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	NAB1912661013
District RP	2RP-5390
Facility ID	
Application ID	pAB1912660789

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # *(assigned by OCD)* NAB1912661013
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.151938° Longitude -103.997952°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Corral Canyon Federal 3H	Site Type Production Well Facility flow line
Date Release Discovered 4/2/2019	API# *(if applicable)* 30-015-42922

Unit Letter	Section	Township	Range	County
M	4	25S	29E	Eddy

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

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) 9.1	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 9.8	Volume Recovered (bbls) 0
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Fluids were released to the lease road, adjacent well pad, and pasture soils due to flex pipe flow line rubbing the ground and developing a hole. The well was shut in and the line was isolated until it was repaired. Additional third party resources have been retained to assist with remediation.

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State of New Mexico
Oil Conservation Division

Incident ID	NAB1912661013
District RP	2RP-5390
Facility ID	
Application ID	pAB1912660789

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

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Amy C. Ruth
Title: SH&E Coordinator
Signature:
Date: 4/15/2019
email: Amy_Ruth@xtoenergy.com
Telephone: 575-689-3380

OCD Only

Received by:
Date: 5/6/2019

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5390
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	51-100 (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 4

State of New Mexico
Oil Conservation Division

Incident ID	NAB1907758382
District RP	2RP-5390
Facility ID	
Application ID	pAB1907758096

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 12/23/2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5390
Facility ID	
Application ID	

Closure

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

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

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

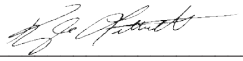
☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 12/23/2019

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

OCD Only

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

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

December 23, 2019

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

RE: Closure Request
Corral Canyon Federal 3H
Remediation Permit Number 2RP-5390
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, remediation, and soil sampling activities at the Corral Canyon Federal 3H (Site) located in Unit M, Section 4, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, remediation, and soil sampling activities was to address impacts to soil following a release of crude oil and produced water at the Site. Based on field observations, field screening, and laboratory analytical results from soil sampling activities, XTO is submitting this Closure Request and requesting no further action (NFA) for Remediation Permit (RP) Number 2RP-5390.

RELEASE BACKGROUND

On April 2, 2019, a hole developed on a flex pipe flowline, resulting in the release of approximately 9.1 barrels (bbls) of crude oil and 9.8 bbls of produced water. Fluids were released onto the right-of-way (ROW), into the pasture area to the west, and onto the caliche well pad to the east. The well was shut in and the line was isolated until repairs could be made. No fluid was recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on April 15, 2019 and was subsequently assigned RP Number 2RP-5390.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based on the nearest water well data. The closest permitted water well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well RA 07162, located approximately 1.08 miles southeast of the Site. The groundwater well has a depth to

groundwater of approximately 40 feet bgs and a total depth of 55 feet bgs. However, as part of remediation efforts at a nearby site, Corral Canyon #1H flow line (2RP-5201), LTE installed six monitoring wells (MW01 through MW06) to assess depth to groundwater. The groundwater monitoring wells are located approximately 105 feet south-southwest of the Site. Static groundwater level measured in monitoring wells MW01 through MW06 on September 13, 2019, ranged from 57.26 feet bgs in monitoring well MW04 to 62.29 feet bgs in monitoring well MW02 with an average depth to water of 58.80 feet bgs. The depth to groundwater measurements are provided in the table below and the location of the monitoring wells is identified on Figure 1.

MONITORING WELL INFORMATION

Sample Name	NMOSE Permit No.	Total Depth (feet bgs)	Depth to Groundwater	Sample Date
MW01	C-4324 POD 12	68.44	58.17	09/13/2019
MW02	C-4324 POD 8	68.10	62.29	09/13/2019
MW03	C-4324 POD 9	75.58	58.30	09/13/2019
MW04	C-4324 POD 10	69.08	57.26	09/13/2019
MW05	C-4324 POD 11	64.80	58.54	09/13/2019
MW06	C-4324 POD 6	64.11	58.25	09/13/2019

Based on depth to groundwater measured recently in the nearby monitoring wells, depth to groundwater at the Site is estimated to be between 51 and 100 feet bgs. The closest continuously-flowing water or significant watercourse to the Site is an unnamed dry wash, located approximately 1,010 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a medium potential karst area.

CLOSURE CRITERIA

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

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

Additionally, a closure criteria of 600 mg/kg chloride was applied to the undeveloped pasture outside of the ROW that was impacted by the release, per NMAC 19.15.29.13.D (1).

SITE ASSESSMENT, REMEDIATION, AND DELINEATION ACTIVITIES

On April 2, 2019, LTE personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. LTE personnel collected five preliminary soil samples (SS01 through SS05) from within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of impacted soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2 Photographic documentation was conducted during excavation activities. Photographs are included in Attachment 1.

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

Laboratory analytical results for preliminary soil samples SS04 indicated that BTEX, TPH-GRO, TPH-DRO, and TPH concentrations exceeded the Closure Criteria. Based on the laboratory analytical results for the preliminary soil samples and field observations, remediation and delineation activities appeared to be warranted. Laboratory analytical results for the preliminary soil samples are presented on Figure 2 and summarized in Table 1.

Visibly stained soil on the northeastern portion of the lease road was scraped utilizing a motor grader.

On October 1 through October 3, 2019, following the scraping of the road, LTE returned to the Site to confirm the presence of absence of subsurface soil impacts within the ROW. Subsurface samples were collected by using either a track-mounted backhoe (potholes designated as PH) or hand auger (boreholes designated as BH).

Within the lease road ROW, 8 boreholes were advanced (PH01, PH02, PH04, BH01, BH02, BH03, BH04, and BH06). Two delineation soil samples were collected from each pothole/borehole at depths ranging from one foot to six feet bgs. Additionally, LTE collected delineation soil samples in the areas of the release extent that were not excavated. Potholes PH03, PH05, PH06, PH07, and borehole BH05 were advanced to a depth of approximately two feet bgs. Two soil samples were collected from each pothole/borehole at depths of approximately one foot and two feet bgs.

Soil from the potholes/boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each pothole/borehole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Carlsbad, New Mexico. The potholes/boreholes were backfilled with the soil removed. The release extent and the pothole/borehole and delineation soil sample locations are depicted on Figure 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated that benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS01 through SS03 and SS05. Laboratory analytical results for preliminary soil sample SS04 indicated that TPH-GRO, TPH-DRO, and TPH concentrations exceeded the Closure Criteria. Soil in this area, as well as visibly stained soil in the ROW was scraped using a road grader. Following the scraping of the road, LTE advanced potholes and boreholes within the release extent to confirm the presence or absence of impacted soil at the scraped area and in the subsurface.

Laboratory analytical results indicated that benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in delineation soil samples PH01/PH01A through PH07/PH07A and BH01/BH01A through BH06/BH06A. Laboratory analytical results are presented on Figure 3 and summarized in Table 1. The complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Preliminary soil samples SS01 through SS05 were collected from within the release extent at depths of 0.5 feet bgs to assess the lateral extent of impacted soil. Laboratory analytical results indicated that benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples in all samples except SS04, which contained TPH-GRO, TPH-DRO, and TPH concentrations exceeding the Closure Criteria. Soil in this area was scraped with a road grader.

Following the scraping of the road, LTE advanced potholes and boreholes within the release extent both on and off of the ROW to confirm the presence or absence of impacted soil. Laboratory analytical results indicated that benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in delineation soil samples PH01/PH01A through PH07/PH07A and BH01/BH01A through BH06/BH06A.

XTO requests NFA for RP Number 2RP-5390.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Carol Ann Whaley
Staff Geologist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
United States Bureau of Land Management – New Mexico
Victoria Venegas, NMOCD
Robert Hamlet, NMOCD

Appendices:

Figure 1	Site Receptor Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Photographic Log
Attachment 2	Lithologic / Soil Sampling Logs
Attachment 3	Laboratory Analytical Reports

FIGURES

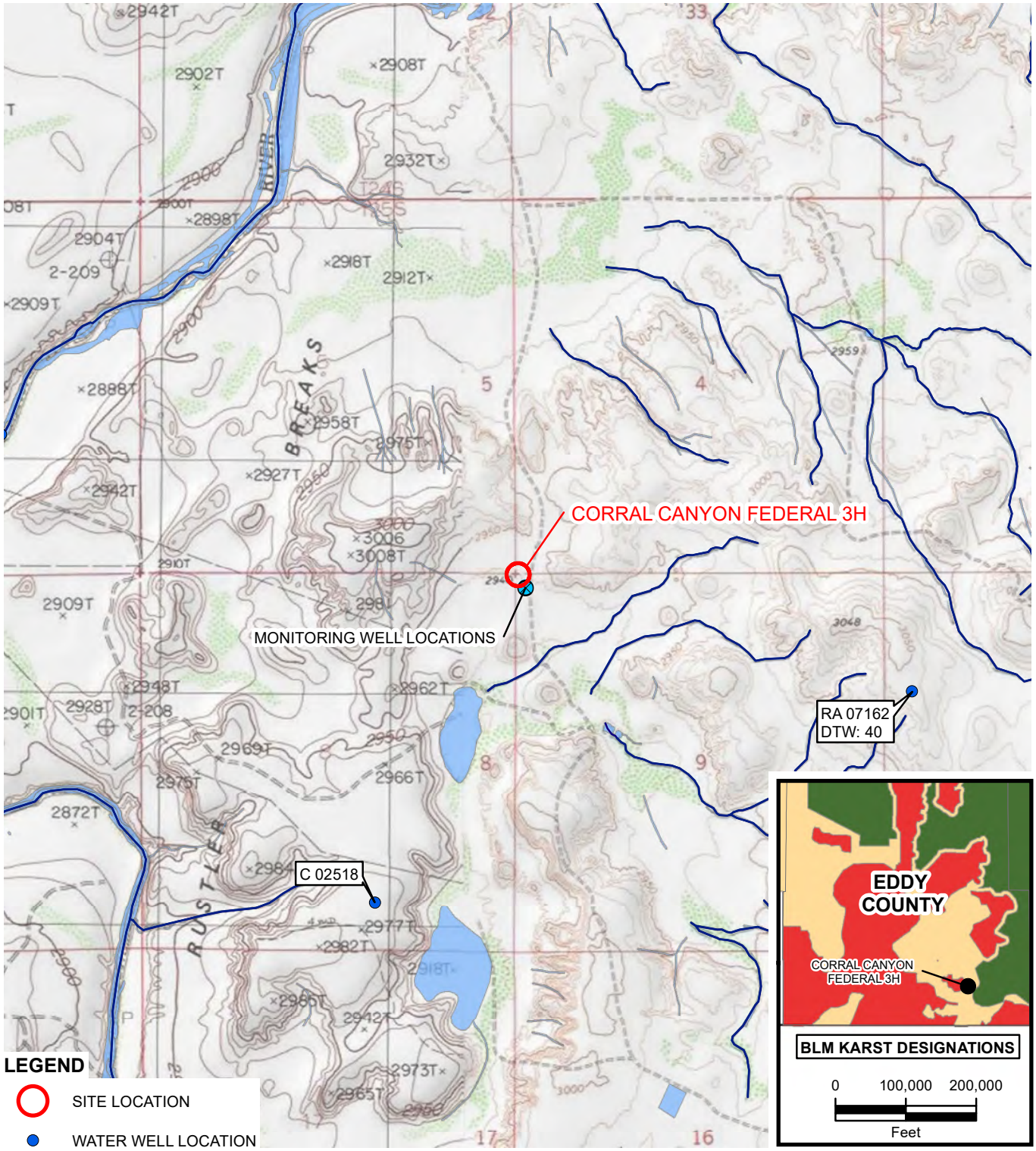


FIGURE 1
POTENTIAL RECEPTOR MAP
CORRAL CANYON FEDERAL 3H
UNIT M SEC 4 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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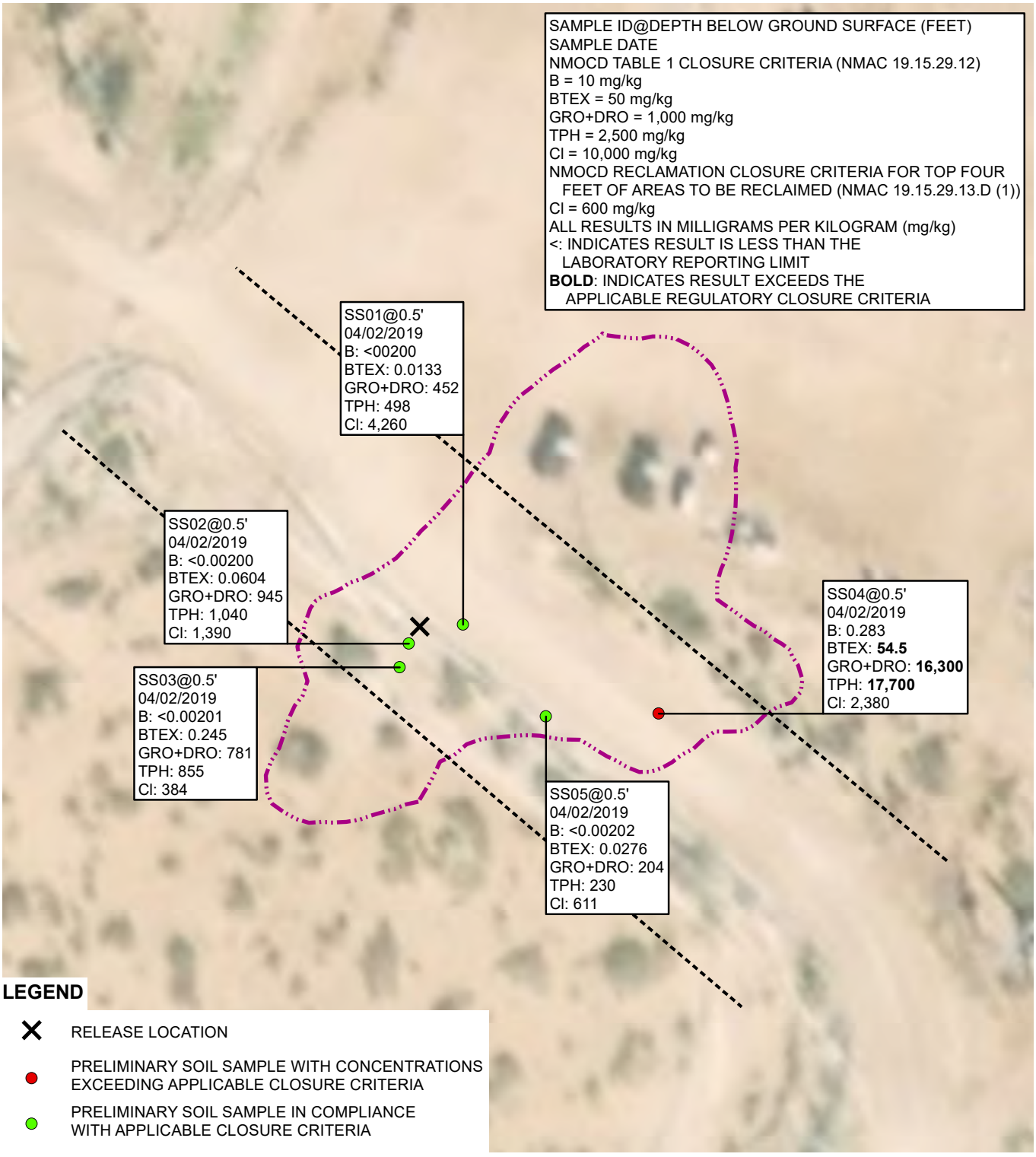
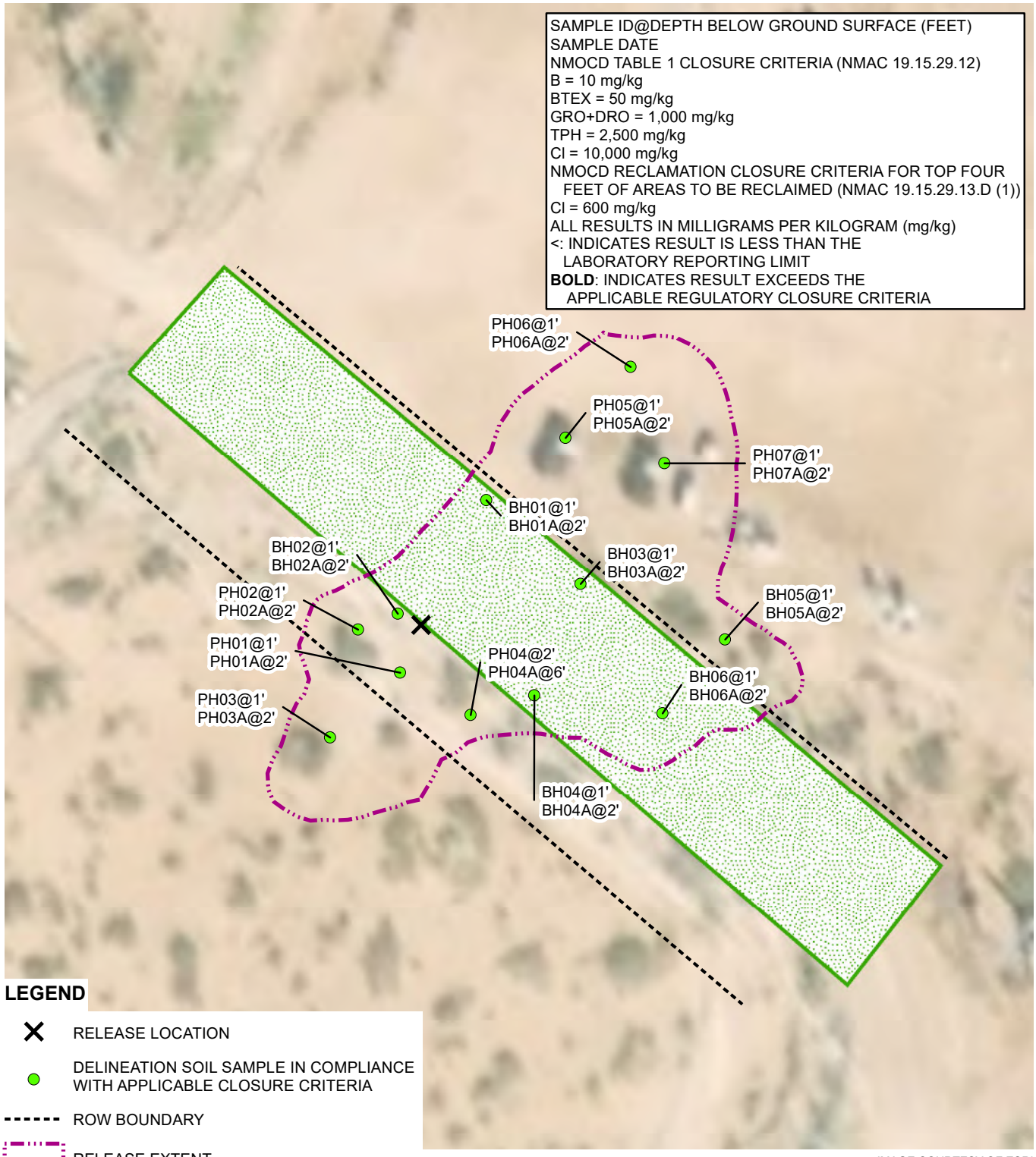


B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-5390

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
CORRAL CANYON FEDERAL 3H
UNIT M SEC 4 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919057_CORRAL CANYON FED 3H FLOWLINE\012919057_FIG02_PRELIMINARY_5390.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-5390

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
CORRAL CANYON FEDERAL 3H
UNIT M SEC 4 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919057_CORRAL CANYON FED 3H FLOWLINE\012919057_FIG03_DELINEATION_5390.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS

CORRAL CANYON FEDERAL 3H
REMEDIATION PERMIT NUMBER 2RP-5390
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**
SS01	0.3	04/02/2019	<0.00200	<0.00200	<0.00200	0.0133	0.0133	36.5	415	46.2	452	498	4,260
SS02	0.5	04/02/2019	<0.00200	<0.00200	0.00537	0.0550	0.0604	59.0	886	96.7	945	1,040	1,390
SS03	0.5	04/02/2019	<0.00201	0.0109	0.0224	0.211	0.245	69.0	712	74.4	781	855	384
SS04	0.5	04/02/2019	0.283	6.67	5.70	41.8	**54.5**	2,340	14,000	1,330	**16,300**	**17,700**	2,380
SS05	0.5	04/02/2019	<0.00202	0.00434	0.00256	0.0207	0.0276	<14.9	204	25.9	204	230	611
PH01	1	10/01/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	399
PH01A	2	10/01/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	44.7
PH02	1	10/01/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	142
PH02A	2	10/01/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	260
PH03	1	10/01/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	<5.00
PH03A	2	10/01/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	<5.03
PH04	2	10/01/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	953
PH04A	6	10/01/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	372
PH05	1	10/02/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	264
PH05A	2	10/02/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	168
PH06	1	10/02/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	358
PH06A	2	10/02/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	312
PH07	1	10/02/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	161
PH07A	2	10/02/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	222
BH01	1	10/03/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	187
BH01A	2	10/03/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	159
BH02	1	10/03/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	444
BH02A	2	10/03/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	270
BH03	1	10/03/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	181
BH03A	2	10/03/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	188

TABLE 1
SOIL ANALYTICAL RESULTS

CORRAL CANYON FEDERAL 3H
REMEDIATION PERMIT NUMBER 2RP-5390
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**
BH04	1	10/03/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	327
BH04A	2	10/03/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	462
BH05	1	10/03/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	89.9
BH05A	2	10/03/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	507
BH06	1	10/03/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	392
BH06A	2	10/03/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	149

Notes:

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

ATTACHMENT 1: PHOTOGRAPHIC LOG

Northern view of release area and ROW during site assessment activities.

Project: 012919057	XTO Energy, Inc. Corral Canyon Federal 3H	LTE Advancing Opportunity
April 2, 2019	Photographic Log	

Northern view of release area during delineation soil sampling activities.

Project: 012919057	XTO Energy, Inc. Corral Canyon Federal 3H	LTE Advancing Opportunity
October 3, 2019	Photographic Log	

ATTACHMENT 2: LITHOLOGIC/SOIL SAMPLING LOGS

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

Identifier: PH01	Date: 10/01/19
Project Name: Corral Canyon 3H flowline	RP Number: 2RP-5390
Logged By: Robert M.	Method: Pothole
Hole Diameter: 2'	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1214 D	200	0.5	N		0 1	1'	S	SP-SM Brown/tan
1215 D	5124	0.3	N		2 3 4 5 6 7 8 9 10 11 12	2'	S	SP-SM Brown/tan

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

Identifier:	Date:
PH02	10/01/19
Project Name: Corral Canyon 3H Flow line	RP Number: 2RP-5390
Logged By: Robert M	Method: Pothole
Lat/Long:	Field Screening:
Hole Diameter: 2'	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1300 dry	<124	1.1	N		0–1	1'	S	SP-SM Brown/tan
1305 dry	200	1.3	N		1–2	2'	S	SP-SM Brown/tan
					2–12			

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

Identifier: PH03	Date: 10/01/19
Project Name: Corral Canyon 3H flowline	RP Number: 2RP-5390
Logged By: Robert M	Method: Pot hole
Hole Diameter: 2'	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: Field Screening:

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1308 M	<124	1.2	N		0 1	1'	S	SP-SC Brown light Brown
1310 M	<124	1.1	N		2 3 4 5 6 7 8 9 10 11 12	2'	S	SP-SC Brown light Brown

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

Identifier: PH04	Date: 10/01/19
Project Name: Corral Canyon 3H Flowline	RP Number: 2RP-5390
Logged By: Robert M	Method: Pothole
Lat/Long:	Field Screening:
Hole Diameter: 2'	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1313	D	875	1.3	N		1	1'	S	SP-SM Brown/tan
1315	D	955	1.5	N		2	2'	S	SP-SM Brown/tan
1350	M	875	0.2	N		3	3'	S	SP-SM Brown/tan
1400	M	875	0.3	N		4	4'	S	SP-SM Brown/tan
1430	M	480	0.5	N		6	6'	S	SP-SM Brown/tan
						0, 5, 7, 8, 9, 10, 11, 12			

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

Identifier: PH05	Date: 10/02/19
Project Name: Corral Canyon 3H flowline	RP Number: 2RP-539
Logged By: Robert M	Method: Pothole
Lat/Long:	Field Screening:
Hole Diameter: 2'	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0940 M	200	0.2	N		1	1'	S	SP-SC Brown
0945 M	200	0.2	N		2	2'	S	SP-SC Brown
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier: pH06	Date: 10/02/19
Project Name: Corral Canyon 34 Flow line	RP Number: 2RP-5390
Logged By: Robert M	Method: Pothole
Lat/Long:	Field Screening:
Hole Diameter: 2'	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1015 M	200	0.4	N		0–1	1'	S	Clayey Sand Brown
1025 M	200	0.2	N		1–2	2'	S	SC light Brown
					2–12			

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

Identifier: PH07	Date: 10/02/19
Project Name: Corral Canyon 3H Flowline	RP Number: 2RP-5398
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Robert Method: Pothole
Lat/Long:	Field Screening: Hole Diameter: 2' Total Depth:
Comments:	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1045 M	<126	0.4	N		1	1'	S	Clayey sand Brown
1050 M	<126	0.4	N		2	2'	S	SC light Brown
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
BH01	10/03/19
Project Name: Corral Canyon 3rd Flowline	RP Number: 2RP-5390
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening:
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1135 D	<124	0.2	N		0–1	1'	S	SP-SC Brown
1140 M	<124	0.3	N		1–2	2'	S	Clayey sand Brown
					2–3			
					3–4			
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

RM

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

Identifier: ~~BH02~~ BH02	Date: 10/03/19
Project Name: Corral Canyon 3H flowline	RP Number: 2RP-5390
Logged By: Robert M	Method: Hand Auger
Hole Diameter: 3"	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1145 M	380	0.8	N		0 1	1'	S	SP-SC Brown
1150 M	200	0.7	N		2	2'	S	SP-SC Brown
					3 4 5 6 7 8 9 10 11 12			

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

Identifier: BH03	Date: 10/03/19
Project Name: Corral Canyon 3H flowline	RP Number: 2RP-5390
Logged By: Robert M.	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1155 D	200	0.4	N		0–1	1'	S	SP-SM Brown
1200 D	200	0.4	N		1–2	2'	S	SP-SM Brown
					2–3			
					3–4			
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

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

Identifier: BH04	Date: 10/03/19
Project Name: Corral Canyon 34 flowline	RP Number: 2RP-5390
Logged By: Robert M.	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1205 D	200	0.7	N		0–1	1'	S	SP-SM Brown
1210 D	380	0.6	N		1–2	2'	S	SP-SM Brown
					2–3			
					3–4			
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

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

Identifier:	Date:
BH65	10/03/19
Project Name: Corral Canyon 3H flowline	RP Number: 2RP-5390
Logged By: Robert M.	Method: Hand Augers
Hole Diameter: 3"	Total Depth:
Lat/Long:	Field Screening:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1215 D	<124	0.6	N		0–1	1'	S	SP-SM Brown
1220 D	200	0.6	N		1–2	2'	S	SP-SM Brown
					2–3			
					3–4			
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier: BH06	Date: 10/03/19
Project Name: Corral Canyon 311 Flowline	RP Number: 2RP-5390
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth:

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening:
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1225 M	380	0.8	N		0 1	1'	S	SM SP-~~SC~~ Brown
1230 M	380	0.7	N		2	2'	S	SM SP-~~SC~~ Brown
					3 4 5 6 7 8 9 10 11 12			

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 620069

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Coral Canyon Federal 3H Flowline

012919057

12-APR-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)
Xenco-Lakeland: Florida (E84098)

12-APR-19

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

Reference: XENCO Report No(s): **620069**
Coral Canyon Federal 3H Flowline
Project Address: ---

Adrian Baker:

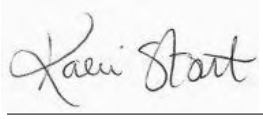
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 620069. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory 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. 620069 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,



Kalei Stout
Midland Laboratory Director

Sample Cross Reference 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	04-02-19 17:15	- 0.3 ft	620069-001
SS02	S	04-02-19 17:25	- 0.5 ft	620069-002
SS03	S	04-02-19 17:30	- 0.5 ft	620069-003
SS04	S	04-02-19 18:15	- 0.5 ft	620069-004
SS05	S	04-02-19 18:20	- 0.5 ft	620069-005

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Coral Canyon Federal 3H Flowline

Project ID: *012919057*
Work Order Number(s): *620069*

Report Date: *12-APR-19*
Date Received: *04/04/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3085314 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 620069-004,620069-003.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 620069

LT Environmental, Inc., Arvada, CO

Project Name: Coral Canyon Federal 3H Flowline

Project Id: 012919057
Contact: Adrian Baker
Project Location: ---

Date Received in Lab: Thu Apr-04-19 11:35 am
Report Date: 12-APR-19
Project Manager: Kalei Stout

Analysis Requested																
	Lab Id:	620069-001		620069-002		620069-003		620069-004		620069-005						
	Field Id:	SS01		SS02		SS03		SS04		SS05						
	Depth:	0.3 ft		0.5 ft		0.5 ft		0.5 ft		0.5 ft						
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL						
	Sampled:	Apr-02-19 17:15		Apr-02-19 17:25		Apr-02-19 17:30		Apr-02-19 18:15		Apr-02-19 18:20						
BTEX by EPA 8021B	***Extracted:***	Apr-10-19 14:30		Apr-10-19 14:30		Apr-10-19 14:30		Apr-10-19 14:30		Apr-10-19 14:30						
	Analyzed:	Apr-10-19 19:59		Apr-10-19 20:18		Apr-10-19 20:37		Apr-11-19 10:02		Apr-10-19 21:15						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	0.283	0.101	<0.00202	0.00202					
Toluene		<0.00200	0.00200	<0.00200	0.00200	0.0109	0.00201	6.67	0.101	0.00434	0.00202					
Ethylbenzene		<0.00200	0.00200	0.00537	0.00200	0.0224	0.00201	5.70	0.101	0.00256	0.00202					
m,p-Xylenes		0.00811	0.00400	0.0355	0.00400	0.142	0.00402	30.5	0.202	0.0139	0.00404					
o-Xylene		0.00515	0.00200	0.0195	0.00200	0.0694	0.00201	11.3	0.101	0.00684	0.00202					
Total Xylenes		0.0133	0.00200	0.0550	0.00200	0.211	0.00201	41.8	0.101	0.0207	0.00202					
Total BTEX		0.0133	0.00200	0.0604	0.00200	0.245	0.00201	54.5	0.101	0.0276	0.00202					
Inorganic Anions by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Apr-09-19 14:53		Apr-09-19 14:53		Apr-09-19 14:53		Apr-09-19 14:53		Apr-09-19 14:53						
	Analyzed:	Apr-09-19 23:50		Apr-09-19 23:59		Apr-10-19 00:07		Apr-10-19 00:16		Apr-10-19 00:25						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Chloride		4260	9.94	1390	9.98	384	10.1	2380	10.1	611	9.96					
TPH by SW8015 Mod	***Extracted:***	Apr-07-19 12:00		Apr-07-19 12:00		Apr-07-19 12:00		Apr-07-19 12:00		Apr-07-19 12:00						
	Analyzed:	Apr-07-19 22:22		Apr-08-19 23:19		Apr-08-19 23:38		Apr-08-19 23:57		Apr-08-19 00:16						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		36.5	15.0	59.0	15.0	69.0	15.0	2340	74.9	<14.9	14.9					
Diesel Range Organics (DRO)		415	15.0	886	15.0	712	15.0	14000	74.9	204	14.9					
Motor Oil Range Hydrocarbons (MRO)		46.2	15.0	96.7	15.0	74.4	15.0	1330	74.9	25.9	14.9					
Total TPH		498	15.0	1040	15.0	855	15.0	17700	74.9	230	14.9					
Total GRO-DRO		452	15.0	945	15.0	781	15.0	16300	74.9	204	14.9					

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

Version: 1.%

Kalei Stout
Midland Laboratory Director

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-001	Date Collected:	04.02.19 17.15	Sample Depth:	0.3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	04.09.19 14.53	Basis:	Wet Weight
Seq Number:	3085116			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4260**	9.94	mg/kg	04.09.19 23.50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.07.19 12.00	Basis:	Wet Weight
Seq Number:	3085083				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**36.5**	15.0	mg/kg	04.07.19 22.22		1
Diesel Range Organics (DRO)	C10C28DRO	**415**	15.0	mg/kg	04.07.19 22.22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**46.2**	15.0	mg/kg	04.07.19 22.22		1
Total TPH	PHC635	**498**	15.0	mg/kg	04.07.19 22.22		1
Total GRO-DRO	PHC628	**452**	15.0	mg/kg	04.07.19 22.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	04.07.19 22.22	
o-Terphenyl	84-15-1	103	%	70-135	04.07.19 22.22	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-001	Date Collected:	04.02.19 17.15	Sample Depth:	0.3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.10.19 14.30	Basis:	Wet Weight
Seq Number:	3085314				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.10.19 19.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.10.19 19.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.10.19 19.59	U	1
m,p-Xylenes	179601-23-1	**0.00811**	0.00400	mg/kg	04.10.19 19.59		1
o-Xylene	95-47-6	**0.00515**	0.00200	mg/kg	04.10.19 19.59		1
Total Xylenes	1330-20-7	**0.0133**	0.00200	mg/kg	04.10.19 19.59		1
Total BTEX		**0.0133**	0.00200	mg/kg	04.10.19 19.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	04.10.19 19.59	
1,4-Difluorobenzene	540-36-3	101	%	70-130	04.10.19 19.59	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-002	Date Collected:	04.02.19 17.25	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	04.09.19 14.53	Basis:	Wet Weight
Seq Number:	3085116			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1390**	9.98	mg/kg	04.09.19 23.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.07.19 12.00	Basis:	Wet Weight
Seq Number:	3085083				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**59.0**	15.0	mg/kg	04.08.19 23.19		1
Diesel Range Organics (DRO)	C10C28DRO	**886**	15.0	mg/kg	04.08.19 23.19		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**96.7**	15.0	mg/kg	04.08.19 23.19		1
Total TPH	PHC635	**1040**	15.0	mg/kg	04.08.19 23.19		1
Total GRO-DRO	PHC628	**945**	15.0	mg/kg	04.08.19 23.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	04.08.19 23.19	
o-Terphenyl	84-15-1	106	%	70-135	04.08.19 23.19	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-002	Date Collected:	04.02.19 17.25	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.10.19 14.30	Basis:	Wet Weight
Seq Number:	3085314				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.10.19 20.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.10.19 20.18	U	1
Ethylbenzene	100-41-4	**0.00537**	0.00200	mg/kg	04.10.19 20.18		1
m,p-Xylenes	179601-23-1	**0.0355**	0.00400	mg/kg	04.10.19 20.18		1
o-Xylene	95-47-6	**0.0195**	0.00200	mg/kg	04.10.19 20.18		1
Total Xylenes	1330-20-7	**0.0550**	0.00200	mg/kg	04.10.19 20.18		1
Total BTEX		**0.0604**	0.00200	mg/kg	04.10.19 20.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	129	%	70-130	04.10.19 20.18	
1,4-Difluorobenzene	540-36-3	99	%	70-130	04.10.19 20.18	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-003	Date Collected:	04.02.19 17.30	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	04.09.19 14.53	Basis:	Wet Weight
Seq Number:	3085116			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**384**	10.1	mg/kg	04.10.19 00.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.07.19 12.00	Basis:	Wet Weight
Seq Number:	3085083				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**69.0**	15.0	mg/kg	04.08.19 23.38		1
Diesel Range Organics (DRO)	C10C28DRO	**712**	15.0	mg/kg	04.08.19 23.38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**74.4**	15.0	mg/kg	04.08.19 23.38		1
Total TPH	PHC635	**855**	15.0	mg/kg	04.08.19 23.38		1
Total GRO-DRO	PHC628	**781**	15.0	mg/kg	04.08.19 23.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	04.08.19 23.38	
o-Terphenyl	84-15-1	107	%	70-135	04.08.19 23.38	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-003	Date Collected:	04.02.19 17.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.10.19 14.30	Basis:	Wet Weight
Seq Number:	3085314				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.10.19 20.37	U	1
Toluene	108-88-3	**0.0109**	0.00201	mg/kg	04.10.19 20.37		1
Ethylbenzene	100-41-4	**0.0224**	0.00201	mg/kg	04.10.19 20.37		1
m,p-Xylenes	179601-23-1	**0.142**	0.00402	mg/kg	04.10.19 20.37		1
o-Xylene	95-47-6	**0.0694**	0.00201	mg/kg	04.10.19 20.37		1
Total Xylenes	1330-20-7	**0.211**	0.00201	mg/kg	04.10.19 20.37		1
Total BTEX		**0.245**	0.00201	mg/kg	04.10.19 20.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	04.10.19 20.37	
4-Bromofluorobenzene	460-00-4	199	%	70-130	04.10.19 20.37	**

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-004	Date Collected:	04.02.19 18.15	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	04.09.19 14.53	Basis:	Wet Weight
Seq Number:	3085116			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2380**	10.1	mg/kg	04.10.19 00.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.07.19 12.00	Basis:	Wet Weight
Seq Number:	3085083				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**2340**	74.9	mg/kg	04.08.19 23.57		5
Diesel Range Organics (DRO)	C10C28DRO	**14000**	74.9	mg/kg	04.08.19 23.57		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1330**	74.9	mg/kg	04.08.19 23.57		5
Total TPH	PHC635	**17700**	74.9	mg/kg	04.08.19 23.57		5
Total GRO-DRO	PHC628	**16300**	74.9	mg/kg	04.08.19 23.57		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	04.08.19 23.57	
o-Terphenyl	84-15-1	100	%	70-135	04.08.19 23.57	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-004	Date Collected:	04.02.19 18.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.10.19 14.30	Basis:	Wet Weight
Seq Number:	3085314				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.283**	0.101	mg/kg	04.11.19 10.02		50
Toluene	108-88-3	**6.67**	0.101	mg/kg	04.11.19 10.02		50
Ethylbenzene	100-41-4	**5.70**	0.101	mg/kg	04.11.19 10.02		50
m,p-Xylenes	179601-23-1	**30.5**	0.202	mg/kg	04.11.19 10.02		50
o-Xylene	95-47-6	**11.3**	0.101	mg/kg	04.11.19 10.02		50
Total Xylenes	1330-20-7	**41.8**	0.101	mg/kg	04.11.19 10.02		50
Total BTEX		**54.5**	0.101	mg/kg	04.11.19 10.02		50

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	229	%	70-130	04.11.19 10.02	**
1,4-Difluorobenzene	540-36-3	101	%	70-130	04.11.19 10.02	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-005	Date Collected:	04.02.19 18.20	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	04.09.19 14.53	Basis:	Wet Weight
Seq Number:	3085116			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**611**	9.96	mg/kg	04.10.19 00.25		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.07.19 12.00	Basis:	Wet Weight
Seq Number:	3085083				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	04.08.19 00.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	**204**	14.9	mg/kg	04.08.19 00.16		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**25.9**	14.9	mg/kg	04.08.19 00.16		1
Total TPH	PHC635	**230**	14.9	mg/kg	04.08.19 00.16		1
Total GRO-DRO	PHC628	**204**	14.9	mg/kg	04.08.19 00.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	04.08.19 00.16	
o-Terphenyl	84-15-1	97	%	70-135	04.08.19 00.16	

Certificate of Analytical Results 620069

LT Environmental, Inc., Arvada, CO

Coral Canyon Federal 3H Flowline

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	04.04.19 11.35
Lab Sample Id:	620069-005	Date Collected:	04.02.19 18.20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	04.10.19 14.30	Basis:	Wet Weight
Seq Number:	3085314				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.10.19 21.15	U	1
Toluene	108-88-3	**0.00434**	0.00202	mg/kg	04.10.19 21.15		1
Ethylbenzene	100-41-4	**0.00256**	0.00202	mg/kg	04.10.19 21.15		1
m,p-Xylenes	179601-23-1	**0.0139**	0.00404	mg/kg	04.10.19 21.15		1
o-Xylene	95-47-6	**0.00684**	0.00202	mg/kg	04.10.19 21.15		1
Total Xylenes	1330-20-7	**0.0207**	0.00202	mg/kg	04.10.19 21.15		1
Total BTEX		**0.0276**	0.00202	mg/kg	04.10.19 21.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	04.10.19 21.15	
4-Bromofluorobenzene	460-00-4	129	%	70-130	04.10.19 21.15	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

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 620069

LT Environmental, Inc.

Coral Canyon Federal 3H Flowline

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3085116 — Matrix: Solid — Date Prep: 04.09.19
MB Sample Id: 7675357-1-BLK — LCS Sample Id: 7675357-1-BKS — LCSD Sample Id: 7675357-1-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	100	103	103	103	103	80-120	0	20	mg/kg	04.09.19 23:32	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3085116 — Matrix: Soil — Date Prep: 04.09.19
Parent Sample Id: 620070-001 — MS Sample Id: 620070-001 S — MSD Sample Id: 620070-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	253	100	356	103	357	104	80-120	0	20	mg/kg	04.10.19 01:53	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3085116 — Matrix: Soil — Date Prep: 04.09.19
Parent Sample Id: 620070-002 — MS Sample Id: 620070-002 S — MSD Sample Id: 620070-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	780	100	874	94	870	90	80-120	0	20	mg/kg	04.10.19 02:20	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3085083 — Matrix: Solid — Date Prep: 04.07.19
MB Sample Id: 7675269-1-BLK — LCS Sample Id: 7675269-1-BKS — LCSD Sample Id: 7675269-1-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)	<8.00	1000	1010	101	974	97	70-135	4	20	mg/kg	04.07.19 21:44	
Diesel Range Organics (DRO)	<8.13	1000	1090	109	1050	105	70-135	4	20	mg/kg	04.07.19 21:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		127		125		70-135	%	04.07.19 21:44
o-Terphenyl	104		113		105		70-135	%	04.07.19 21:44

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

QC Summary 620069

LT Environmental, Inc.

Coral Canyon Federal 3H Flowline

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3085083 — Matrix: Soil — Date Prep: 04.07.19
Parent Sample Id: 620069-001 — MS Sample Id: 620069-001 S — MSD Sample Id: 620069-001 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)	36.5	996	955	92	970	94	70-135	2	20	mg/kg	04.07.19 22:41	
Diesel Range Organics (DRO)	415	996	1290	88	1310	90	70-135	2	20	mg/kg	04.07.19 22:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		123		70-135	%	04.07.19 22:41
o-Terphenyl	100		101		70-135	%	04.07.19 22:41

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3085314 — Matrix: Solid — Date Prep: 04.10.19
MB Sample Id: 7675535-1-BLK — LCS Sample Id: 7675535-1-BKS — LCSD Sample Id: 7675535-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0999	101	0.101	101	70-130	1	35	mg/kg	04.10.19 16:25	
Toluene	<0.00198	0.0992	0.0939	95	0.0959	96	70-130	2	35	mg/kg	04.10.19 16:25	
Ethylbenzene	<0.00198	0.0992	0.0960	97	0.0986	99	70-130	3	35	mg/kg	04.10.19 16:25	
m,p-Xylenes	<0.00101	0.198	0.192	97	0.197	99	70-130	3	35	mg/kg	04.10.19 16:25	
o-Xylene	<0.00198	0.0992	0.0971	98	0.0992	99	70-130	2	35	mg/kg	04.10.19 16:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		101		100		70-130	%	04.10.19 16:25
4-Bromofluorobenzene	100		102		100		70-130	%	04.10.19 16:25

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3085314 — Matrix: Soil — Date Prep: 04.10.19
Parent Sample Id: 620065-001 — MS Sample Id: 620065-001 S — MSD Sample Id: 620065-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0945	95	0.0869	86	70-130	8	35	mg/kg	04.10.19 17:03	
Toluene	0.00105	0.100	0.0887	88	0.0856	84	70-130	4	35	mg/kg	04.10.19 17:03	
Ethylbenzene	0.000614	0.100	0.0889	88	0.0861	85	70-130	3	35	mg/kg	04.10.19 17:03	
m,p-Xylenes	0.00170	0.201	0.177	87	0.174	85	70-130	2	35	mg/kg	04.10.19 17:03	
o-Xylene	0.000694	0.100	0.0904	90	0.0890	87	70-130	2	35	mg/kg	04.10.19 17:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		97		70-130	%	04.10.19 17:03
4-Bromofluorobenzene	104		109		70-130	%	04.10.19 17:03

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

Chain of Custody

Work Order No: 620109

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:	Adrian Baker	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental Inc	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Greene Street
City, State ZIP:	Midland TX 79705	City, State ZIP:	Carlsbad NM, 88220
Phone:	432 704 5178	Email:	abaker@ltenv.com & abyers@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:	Corral Canyon Federal 3H	Turn Around	
Project Number:	012919057 Flowline	Routine	☒
P.O. Number:	Spill date: 4/2/19	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	0.8/0.4	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.1
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
SS01	S	4/2/19	1715	0.3'	1	X	X	X	(32.151900, -103.997818)
SS02	S		1725	0.5'	1	X	X	X	(32.151880, -103.997886)
SS03	S		1730	0.5'	1	X	X	X	(32.151857, -103.997897)
SS04	S		1815	0.3'	1	X	X	X	(32.151801, -103.997602)
SS05	S		1820	0.3'	1	X	X	X	(32.151809, -103.997730)

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		04/2/19 @ 19:30	2	Pac N Mail	04/03/2019 7:00
3		4/4/19 1135	4		
5			6		

Revised Date 051418 Rev. 2018.1

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Inter-Office Shipment

IOS Number : 126125

Date/Time:	04.08.2019 11:10	Created by:	Katie Lowe	Please send report to:	Kalei Stout
Lab# From:	**Midland**	Delivery Priority:		Address:	1211 W. Florida Ave
Lab# To:	**Houston**	Air Bill No.:	0774915573670	E-Mail:	kalei.stout@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM		Analytes	Sign
620069-001	S	SS01	04.02.2019 17:15	E300	Inorganic Anions by EPA 300	**04.10.2019**	04.30.2019	KLS	CL		
620069-002	S	SS02	04.02.2019 17:25	E300	Inorganic Anions by EPA 300	**04.10.2019**	04.30.2019	KLS	CL		
620069-003	S	SS03	04.02.2019 17:30	E300	Inorganic Anions by EPA 300	**04.10.2019**	04.30.2019	KLS	CL		
620069-004	S	SS04	04.02.2019 18:15	E300	Inorganic Anions by EPA 300	**04.10.2019**	04.30.2019	KLS	CL		
620069-005	S	SS05	04.02.2019 18:20	E300	Inorganic Anions by EPA 300	**04.10.2019**	04.30.2019	KLS	CL		

Inter Office Shipment or Sample Comments:

Relinquished By: Katie Lowe

Date Relinquished: 04.08.2019

Received By:

Date Received: 04.09.2019 09:00

Cooler Temperature: 3.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 126125

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : hou-068

Sent By: Katie Lowe **Date Sent:** 04/08/2019 11:10 AM

Received By: Taha Hedib **Date Received:** 04/09/2019 09:00 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.4	
#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: _____

Date: 04/09/2019

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04/04/2019 11:35:00 AM

Work Order #: 620069

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 04/04/2019
Brianna Teel

Checklist reviewed by: Kalei Stout Date: 04/05/2019
Kalei Stout

Analytical Report 639113

for

LT Environmental, Inc.

Project Manager: Dan Moir

Corral Canyon 3H Flowline

11-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)

11-OCT-19

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

Reference: XENCO Report No(s): **639113**
Corral Canyon 3H Flowline
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 639113. 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. 639113 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

Sample Cross Reference 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	10-03-19 11:35	1 ft	639113-001
BH01A	S	10-03-19 11:40	2 ft	639113-002
BH02	S	10-03-19 11:45	1 ft	639113-003
BH02A	S	10-03-19 11:50	2 ft	639113-004
BH03	S	10-03-19 11:55	1 ft	639113-005
BH03A	S	10-03-19 12:00	2 ft	639113-006
BH04	S	10-03-19 12:05	1 ft	639113-007
BH04A	S	10-03-19 12:10	2 ft	639113-008
BH05	S	10-03-19 12:15	1 ft	639113-009
BH05A	S	10-03-19 12:20	2 ft	639113-010
BH06	S	10-03-19 12:25	1 ft	639113-011
BH06A	S	10-03-19 12:30	2 ft	639113-012

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: Corral Canyon 3H Flowline

Project ID:
Work Order Number(s): *639113*

Report Date: *11-OCT-19*
Date Received: *10/04/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3103868 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 639113

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 11-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639113-001		639113-002		639113-003		639113-004		639113-005		639113-006	
	Field Id:	BH01		BH01A		BH02		BH02A		BH03		BH03A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-03-19 11:35		Oct-03-19 11:40		Oct-03-19 11:45		Oct-03-19 11:50		Oct-03-19 11:55		Oct-03-19 12:00	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00	
	Analyzed:	Oct-10-19 06:11		Oct-10-19 06:31		Oct-10-19 06:51		Oct-10-19 07:12		Oct-10-19 07:32		Oct-10-19 07:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Toluene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399	<0.00400	0.00400	<0.00403	0.00403	<0.00396	0.00396
o-Xylene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Total Xylenes		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Total BTEX		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15	
	Analyzed:	Oct-09-19 16:55		Oct-09-19 17:11		Oct-09-19 17:16		Oct-09-19 17:32		Oct-09-19 17:37		Oct-09-19 17:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		187	5.00	159	5.02	444	4.96	270	4.95	181	4.95	188	4.95
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00	
	Analyzed:	Oct-09-19 15:38		Oct-09-19 15:59		Oct-09-19 16:21		Oct-09-19 16:43		Oct-09-19 17:04		Oct-09-19 17:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total GRO-DRO		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 639113

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 11-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639113-007		639113-008		639113-009		639113-010		639113-011		639113-012	
	Field Id:	BH04		BH04A		BH05		BH05A		BH06		BH06A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-03-19 12:05		Oct-03-19 12:10		Oct-03-19 12:15		Oct-03-19 12:20		Oct-03-19 12:25		Oct-03-19 12:30	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00	
	Analyzed:	Oct-10-19 08:12		Oct-10-19 08:32		Oct-10-19 09:51		Oct-10-19 10:11		Oct-10-19 10:31		Oct-10-19 10:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00400	0.00400	<0.00398	0.00398	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 14:20		Oct-09-19 14:20	
	Analyzed:	Oct-09-19 17:48		Oct-09-19 17:53		Oct-09-19 17:58		Oct-09-19 18:04		Oct-09-19 14:54		Oct-09-19 15:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		327	5.00	462	5.04	89.9	5.05	507	5.00	392	5.00	149	4.99
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00	
	Analyzed:	Oct-09-19 18:09		Oct-09-19 18:30		Oct-09-19 18:51		Oct-09-19 19:12		Oct-09-19 19:33		Oct-09-19 19:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total TPH		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0

Jessica Kramer
Project Assistant

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-001	Date Collected:	10.03.19 11.35	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**187**	5.00	mg/kg	10.09.19 16.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 15.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 15.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 15.38	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 15.38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 15.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.09.19 15.38	
o-Terphenyl	84-15-1	100	%	70-135	10.09.19 15.38	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-001	Date Collected:	10.03.19 11.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.10.19 06.11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.10.19 06.11	
1,4-Difluorobenzene	540-36-3	86	%	70-130	10.10.19 06.11	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-002	Date Collected:	10.03.19 11.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**159**	5.02	mg/kg	10.09.19 17.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 15.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 15.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 15.59	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 15.59	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 15.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.09.19 15.59	
o-Terphenyl	84-15-1	106	%	70-135	10.09.19 15.59	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-002	Date Collected:	10.03.19 11.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 06.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 06.31	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.10.19 06.31	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-003	Date Collected:	10.03.19 11.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**444**	4.96	mg/kg	10.09.19 17.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 16.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 16.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 16.21	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 16.21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 16.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.09.19 16.21	
o-Terphenyl	84-15-1	100	%	70-135	10.09.19 16.21	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-003	Date Collected:	10.03.19 11.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.19 06.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	70-130	10.10.19 06.51	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.10.19 06.51	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-004	Date Collected:	10.03.19 11.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**270**	4.95	mg/kg	10.09.19 17.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 16.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 16.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 16.43	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 16.43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.09.19 16.43	
o-Terphenyl	84-15-1	94	%	70-135	10.09.19 16.43	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-004	Date Collected:	10.03.19 11.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.10.19 07.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 07.12	
4-Bromofluorobenzene	460-00-4	123	%	70-130	10.10.19 07.12	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-005	Date Collected:	10.03.19 11.55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**181**	4.95	mg/kg	10.09.19 17.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 17.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 17.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 17.04	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 17.04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 17.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.09.19 17.04	
o-Terphenyl	84-15-1	109	%	70-135	10.09.19 17.04	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-005	Date Collected:	10.03.19 11.55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.10.19 07.32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 07.32	
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.10.19 07.32	

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Corral Canyon 3H Flowline

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-006	Date Collected:	10.03.19 12.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**188**	4.95	mg/kg	10.09.19 17.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 17.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 17.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 17.47	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 17.47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 17.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	10.09.19 17.47	
o-Terphenyl	84-15-1	120	%	70-135	10.09.19 17.47	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-006	Date Collected:	10.03.19 12.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.10.19 07.52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 07.52	
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.10.19 07.52	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-007	Date Collected:	10.03.19 12.05	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**327**	5.00	mg/kg	10.09.19 17.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 18.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 18.09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 18.09	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 18.09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 18.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.09.19 18.09	
o-Terphenyl	84-15-1	106	%	70-135	10.09.19 18.09	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-007	Date Collected:	10.03.19 12.05	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.19 08.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 08.12	
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.10.19 08.12	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-008	Date Collected:	10.03.19 12.10	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**462**	5.04	mg/kg	10.09.19 17.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 18.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 18.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 18.30	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 18.30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 18.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.09.19 18.30	
o-Terphenyl	84-15-1	111	%	70-135	10.09.19 18.30	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-008	Date Collected:	10.03.19 12.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 08.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87	%	70-130	10.10.19 08.32	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.10.19 08.32	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-009	Date Collected:	10.03.19 12.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**89.9**	5.05	mg/kg	10.09.19 17.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 18.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 18.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 18.51	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 18.51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 18.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.09.19 18.51	
o-Terphenyl	84-15-1	100	%	70-135	10.09.19 18.51	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-009	Date Collected:	10.03.19 12.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.10.19 09.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.10.19 09.51	
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 09.51	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-010	Date Collected:	10.03.19 12.20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**507**	5.00	mg/kg	10.09.19 18.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.09.19 19.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.09.19 19.12	
o-Terphenyl	84-15-1	101	%	70-135	10.09.19 19.12	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-010	Date Collected:	10.03.19 12.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 10.11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 10.11	
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.10.19 10.11	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-011	Date Collected:	10.03.19 12.25	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 14.20	Basis:	Wet Weight
Seq Number:	3103862			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**392**	5.00	mg/kg	10.09.19 14.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 19.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 19.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 19.33	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 19.33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 19.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.09.19 19.33	
o-Terphenyl	84-15-1	104	%	70-135	10.09.19 19.33	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-011	Date Collected:	10.03.19 12.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 10.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.10.19 10.31	
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 10.31	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-012	Date Collected:	10.03.19 12.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 14.20	Basis:	Wet Weight
Seq Number:	3103862			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**149**	4.99	mg/kg	10.09.19 15.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 19.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 19.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 19.54	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 19.54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 19.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.09.19 19.54	
o-Terphenyl	84-15-1	103	%	70-135	10.09.19 19.54	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-012	Date Collected:	10.03.19 12.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.10.19 10.51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 10.51	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.10.19 10.51	

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 639113

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103861 — Matrix: Solid — Date Prep: 10.09.19
MB Sample Id: 7687761-1-BLK — LCS Sample Id: 7687761-1-BKS — LCSD Sample Id: 7687761-1-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	236	94	236	94	90-110	0	20	mg/kg	10.09.19 15:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103862 — Matrix: Solid — Date Prep: 10.09.19
MB Sample Id: 7687775-1-BLK — LCS Sample Id: 7687775-1-BKS — LCSD Sample Id: 7687775-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	242	97	242	97	90-110	0	20	mg/kg	10.09.19 14:40	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103861 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639113-001 — MS Sample Id: 639113-001 S — MSD Sample Id: 639113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	187	250	431	98	430	97	90-110	0	20	mg/kg	10.09.19 17:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103861 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639397-001 — MS Sample Id: 639397-001 S — MSD Sample Id: 639397-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	277	252	525	98	503	90	90-110	4	20	mg/kg	10.09.19 15:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103862 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639113-011 — MS Sample Id: 639113-011 S — MSD Sample Id: 639113-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	392	250	648	102	644	101	90-110	1	20	mg/kg	10.09.19 15:01	

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 639113

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3103862 Matrix: Soil Date Prep: 10.09.19
Parent Sample Id: 639298-017 MS Sample Id: 639298-017 S MSD Sample Id: 639298-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	371	249	609	96	609	96	90-110	0	20	mg/kg	10.09.19 16:41	

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Seq Number: 3103873 Matrix: Solid Date Prep: 10.09.19
MB Sample Id: 7687806-1-BLK LCS Sample Id: 7687806-1-BKS LCSD Sample Id: 7687806-1-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	1070	107	1070	107	70-135	0	20	mg/kg	10.09.19 12:21	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1080	108	70-135	1	20	mg/kg	10.09.19 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		96		100		70-135	%	10.09.19 12:21
o-Terphenyl	103		100		104		70-135	%	10.09.19 12:21

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Seq Number: 3103873 Matrix: Solid Date Prep: 10.09.19
MB Sample Id: 7687806-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.09.19 12:00	

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Seq Number: 3103873 Matrix: Soil Date Prep: 10.09.19
Parent Sample Id: 639195-001 MS Sample Id: 639195-001 S MSD Sample Id: 639195-001 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)	<14.9	996	1130	113	1100	110	70-135	3	20	mg/kg	10.09.19 13:24	
Diesel Range Organics (DRO)	31.1	996	1090	106	1070	104	70-135	2	20	mg/kg	10.09.19 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		101		70-135	%	10.09.19 13:24
o-Terphenyl	105		101		70-135	%	10.09.19 13:24

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 639113

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3103868 | Matrix: Solid | Date Prep: 10.09.19
MB Sample Id: 7687788-1-BLK | LCS Sample Id: 7687788-1-BKS | LCSD Sample Id: 7687788-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.0944	94	70-130	10	35	mg/kg	10.10.19 03:31	
Toluene	<0.00200	0.100	0.102	102	0.0957	96	70-130	6	35	mg/kg	10.10.19 03:31	
Ethylbenzene	<0.00200	0.100	0.110	110	0.105	105	70-130	5	35	mg/kg	10.10.19 03:31	
m,p-Xylenes	<0.00400	0.200	0.219	110	0.210	105	70-130	4	35	mg/kg	10.10.19 03:31	
o-Xylene	<0.00200	0.100	0.115	115	0.112	112	70-130	3	35	mg/kg	10.10.19 03:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		90		90		70-130	%	10.10.19 03:31
4-Bromofluorobenzene	108		117		123		70-130	%	10.10.19 03:31

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3103868 | Matrix: Soil | Date Prep: 10.09.19
Parent Sample Id: 639113-001 | MS Sample Id: 639113-001 S | MSD Sample Id: 639113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0838	84	0.0760	76	70-130	10	35	mg/kg	10.10.19 04:12	
Toluene	<0.00198	0.0992	0.0848	85	0.0803	81	70-130	5	35	mg/kg	10.10.19 04:12	
Ethylbenzene	<0.00198	0.0992	0.0929	94	0.0875	88	70-130	6	35	mg/kg	10.10.19 04:12	
m,p-Xylenes	<0.00397	0.198	0.182	92	0.181	91	70-130	1	35	mg/kg	10.10.19 04:12	
o-Xylene	<0.00198	0.0992	0.0947	95	0.0915	92	70-130	3	35	mg/kg	10.10.19 04:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		88		70-130	%	10.10.19 04:12
4-Bromofluorobenzene	115		124		70-130	%	10.10.19 04:12

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

Inter-Office Shipment

IOS Number **49467**

Date/Time: 10/07/19 10:51
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
639113-001	S	BH01	10/03/19 11:35	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-001	S	BH01	10/03/19 11:35	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-001	S	BH01	10/03/19 11:35	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-002	S	BH01A	10/03/19 11:40	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-002	S	BH01A	10/03/19 11:40	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-002	S	BH01A	10/03/19 11:40	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-003	S	BH02	10/03/19 11:45	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-003	S	BH02	10/03/19 11:45	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-003	S	BH02	10/03/19 11:45	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-004	S	BH02A	10/03/19 11:50	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-004	S	BH02A	10/03/19 11:50	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-004	S	BH02A	10/03/19 11:50	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-005	S	BH03	10/03/19 11:55	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-005	S	BH03	10/03/19 11:55	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-005	S	BH03	10/03/19 11:55	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-006	S	BH03A	10/03/19 12:00	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-006	S	BH03A	10/03/19 12:00	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-006	S	BH03A	10/03/19 12:00	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-007	S	BH04	10/03/19 12:05	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-007	S	BH04	10/03/19 12:05	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-007	S	BH04	10/03/19 12:05	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-008	S	BH04A	10/03/19 12:10	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-008	S	BH04A	10/03/19 12:10	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-008	S	BH04A	10/03/19 12:10	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-009	S	BH05	10/03/19 12:15	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	

Inter-Office Shipment

IOS Number **49467**

Date/Time: 10/07/19 10:51
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
639113-009	S	BH05	10/03/19 12:15	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-009	S	BH05	10/03/19 12:15	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-010	S	BH05A	10/03/19 12:20	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-010	S	BH05A	10/03/19 12:20	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-010	S	BH05A	10/03/19 12:20	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-011	S	BH06	10/03/19 12:25	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-011	S	BH06	10/03/19 12:25	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-011	S	BH06	10/03/19 12:25	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-012	S	BH06A	10/03/19 12:30	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-012	S	BH06A	10/03/19 12:30	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-012	S	BH06A	10/03/19 12:30	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	

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 #: 49467

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 10:51 AM

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

Analytical Report 639113

for

LT Environmental, Inc.

Project Manager: Dan Moir

Corral Canyon 3H Flowline

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): **639113**
Corral Canyon 3H Flowline
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 639113. 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. 639113 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

Sample Cross Reference 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	10-03-19 11:35	1 ft	639113-001
BH01A	S	10-03-19 11:40	2 ft	639113-002
BH02	S	10-03-19 11:45	1 ft	639113-003
BH02A	S	10-03-19 11:50	2 ft	639113-004
BH03	S	10-03-19 11:55	1 ft	639113-005
BH03A	S	10-03-19 12:00	2 ft	639113-006
BH04	S	10-03-19 12:05	1 ft	639113-007
BH04A	S	10-03-19 12:10	2 ft	639113-008
BH05	S	10-03-19 12:15	1 ft	639113-009
BH05A	S	10-03-19 12:20	2 ft	639113-010
BH06	S	10-03-19 12:25	1 ft	639113-011
BH06A	S	10-03-19 12:30	2 ft	639113-012

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Corral Canyon 3H Flowline

Project ID:
Work Order Number(s): *639113*

Report Date: *14-OCT-19*
Date Received: *10/04/2019*

Sample receipt non conformances and comments:

COC missing in original report, NEW VERSION GENERATED.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3103868 BTEX by EPA 8021B

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

Certificate of Analysis Summary 639113

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 14-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639113-001		639113-002		639113-003		639113-004		639113-005		639113-006	
	Field Id:	BH01		BH01A		BH02		BH02A		BH03		BH03A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-03-19 11:35		Oct-03-19 11:40		Oct-03-19 11:45		Oct-03-19 11:50		Oct-03-19 11:55		Oct-03-19 12:00	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00	
	Analyzed:	Oct-10-19 06:11		Oct-10-19 06:31		Oct-10-19 06:51		Oct-10-19 07:12		Oct-10-19 07:32		Oct-10-19 07:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Toluene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399	<0.00400	0.00400	<0.00403	0.00403	<0.00396	0.00396
o-Xylene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Total Xylenes		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Total BTEX		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15	
	Analyzed:	Oct-09-19 16:55		Oct-09-19 17:11		Oct-09-19 17:16		Oct-09-19 17:32		Oct-09-19 17:37		Oct-09-19 17:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		187	5.00	159	5.02	444	4.96	270	4.95	181	4.95	188	4.95
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00	
	Analyzed:	Oct-09-19 15:38		Oct-09-19 15:59		Oct-09-19 16:21		Oct-09-19 16:43		Oct-09-19 17:04		Oct-09-19 17:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total GRO-DRO		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 639113

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 14-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639113-007		639113-008		639113-009		639113-010		639113-011		639113-012	
	Field Id:	BH04		BH04A		BH05		BH05A		BH06		BH06A	
	Depth:	1- ft		2- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-03-19 12:05		Oct-03-19 12:10		Oct-03-19 12:15		Oct-03-19 12:20		Oct-03-19 12:25		Oct-03-19 12:30	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00	
	Analyzed:	Oct-10-19 08:12		Oct-10-19 08:32		Oct-10-19 09:51		Oct-10-19 10:11		Oct-10-19 10:31		Oct-10-19 10:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00400	0.00400	<0.00398	0.00398	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 12:15		Oct-09-19 14:20		Oct-09-19 14:20	
	Analyzed:	Oct-09-19 17:48		Oct-09-19 17:53		Oct-09-19 17:58		Oct-09-19 18:04		Oct-09-19 14:54		Oct-09-19 15:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		327	5.00	462	5.04	89.9	5.05	507	5.00	392	5.00	149	4.99
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00		Oct-09-19 11:00	
	Analyzed:	Oct-09-19 18:09		Oct-09-19 18:30		Oct-09-19 18:51		Oct-09-19 19:12		Oct-09-19 19:33		Oct-09-19 19:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total TPH		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0

Jessica Kramer
Project Assistant

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-001	Date Collected:	10.03.19 11.35	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**187**	5.00	mg/kg	10.09.19 16.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 15.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 15.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 15.38	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 15.38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 15.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.09.19 15.38	
o-Terphenyl	84-15-1	100	%	70-135	10.09.19 15.38	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-001	Date Collected:	10.03.19 11.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.10.19 06.11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.10.19 06.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.10.19 06.11	
1,4-Difluorobenzene	540-36-3	86	%	70-130	10.10.19 06.11	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-002	Date Collected:	10.03.19 11.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**159**	5.02	mg/kg	10.09.19 17.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 15.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 15.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 15.59	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 15.59	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 15.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.09.19 15.59	
o-Terphenyl	84-15-1	106	%	70-135	10.09.19 15.59	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-002	Date Collected:	10.03.19 11.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 06.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 06.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 06.31	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.10.19 06.31	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-003	Date Collected:	10.03.19 11.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**444**	4.96	mg/kg	10.09.19 17.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 16.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 16.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 16.21	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 16.21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 16.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.09.19 16.21	
o-Terphenyl	84-15-1	100	%	70-135	10.09.19 16.21	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-003	Date Collected:	10.03.19 11.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.19 06.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 06.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	70-130	10.10.19 06.51	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.10.19 06.51	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-004	Date Collected:	10.03.19 11.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**270**	4.95	mg/kg	10.09.19 17.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 16.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 16.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 16.43	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 16.43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.09.19 16.43	
o-Terphenyl	84-15-1	94	%	70-135	10.09.19 16.43	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-004	Date Collected:	10.03.19 11.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.10.19 07.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 07.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 07.12	
4-Bromofluorobenzene	460-00-4	123	%	70-130	10.10.19 07.12	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-005	Date Collected:	10.03.19 11.55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**181**	4.95	mg/kg	10.09.19 17.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 17.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 17.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 17.04	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 17.04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 17.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.09.19 17.04	
o-Terphenyl	84-15-1	109	%	70-135	10.09.19 17.04	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-005	Date Collected:	10.03.19 11.55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.10.19 07.32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.10.19 07.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 07.32	
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.10.19 07.32	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-006	Date Collected:	10.03.19 12.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**188**	4.95	mg/kg	10.09.19 17.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 17.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 17.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 17.47	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 17.47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 17.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	10.09.19 17.47	
o-Terphenyl	84-15-1	120	%	70-135	10.09.19 17.47	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-006	Date Collected:	10.03.19 12.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.10.19 07.52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.10.19 07.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 07.52	
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.10.19 07.52	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-007	Date Collected:	10.03.19 12.05	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**327**	5.00	mg/kg	10.09.19 17.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 18.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 18.09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 18.09	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 18.09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 18.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.09.19 18.09	
o-Terphenyl	84-15-1	106	%	70-135	10.09.19 18.09	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-007	Date Collected:	10.03.19 12.05	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.19 08.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 08.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 08.12	
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.10.19 08.12	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-008	Date Collected:	10.03.19 12.10	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**462**	5.04	mg/kg	10.09.19 17.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 18.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.09.19 18.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.09.19 18.30	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.09.19 18.30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.09.19 18.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.09.19 18.30	
o-Terphenyl	84-15-1	111	%	70-135	10.09.19 18.30	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-008	Date Collected:	10.03.19 12.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 08.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 08.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87	%	70-130	10.10.19 08.32	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.10.19 08.32	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-009	Date Collected:	10.03.19 12.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**89.9**	5.05	mg/kg	10.09.19 17.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 18.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 18.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 18.51	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 18.51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 18.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.09.19 18.51	
o-Terphenyl	84-15-1	100	%	70-135	10.09.19 18.51	

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Corral Canyon 3H Flowline

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-009	Date Collected:	10.03.19 12.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.10.19 09.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 09.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.10.19 09.51	
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 09.51	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-010	Date Collected:	10.03.19 12.20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 12.15	Basis:	Wet Weight
Seq Number:	3103861			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**507**	5.00	mg/kg	10.09.19 18.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.09.19 19.12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.09.19 19.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.09.19 19.12	
o-Terphenyl	84-15-1	101	%	70-135	10.09.19 19.12	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-010	Date Collected:	10.03.19 12.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 10.11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 10.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 10.11	
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.10.19 10.11	

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Corral Canyon 3H Flowline

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-011	Date Collected:	10.03.19 12.25	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 14.20	Basis:	Wet Weight
Seq Number:	3103862			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**392**	5.00	mg/kg	10.09.19 14.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 19.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 19.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 19.33	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 19.33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 19.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.09.19 19.33	
o-Terphenyl	84-15-1	104	%	70-135	10.09.19 19.33	

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Corral Canyon 3H Flowline

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-011	Date Collected:	10.03.19 12.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 10.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 10.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.10.19 10.31	
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 10.31	

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Corral Canyon 3H Flowline

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-012	Date Collected:	10.03.19 12.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.09.19 14.20	Basis:	Wet Weight
Seq Number:	3103862			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**149**	4.99	mg/kg	10.09.19 15.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 11.00	Basis:	Wet Weight
Seq Number:	3103873			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	10.09.19 19.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.09.19 19.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.09.19 19.54	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.09.19 19.54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.09.19 19.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.09.19 19.54	
o-Terphenyl	84-15-1	103	%	70-135	10.09.19 19.54	

Certificate of Analytical Results 639113

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639113-012	Date Collected:	10.03.19 12.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.10.19 10.51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.10.19 10.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 10.51	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.10.19 10.51	

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 639113

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103861 — Matrix: Solid — Date Prep: 10.09.19
MB Sample Id: 7687761-1-BLK — LCS Sample Id: 7687761-1-BKS — LCSD Sample Id: 7687761-1-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	236	94	236	94	90-110	0	20	mg/kg	10.09.19 15:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103862 — Matrix: Solid — Date Prep: 10.09.19
MB Sample Id: 7687775-1-BLK — LCS Sample Id: 7687775-1-BKS — LCSD Sample Id: 7687775-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	242	97	242	97	90-110	0	20	mg/kg	10.09.19 14:40	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103861 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639113-001 — MS Sample Id: 639113-001 S — MSD Sample Id: 639113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	187	250	431	98	430	97	90-110	0	20	mg/kg	10.09.19 17:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103861 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639397-001 — MS Sample Id: 639397-001 S — MSD Sample Id: 639397-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	277	252	525	98	503	90	90-110	4	20	mg/kg	10.09.19 15:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103862 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639113-011 — MS Sample Id: 639113-011 S — MSD Sample Id: 639113-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	392	250	648	102	644	101	90-110	1	20	mg/kg	10.09.19 15:01	

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 639113

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3103862 Matrix: Soil Date Prep: 10.09.19
Parent Sample Id: 639298-017 MS Sample Id: 639298-017 S MSD Sample Id: 639298-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	371	249	609	96	609	96	90-110	0	20	mg/kg	10.09.19 16:41	

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Seq Number: 3103873 Matrix: Solid Date Prep: 10.09.19
MB Sample Id: 7687806-1-BLK LCS Sample Id: 7687806-1-BKS LCSD Sample Id: 7687806-1-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	1070	107	1070	107	70-135	0	20	mg/kg	10.09.19 12:21	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1080	108	70-135	1	20	mg/kg	10.09.19 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		96		100		70-135	%	10.09.19 12:21
o-Terphenyl	103		100		104		70-135	%	10.09.19 12:21

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Seq Number: 3103873 Matrix: Solid Date Prep: 10.09.19
MB Sample Id: 7687806-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.09.19 12:00	

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Seq Number: 3103873 Matrix: Soil Date Prep: 10.09.19
Parent Sample Id: 639195-001 MS Sample Id: 639195-001 S MSD Sample Id: 639195-001 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)	<14.9	996	1130	113	1100	110	70-135	3	20	mg/kg	10.09.19 13:24	
Diesel Range Organics (DRO)	31.1	996	1090	106	1070	104	70-135	2	20	mg/kg	10.09.19 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		101		70-135	%	10.09.19 13:24
o-Terphenyl	105		101		70-135	%	10.09.19 13:24

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 639113

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3103868 | Matrix: Solid | Date Prep: 10.09.19
MB Sample Id: 7687788-1-BLK | LCS Sample Id: 7687788-1-BKS | LCSD Sample Id: 7687788-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.0944	94	70-130	10	35	mg/kg	10.10.19 03:31	
Toluene	<0.00200	0.100	0.102	102	0.0957	96	70-130	6	35	mg/kg	10.10.19 03:31	
Ethylbenzene	<0.00200	0.100	0.110	110	0.105	105	70-130	5	35	mg/kg	10.10.19 03:31	
m,p-Xylenes	<0.00400	0.200	0.219	110	0.210	105	70-130	4	35	mg/kg	10.10.19 03:31	
o-Xylene	<0.00200	0.100	0.115	115	0.112	112	70-130	3	35	mg/kg	10.10.19 03:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		90		90		70-130	%	10.10.19 03:31
4-Bromofluorobenzene	108		117		123		70-130	%	10.10.19 03:31

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3103868 | Matrix: Soil | Date Prep: 10.09.19
Parent Sample Id: 639113-001 | MS Sample Id: 639113-001 S | MSD Sample Id: 639113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0838	84	0.0760	76	70-130	10	35	mg/kg	10.10.19 04:12	
Toluene	<0.00198	0.0992	0.0848	85	0.0803	81	70-130	5	35	mg/kg	10.10.19 04:12	
Ethylbenzene	<0.00198	0.0992	0.0929	94	0.0875	88	70-130	6	35	mg/kg	10.10.19 04:12	
m,p-Xylenes	<0.00397	0.198	0.182	92	0.181	91	70-130	1	35	mg/kg	10.10.19 04:12	
o-Xylene	<0.00198	0.0992	0.0947	95	0.0915	92	70-130	3	35	mg/kg	10.10.19 04:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		88		70-130	%	10.10.19 04:12
4-Bromofluorobenzene	115		124		70-130	%	10.10.19 04:12

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: 639113

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

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Corral Canyon 3H flowline	Turn Around	
Project Number:		Routine	☑
P.O. Number:	2RP-5390	Rush:	
Sampler's Name:	Robert McAfee	Due Date:	

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:	12	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH01	S	10/03/19	1135	1'	1	X	X	X	discrete
BH01A			1140	2'		X	X	X	
BH02			1145	1'		X	X	X	
BH02A			1150	2'		X	X	X	
BH03			1155	1'		X	X	X	
BH03A			1200	2'		X	X	X	
BH04			1205	1'		X	X	X	
BH04A			1210	2'		X	X	X	
BH05			1215	1'		X	X	X	
BH05A			1220	2'		X	X	X	

ANALYSIS REQUEST

Work Order Notes

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Robert McAfee		10/4/19 10:13	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

Chain of Custody

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

Work Order No: 639113

Page 2 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Corral Canyon 3H flowline	Turn Around	
Project Number:		Routine	☑
P.O. Number:	2RP-5390	Rush:	
Sampler's Name:	Robert McAfee	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH06	S	10/05/19	1225	1'	1	X	X	X	discrete
BH06A	S	10/05/19	1230	2'	1	X	X	X	discrete

ANALYSIS REQUEST

Work Order Notes

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Robert McAfee		10/4/19 16:13	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **49467**

Date/Time: 10/07/19 10:51
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
639113-001	S	BH01	10/03/19 11:35	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-001	S	BH01	10/03/19 11:35	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-001	S	BH01	10/03/19 11:35	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-002	S	BH01A	10/03/19 11:40	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-002	S	BH01A	10/03/19 11:40	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-002	S	BH01A	10/03/19 11:40	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-003	S	BH02	10/03/19 11:45	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-003	S	BH02	10/03/19 11:45	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-003	S	BH02	10/03/19 11:45	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-004	S	BH02A	10/03/19 11:50	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-004	S	BH02A	10/03/19 11:50	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-004	S	BH02A	10/03/19 11:50	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-005	S	BH03	10/03/19 11:55	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-005	S	BH03	10/03/19 11:55	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-005	S	BH03	10/03/19 11:55	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-006	S	BH03A	10/03/19 12:00	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-006	S	BH03A	10/03/19 12:00	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-006	S	BH03A	10/03/19 12:00	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-007	S	BH04	10/03/19 12:05	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-007	S	BH04	10/03/19 12:05	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-007	S	BH04	10/03/19 12:05	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-008	S	BH04A	10/03/19 12:10	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-008	S	BH04A	10/03/19 12:10	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-008	S	BH04A	10/03/19 12:10	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-009	S	BH05	10/03/19 12:15	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	

Inter-Office Shipment

IOS Number **49467**

Date/Time: 10/07/19 10:51
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
639113-009	S	BH05	10/03/19 12:15	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-009	S	BH05	10/03/19 12:15	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-010	S	BH05A	10/03/19 12:20	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-010	S	BH05A	10/03/19 12:20	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-010	S	BH05A	10/03/19 12:20	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-011	S	BH06	10/03/19 12:25	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	
639113-011	S	BH06	10/03/19 12:25	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-011	S	BH06	10/03/19 12:25	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-012	S	BH06A	10/03/19 12:30	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/17/19	JKR	GRO-DRO PHCC10C28 PH	
639113-012	S	BH06A	10/03/19 12:30	E300_CL	Chloride by EPA 300	10/10/19	03/31/20	JKR	CL	
639113-012	S	BH06A	10/03/19 12:30	SW8021B	BTEX by EPA 8021B	10/10/19	10/17/19	JKR	BR4FBZ BZ BZME EBZ X	

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 #: 49467

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 10:51 AM

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

Analytical Report 639115

for

LT Environmental, Inc.

Project Manager: Dan Moir

Corral Canyon 3H Flowline

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): **639115**
Corral Canyon 3H Flowline
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 639115. 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. 639115 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

Sample Cross Reference 639115

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	10-01-19 12:14	1 ft	639115-001
PH02	S	10-01-19 13:00	1 ft	639115-002
PH01A	S	10-01-19 12:15	2 ft	639115-003
PH02A	S	10-01-19 13:05	2 ft	639115-004
PH03	S	10-01-19 13:08	1 ft	639115-005
PH03A	S	10-01-19 13:10	2 ft	639115-006
PH04	S	10-01-19 13:15	2 ft	639115-007
PH04A	S	10-01-19 14:30	6 ft	639115-008
PH05	S	10-02-19 09:40	1 ft	639115-009
PH05A	S	10-02-19 09:45	2 ft	639115-010
PH06	S	10-02-19 10:15	1 ft	639115-011
PH06A	S	10-02-19 10:25	2 ft	639115-012
PH07	S	10-02-19 10:45	1 ft	639115-013
PH07A	S	10-02-19 10:50	2 ft	639115-014

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: Corral Canyon 3H Flowline

Project ID:
Work Order Number(s): *639115*

Report Date: *14-OCT-19*
Date Received: *10/04/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3103868 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104057 TPH by SW8015 Mod
Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 639157-001 S.

Batch: LBA-3104087 BTEX by EPA 8021B
Lab Sample ID 639115-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). m,p-Xylenes recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 639115-007, -008, -009, -010, -011, -012, -013, -014.
The Laboratory Control Sample for m,p-Xylenes is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 639115

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 14-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639115-001		639115-002		639115-003		639115-004		639115-005		639115-006	
	Field Id:	PH01		PH02		PH01A		PH02A		PH03		PH03A	
	Depth:	1- ft		1- ft		2- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-01-19 12:14		Oct-01-19 13:00		Oct-01-19 12:15		Oct-01-19 13:05		Oct-01-19 13:08		Oct-01-19 13:10	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00		Oct-09-19 14:00	
	Analyzed:	Oct-10-19 11:11		Oct-10-19 11:31		Oct-10-19 11:51		Oct-10-19 12:11		Oct-10-19 12:32		Oct-10-19 12:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401	<0.00399	0.00399	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45	
	Analyzed:	Oct-08-19 20:20		Oct-08-19 20:27		Oct-08-19 20:48		Oct-08-19 20:55		Oct-08-19 21:01		Oct-08-19 21:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		399	5.04	142	5.01	44.7	4.97	260	4.99	<5.00	5.00	<5.03	5.03
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00	
	Analyzed:	Oct-10-19 14:40		Oct-10-19 15:01		Oct-10-19 15:22		Oct-10-19 15:43		Oct-10-19 16:05		Oct-10-19 16:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total GRO-DRO		<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 639115

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 14-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	639115-007		639115-008		639115-009		639115-010		639115-011		639115-012	
	Field Id:	PH04		PH04A		PH05		PH05A		PH06		PH06A	
	Depth:	2- ft		6- ft		1- ft		2- ft		1- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-01-19 13:15		Oct-01-19 14:30		Oct-02-19 09:40		Oct-02-19 09:45		Oct-02-19 10:15		Oct-02-19 10:25	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 15:30		Oct-09-19 15:30		Oct-09-19 15:30		Oct-09-19 15:30		Oct-09-19 15:30		Oct-09-19 15:30	
	Analyzed:	Oct-13-19 12:25		Oct-13-19 12:45		Oct-13-19 13:05		Oct-13-19 13:25		Oct-13-19 13:45		Oct-13-19 14:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00397	0.00397	<0.00401	0.00401	<0.00402	0.00402	<0.00400	0.00400	<0.00399	0.00399
o-Xylene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45		Oct-08-19 15:45	
	Analyzed:	Oct-08-19 21:15		Oct-08-19 21:22		Oct-08-19 21:42		Oct-08-19 21:49		Oct-08-19 22:10		Oct-08-19 22:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		953	4.96	372	4.95	264	5.01	168	4.96	358	4.98	312	5.04
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00		Oct-10-19 09:00	
	Analyzed:	Oct-10-19 17:08		Oct-10-19 17:29		Oct-10-19 17:51		Oct-10-19 18:12		Oct-10-19 18:33		Oct-10-19 18:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0	<50.0	50.0
Total TPH		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0	<50.0	50.0

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 639115

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 3H Flowline

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Oct-04-19 04:13 pm

Report Date: 14-OCT-19

Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	639115-013		639115-014					
	Field Id:	PH07		PH07A					
	Depth:	1- ft		2- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Oct-02-19 10:45		Oct-02-19 10:50					
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-09-19 15:30		Oct-09-19 15:30					
	Analyzed:	Oct-13-19 14:26		Oct-13-19 14:46					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00202	0.00202				
Toluene		<0.00200	0.00200	<0.00202	0.00202				
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202				
m,p-Xylenes		<0.00399	0.00399	<0.00403	0.00403				
o-Xylene		<0.00200	0.00200	<0.00202	0.00202				
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202				
Total BTEX		<0.00200	0.00200	<0.00202	0.00202				
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-08-19 15:45		Oct-08-19 15:45					
	Analyzed:	Oct-08-19 22:24		Oct-08-19 22:30					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		161	5.03	222	5.00				
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-10-19 09:00		Oct-09-19 17:00					
	Analyzed:	Oct-10-19 19:16		Oct-10-19 06:22					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0				
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0				
Total GRO-DRO		<49.9	49.9	<50.0	50.0				
Total TPH		<49.9	49.9	<50.0	50.0				

Jessica Kramer
Project Assistant

Certificate of Analytical Results 639115

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-001	Date Collected:	10.01.19 12.14	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**399**	5.04	mg/kg	10.08.19 20.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 14.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 14.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 14.40	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 14.40	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 14.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	10.10.19 14.40	
o-Terphenyl	84-15-1	118	%	70-135	10.10.19 14.40	

Certificate of Analytical Results 639115

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-001	Date Collected:	10.01.19 12.14	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 11.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 11.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 11.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.19 11.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 11.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 11.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 11.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.10.19 11.11	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 11.11	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-002	Date Collected:	10.01.19 13.00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	5.01	mg/kg	10.08.19 20.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.10.19 15.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.10.19 15.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.10.19 15.01	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.10.19 15.01	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.10.19 15.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.10.19 15.01	
o-Terphenyl	84-15-1	115	%	70-135	10.10.19 15.01	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-002	Date Collected:	10.01.19 13.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.10.19 11.31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.10.19 11.31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.10.19 11.31	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.10.19 11.31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.10.19 11.31	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.10.19 11.31	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.10.19 11.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.10.19 11.31	
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 11.31	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-003	Date Collected:	10.01.19 12.15	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**44.7**	4.97	mg/kg	10.08.19 20.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 15.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.10.19 15.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.10.19 15.22	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.10.19 15.22	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.10.19 15.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	10.10.19 15.22	
o-Terphenyl	84-15-1	123	%	70-135	10.10.19 15.22	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-003	Date Collected:	10.01.19 12.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 11.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 11.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 11.51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.10.19 11.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 11.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 11.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 11.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 11.51	
4-Bromofluorobenzene	460-00-4	103	%	70-130	10.10.19 11.51	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-004	Date Collected:	10.01.19 13.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**260**	4.99	mg/kg	10.08.19 20.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 15.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 15.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 15.43	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 15.43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 15.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.10.19 15.43	
o-Terphenyl	84-15-1	117	%	70-135	10.10.19 15.43	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-004	Date Collected:	10.01.19 13.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.19 12.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.19 12.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.19 12.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.19 12.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.19 12.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.19 12.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.19 12.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.10.19 12.11	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.10.19 12.11	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-005	Date Collected:	10.01.19 13.08	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	10.08.19 21.01	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 16.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 16.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 16.05	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 16.05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 16.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	10.10.19 16.05	
o-Terphenyl	84-15-1	114	%	70-135	10.10.19 16.05	

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Corral Canyon 3H Flowline

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-005	Date Collected:	10.01.19 13.08	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.19 12.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.19 12.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.19 12.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.19 12.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.19 12.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.19 12.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.19 12.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.10.19 12.32	
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.10.19 12.32	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-006	Date Collected:	10.01.19 13.10	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	10.08.19 21.08	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 16.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.10.19 16.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.10.19 16.26	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.10.19 16.26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.10.19 16.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	10.10.19 16.26	
o-Terphenyl	84-15-1	125	%	70-135	10.10.19 16.26	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-006	Date Collected:	10.01.19 13.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 14.00	Basis:	Wet Weight
Seq Number:	3103868			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.10.19 12.52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.10.19 12.52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.10.19 12.52	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.10.19 12.52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.10.19 12.52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.10.19 12.52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.10.19 12.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	10.10.19 12.52	
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.10.19 12.52	

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Corral Canyon 3H Flowline

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-007	Date Collected:	10.01.19 13.15	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**953**	4.96	mg/kg	10.08.19 21.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 17.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 17.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 17.08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 17.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 17.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.10.19 17.08	
o-Terphenyl	84-15-1	125	%	70-135	10.10.19 17.08	

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Corral Canyon 3H Flowline

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-007	Date Collected:	10.01.19 13.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.13.19 12.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.13.19 12.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.13.19 12.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.13.19 12.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.13.19 12.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.13.19 12.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.13.19 12.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.13.19 12.25	
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.13.19 12.25	

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Corral Canyon 3H Flowline

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-008	Date Collected:	10.01.19 14.30	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**372**	4.95	mg/kg	10.08.19 21.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 17.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.10.19 17.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.10.19 17.29	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.10.19 17.29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.10.19 17.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	10.10.19 17.29	
o-Terphenyl	84-15-1	119	%	70-135	10.10.19 17.29	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-008	Date Collected:	10.01.19 14.30	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.13.19 12.45	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.13.19 12.45	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.13.19 12.45	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.13.19 12.45	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.13.19 12.45	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.13.19 12.45	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.13.19 12.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.13.19 12.45	
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.13.19 12.45	

Certificate of Analytical Results 639115

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-009	Date Collected:	10.02.19 09.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**264**	5.01	mg/kg	10.08.19 21.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.10.19 17.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.10.19 17.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.10.19 17.51	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.10.19 17.51	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.10.19 17.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.10.19 17.51	
o-Terphenyl	84-15-1	118	%	70-135	10.10.19 17.51	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-009	Date Collected:	10.02.19 09.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.13.19 13.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.13.19 13.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.13.19 13.05	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.13.19 13.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.13.19 13.05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.13.19 13.05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.13.19 13.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.13.19 13.05	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.13.19 13.05	

Certificate of Analytical Results 639115

LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-010	Date Collected:	10.02.19 09.45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**168**	4.96	mg/kg	10.08.19 21.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 18.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 18.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 18.12	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 18.12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 18.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	10.10.19 18.12	
o-Terphenyl	84-15-1	107	%	70-135	10.10.19 18.12	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-010	Date Collected:	10.02.19 09.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.13.19 13.25	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.13.19 13.25	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.13.19 13.25	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.13.19 13.25	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.13.19 13.25	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.13.19 13.25	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.13.19 13.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.13.19 13.25	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.13.19 13.25	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-011	Date Collected:	10.02.19 10.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**358**	4.98	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 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 18.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 18.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 18.33	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 18.33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 18.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	10.10.19 18.33	
o-Terphenyl	84-15-1	110	%	70-135	10.10.19 18.33	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-011	Date Collected:	10.02.19 10.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.13.19 13.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.13.19 13.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.13.19 13.45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.13.19 13.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.13.19 13.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.13.19 13.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.13.19 13.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.13.19 13.45	
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.13.19 13.45	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-012	Date Collected:	10.02.19 10.25	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**312**	5.04	mg/kg	10.08.19 22.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 18.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 18.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 18.54	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 18.54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 18.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	10.10.19 18.54	
o-Terphenyl	84-15-1	114	%	70-135	10.10.19 18.54	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-012	Date Collected:	10.02.19 10.25	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.13.19 14.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.13.19 14.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.13.19 14.05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.13.19 14.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.13.19 14.05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.13.19 14.05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.13.19 14.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.13.19 14.05	
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.13.19 14.05	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-013	Date Collected:	10.02.19 10.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**161**	5.03	mg/kg	10.08.19 22.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	10.10.19 09.00	Basis:	Wet Weight
Seq Number:	3104057			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	10.10.19 19.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.10.19 19.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.10.19 19.16	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.10.19 19.16	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.10.19 19.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	10.10.19 19.16	
o-Terphenyl	84-15-1	114	%	70-135	10.10.19 19.16	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-013	Date Collected:	10.02.19 10.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.13.19 14.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.13.19 14.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.13.19 14.26	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.13.19 14.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.13.19 14.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.13.19 14.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.13.19 14.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.13.19 14.26	
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.13.19 14.26	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-014	Date Collected:	10.02.19 10.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.08.19 15.45	Basis:	Wet Weight
Seq Number:	3103710			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**222**	5.00	mg/kg	10.08.19 22.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.09.19 17.00	Basis:	Wet Weight
Seq Number:	3103874			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	10.10.19 06.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.19 06.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.19 06.22	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.19 06.22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.19 06.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.10.19 06.22	
o-Terphenyl	84-15-1	106	%	70-135	10.10.19 06.22	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 3H Flowline

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	10.04.19 16.13
Lab Sample Id:	639115-014	Date Collected:	10.02.19 10.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.09.19 15.30	Basis:	Wet Weight
Seq Number:	3104087			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.13.19 14.46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.13.19 14.46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.13.19 14.46	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.13.19 14.46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.13.19 14.46	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.13.19 14.46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.13.19 14.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.13.19 14.46	
1,4-Difluorobenzene	540-36-3	80	%	70-130	10.13.19 14.46	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

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 639115

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103710 — Matrix: Solid — Date Prep: 10.08.19
MB Sample Id: 7687721-1-BLK — LCS Sample Id: 7687721-1-BKS — LCSD Sample Id: 7687721-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	254	102	253	101	90-110	0	20	mg/kg	10.08.19 19:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103710 — Matrix: Soil — Date Prep: 10.08.19
Parent Sample Id: 639115-008 — MS Sample Id: 639115-008 S — MSD Sample Id: 639115-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	372	248	595	90	607	95	90-110	2	20	mg/kg	10.08.19 21:29	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3103710 — Matrix: Soil — Date Prep: 10.08.19
Parent Sample Id: 639198-002 — MS Sample Id: 639198-002 S — MSD Sample Id: 639198-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	331	250	573	97	579	99	90-110	1	20	mg/kg	10.08.19 19:53	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3103874 — Matrix: Solid — Date Prep: 10.09.19
MB Sample Id: 7687818-1-BLK — LCS Sample Id: 7687818-1-BKS — LCSD Sample Id: 7687818-1-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	1160	116	1190	119	70-135	3	20	mg/kg	10.09.19 21:59	
Diesel Range Organics (DRO)	<15.0	1000	1200	120	1180	118	70-135	2	20	mg/kg	10.09.19 21:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		111		107		70-135	%	10.09.19 21:59
o-Terphenyl	106		116		108		70-135	%	10.09.19 21:59

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 639115

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104057 — Matrix: Solid — Date Prep: 10.10.19
MB Sample Id: 7687881-1-BLK — LCS Sample Id: 7687881-1-BKS — LCSD Sample Id: 7687881-1-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	1020	102	1180	118	70-135	15	20	mg/kg	10.10.19 11:53	
Diesel Range Organics (DRO)	<15.0	1000	971	97	1110	111	70-135	13	20	mg/kg	10.10.19 11:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		94		106		70-135	%	10.10.19 11:53
o-Terphenyl	94		89		104		70-135	%	10.10.19 11:53

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3103874 — Matrix: Solid — Date Prep: 10.09.19
MB Sample Id: 7687818-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.09.19 21:39	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104057 — Matrix: Solid — Date Prep: 10.10.19
MB Sample Id: 7687881-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.10.19 11:32	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3103874 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639278-001 — MS Sample Id: 639278-001 S — MSD Sample Id: 639278-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	1100	110	1130	113	70-135	3	20	mg/kg	10.09.19 23:02	
Diesel Range Organics (DRO)	<15.0	999	1130	113	1150	115	70-135	2	20	mg/kg	10.09.19 23:02	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		106		70-135	%	10.09.19 23:02
o-Terphenyl	104		109		70-135	%	10.09.19 23:02

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 639115

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: TPH by SW8015 Mod
Prep Method: SW8015P
Seq Number: 3104057 Matrix: Soil Date Prep: 10.10.19
Parent Sample Id: 639157-001 MS Sample Id: 639157-001 S MSD Sample Id: 639157-001 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)	312	997	1130	82	1120	81	70-135	1	20	mg/kg	10.11.19 08:48	
Diesel Range Organics (DRO)	12400	997	12300	0	11700	0	70-135	5	20	mg/kg	10.11.19 08:48	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	150	**	109		70-135	%	10.11.19 08:48
o-Terphenyl	120		117		70-135	%	10.11.19 08:48

Analytical Method: BTEX by EPA 8021B
Prep Method: SW5030B
Seq Number: 3103868 Matrix: Solid Date Prep: 10.09.19
MB Sample Id: 7687788-1-BLK LCS Sample Id: 7687788-1-BKS LCSD Sample Id: 7687788-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.0944	94	70-130	10	35	mg/kg	10.10.19 03:31	
Toluene	<0.00200	0.100	0.102	102	0.0957	96	70-130	6	35	mg/kg	10.10.19 03:31	
Ethylbenzene	<0.00200	0.100	0.110	110	0.105	105	70-130	5	35	mg/kg	10.10.19 03:31	
m,p-Xylenes	<0.00400	0.200	0.219	110	0.210	105	70-130	4	35	mg/kg	10.10.19 03:31	
o-Xylene	<0.00200	0.100	0.115	115	0.112	112	70-130	3	35	mg/kg	10.10.19 03:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		90		90		70-130	%	10.10.19 03:31
4-Bromofluorobenzene	108		117		123		70-130	%	10.10.19 03:31

Analytical Method: BTEX by EPA 8021B
Prep Method: SW5030B
Seq Number: 3104087 Matrix: Solid Date Prep: 10.09.19
MB Sample Id: 7687791-1-BLK LCS Sample Id: 7687791-1-BKS LCSD Sample Id: 7687791-1-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	0.0941	94	0.102	102	70-130	8	35	mg/kg	10.13.19 05:26	
Toluene	<0.00200	0.100	0.0914	91	0.0998	100	70-130	9	35	mg/kg	10.13.19 05:26	
Ethylbenzene	<0.00200	0.100	0.0981	98	0.109	109	70-130	11	35	mg/kg	10.13.19 05:26	
m,p-Xylenes	<0.00400	0.200	0.194	97	0.216	108	70-130	11	35	mg/kg	10.13.19 05:26	
o-Xylene	<0.00200	0.100	0.101	101	0.112	112	70-130	10	35	mg/kg	10.13.19 05:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		88		90		70-130	%	10.13.19 05:26
4-Bromofluorobenzene	104		106		112		70-130	%	10.13.19 05:26

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 639115

LT Environmental, Inc.

Corral Canyon 3H Flowline

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3103868 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639113-001 — MS Sample Id: 639113-001 S — MSD Sample Id: 639113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0838	84	0.0760	76	70-130	10	35	mg/kg	10.10.19 04:12	
Toluene	<0.00198	0.0992	0.0848	85	0.0803	81	70-130	5	35	mg/kg	10.10.19 04:12	
Ethylbenzene	<0.00198	0.0992	0.0929	94	0.0875	88	70-130	6	35	mg/kg	10.10.19 04:12	
m,p-Xylenes	<0.00397	0.198	0.182	92	0.181	91	70-130	1	35	mg/kg	10.10.19 04:12	
o-Xylene	<0.00198	0.0992	0.0947	95	0.0915	92	70-130	3	35	mg/kg	10.10.19 04:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		88		70-130	%	10.10.19 04:12
4-Bromofluorobenzene	115		124		70-130	%	10.10.19 04:12

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104087 — Matrix: Soil — Date Prep: 10.09.19
Parent Sample Id: 639115-009 — MS Sample Id: 639115-009 S — MSD Sample Id: 639115-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0775	78	0.0844	85	70-130	9	35	mg/kg	10.13.19 06:06	
Toluene	<0.00200	0.0998	0.0715	72	0.0785	79	70-130	9	35	mg/kg	10.13.19 06:06	
Ethylbenzene	<0.00200	0.0998	0.0710	71	0.0808	81	70-130	13	35	mg/kg	10.13.19 06:06	
m,p-Xylenes	<0.00399	0.200	0.137	69	0.155	78	70-130	12	35	mg/kg	10.13.19 06:06	X
o-Xylene	<0.00200	0.0998	0.0728	73	0.0836	84	70-130	14	35	mg/kg	10.13.19 06:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		92		70-130	%	10.13.19 06:06
4-Bromofluorobenzene	122		122		70-130	%	10.13.19 06:06

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: 1639 119

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:	Dan Moir	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Corral Canyon BH flowline	Turn Around	
Project Number:		Routine	☑
P.O. Number:	2RP-5390	Rush:	
Sampler's Name:	Robert McAfee	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.2	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	14	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	10/01/19	1214	1'	1	X	X	X
PH0C			1300	1'		X	X	X
PH01A			1215	2'		X	X	X
PH02A			1305	2'		X	X	X
PH03			1308	1'		X	X	X
PH03A			1310	2'		X	X	X
PH04			1315	2'		X	X	X
PH04A			1430	6'		X	X	X
PH05		10/02/19	0940	1'		X	X	X
PH05A			0945	2'		X	X	X

Work Order Notes

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

Sample Comments

discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Robert McAfee		10/4/19 10:13	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: e39115

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

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178 Email:		dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Corral Canyon 3H flowline	Turn Around	
Project Number:		Routine	☑
P.O. Number:	2RP-5390	Rush:	
Sampler's Name:	Robert McAfee	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH06	S	10/02/19	1015	1'	1	X	X	X	discrete
PH06A			1025	2'		X	X	X	
PH07			1045	1'		X	X	X	
PH07A			1050	2'		X	X	X	

ANALYSIS REQUEST

Work Order Notes

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Robert McAfee		10/4/19 10:13	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **49469**

Date/Time: 10/07/19 10:54
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
639115-001	S	PH01	10/01/19 12:14	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-001	S	PH01	10/01/19 12:14	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-001	S	PH01	10/01/19 12:14	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-002	S	PH02	10/01/19 13:00	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-002	S	PH02	10/01/19 13:00	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-002	S	PH02	10/01/19 13:00	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-003	S	PH01A	10/01/19 12:15	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-003	S	PH01A	10/01/19 12:15	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-003	S	PH01A	10/01/19 12:15	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-004	S	PH02A	10/01/19 13:05	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-004	S	PH02A	10/01/19 13:05	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-004	S	PH02A	10/01/19 13:05	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-005	S	PH03	10/01/19 13:08	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-005	S	PH03	10/01/19 13:08	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-005	S	PH03	10/01/19 13:08	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-006	S	PH03A	10/01/19 13:10	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-006	S	PH03A	10/01/19 13:10	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-006	S	PH03A	10/01/19 13:10	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-007	S	PH04	10/01/19 13:15	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-007	S	PH04	10/01/19 13:15	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-007	S	PH04	10/01/19 13:15	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-008	S	PH04A	10/01/19 14:30	SW8021B	BTEX by EPA 8021B	10/10/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-008	S	PH04A	10/01/19 14:30	E300_CL	Chloride by EPA 300	10/10/19	03/29/20	JKR	CL	
639115-008	S	PH04A	10/01/19 14:30	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/15/19	JKR	GRO-DRO PHCC10C28 PI	
639115-009	S	PH05	10/02/19 09:40	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/16/19	JKR	GRO-DRO PHCC10C28 PI	

Inter-Office Shipment

IOS Number **49469**

Date/Time: 10/07/19 10:54
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
639115-009	S	PH05	10/02/19 09:40	SW8021B	BTEX by EPA 8021B	10/10/19	10/16/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-009	S	PH05	10/02/19 09:40	E300_CL	Chloride by EPA 300	10/10/19	03/30/20	JKR	CL	
639115-010	S	PH05A	10/02/19 09:45	SW8021B	BTEX by EPA 8021B	10/10/19	10/16/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-010	S	PH05A	10/02/19 09:45	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/16/19	JKR	GRO-DRO PHCC10C28 PH	
639115-010	S	PH05A	10/02/19 09:45	E300_CL	Chloride by EPA 300	10/10/19	03/30/20	JKR	CL	
639115-011	S	PH06	10/02/19 10:15	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/16/19	JKR	GRO-DRO PHCC10C28 PH	
639115-011	S	PH06	10/02/19 10:15	E300_CL	Chloride by EPA 300	10/10/19	03/30/20	JKR	CL	
639115-011	S	PH06	10/02/19 10:15	SW8021B	BTEX by EPA 8021B	10/10/19	10/16/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-012	S	PH06A	10/02/19 10:25	SW8021B	BTEX by EPA 8021B	10/10/19	10/16/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-012	S	PH06A	10/02/19 10:25	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/16/19	JKR	GRO-DRO PHCC10C28 PH	
639115-012	S	PH06A	10/02/19 10:25	E300_CL	Chloride by EPA 300	10/10/19	03/30/20	JKR	CL	
639115-013	S	PH07	10/02/19 10:45	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/16/19	JKR	GRO-DRO PHCC10C28 PH	
639115-013	S	PH07	10/02/19 10:45	E300_CL	Chloride by EPA 300	10/10/19	03/30/20	JKR	CL	
639115-013	S	PH07	10/02/19 10:45	SW8021B	BTEX by EPA 8021B	10/10/19	10/16/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-014	S	PH07A	10/02/19 10:50	SW8021B	BTEX by EPA 8021B	10/10/19	10/16/19	JKR	BR4FBZ BZ BZME EBZ X	
639115-014	S	PH07A	10/02/19 10:50	E300_CL	Chloride by EPA 300	10/10/19	03/30/20	JKR	CL	
639115-014	S	PH07A	10/02/19 10:50	SW8015MOD_NM	TPH by SW8015 Mod	10/10/19	10/16/19	JKR	GRO-DRO PHCC10C28 PH	

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 #: 49469

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 10:54 AM

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: 10/04/2019 04:13:00 PM

Work Order #: 639115

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.2	
#2 *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: 10/07/2019

Jessica Kramer