.13.20 23.44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.13.20 23.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.13.20 23.44	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.13.20 23.44	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-004	Date Collected:	01.10.20 13.20	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 18.00	Basis:	Wet Weight
Seq Number:	3113141				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**180**	49.9	mg/kg	01.13.20 23.04		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.15.20 09.00	Basis:	Wet Weight
Seq Number:	3113462			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	01.15.20 18.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.15.20 18.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.15.20 18.37	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	01.15.20 18.37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.15.20 18.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	01.15.20 18.37	
o-Terphenyl	84-15-1	79	%	70-135	01.15.20 18.37	

Certificate of Analytical Results 648849

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	01.13.20 12.40
Lab Sample Id:	648849-004	Date Collected:	01.10.20 13.20	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.13.20 17.30	Basis:	Wet Weight
Seq Number:	3113153				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.14.20 03.02	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.14.20 03.02	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.14.20 03.02	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.14.20 03.02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.14.20 03.02	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.14.20 03.02	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.14.20 03.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.14.20 03.02	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.14.20 03.02	

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 648849

LT Environmental, Inc.

RDU 38

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3113141 — Matrix: Solid — Date Prep: 01.13.20
MB Sample Id: 7694273-1-BLK — LCS Sample Id: 7694273-1-BKS — LCSD Sample Id: 7694273-1-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	248	99	248	99	90-110	0	20	mg/kg	01.13.20 21:42	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3113141 — Matrix: Soil — Date Prep: 01.13.20
Parent Sample Id: 648838-003 — MS Sample Id: 648838-003 S — MSD Sample Id: 648838-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10600	203	10800	99	10800	99	90-110	0	20	mg/kg	01.13.20 22:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3113141 — Matrix: Soil — Date Prep: 01.13.20
Parent Sample Id: 648878-010 — MS Sample Id: 648878-010 S — MSD Sample Id: 648878-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.6	200	217	97	213	96	90-110	2	20	mg/kg	01.13.20 23:21	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113462 — Matrix: Solid — Date Prep: 01.15.20
MB Sample Id: 7694462-1-BLK — LCS Sample Id: 7694462-1-BKS — LCSD Sample Id: 7694462-1-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	883	88	892	89	70-135	1	20	mg/kg	01.15.20 12:58	
Diesel Range Organics (DRO)	<15.0	1000	854	85	849	85	70-135	1	20	mg/kg	01.15.20 12:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		110		111		70-135	%	01.15.20 12:58
o-Terphenyl	91		99		99		70-135	%	01.15.20 12:58

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113462 — Matrix: Solid — Date Prep: 01.15.20
MB Sample Id: 7694462-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.15.20 12:39	

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 648849

LT Environmental, Inc.

RDU 38

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3113462 | Matrix: Soil | Date Prep: 01.15.20
Parent Sample Id: 648841-001 | MS Sample Id: 648841-001 S | MSD Sample Id: 648841-001 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	865	87	870	87	70-135	1	20	mg/kg	01.15.20 13:55	
Diesel Range Organics (DRO)	<15.0	997	837	84	842	85	70-135	1	20	mg/kg	01.15.20 13:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		106		70-135	%	01.15.20 13:55
o-Terphenyl	95		91		70-135	%	01.15.20 13:55

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3113150 | Matrix: Solid | Date Prep: 01.13.20
MB Sample Id: 7694257-1-BLK | LCS Sample Id: 7694257-1-BKS | LCSD Sample Id: 7694257-1-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	0.0952	95	0.105	105	70-130	10	35	mg/kg	01.13.20 14:42	
Toluene	<0.00200	0.100	0.0923	92	0.103	103	70-130	11	35	mg/kg	01.13.20 14:42	
Ethylbenzene	<0.00200	0.100	0.0928	93	0.104	104	71-129	11	35	mg/kg	01.13.20 14:42	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.209	105	70-135	12	35	mg/kg	01.13.20 14:42	
o-Xylene	<0.00200	0.100	0.0923	92	0.104	104	71-133	12	35	mg/kg	01.13.20 14:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		100		102		70-130	%	01.13.20 14:42
4-Bromofluorobenzene	106		98		106		70-130	%	01.13.20 14:42

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3113153 | Matrix: Solid | Date Prep: 01.13.20
MB Sample Id: 7694260-1-BLK | LCS Sample Id: 7694260-1-BKS | LCSD Sample Id: 7694260-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.102	102	0.109	109	70-130	7	35	mg/kg	01.14.20 01:26	
Toluene	<0.00200	0.100	0.101	101	0.108	108	70-130	7	35	mg/kg	01.14.20 01:26	
Ethylbenzene	<0.00200	0.100	0.101	101	0.108	108	71-129	7	35	mg/kg	01.14.20 01:26	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.215	108	70-135	6	35	mg/kg	01.14.20 01:26	
o-Xylene	<0.00200	0.100	0.102	102	0.109	109	71-133	7	35	mg/kg	01.14.20 01:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		101		103		70-130	%	01.14.20 01:26
4-Bromofluorobenzene	100		108		108		70-130	%	01.14.20 01:26

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 648849

LT Environmental, Inc.

RDU 38

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3113150 Matrix: Soil Date Prep: 01.13.20

Parent Sample Id: 648831-021 MS Sample Id: 648831-021 S MSD Sample Id: 648831-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0957	95	0.109	109	70-130	13	35	mg/kg	01.13.20 15:21	
Toluene	<0.00202	0.101	0.0899	89	0.105	105	70-130	15	35	mg/kg	01.13.20 15:21	
Ethylbenzene	<0.00202	0.101	0.0843	83	0.104	104	71-129	21	35	mg/kg	01.13.20 15:21	
m,p-Xylenes	<0.00405	0.202	0.167	83	0.206	103	70-135	21	35	mg/kg	01.13.20 15:21	
o-Xylene	<0.00202	0.101	0.0826	82	0.116	116	71-133	34	35	mg/kg	01.13.20 15:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		104		70-130	%	01.13.20 15:21
4-Bromofluorobenzene	100		108		70-130	%	01.13.20 15:21

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3113153 Matrix: Soil Date Prep: 01.13.20

Parent Sample Id: 648849-004 MS Sample Id: 648849-004 S MSD Sample Id: 648849-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0930	92	0.116	116	70-130	22	35	mg/kg	01.14.20 02:05	
Toluene	<0.00202	0.101	0.0910	90	0.113	113	70-130	22	35	mg/kg	01.14.20 02:05	
Ethylbenzene	<0.00202	0.101	0.0910	90	0.114	114	71-129	22	35	mg/kg	01.14.20 02:05	
m,p-Xylenes	<0.00403	0.202	0.181	90	0.226	113	70-135	22	35	mg/kg	01.14.20 02:05	
o-Xylene	<0.00202	0.101	0.0907	90	0.114	114	71-133	23	35	mg/kg	01.14.20 02:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		105		70-130	%	01.14.20 02:05
4-Bromofluorobenzene	105		111		70-130	%	01.14.20 02:05

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

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

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

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

CHAIN OF CUSTODY

Revision 2016.1

XENCO LABORATORIES

Setting the Standard since 1990

Page 1 Of 1

Stafford, TX (281) 240-4200 | El Paso, TX (915) 585-3443 | Midland, TX (432) 704-5440 | Phoenix, AZ (480) 355-0900 | Service Center- Amarillo, TX (806)678-4514
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www.xenco.com

Xenco Quote # | Xenco Job # 648849

Client / Reporting Information

Company Name / Branch: LT Environmental
Company Address: 820 Megan Ave, Unit B, Rifle, CO 81650
Email: cmckisson@ltenv.com, abyers@ltenv.com
Phone No: 970 295 9985, 575 200 6754
Project Contact: Chris McKisson & Anna Byers
Samplers's Name: Anna Byers

Project Information

Project Name/Number: 034819066
Project Location: (Rural Eddy County) RDU 38
Invoice To: Chris McKisson, LT Environmental, 820 Megan Ave, Unit B, Rifle, CO 81650
PO Number: 2RP-5679

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Field Comments
1	PH01B	7'	1/10/20	1055	S	1								X	X	X	X	
2	PH05B	9'	1/10/20	1155	S	1								X	X	X	X	
3	PH09	3'	1/10/20	1255	S	1								X	X	X	X	
4	PH09A	6'	1/10/20	1320	S	1								X	X	X	X	
5																		
6																		
7																		
8																		
9																		
10																		

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [x] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler / Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Anna Byers	1/13/20 12:00 PM				
2					1/13/20 12:40	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp.: 1.0; Thermo. Corr. Factor: -0.2

Inter-Office Shipment

IOS Number **55957**

Date/Time: 01/13/20 15:30

Lab# From: **Carlsbad**

Lab# To: **Midland**

Created by: Elizabeth Mcclellan

Delivery Priority:

Air Bill No.: 777466121006

Please send report to: Jessica Kramer

Address: 1089 N Canal Street

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
648849-001	S	PH01B	01/10/20 10:55	SW8015MOD_NM	TPH by SW8015 Mod	**01/15/20**	01/24/20	JKR	GRO-DRO PHCC10C28 PI	
648849-002	S	PH05B	01/10/20 11:55	SW8015MOD_NM	TPH by SW8015 Mod	**01/15/20**	01/24/20	JKR	GRO-DRO PHCC10C28 PI	
648849-003	S	PH09	01/10/20 12:55	SW8015MOD_NM	TPH by SW8015 Mod	**01/15/20**	01/24/20	JKR	GRO-DRO PHCC10C28 PI	
648849-004	S	PH09A	01/10/20 13:20	SW8015MOD_NM	TPH by SW8015 Mod	**01/15/20**	01/24/20	JKR	GRO-DRO PHCC10C28 PI	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 01/13/2020

Received By: Brianna Teel

Date Received: 01/14/2020 12:54

Cooler Temperature: 0.7

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 55957

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

Sent By: Elizabeth McClellan **Date Sent:** 01/13/2020 03:30 PM

Received By: Brianna Teel **Date Received:** 01/14/2020 12:54 PM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: Brianna Teel Date: 01/14/2020

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 01.13.2020 12.40.00 PM

Work Order #: 648849

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**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: 01.13.2020

Checklist reviewed by: Jessica Kramer Date: 01.13.2020

Jessica Kramer

Analytical Report 649021

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 38

034819066

17-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)

17-JAN-20

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

Reference: XENCO Report No(s): **649021**
RDU 38
Project Address: Rural Eddy County

Chris McKisson:

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) 649021. 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. 649021 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 649021

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH10	S	01-13-20 08:55	3 ft	649021-001
PH10A	S	01-13-20 09:00	4 ft	649021-002
PH11	S	01-13-20 09:25	3 ft	649021-003
PH11A	S	01-13-20 09:30	4 ft	649021-004
PH12	S	01-13-20 09:50	1.5 ft	649021-005
PH12A	S	01-13-20 10:00	4 ft	649021-006
PH13	S	01-13-20 10:15	1 ft	649021-007
PH13A	S	01-13-20 10:25	3 ft	649021-008
PH14	S	01-13-20 10:50	2.5 ft	649021-009
PH14A	S	01-13-20 11:00	4.5 ft	649021-010
PH15	S	01-13-20 11:25	3 ft	649021-011
PH15A	S	01-13-20 11:30	4 ft	649021-012
PH16	S	01-13-20 11:55	3 ft	649021-013
PH16A	S	01-13-20 12:05	5 ft	649021-014
PH17	S	01-13-20 12:20	3 ft	649021-015
PH17A	S	01-13-20 12:25	4 ft	649021-016

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 38

Project ID: *034819066*
Work Order Number(s): *649021*

Report Date: *17-JAN-20*
Date Received: *01/14/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3113427 BTEX by EPA 8021B

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

Certificate of Analysis Summary 649021

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Jan-14-20 03:30 pm
Report Date: 17-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649021-001		649021-002		649021-003		649021-004		649021-005		649021-006	
	Field Id:	PH10		PH10A		PH11		PH11A		PH12		PH12A	
	Depth:	3- ft		4- ft		3- ft		4- ft		1.5- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-13-20 08:55		Jan-13-20 09:00		Jan-13-20 09:25		Jan-13-20 09:30		Jan-13-20 09:50		Jan-13-20 10:00	
BTEX by EPA 8021B	*Extracted:*	Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56	
	Analyzed:	Jan-16-20 06:29		Jan-16-20 06:48		Jan-16-20 07:07		Jan-16-20 07:26		Jan-16-20 02:14		Jan-16-20 02:33	
	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	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00404	0.00404	<0.00402	0.00402	<0.00399	0.00399	<0.00403	0.00403	<0.00396	0.00396	<0.00400	0.00400
o-Xylene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Xylenes, Total		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14	
	Analyzed:	Jan-15-20 09:05		Jan-15-20 09:21		Jan-15-20 09:26		Jan-15-20 09:31		Jan-15-20 09:37		Jan-15-20 09:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		477	10.0	70.2	10.1	392	9.98	173	9.96	829	49.9	150	9.96
TPH by SW8015 Mod	*Extracted:*	Jan-16-20 12:10		Jan-16-20 12:10		Jan-16-20 12:10		Jan-16-20 12:10		Jan-16-20 12:10		Jan-16-20 12:10	
	Analyzed:	Jan-16-20 16:00		Jan-16-20 16:00		Jan-16-20 16:20		Jan-16-20 16:20		Jan-16-20 16:40		Jan-16-20 16:40	
	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	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.8	49.8
Diesel Range Organics (DRO)		<50.3	50.3	<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.8	49.8
Total GRO-DRO		<50.3	50.3	<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.8	49.8
Total TPH		<50.3	50.3	<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.8	49.8

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649021

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Jan-14-20 03:30 pm
Report Date: 17-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649021-007		649021-008		649021-009		649021-010		649021-011		649021-012	
	Field Id:	PH13		PH13A		PH14		PH14A		PH15		PH15A	
	Depth:	1- ft		3- ft		2.5- ft		4.5- ft		3- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-13-20 10:15		Jan-13-20 10:25		Jan-13-20 10:50		Jan-13-20 11:00		Jan-13-20 11:25		Jan-13-20 11:30	
BTEX by EPA 8021B	*Extracted:*	Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56	
	Analyzed:	Jan-16-20 02:52		Jan-16-20 03:11		Jan-16-20 03:30		Jan-16-20 04:34		Jan-16-20 04:53		Jan-16-20 05:12	
	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	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00403	0.00403	<0.00404	0.00404	<0.00404	0.00404	<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Xylenes, Total		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14	
	Analyzed:	Jan-15-20 09:58		Jan-15-20 10:04		Jan-15-20 10:09		Jan-15-20 10:14		Jan-15-20 10:20		Jan-15-20 10:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		19.5	9.92	<9.94	9.94	645	9.88	218	9.98	413	50.2	50.8	9.94
TPH by SW8015 Mod	*Extracted:*	Jan-16-20 12:10		Jan-16-20 12:10		Jan-16-20 12:10		Jan-16-20 15:00		Jan-16-20 15:00		Jan-16-20 15:00	
	Analyzed:	Jan-16-20 16:59		Jan-16-20 16:59		Jan-16-20 17:19		Jan-16-20 22:34		Jan-16-20 23:13		Jan-16-20 23:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.2	50.2	<50.3	50.3	<50.3	50.3	<49.8	49.8	<50.2	50.2
Diesel Range Organics (DRO)		<50.0	50.0	<50.2	50.2	<50.3	50.3	<50.3	50.3	<49.8	49.8	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.2	50.2	<50.3	50.3	<50.3	50.3	<49.8	49.8	<50.2	50.2
Total GRO-DRO		<50.0	50.0	<50.2	50.2	<50.3	50.3	<50.3	50.3	<49.8	49.8	<50.2	50.2
Total TPH		<50.0	50.0	<50.2	50.2	<50.3	50.3	<50.3	50.3	<49.8	49.8	<50.2	50.2

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649021

LT Environmental, Inc., Arvada, CO

Project Name: RDU 38

Project Id: 034819066
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Jan-14-20 03:30 pm
Report Date: 17-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649021-013		649021-014		649021-015		649021-016					
	Field Id:	PH16		PH16A		PH17		PH17A					
	Depth:	3- ft		5- ft		3- ft		4- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jan-13-20 11:55		Jan-13-20 12:05		Jan-13-20 12:20		Jan-13-20 12:25					
BTEX by EPA 8021B	***Extracted:***	Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56		Jan-15-20 15:56					
	Analyzed:	Jan-16-20 05:31		Jan-16-20 05:51		Jan-16-20 06:10		Jan-16-20 00:38					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
m,p-Xylenes		<0.00403	0.00403	<0.00401	0.00401	<0.00402	0.00402	<0.00404	0.00404				
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Xylenes, Total		<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Chloride by EPA 300	***Extracted:***	Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14		Jan-15-20 07:14					
	Analyzed:	Jan-15-20 10:52		Jan-15-20 10:57		Jan-15-20 11:03		Jan-15-20 11:08					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		649	9.98	79.2	9.98	419	9.98	345	9.98				
TPH by SW8015 Mod	***Extracted:***	Jan-16-20 15:00		Jan-16-20 15:00		Jan-16-20 15:00		Jan-16-20 15:00					
	Analyzed:	Jan-16-20 23:33		Jan-16-20 23:33		Jan-16-20 23:52		Jan-16-20 23:52					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2				
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2				
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2				
Total GRO-DRO		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2				
Total TPH		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2				

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 649021

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-001	Date Collected:	01.13.20 08.55	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**477**	10.0	mg/kg	01.15.20 09.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.16.20 16.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	01.16.20 16.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.16.20 16.00	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	01.16.20 16.00	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	01.16.20 16.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	01.16.20 16.00	
o-Terphenyl	84-15-1	93	%	70-135	01.16.20 16.00	

Certificate of Analytical Results 649021

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-001	Date Collected:	01.13.20 08.55	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 06.29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 06.29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 06.29	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.16.20 06.29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 06.29	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 06.29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 06.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.16.20 06.29	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.16.20 06.29	

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LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id: **PH10A** Matrix: Soil Date Received:01.14.20 15.30

Lab Sample Id: 649021-002 Date Collected: 01.13.20 09.00 Sample Depth:4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 01.15.20 07.14 Basis: Wet Weight

Seq Number: 3113335

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.2**	10.1	mg/kg	01.15.20 09.21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 01.16.20 12.10 Basis: Wet Weight

Seq Number: 3113555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.16.20 16.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.16.20 16.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.16.20 16.00	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.16.20 16.00	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.16.20 16.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.16.20 16.00	
o-Terphenyl	84-15-1	98	%	70-135	01.16.20 16.00	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-002	Date Collected:	01.13.20 09.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.16.20 06.48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.16.20 06.48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.16.20 06.48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.16.20 06.48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.16.20 06.48	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	01.16.20 06.48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.16.20 06.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.16.20 06.48	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.16.20 06.48	

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LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH11**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-003	Date Collected:	01.13.20 09.25	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**392**	9.98	mg/kg	01.15.20 09.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.16.20 16.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	01.16.20 16.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.16.20 16.20	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	01.16.20 16.20	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	01.16.20 16.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	01.16.20 16.20	
o-Terphenyl	84-15-1	93	%	70-135	01.16.20 16.20	

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Sample Id:	**PH11**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-003	Date Collected:	01.13.20 09.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.20 07.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.20 07.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.20 07.07	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.16.20 07.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.20 07.07	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	01.16.20 07.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.20 07.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.16.20 07.07	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.16.20 07.07	

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Sample Id:	**PH11A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-004	Date Collected:	01.13.20 09.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	9.96	mg/kg	01.15.20 09.31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.16.20 16.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.16.20 16.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.16.20 16.20	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	01.16.20 16.20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.16.20 16.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.16.20 16.20	
o-Terphenyl	84-15-1	103	%	70-135	01.16.20 16.20	

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Sample Id:	**PH11A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-004	Date Collected:	01.13.20 09.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 07.26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 07.26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 07.26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.16.20 07.26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 07.26	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 07.26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 07.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.16.20 07.26	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.16.20 07.26	

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Sample Id:	**PH12**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-005	Date Collected:	01.13.20 09.50	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**829**	49.9	mg/kg	01.15.20 09.37		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.16.20 16.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.16.20 16.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.16.20 16.40	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.16.20 16.40	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.16.20 16.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.16.20 16.40	
o-Terphenyl	84-15-1	96	%	70-135	01.16.20 16.40	

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Sample Id:	**PH12**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-005	Date Collected:	01.13.20 09.50	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.16.20 02.14	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.16.20 02.14	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.16.20 02.14	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.16.20 02.14	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.16.20 02.14	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	01.16.20 02.14	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.16.20 02.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.16.20 02.14	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.16.20 02.14	

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Sample Id:	**PH12A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-006	Date Collected:	01.13.20 10.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**150**	9.96	mg/kg	01.15.20 09.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.16.20 16.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.16.20 16.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.16.20 16.40	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	01.16.20 16.40	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.16.20 16.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	01.16.20 16.40	
o-Terphenyl	84-15-1	96	%	70-135	01.16.20 16.40	

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RDU 38

Sample Id:	**PH12A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-006	Date Collected:	01.13.20 10.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.20 02.33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.20 02.33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.20 02.33	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.16.20 02.33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.20 02.33	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	01.16.20 02.33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.20 02.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.16.20 02.33	
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.16.20 02.33	

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RDU 38

Sample Id:	**PH13**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-007	Date Collected:	01.13.20 10.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.5**	9.92	mg/kg	01.15.20 09.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.16.20 16.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.16.20 16.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.16.20 16.59	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	01.16.20 16.59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.16.20 16.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.16.20 16.59	
o-Terphenyl	84-15-1	97	%	70-135	01.16.20 16.59	

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Sample Id:	**PH13**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-007	Date Collected:	01.13.20 10.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 02.52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 02.52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 02.52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.16.20 02.52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 02.52	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 02.52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 02.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.16.20 02.52	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.16.20 02.52	

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Sample Id:	**PH13A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-008	Date Collected:	01.13.20 10.25	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	01.15.20 10.04	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.16.20 16.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.16.20 16.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.16.20 16.59	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.16.20 16.59	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.16.20 16.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.16.20 16.59	
o-Terphenyl	84-15-1	98	%	70-135	01.16.20 16.59	

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RDU 38

Sample Id:	**PH13A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-008	Date Collected:	01.13.20 10.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 03.11	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 03.11	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 03.11	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.16.20 03.11	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 03.11	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 03.11	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 03.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.16.20 03.11	
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.16.20 03.11	

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Sample Id:	**PH14**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-009	Date Collected:	01.13.20 10.50	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**645**	9.88	mg/kg	01.15.20 10.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 12.10	Basis:	Wet Weight
Seq Number:	3113555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.16.20 17.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	01.16.20 17.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.16.20 17.19	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	01.16.20 17.19	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	01.16.20 17.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.16.20 17.19	
o-Terphenyl	84-15-1	102	%	70-135	01.16.20 17.19	

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Sample Id:	**PH14**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-009	Date Collected:	01.13.20 10.50	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 03.30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 03.30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 03.30	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.16.20 03.30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 03.30	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 03.30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 03.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.16.20 03.30	
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.16.20 03.30	

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Sample Id: **PH14A** Matrix: Soil Date Received:01.14.20 15.30

Lab Sample Id: 649021-010 Date Collected: 01.13.20 11.00 Sample Depth:4.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 01.15.20 07.14 Basis: Wet Weight

Seq Number: 3113335

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**218**	9.98	mg/kg	01.15.20 10.14		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 01.16.20 15.00 Basis: Wet Weight

Seq Number: 3113603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.16.20 22.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	01.16.20 22.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.16.20 22.34	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	01.16.20 22.34	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	01.16.20 22.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.16.20 22.34	
o-Terphenyl	84-15-1	100	%	70-135	01.16.20 22.34	

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Sample Id:	**PH14A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-010	Date Collected:	01.13.20 11.00	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.16.20 04.34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.16.20 04.34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.16.20 04.34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.16.20 04.34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.16.20 04.34	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	01.16.20 04.34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.16.20 04.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.16.20 04.34	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.16.20 04.34	

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Sample Id:	**PH15**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-011	Date Collected:	01.13.20 11.25	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**413**	50.2	mg/kg	01.15.20 10.20		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 15.00	Basis:	Wet Weight
Seq Number:	3113603				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.16.20 23.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.16.20 23.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.16.20 23.13	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	01.16.20 23.13	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.16.20 23.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	01.16.20 23.13	
o-Terphenyl	84-15-1	110	%	70-135	01.16.20 23.13	

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Sample Id:	**PH15**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-011	Date Collected:	01.13.20 11.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.16.20 04.53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.16.20 04.53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.16.20 04.53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.16.20 04.53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.16.20 04.53	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	01.16.20 04.53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.16.20 04.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.16.20 04.53	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.16.20 04.53	

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Sample Id:	**PH15A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-012	Date Collected:	01.13.20 11.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**50.8**	9.94	mg/kg	01.15.20 10.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 15.00	Basis:	Wet Weight
Seq Number:	3113603				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.16.20 23.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.16.20 23.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.16.20 23.13	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.16.20 23.13	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.16.20 23.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.16.20 23.13	
o-Terphenyl	84-15-1	104	%	70-135	01.16.20 23.13	

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Sample Id:	**PH15A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-012	Date Collected:	01.13.20 11.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.20 05.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.20 05.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.20 05.12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.16.20 05.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.20 05.12	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	01.16.20 05.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.20 05.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.16.20 05.12	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.16.20 05.12	

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Sample Id:	**PH16**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-013	Date Collected:	01.13.20 11.55	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**649**	9.98	mg/kg	01.15.20 10.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 15.00	Basis:	Wet Weight
Seq Number:	3113603				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.16.20 23.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.16.20 23.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.16.20 23.33	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.16.20 23.33	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.16.20 23.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	01.16.20 23.33	
o-Terphenyl	84-15-1	104	%	70-135	01.16.20 23.33	

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Sample Id:	**PH16**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-013	Date Collected:	01.13.20 11.55	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 05.31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 05.31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 05.31	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.16.20 05.31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 05.31	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 05.31	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 05.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.16.20 05.31	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.16.20 05.31	

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Sample Id:	**PH16A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-014	Date Collected:	01.13.20 12.05	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**79.2**	9.98	mg/kg	01.15.20 10.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 15.00	Basis:	Wet Weight
Seq Number:	3113603				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	01.16.20 23.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	01.16.20 23.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	01.16.20 23.33	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	01.16.20 23.33	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	01.16.20 23.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	01.16.20 23.33	
o-Terphenyl	84-15-1	100	%	70-135	01.16.20 23.33	

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Sample Id:	**PH16A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-014	Date Collected:	01.13.20 12.05	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.20 05.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.20 05.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.20 05.51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.16.20 05.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.20 05.51	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	01.16.20 05.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.20 05.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.16.20 05.51	
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.16.20 05.51	

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Sample Id:	**PH17**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-015	Date Collected:	01.13.20 12.20	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**419**	9.98	mg/kg	01.15.20 11.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 15.00	Basis:	Wet Weight
Seq Number:	3113603				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	01.16.20 23.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	01.16.20 23.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	01.16.20 23.52	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	01.16.20 23.52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	01.16.20 23.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	01.16.20 23.52	
o-Terphenyl	84-15-1	103	%	70-135	01.16.20 23.52	

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Sample Id:	**PH17**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-015	Date Collected:	01.13.20 12.20	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.16.20 06.10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.16.20 06.10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.16.20 06.10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.16.20 06.10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.16.20 06.10	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	01.16.20 06.10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.16.20 06.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.16.20 06.10	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.16.20 06.10	

Certificate of Analytical Results 649021

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH17A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-016	Date Collected:	01.13.20 12.25	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 07.14	Basis:	Wet Weight
Seq Number:	3113335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**345**	9.98	mg/kg	01.15.20 11.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	01.16.20 15.00	Basis:	Wet Weight
Seq Number:	3113603				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	01.16.20 23.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	01.16.20 23.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.16.20 23.52	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	01.16.20 23.52	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.16.20 23.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.16.20 23.52	
o-Terphenyl	84-15-1	100	%	70-135	01.16.20 23.52	

Certificate of Analytical Results 649021

LT Environmental, Inc., Arvada, CO

RDU 38

Sample Id:	**PH17A**	Matrix:	Soil	Date Received:	01.14.20 15.30
Lab Sample Id:	649021-016	Date Collected:	01.13.20 12.25	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	01.15.20 15.56	Basis:	Wet Weight
Seq Number:	3113427				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.16.20 00.38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.16.20 00.38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.16.20 00.38	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.16.20 00.38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.16.20 00.38	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	01.16.20 00.38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.16.20 00.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.16.20 00.38	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.16.20 00.38	

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 649021

LT Environmental, Inc.

RDU 38

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3113335 — Matrix: Solid — Date Prep: 01.15.20
MB Sample Id: 7694377-1-BLK — LCS Sample Id: 7694377-1-BKS — LCSD Sample Id: 7694377-1-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	254	102	90-110	0	20	mg/kg	01.15.20 08:54	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3113335 — Matrix: Soil — Date Prep: 01.15.20
Parent Sample Id: 649021-001 — MS Sample Id: 649021-001 S — MSD Sample Id: 649021-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	477	200	682	103	685	104	90-110	0	20	mg/kg	01.15.20 09:10	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3113335 — Matrix: Soil — Date Prep: 01.15.20
Parent Sample Id: 649021-011 — MS Sample Id: 649021-011 S — MSD Sample Id: 649021-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	413	201	607	97	609	98	90-110	0	20	mg/kg	01.15.20 10:25	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113555 — Matrix: Solid — Date Prep: 01.16.20
MB Sample Id: 7694525-1-BLK — LCS Sample Id: 7694525-1-BKS — LCSD Sample Id: 7694525-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1140	114	1010	101	70-135	12	35	mg/kg	01.16.20 13:21	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1110	111	70-135	1	35	mg/kg	01.16.20 13:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		132		123		70-135	%	01.16.20 13:21
o-Terphenyl	98		128		109		70-135	%	01.16.20 13:21

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 649021

LT Environmental, Inc.

RDU 38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113603 — Matrix: Solid — Date Prep: 01.16.20
MB Sample Id: 7694557-1-BLK — LCS Sample Id: 7694557-1-BKS — LCSD Sample Id: 7694557-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1140	114	1000	100	70-135	13	35	mg/kg	01.16.20 22:14	
Diesel Range Organics (DRO)	<50.0	1000	1130	113	983	98	70-135	14	35	mg/kg	01.16.20 22:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		134		120		70-135	%	01.16.20 22:14
o-Terphenyl	97		129		116		70-135	%	01.16.20 22:14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113555 — Matrix: Solid — Date Prep: 01.16.20
MB Sample Id: 7694525-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.16.20 13:01	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113603 — Matrix: Solid — Date Prep: 01.16.20
MB Sample Id: 7694557-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.16.20 22:14	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113555 — Matrix: Soil — Date Prep: 01.16.20
Parent Sample Id: 649110-005 — MS Sample Id: 649110-005 S — MSD Sample Id: 649110-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	968	97	986	99	70-135	2	35	mg/kg	01.16.20 13:40	
Diesel Range Organics (DRO)	<50.1	1000	1080	108	1060	106	70-135	2	35	mg/kg	01.16.20 13:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	132		134		70-135	%	01.16.20 13:40
o-Terphenyl	109		109		70-135	%	01.16.20 13:40

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 649021

LT Environmental, Inc.

RDU 38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113603 — Matrix: Soil — Date Prep: 01.16.20
Parent Sample Id: 649021-010 — MS Sample Id: 649021-010 S — MSD Sample Id: 649021-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	945	95	1030	103	70-135	9	35	mg/kg	01.16.20 22:53	
Diesel Range Organics (DRO)	<50.2	1000	1030	103	1170	117	70-135	13	35	mg/kg	01.16.20 22:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		123		70-135	%	01.16.20 22:53
o-Terphenyl	111		119		70-135	%	01.16.20 22:53

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3113427 — Matrix: Solid — Date Prep: 01.15.20
MB Sample Id: 7694451-1-BLK — LCS Sample Id: 7694451-1-BKS — LCSD Sample Id: 7694451-1-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	0.100	100	0.0988	99	70-130	1	35	mg/kg	01.15.20 23:02	
Toluene	<0.00200	0.100	0.0978	98	0.0967	97	70-130	1	35	mg/kg	01.15.20 23:02	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.0969	97	71-129	1	35	mg/kg	01.15.20 23:02	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.193	97	70-135	1	35	mg/kg	01.15.20 23:02	
o-Xylene	<0.00200	0.100	0.0977	98	0.0970	97	71-133	1	35	mg/kg	01.15.20 23:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		101		70-130	%	01.15.20 23:02
4-Bromofluorobenzene	99		103		101		70-130	%	01.15.20 23:02

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3113427 — Matrix: Soil — Date Prep: 01.15.20
Parent Sample Id: 649021-016 — MS Sample Id: 649021-016 S — MSD Sample Id: 649021-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0992	98	0.113	112	70-130	13	35	mg/kg	01.15.20 23:41	
Toluene	<0.00202	0.101	0.0978	97	0.110	109	70-130	12	35	mg/kg	01.15.20 23:41	
Ethylbenzene	<0.00202	0.101	0.0978	97	0.110	109	71-129	12	35	mg/kg	01.15.20 23:41	
m,p-Xylenes	<0.00403	0.202	0.195	97	0.219	109	70-135	12	35	mg/kg	01.15.20 23:41	
o-Xylene	<0.00202	0.101	0.0987	98	0.110	109	71-133	11	35	mg/kg	01.15.20 23:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		105		70-130	%	01.15.20 23:41
4-Bromofluorobenzene	110		108		70-130	%	01.15.20 23:41

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

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 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com Page 1 of 2

Work Order No: 649021

Project Manager:	Chris McKisson	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 ~~Rit~~ Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckisson@ltenv.com tabyers@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:	RDU 38	Turn Around	
Project Number:	03481906G	Routine	☒
Project Location	Rural Eddy County	Rush:	5DAY
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.2	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:	16

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEx (EPA 8021)	Chloride (EPA 300.0)
	PH10	S	1/13/20	0855	3'	1			
	PH10A			0900	4'	1			
	PH11			0925	3'	1			
	PH11A			0930	4'	1			
	PH12			0950	1.5'	1			
	PH12A			1000	4'	1			
	PH13			1015	1'	1			
	PH13A			1025	3'	1			
	PH14			1050	2.5'	1			
	PH14A			1100	4.5'	1			

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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
Anna Byers		1/14/20 15:30	2		
			4		
			6		

Revised Date 022619 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 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 649021

Page 2 of 2

Project Manager:	Chris McKissor	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckisson@ltenv.com takyers@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:	RDU 88	Turn Around	
Project Number:	034819066	Routine	☒
Project Location	Rural Eddy County	Rush:	5 DAY
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2	Thermometer ID	3E-pg
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	PH15	S	1/13/20	1125	3'	1			
	PH15A	S		1130	4'	1			
	PH16	S		1155	3'	1			
	PH16A	S		1205	5'	1			
	PH17	S		1220	3'	1			
	PH17A	S		1225	4'	1			

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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
Anna Byers		1/14/20 15:30	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 01.14.2020 03.30.00 PM

Work Order #: 649021

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#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: 01.14.2020

Checklist reviewed by: Jessica Kramer Date: 01.15.2020

Jessica Kramer