

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	NRH2002732419
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.152497 Longitude -103.983436
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Corral Canyon Fed 008H	Site Type	Well Location
Date Release Discovered	12/13/2019	API# (if applicable)	30-015-43709 (Corral Canyon Fed #008H)

Unit Letter	Section	Township	Range	County
P	4	25S	29E	EDDY

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls)	8.0	Volume Recovered (bbls)	5.0
☒ Produced Water	Volume Released (bbls)	24.8	Volume Recovered (bbls)	1.0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?		☐ Yes ☐ No	
☐ Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
☐ Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
☐ Other (describe)	Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)	

Cause of Release: When commissioning the well, the flowline was tied to the wrong drop in the header, resulting in a leak. This resulted in a spill of approximately 32.8 bbls total fluid on the ground 8 bbls of crude oil and 24.8 bbls of produced water, 6 bbls of fluid was recovered and hauled to disposal. Additional third party resources have been retained to assist in the remediation.

Form C-141

Page 2

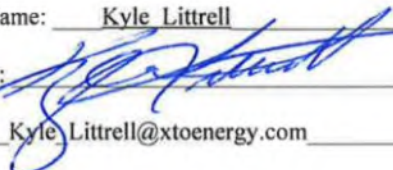
State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? YES – An unauthorized release of fluid over 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? YES, by Kyle Littrell : Mike Bratcher; Rob Hamlet; Victoria Venegas; 'Griswold, Jim, EMNRD'; blm_nm_cfo_spill@blm.gov; Crisha Morgan ; by email December 14, 2019 1:28 PM	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 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: <u>Kyle Littrell</u>	Title: <u>SH&E Supervisor</u>
Signature: 	Date: <u>12/20/19</u>
email: <u>Kyle.Littrell@xtoenergy.com</u>	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Robert Hamlet</u>	Date: <u>1/27/2020</u>

Incident ID	NRH2002732419
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>50-100 ft bgs</u>
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NRH2002732419
District RP	
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 7/3/20

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

OCD Only

Received by: _____ Date: _____

Incident ID	NRH2002732419
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor Signature: _____

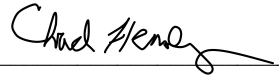
 Date: 7/3/20

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

OCD Only

Received by: Chad Hensley Date: 04/19/2021

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

Closure Approved by:  Date: 04/19/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced



LT Environmental, Inc.

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

July 3, 2020

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

**RE: Closure Request
Corral Canyon Fed 008H
Incident Number NRH2002732419
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, soil sampling, and remediation activities at the Corral Canyon Fed 008H (Site) in Unit P Section 4, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment soil sampling, and remediation activities was to confirm the presence or absence of impacts to soil following the 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 Incident Number NRH2002732419.

RELEASE BACKGROUND

On December 13, 2019, a flowline was incorrectly tied into the wrong drop in the header resulting in the release of approximately 8.0 barrels (bbls) of crude oil and 24.8 bbls of produced water onto the caliche well pad and the pasture area. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; approximately 6 bbls of crude oil and produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on December 20, 2019 and was subsequently assigned Incident Number NRH2002732419.

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 50 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater wells with depth to groundwater data is New Mexico Office of the State Engineer (NM OSE) wells #C04324, Pod 6, Pod 8, Pod 9, Pod 10, Pod 11, and Pod 12, located approximately 4,203 feet west and topographically downgradient of the Site. The groundwater wells have a



reported depth to groundwater range between of 60 feet bgs and 65 feet bgs and a total depth between 61 feet bgs and 72 feet bgs. Just more than 1.5 miles to the northeast is a United States Geological Survey (USGS) water well number 320956103574301 with depth to water of 98 feet. Seven available data points distributed in two directions around the Site demonstrate regional consistency in depth to water between 50 and 100 feet bgs. Additionally, there are no surface features indicative of shallow groundwater, including wetlands, springs, vegetation, or surface water. The Site is on the flank of a shallow slope. The referenced well records are in Attachment 1. All wells used for depth to groundwater determination are depicted on Figure 1.

The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash, located approximately 1,080 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On December 23, 2019, LTE personnel visited the Site to evaluate the release extent. The release extent was mapped utilizing a handheld Global Positioning System (GPS). The release occurred on the caliche well pad and overflowed into the pasture area and caliche road. LTE personnel collected and field screened preliminary soil assessment samples at seven locations (SS01 through SS07) within the release extent. The release extent and the preliminary soil sample locations are presented on Figure 2. Visually impacted soil was located on the caliche well pad,



Bratcher, M.
Page 3

pasture, and caliche road. Photographic documentation was conducted during the initial site visit and photos are included in a photographic log in Attachment 2.

The preliminary soil samples were collected at a depth of 0.5 feet bgs and were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

According to laboratory analytical results, benzene, BTEX, TPH-GRO and TPH-DRO, TPH and/or chloride were reported at concentrations not compliant with the Closure Criteria in the preliminary assessment soil samples all samples except SS05. Laboratory analytical reports are provided in Attachment 3. Based on visible staining in the release areas, field screening results, and laboratory analytical results, remediation to address the staining appeared to be warranted for the release area.

EXCAVATION AND DELINEATION SOIL SAMPLING ACTIVITIES

Between June 3, and June 11, 2020, LTE oversaw excavation activities to remediate impacted soil as indicated by visual observation, field screening results, and preliminary soil sample results. Excavation activities were performed with a track-mounted backhoe and with a hydrovac near production equipment. The excavation extent is presented on Figure 3.

Following removal of impacted soil, LTE collected 5-point composite soil samples at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the sample by thoroughly mixing. A total of 24 composite floor samples (FS01 through FS24) and 21 composite sidewall samples (SW01 through SW21) were collected from the excavation. Floor samples were collected at depths of 1 foot bgs and 4 feet bgs. No sidewall samples were collected in the northern portion of the excavation that was only 1 foot in depth. In that area, floor samples were collected to represent the floor and sidewall material. Sample SW09 and subsequent sample SW21 were collected from the northern wall of the excavation that exceeded 1 foot in depth. The excavation soil samples were collected, handled, and analyzed as described above. The locations of final excavation confirmation samples are presented in Figure 3.

The excavation extent totaled approximately 4,800 square feet and approximately 486 cubic yards of impacted soil were removed. The impacted soil was transported and properly disposed



Bratcher, M.
Page 4

of at the R360 Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples collected on pad, in the pasture, and adjacent to the road contained GRO/DRO and TPH concentrations exceeding Closure Criteria. Samples collected in the pasture and road also contained chloride concentrations exceeding 600 mg/kg (the Reclamation Standard).

Following excavation of impacted soil, laboratory analytical results for all excavation confirmation samples, except SW09, indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Excavation sidewall sample SW09 initially exceeded a TPH concentration of 100 mg/kg. Additional soil was removed from this area and sidewall sample SW21, collected from the final excavation extent, was compliant with the Closure Criteria. Additionally, samples collected from the top 4 feet of the subsurface in pasture and road areas contained chloride concentrations below 600 mg/kg in samples. Laboratory analytical results for the excavation soil samples are summarized in Table 1.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the December 13, 2019, release of crude oil and produced water. Based on the laboratory analytical results for the preliminary soil samples, impacted soil was excavated. Laboratory analytical results for excavation soil samples collected from the final excavation extent indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, chloride concentrations were below 600 mg/kg in excavation soil samples collected from the top four feet of the subsurface in the pasture and road areas. Based on the excavation soil sample analytical results, no further remediation was required. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for Incident Number NRH2002732419. XTO has backfilled the excavations with material purchased locally and recontour the Site to match pre-existing Site conditions.

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



Bratcher, M.
Page 5

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'Spencer Lo'.

Spencer Lo
Staff Geologist

A handwritten signature in blue ink, appearing to read 'Ashley L. Ager'.

Ashley L. Ager, P.G.
Senior Geologist

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

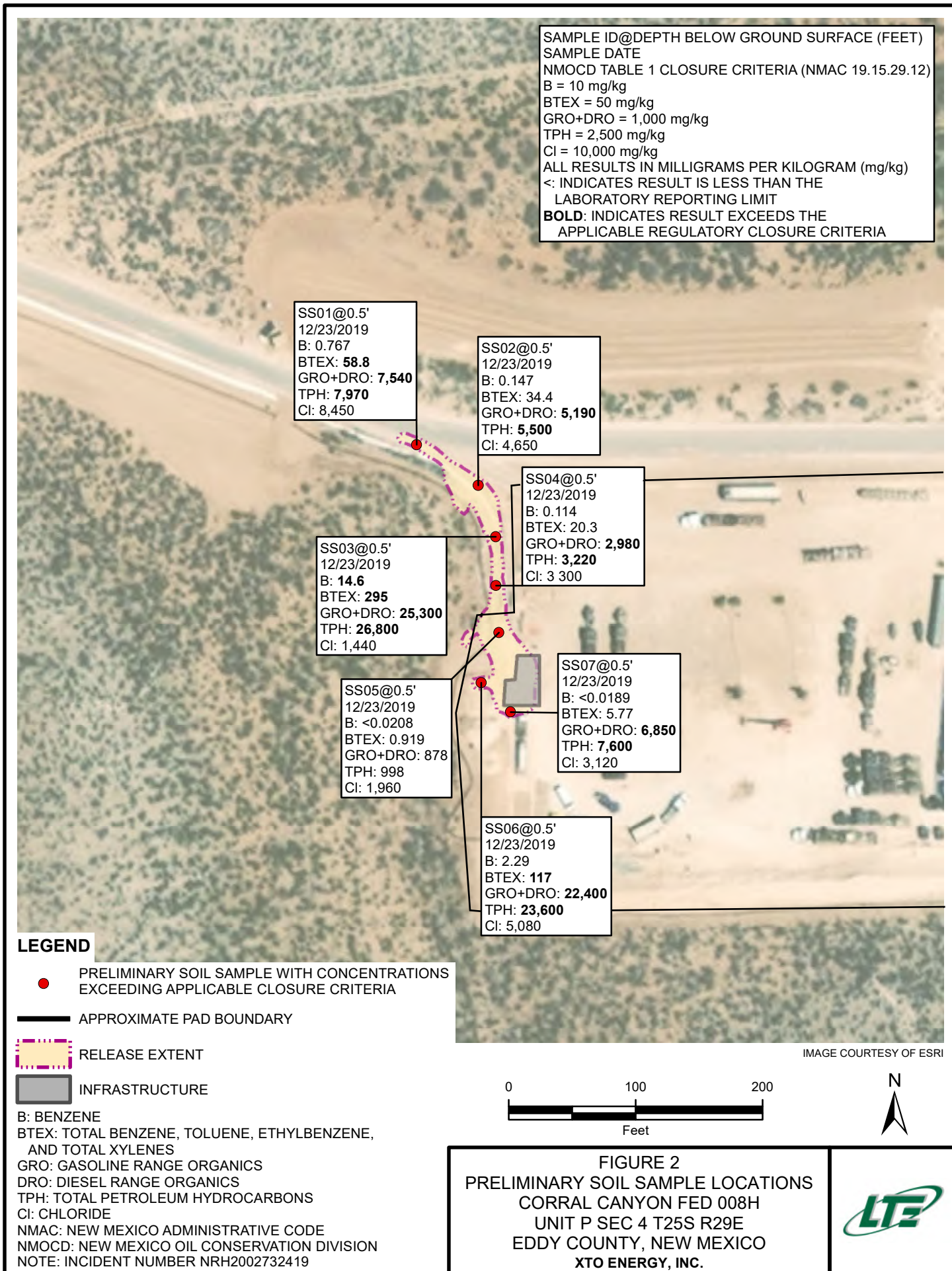
Attachments:

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

FIGURES







**LEGEND**

■ SIDEWALL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED

■ SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

● FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

■ EXCAVATION EXTENT

NOTE: INCIDENT NUMBER NRH2002732419
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

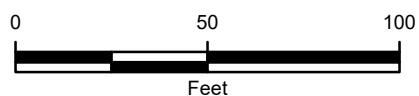


FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
CORRAL CANYON FED 008H
UNIT P SEC 4 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



TABLES



**TABLE 1
SOIL ANALYTICAL RESULTS**

**CORRAL CANYON FED 008H
INCIDENT NUMBER NRH2002732419
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*	0.5	12/23/2019	0.767	13.2	5.97	38.9	58.8	1,390	6,150	427	7,540	7,970	8,450
SS02*	0.5	12/23/2019	0.147	6.4	3.64	24.2	34.4	993	4,200	309	5,190	5,500	4,650
SS03*	0.5	12/23/2019	14.6	132	21.1	128	295	6,540	18,800	1,420	25,300	26,800	1,440
SS04*	0.5	12/23/2019	0.114	2.91	1.97	15.4	20.3	306	2,670	241	2,980	3,220	3,300
SS05	0.5	12/23/2019	<0.0208	0.143	0.136	0.64	0.919	60.6	817	120	878	998	1,960
SS06	0.5	12/23/2019	2.29	31.3	11.4	72.2	117	4,660	17,700	1,240	22,400	23,600	5,080
SS07	0.5	12/23/2019	<0.0189	0.319	0.554	4.9	5.77	322	6,530	743	6,850	7,600	3,120
FS01*	1	06/03/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	225
FS02*	1	06/03/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	354
FS03*	1	06/03/2020	<0.00197	<0.00197	<0.00197	<0.00197	<0.00197	<49.9	<49.9	<49.9	<49.9	<49.9	178
FS04*	2	06/03/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	231
FS05*	2	06/03/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	274
FS06*	2	06/03/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	237
FS07*	2	06/03/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	187
FS08*	2	06/03/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	222
FS09*	2	06/03/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	56.4
FS10*	2	06/04/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	263
FS11*	2	06/04/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	63.5
FS12*	2	06/04/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	148
FS13	4	06/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	386
FS14	4	06/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	97.5
FS15	4	06/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	17.6



A proud member
of WSP

**TABLE 1
SOIL ANALYTICAL RESULTS**

**CORRAL CANYON FED 008H
INCIDENT NUMBER NRH2002732419
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
FS16	4	06/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	355
FS17	4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	12.5
FS18	4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	26.7
FS19	4	06/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	77.3
FS20	4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	15.2
FS21	4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	24.5
FS22	4	06/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	27.8
FS23	4	06/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	17.4
FS24	4	06/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	361
SW01*	0 - 2	06/04/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	157
SW02*	0 - 2	06/04/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	163
SW03*	0 - 2	06/04/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	83.4
SW04*	0 - 2	06/04/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	248
SW05*	0 - 2	06/04/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	40.3
SW06*	0 - 2	06/04/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	262
SW07*	0 - 2	06/04/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	138
SW08*	0 - 2	06/04/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	39.6
SW09*	1 - 2	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	158	<50.3	158	158	357
SW10	0 - 4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	319
SW11	0 - 4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	74.3
SW12	0 - 4	06/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	859
SW13	0 - 4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	115

**TABLE 1
SOIL ANALYTICAL RESULTS**

**CORRAL CANYON FED 008H
INCIDENT NUMBER NRH2002732419
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
SW14	0 - 4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	25.0
SW15	0 - 4	06/05/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	57.2
SW16	0 - 4	06/05/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	162
SW17	0 - 4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	22.8
SW18	0 - 4	06/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	114
SW19	0 - 4	06/05/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	46.5
SW20	0 - 4	06/05/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	45.8
SW21*	1 - 2	06/11/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	105

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

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

Greyed data represents samples that were excavated

* - indicates sample was collected in the top 4 feet of an area to be reclaimed after remediation closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

ATTACHMENT 1: REFERENCED WELL RECORDS





New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04324 POD6	1	1	1	09	25S	29E	594538	3557657 

Driller License:	1664	Driller Company:	CASCADE DRILLING, LP	
Driller Name:	CAIN, SHAWN N.NJR.L.NER			
Drill Start Date:	07/18/2019	Drill Finish Date:	07/18/2019	Plug Date:
Log File Date:	08/28/2019	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:
Casing Size:	2.67	Depth Well:	62 feet	Depth Water: 61 feet

Water Bearing Stratifications:	Top	Bottom	Description
	48	62	Limestone/Dolomite/Chalk

Casing Perforations:	Top	Bottom
	47	62

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

7/1/20 10:09 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04324 POD8	4	4	4	05	25S	29E	594442	3557807 

Driller License:	1664	Driller Company:	CASCADE DRILLING, LP	
Driller Name:	CAIN, SHAWN N.NJR.L.NER			
Drill Start Date:	07/21/2019	Drill Finish Date:	07/21/2019	Plug Date:
Log File Date:	08/28/2019	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:
Casing Size:	2.06	Depth Well:	69 feet	Depth Water: 65 feet

Water Bearing Stratifications:	Top	Bottom	Description
	60	69	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	49	69

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

7/1/20 10:09 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(NAD83 UTM in meters)			
		(quarters are smallest to largest)							
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04324 POD9	1	1	1	09	25S	29E	594590	3557676 

Driller License:	1664	Driller Company:	CASCADE DRILLING, LP	
Driller Name:	CAIN, SHAWN N.NJR.L.NER			
Drill Start Date:	07/21/2019	Drill Finish Date:	07/21/2019	Plug Date:
Log File Date:	08/28/2019	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:
Casing Size:	2.06	Depth Well:	72 feet	Depth Water: 62 feet

Water Bearing Stratifications:	Top	Bottom	Description
	45	72	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	57	72

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

7/1/20 10:09 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04324 POD10	1	1	1	09	25S	29E	594563	3557603 

x

Driller License:	1664	Driller Company:	CASCADE DRILLING, LP
Driller Name:	CAIN, SHAWN N.NJR.L.NER		
Drill Start Date:	07/20/2019	Drill Finish Date:	07/21/2019
Log File Date:	08/28/2019	PCW Rcv Date:	
Pump Type:		Pipe Discharge Size:	
Casing Size:	2.06	Depth Well:	65 feet
		Plug Date:	
		Source:	Shallow
		Estimated Yield:	
		Depth Water:	60 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	60	65	Shale/Mudstone/Siltstone

x

Casing Perforations:	Top	Bottom
	45	65

x

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

7/1/20 10:09 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04324 POD11	1	1	1	09	25S	29E	594576	3557619 

Driller License:	1664	Driller Company:	CASCADE DRILLING, LP	
Driller Name:	CAIN, SHAWN N.NJR.L.NER			
Drill Start Date:	07/20/2019	Drill Finish Date:	07/20/2019	Plug Date:
Log File Date:	08/28/2019	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:
Casing Size:	2.06	Depth Well:	61 feet	Depth Water: 61 feet

Water Bearing Stratifications:	Top	Bottom	Description
	46	61	Limestone/Dolomite/Chalk

Casing Perforations:	Top	Bottom
	41	61

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

7/1/20 10:09 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04324 POD12	2	2	2	08	25S	29E	594476	3557627 

x

Driller License:	1664	Driller Company:	CASCADE DRILLING, LP
Driller Name:	CAIN, SHAWN N.NJR.L.NER		
Drill Start Date:	07/19/2019	Drill Finish Date:	07/20/2019
Log File Date:	08/28/2019	PCW Rcv Date:	
Pump Type:		Pipe Discharge Size:	
Casing Size:	2.06	Depth Well:	65 feet
		Plug Date:	
		Source:	Shallow
		Estimated Yield:	
		Depth Water:	60 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	60	65	Limestone/Dolomite/Chalk

x

Casing Perforations:	Top	Bottom
	45	65

x

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

7/1/20 10:09 AM

POINT OF DIVERSION SUMMARY

USGS 320956103574301 25S.29E.02.11111

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°09'56", Longitude 103°57'43" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 140 feet

Land surface altitude: 3,000 feet above NAVD88.

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

AVAILABLE DATA:

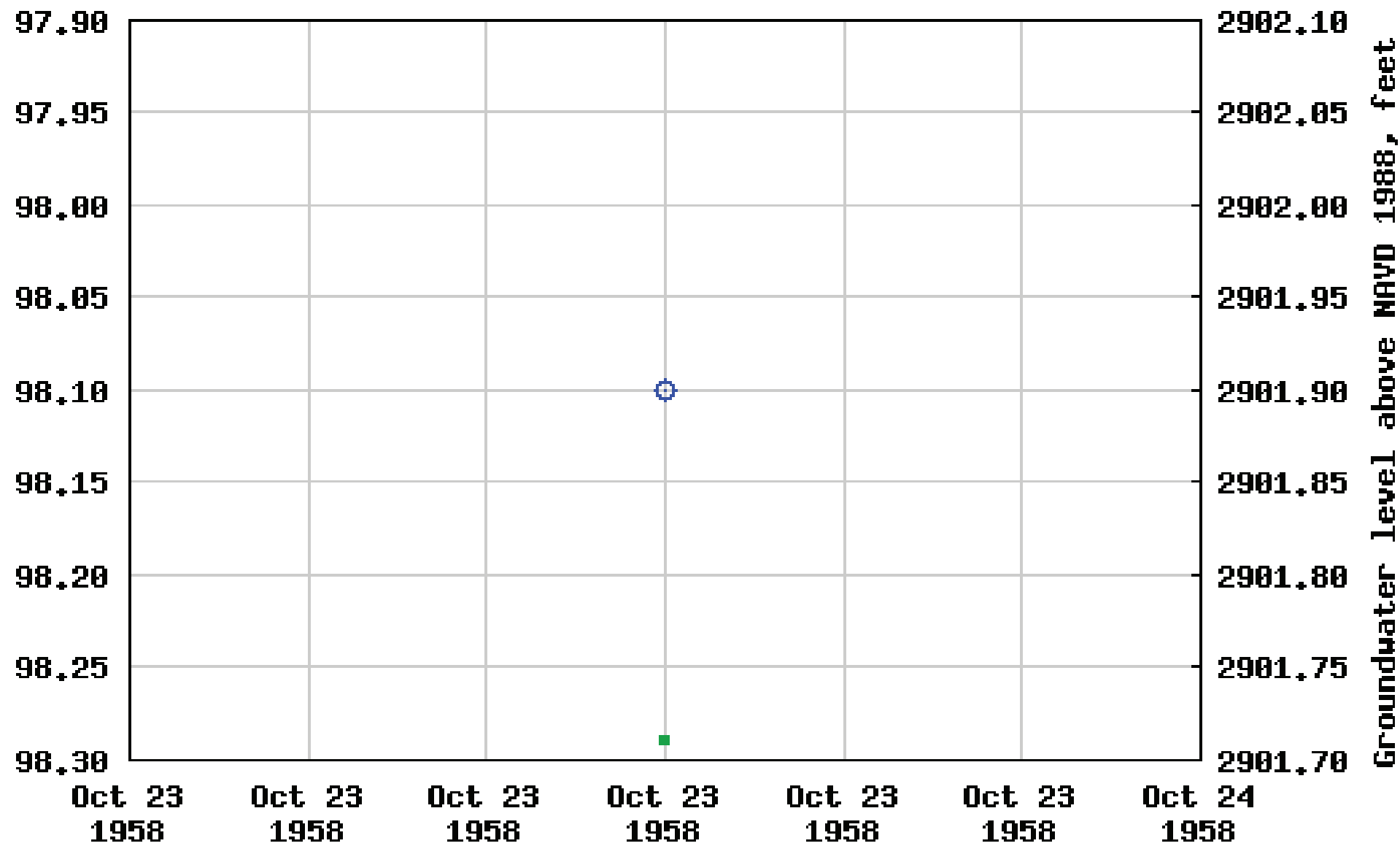
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-10-23	1958-10-23	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

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

USGS 320956103574301 25S.29E.02.11111



ATTACHMENT 2: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG



Photograph 1: Northern view of stained area.



Photograph 2: North western view of stained area.



Photograph 3: Southern view of stained area.



Photograph 4: Eastern view of excavation on pad.

PHOTOGRAPHIC LOG



Photograph 5: Western view of excavation on pad.



Photograph 6: Northern view of excavation.



Photograph 7: Northern view of backfilled excavation.



Photograph 8: Southern view of backfilled excavation.

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS



Analytical Report 647419

for
LT Environmental, Inc.

Project Manager: Dan Moir

Corral Canyon 8H-20H

27-DEC-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 (2019-058), North Carolina (681), Arkansas (19-037-0)

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

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



27-DEC-19

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

Reference: XENCO Report No(s): **647419**
Corral Canyon 8H-20H
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) 647419. 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. 647419 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,

A handwritten signature in black ink that reads 'Jessica Kramer'. The signature is written in a cursive, flowing style.

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

**Sample Cross Reference 647419****LT Environmental, Inc., Arvada, CO**

Corral Canyon 8H-20H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	12-23-19 11:45	0.5 ft	647419-001
SS02	S	12-23-19 11:50	0.5 ft	647419-002
SS03	S	12-23-19 11:55	0.5 ft	647419-003
SS04	S	12-23-19 12:00	0.5 ft	647419-004
SS05	S	12-23-19 12:35	0.5 ft	647419-005
SS06	S	12-23-19 12:40	0.5 ft	647419-006
SS07	S	12-23-19 12:45	0.5 ft	647419-007

**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: Corral Canyon 8H-20H**

Project ID:
Work Order Number(s): 647419

Report Date: 27-DEC-19
Date Received: 12/23/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3111567 Chloride by EPA 300

Lab Sample ID 647419-007 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 647419-001, -002, -003, -004, -005, -006, -007.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3111614 TPH by SW8015 Mod

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

Samples affected are: 647419-001.

Batch: LBA-3111623 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 647419-001.

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



Certificate of Analysis Summary 647419

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 8H-20H

Project Id: Dan Moir
Contact: 27-DEC-19
Project Location: Jessica Kramer
Date Received in Lab: Mon Dec-23-19 02:35 pm
Report Date: 27-DEC-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	647419-001	647419-002	647419-003	647419-004	647419-005	647419-006
	Field Id:	SS01	SS02	SS03	SS04	SS05	SS06
	Depth:	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Dec-23-19 11:45	Dec-23-19 11:50	Dec-23-19 11:55	Dec-23-19 12:00	Dec-23-19 12:35	Dec-23-19 12:40
BTEX by EPA 8021B	Extracted:	Dec-24-19 08:07	Dec-24-19 08:07	Dec-24-19 08:07	Dec-24-19 08:07	Dec-24-19 08:07	Dec-24-19 08:07
	Analyzed:	Dec-24-19 12:58	Dec-24-19 13:15	Dec-24-19 13:33	Dec-24-19 12:06	Dec-24-19 12:23	Dec-24-19 13:50
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		0.767 0.395	0.147 0.0996	14.6 0.394	0.114 0.0182	<0.0208 0.0208	2.29 0.401
		13.2 0.395	6.40 0.398	132 D 0.994	2.91 0.0182	0.143 0.0208	31.3 0.401
		5.97 0.395	3.64 0.398	21.1 0.394	1.97 0.0182	0.136 0.0208	11.4 0.401
Chloride by EPA 300		27.6 0.791	17.6 0.797	95.3 0.789	11.0 D 0.396	0.295 0.0417	53.1 0.802
		11.3 0.395	6.57 0.398	32.4 0.394	4.35 D 0.198	0.345 0.0208	19.1 0.401
		38.9 0.395	24.2 0.398	128 0.394	15.4 0.198	0.640 0.0208	72.2 0.401
		58.8 0.395	34.4 0.0996	295 0.394	20.3 0.0182	0.919 0.0208	117 0.401
	Extracted:	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00
	Analyzed:	Dec-24-19 00:03	Dec-24-19 00:09	Dec-24-19 00:28	Dec-24-19 00:34	Dec-24-19 00:40	Dec-24-19 00:47
TPH by SW8015 Mod	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		8450 198	4650 99.4	1440 99.8	3300 100	1960 100	5080 100
	Extracted:	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00	Dec-23-19 17:00
	Analyzed:	Dec-24-19 10:12	Dec-23-19 23:42	Dec-24-19 10:12	Dec-24-19 00:21	Dec-24-19 01:01	Dec-24-19 10:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		1390 250	993 50.1	6540 499	306 50.1	60.6 50.0	4660 498
		6150 250	4200 50.1	18800 499	2670 50.1	817 50.0	17700 498
		427 250	309 50.1	1420 499	241 50.1	120 50.0	1240 498
		7540 250	5190 50.1	25300 499	2980 50.1	878 50.0	22400 498
		7970 250	5500 50.1	26800 499	3220 50.1	998 50.0	23600 498

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Version: 1.9%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 647419

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 8H-20H

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Dec-23-19 02:35 pm

Report Date: 27-DEC-19

Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	647419-007				
BTEX by EPA 8021B		Field Id:	SS07				
		Depth:	0.5- ft				
		Matrix:	SOIL				
		Sampled:	Dec-23-19 12:45				
		Extracted:	Dec-24-19 08:07				
		Analyzed:	Dec-24-19 12:40				
		Units/RL:	mg/kg RL				
Benzene			<0.0189 0.0189				
Toluene			0.319 0.0189				
Ethylbenzene			0.554 0.0189				
m,p-Xylenes			3.40 0.0377				
o-Xylene			1.50 0.0189				
Total Xylenes			4.90 0.0189				
Total BTEX			5.77 0.0189				
Chloride by EPA 300		Extracted:	Dec-23-19 17:00				
		Analyzed:	Dec-24-19 00:53				
		Units/RL:	mg/kg RL				
Chloride			3120 99.4				
TPH by SW8015 Mod		Extracted:	Dec-23-19 17:00				
		Analyzed:	Dec-24-19 10:32				
		Units/RL:	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)			322 251				
Diesel Range Organics (DRO)			6530 251				
Motor Oil Range Hydrocarbons (MIRO)			743 251				
Total GRO-DRO			6850 251				
Total TPH			7600 251				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Version: 1%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: SS01
Lab Sample Id: 647419-001

Matrix: Soil
Date Collected: 12.23.19 11.45

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3111567

Date Prep: 12.23.19 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8450	198	mg/kg	12.24.19 00.03		20

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3111614

Date Prep: 12.23.19 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1390	250	mg/kg	12.24.19 10.12		5
Diesel Range Organics (DRO)	C10C28DRO	6150	250	mg/kg	12.24.19 10.12		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	427	250	mg/kg	12.24.19 10.12		5
Total GRO-DRO	PHC628	7540	250	mg/kg	12.24.19 10.12		5
Total TPH	PHC635	7970	250	mg/kg	12.24.19 10.12		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	138	%	70-135	12.24.19 10.12	**
o-Terphenyl	84-15-1	119	%	70-135	12.24.19 10.12	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS01**
Lab Sample Id: 647419-001

Matrix: Soil
Date Collected: 12.23.19 11.45

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.767	0.395	mg/kg	12.24.19 12.58		200
Toluene	108-88-3	13.2	0.395	mg/kg	12.24.19 12.58		200
Ethylbenzene	100-41-4	5.97	0.395	mg/kg	12.24.19 12.58		200
m,p-Xylenes	179601-23-1	27.6	0.791	mg/kg	12.24.19 12.58		200
o-Xylene	95-47-6	11.3	0.395	mg/kg	12.24.19 12.58		200
Total Xylenes	1330-20-7	38.9	0.395	mg/kg	12.24.19 12.58		200
Total BTEX		58.8	0.395	mg/kg	12.24.19 12.58		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	131	%	70-130	12.24.19 12.58	**	
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.24.19 12.58		



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS02**
Lab Sample Id: 647419-002

Matrix: Soil
Date Collected: 12.23.19 11.50

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3111567

Date Prep: 12.23.19 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4650	99.4	mg/kg	12.24.19 00.09		10

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3111614

Date Prep: 12.23.19 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	993	50.1	mg/kg	12.23.19 23.42		1
Diesel Range Organics (DRO)	C10C28DRO	4200	50.1	mg/kg	12.23.19 23.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	309	50.1	mg/kg	12.23.19 23.42		1
Total GRO-DRO	PHC628	5190	50.1	mg/kg	12.23.19 23.42		1
Total TPH	PHC635	5500	50.1	mg/kg	12.23.19 23.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	12.23.19 23.42	
o-Terphenyl	84-15-1	117	%	70-135	12.23.19 23.42	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS02**
Lab Sample Id: 647419-002

Matrix: Soil
Date Collected: 12.23.19 11.50

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.147	0.0996	mg/kg	12.24.19 13.15		200
Toluene	108-88-3	6.40	0.398	mg/kg	12.24.19 13.15		200
Ethylbenzene	100-41-4	3.64	0.398	mg/kg	12.24.19 13.15		200
m,p-Xylenes	179601-23-1	17.6	0.797	mg/kg	12.24.19 13.15		200
o-Xylene	95-47-6	6.57	0.398	mg/kg	12.24.19 13.15		200
Total Xylenes	1330-20-7	24.2	0.398	mg/kg	12.24.19 13.15		200
Total BTEX		34.4	0.0996	mg/kg	12.24.19 13.15		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	12.24.19 13.15		
4-Bromofluorobenzene	460-00-4	107	%	70-130	12.24.19 13.15		



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS03**
Lab Sample Id: 647419-003

Matrix: Soil
Date Collected: 12.23.19 11.55

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3111567

Date Prep: 12.23.19 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1440	99.8	mg/kg	12.24.19 00.28		10

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3111614

Date Prep: 12.23.19 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	6540	499	mg/kg	12.24.19 10.12		10
Diesel Range Organics (DRO)	C10C28DRO	18800	499	mg/kg	12.24.19 10.12		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1420	499	mg/kg	12.24.19 10.12		10
Total GRO-DRO	PHC628	25300	499	mg/kg	12.24.19 10.12		10
Total TPH	PHC635	26800	499	mg/kg	12.24.19 10.12		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	12.24.19 10.12	
o-Terphenyl	84-15-1	114	%	70-135	12.24.19 10.12	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS03**
Lab Sample Id: 647419-003

Matrix: Soil
Date Collected: 12.23.19 11.55

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	14.6	0.394	mg/kg	12.24.19 13.33		200
Toluene	108-88-3	132	0.994	mg/kg	12.24.19 17.18	D	500
Ethylbenzene	100-41-4	21.1	0.394	mg/kg	12.24.19 13.33		200
m,p-Xylenes	179601-23-1	95.3	0.789	mg/kg	12.24.19 13.33		200
o-Xylene	95-47-6	32.4	0.394	mg/kg	12.24.19 13.33		200
Total Xylenes	1330-20-7	128	0.394	mg/kg	12.24.19 13.33		200
Total BTEX		295	0.394	mg/kg	12.24.19 17.18		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	12.24.19 13.33		
1,4-Difluorobenzene	540-36-3	95	%	70-130	12.24.19 13.33		



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: SS04
Lab Sample Id: 647419-004

Matrix: Soil
Date Collected: 12.23.19 12.00

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.23.19 17.00

Basis: Wet Weight

Seq Number: 3111567

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3300	100	mg/kg	12.24.19 00.34		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 12.23.19 17.00

Basis: Wet Weight

Seq Number: 3111614

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	306	50.1	mg/kg	12.24.19 00.21		1
Diesel Range Organics (DRO)	C10C28DRO	2670	50.1	mg/kg	12.24.19 00.21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	241	50.1	mg/kg	12.24.19 00.21		1
Total GRO-DRO	PHC628	2980	50.1	mg/kg	12.24.19 00.21		1
Total TPH	PHC635	3220	50.1	mg/kg	12.24.19 00.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.24.19 00.21	
o-Terphenyl	84-15-1	108	%	70-135	12.24.19 00.21	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS04**
Lab Sample Id: 647419-004

Matrix: Soil
Date Collected: 12.23.19 12.00

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.114	0.0182	mg/kg	12.24.19 12.06		1
Toluene	108-88-3	2.91	0.0182	mg/kg	12.24.19 12.06		1
Ethylbenzene	100-41-4	1.97	0.0182	mg/kg	12.24.19 12.06		1
m,p-Xylenes	179601-23-1	11.0	0.396	mg/kg	12.24.19 17.01	D	100
o-Xylene	95-47-6	4.35	0.198	mg/kg	12.24.19 17.01	D	100
Total Xylenes	1330-20-7	15.4	0.198	mg/kg	12.24.19 17.01		100
Total BTEX		20.3	0.0182	mg/kg	12.24.19 17.01		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.24.19 12.06		
1,4-Difluorobenzene	540-36-3	95	%	70-130	12.24.19 12.06		



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS05**
Lab Sample Id: 647419-005

Matrix: Soil
Date Collected: 12.23.19 12.35

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3111567

Date Prep: 12.23.19 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1960	100	mg/kg	12.24.19 00.40		10

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3111614

Date Prep: 12.23.19 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	60.6	50.0	mg/kg	12.24.19 01.01		1
Diesel Range Organics (DRO)	C10C28DRO	817	50.0	mg/kg	12.24.19 01.01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	120	50.0	mg/kg	12.24.19 01.01		1
Total GRO-DRO	PHC628	878	50.0	mg/kg	12.24.19 01.01		1
Total TPH	PHC635	998	50.0	mg/kg	12.24.19 01.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	12.24.19 01.01	
o-Terphenyl	84-15-1	112	%	70-135	12.24.19 01.01	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS05**
Lab Sample Id: 647419-005

Matrix: Soil
Date Collected: 12.23.19 12.35

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0208	0.0208	mg/kg	12.24.19 12.23	U	1
Toluene	108-88-3	0.143	0.0208	mg/kg	12.24.19 12.23		1
Ethylbenzene	100-41-4	0.136	0.0208	mg/kg	12.24.19 12.23		1
m,p-Xylenes	179601-23-1	0.295	0.0417	mg/kg	12.24.19 12.23		1
o-Xylene	95-47-6	0.345	0.0208	mg/kg	12.24.19 12.23		1
Total Xylenes	1330-20-7	0.640	0.0208	mg/kg	12.24.19 12.23		1
Total BTEX		0.919	0.0208	mg/kg	12.24.19 12.23		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	12.24.19 12.23		
1,4-Difluorobenzene	540-36-3	96	%	70-130	12.24.19 12.23		



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS06**
Lab Sample Id: 647419-006

Matrix: Soil
Date Collected: 12.23.19 12.40

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3111567

Date Prep: 12.23.19 17.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5080	100	mg/kg	12.24.19 00.47		10

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3111614

Date Prep: 12.23.19 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4660	498	mg/kg	12.24.19 10.32		10
Diesel Range Organics (DRO)	C10C28DRO	17700	498	mg/kg	12.24.19 10.32		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1240	498	mg/kg	12.24.19 10.32		10
Total GRO-DRO	PHC628	22400	498	mg/kg	12.24.19 10.32		10
Total TPH	PHC635	23600	498	mg/kg	12.24.19 10.32		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	12.24.19 10.32	
o-Terphenyl	84-15-1	112	%	70-135	12.24.19 10.32	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS06**
Lab Sample Id: 647419-006

Matrix: Soil
Date Collected: 12.23.19 12.40

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	2.29	0.401	mg/kg	12.24.19 13.50		200
Toluene	108-88-3	31.3	0.401	mg/kg	12.24.19 13.50		200
Ethylbenzene	100-41-4	11.4	0.401	mg/kg	12.24.19 13.50		200
m,p-Xylenes	179601-23-1	53.1	0.802	mg/kg	12.24.19 13.50		200
o-Xylene	95-47-6	19.1	0.401	mg/kg	12.24.19 13.50		200
Total Xylenes	1330-20-7	72.2	0.401	mg/kg	12.24.19 13.50		200
Total BTEX		117	0.401	mg/kg	12.24.19 13.50		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.24.19 13.50		
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.24.19 13.50		



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: SS07
Lab Sample Id: 647419-007

Matrix: Soil
Date Collected: 12.23.19 12.45

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.23.19 17.00

Basis: Wet Weight

Seq Number: 3111567

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3120	99.4	mg/kg	12.24.19 00.53		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 12.23.19 17.00

Basis: Wet Weight

Seq Number: 3111614

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	322	251	mg/kg	12.24.19 10.32		5
Diesel Range Organics (DRO)	C10C28DRO	6530	251	mg/kg	12.24.19 10.32		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	743	251	mg/kg	12.24.19 10.32		5
Total GRO-DRO	PHC628	6850	251	mg/kg	12.24.19 10.32		5
Total TPH	PHC635	7600	251	mg/kg	12.24.19 10.32		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	12.24.19 10.32	
o-Terphenyl	84-15-1	111	%	70-135	12.24.19 10.32	



Certificate of Analytical Results 647419

LT Environmental, Inc., Arvada, CO

Corral Canyon 8H-20H

Sample Id: **SS07**
Lab Sample Id: 647419-007

Matrix: Soil
Date Collected: 12.23.19 12.45

Date Received: 12.23.19 14.35
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 12.24.19 08.07

Basis: Wet Weight

Seq Number: 3111623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	12.24.19 12.40	U	1
Toluene	108-88-3	0.319	0.0189	mg/kg	12.24.19 12.40		1
Ethylbenzene	100-41-4	0.554	0.0189	mg/kg	12.24.19 12.40		1
m,p-Xylenes	179601-23-1	3.40	0.0377	mg/kg	12.24.19 12.40		1
o-Xylene	95-47-6	1.50	0.0189	mg/kg	12.24.19 12.40		1
Total Xylenes	1330-20-7	4.90	0.0189	mg/kg	12.24.19 12.40		1
Total BTEX		5.77	0.0189	mg/kg	12.24.19 12.40		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98		%	70-130	12.24.19 12.40	
4-Bromofluorobenzene	460-00-4	128		%	70-130	12.24.19 12.40	



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.
Corral Canyon 8H-20H

Analytical Method: Chloride by EPA 300

Seq Number: 3111567

MB Sample Id: 7693188-1-BLK

Matrix: Solid

LCS Sample Id: 7693188-1-BKS

Prep Method: E300P

Date Prep: 12.23.19

LCSD Sample Id: 7693188-1-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	300	279	93	276	92	90-110	1	20	mg/kg	12.23.19 23:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3111567

Parent Sample Id: 647387-033

Matrix: Soil

MS Sample Id: 647387-033 S

Prep Method: E300P

Date Prep: 12.23.19

MSD Sample Id: 647387-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.2	201	264	114	263	114	90-110	0	20	mg/kg	12.23.19 23:32	X

Analytical Method: Chloride by EPA 300

Seq Number: 3111567

Parent Sample Id: 647419-007

Matrix: Soil

MS Sample Id: 647419-007 S

Prep Method: E300P

Date Prep: 12.23.19

MSD Sample Id: 647419-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3120	199	3280	80	3270	75	90-110	0	20	mg/kg	12.24.19 00:59	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3111614

MB Sample Id: 7693217-1-BLK

Matrix: Solid

LCS Sample Id: 7693217-1-BKS

Prep Method: SW8015P

Date Prep: 12.23.19

LCSD Sample Id: 7693217-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	1300	130	1240	124	70-135	5	35	mg/kg	12.23.19 22:43	
Diesel Range Organics (DRO)	<11.5	1000	1290	129	1260	126	70-135	2	35	mg/kg	12.23.19 22:43	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		116		115		70-135	%	12.23.19 22:43
o-Terphenyl	96		112		114		70-135	%	12.23.19 22:43

Analytical Method: TPH by SW8015 Mod

Seq Number: 3111614

Matrix: Solid

MB Sample Id: 7693217-1-BLK

Prep Method: SW8015P

Date Prep: 12.23.19

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.23.19 22:23	

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

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

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

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



LT Environmental, Inc.
Corral Canyon 8H-20H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3111614

Parent Sample Id: 647387-033

Matrix: Soil

MS Sample Id: 647387-033 S

Prep Method: SW8015P

Date Prep: 12.23.19

MSD Sample Id: 647387-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.8	997	878	88	966	97	70-135	10	35	mg/kg	12.23.19 23:02	
Diesel Range Organics (DRO)	22.1	997	936	92	1010	99	70-135	8	35	mg/kg	12.23.19 23:02	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		121		70-135	%	12.23.19 23:02
o-Terphenyl	107		113		70-135	%	12.23.19 23:02

Analytical Method: BTEX by EPA 8021B

Seq Number: 3111623

MB Sample Id: 7693185-1-BLK

Matrix: Solid

LCS Sample Id: 7693185-1-BKS

Prep Method: SW5030B

Date Prep: 12.24.19

LCSD Sample Id: 7693185-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.100	100	0.0973	97	70-130	3	35	mg/kg	12.24.19 09:12	
Toluene	<0.00200	0.100	0.100	100	0.0967	97	70-130	3	35	mg/kg	12.24.19 09:12	
Ethylbenzene	<0.00200	0.100	0.0978	98	0.0937	94	71-129	4	35	mg/kg	12.24.19 09:12	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.193	97	70-135	5	35	mg/kg	12.24.19 09:12	
o-Xylene	<0.00200	0.100	0.0998	100	0.0962	96	71-133	4	35	mg/kg	12.24.19 09:12	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		101		70-130	%	12.24.19 09:12
4-Bromofluorobenzene	99		101		104		70-130	%	12.24.19 09:12

Analytical Method: BTEX by EPA 8021B

Seq Number: 3111623

Parent Sample Id: 647387-036

Matrix: Soil

MS Sample Id: 647387-036 S

Prep Method: SW5030B

Date Prep: 12.24.19

MSD Sample Id: 647387-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0891	88	0.102	102	70-130	14	35	mg/kg	12.24.19 09:47	
Toluene	<0.00201	0.101	0.0828	82	0.0975	98	70-130	16	35	mg/kg	12.24.19 09:47	
Ethylbenzene	<0.00201	0.101	0.0732	72	0.0894	89	71-129	20	35	mg/kg	12.24.19 09:47	
m,p-Xylenes	<0.00402	0.201	0.147	73	0.182	91	70-135	21	35	mg/kg	12.24.19 09:47	
o-Xylene	<0.00201	0.101	0.0746	74	0.0907	91	71-133	19	35	mg/kg	12.24.19 09:47	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		103		70-130	%	12.24.19 09:47
4-Bromofluorobenzene	103		108		70-130	%	12.24.19 09:47

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

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

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

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



Work Order No: 647419

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)585-5443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 251-1111
Hobbs, NM (575-392-7550)

www.xenco.com

Page of

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

Work Order Comments									
Program: UST/PST		☐ RP	☐ Growfields	☐ RC	☐ \$perfund	☐			
State of Project:									
Reporting: Level II		☐ Level III	☐ ST/UST	☐ RRP	☐ Level IV	☐			
Deliverables: EDD		☐	ADAPT	☐	Other:				

Project Name:	Corral Canyon BH-104	Turn Around
Project Number:		Routine X
P.O. Number:	Eddy County	Rush:
Sampler's Name:	Elizabeth Naka	Due Date:

SAMPLE RECEIPT		Temp Blank:		☒ Yes	No	Wet Ice:	☒ Yes	No
Temperature (°C):	88	Thermometer ID						
Received intact:	☒ Yes ☐ No	TNN007						
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:		-0.32				
Sample Custody Seals:	Yes ☐ No ☒	Total Containers:		7				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP)	BTEX (EP)	Chloride	Sample Comments
SS01	S	12/25/19	1145	6.5'	1	X	X	X	discrete
SS02			1150						
SS03			1155						
SS04			1200						
SS05			1235						
SS06			1240						
SS07			1245						
6.5' to 12.5' Depth Chloride Peak									

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 74

2 Na Sr Ti Sn U V ~~Zn~~
1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Wade Mear</i>	<i>[Signature]</i>	12/23/19 14:35	2		
3			4		
5			6		



Client: LT Environmental, Inc.

Date/ Time Received: 12/23/2019 02:35:00 PM

Work Order #: 647419

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)?	2.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	No
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	No
#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
#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:

Martha Castro

Date: 12/23/2019

Checklist reviewed by:

Jessica Kramer

Date: 12/24/2019



Project Id: 012920091
Contact: Dan Moir
Project Location:

Certificate of Analysis Summary 663707
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.10.2020 15:27
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663707-001	663707-002	663707-003	663707-004	663707-005	663707-006
	Field Id:	SW01	SW02	SW03	SW04	SW05	SW06
	Depth:	0-2 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.04.2020 11:45	06.04.2020 12:00	06.04.2020 12:15	06.04.2020 12:30	06.04.2020 12:45	06.04.2020 13:00
BTEX by EPA 8021B	Extracted:	06.08.2020 13:14	06.08.2020 13:14	06.08.2020 13:14	06.08.2020 13:14	06.08.2020 13:14	06.08.2020 18:21
	Analyzed:	06.08.2020 22:31	06.08.2020 22:52	06.08.2020 23:12	06.08.2020 23:33	06.08.2020 23:53	06.09.2020 02:57
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Toluene	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Ethylbenzene	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Chloride by EPA 300	m,p-Xylenes	<0.00396 0.00396	<0.00398 0.00398	<0.00398 0.00398	<0.00396 0.00396	<0.00397 0.00397	<0.00398 0.00398
	o-Xylene	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Total Xylenes	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Total BTEX	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Extracted:	06.08.2020 17:00	06.08.2020 17:00	06.08.2020 17:00	06.08.2020 17:00	06.08.2020 17:00	06.08.2020 17:08
	Analyzed:	06.08.2020 20:35	06.08.2020 20:40	06.08.2020 20:46	06.08.2020 20:52	06.08.2020 20:58	06.08.2020 21:32
TPH by SW8015 Mod	Units/RL:	157 10.0	163 9.98	83.4 9.92	248 9.96	40.3 9.98	262 10.0
	Chloride						
	Extracted:	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30
	Analyzed:	06.08.2020 14:19	06.08.2020 15:21	06.08.2020 15:41	06.08.2020 16:02	06.08.2020 16:22	06.08.2020 16:43
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Gasoline Range Hydrocarbons (GRO)	<49.8 49.8	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<50.1 50.1
Total GRO-DRO	Diesel Range Organics (DRO)	<49.8 49.8	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<50.1 50.1
	Motor Oil Range Hydrocarbons (MRO)	<49.8 49.8	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<50.1 50.1
	Total GRO-DRO	<49.8 49.8	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<50.1 50.1
	Total TPH	<49.8 49.8	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<50.1 50.1

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer

Jessica Kramer
Project Manager



Certificate of Analysis Summary 663707

LT Environmental, Inc., Arvada, CO

Project Id: 012920091
Contact: Dan Moir
Project Location:

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.10.2020 15:27
Project Manager: Jessica Kramer

Project Name: Corral Canyon 008H

Analysis Requested	Lab Id:	663707-007	663707-008	663707-009	663707-010	663707-011	663707-012
	Field Id:	SW07	SW08	SW09	SW10	SW11	SW12
	Depth:	0-2 ft	0-2 ft	1-2 ft	0-4 ft	0-4 ft	0-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.04.2020 14:00	06.04.2020 14:15	06.05.2020 12:25	06.05.2020 12:30	06.05.2020 12:35	06.05.2020 12:40
BTEX by EPA 8021B	Extracted:	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21
	Analyzed:	06.09.2020 03:17	06.09.2020 03:37	06.09.2020 03:58	06.09.2020 04:18	06.09.2020 04:39	06.09.2020 04:59
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Toluene	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Chloride by EPA 300	Ethylbenzene	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	m,p-Xylenes	<0.00398 0.00398	<0.00400 0.00400	<0.00396 0.00396	<0.00396 0.00396	<0.00397 0.00397	<0.00398 0.00398
	o-Xylene	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Total Xylenes	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
	Total BTEX	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
TPH by SW8015 Mod	Extracted:	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08
	Analyzed:	06.08.2020 21:50	06.08.2020 21:56	06.08.2020 22:01	06.08.2020 22:07	06.08.2020 22:24	06.08.2020 22:30
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	138 9.92	39.6 9.94	357 9.94	319 9.98	74.3 9.96	859 9.98
	Gasoline Range Hydrocarbons (GRO)	<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1	158 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9
Total GRO-DRO		<50.1 50.1	<50.1 50.1	158 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9
Total TPH		<50.1 50.1	<50.1 50.1	158 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer

Jessica Kramer
Project Manager



Certificate of Analysis Summary 663707
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Project Id: 012920091
Contact: Dan Moir
Project Location:

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.10.2020 15:27
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663707-013	663707-014	663707-015	663707-016	663707-017	663707-018
	Field Id:	SW13	SW14	SW15	SW16	SW17	SW18
	Depth:	0-4 ft	0-4 ft	0-4 ft	0-4 ft	0-4 ft	0-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.05.2020 12:45	06.05.2020 12:50	06.05.2020 12:55	06.05.2020 13:00	06.05.2020 13:05	06.05.2020 13:10
BTEX by EPA 8021B	Extracted:	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21
	Analyzed:	06.09.2020 05:19	06.09.2020 05:40	06.09.2020 06:00	06.09.2020 07:01	06.09.2020 07:22	06.09.2020 07:42
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
	Toluene	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Chloride by EPA 300	Ethylbenzene	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
	m,p-Xylenes	<0.00397 0.00397	<0.00396 0.00396	<0.00402 0.00402	<0.00398 0.00398	<0.00397 0.00397	<0.00399 0.00399
	o-Xylene	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
	Total Xylenes	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
	Total BTEX	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
TPH by SW8015 Mod	Extracted:	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08
	Analyzed:	06.08.2020 22:36	06.08.2020 22:42	06.08.2020 22:48	06.08.2020 22:53	06.08.2020 23:11	06.08.2020 23:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	115 9.88	25.0 9.98	57.2 9.92	162 9.96	22.8 9.98	114 10.1
	Gasoline Range Hydrocarbons (GRO)	<49.8 49.8	<49.9 49.9	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1
Total TPH	Diesel Range Organics (DRO)	<49.8 49.8	<49.9 49.9	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1
	Motor Oil Range Hydrocarbons (MRO)	<49.8 49.8	<49.9 49.9	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1
	Total GRO-DRO	<49.8 49.8	<49.9 49.9	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1
	Total TPH	<49.8 49.8	<49.9 49.9	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Jessica Kramer

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

Jessica Kramer
Project Manager

Certificate of Analysis Summary 663707
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.10.2020 15:27
Project Manager: Jessica Kramer

Project Id: 012920091
Contact: Dan Moir
Project Location:



Analysis Requested		Lab Id: Field Id: Depth: Matrix: Sampled:	663707-019 SW19 0-4 ft SOIL 06.05.2020 13:15	663707-020 SW20 0-4 ft SOIL 06.05.2020 13:20		
BTEX by EPA 8021B		Extracted:	06.08.2020 18:21	06.08.2020 18:21		
		Analyzed:	06.09.2020 08:03	06.09.2020 08:23		
		Units/RL:	mg/kg RL	mg/kg RL		
Benzene			<0.00200	<0.00198	0.00198	
Toluene			<0.00200	<0.00198	0.00198	
Ethylbenzene			<0.00200	<0.00198	0.00198	
m,p-Xylenes			<0.00401	<0.00396	0.00396	
o-Xylene			<0.00200	<0.00198	0.00198	
Total Xylenes			<0.00200	<0.00198	0.00198	
Total BTEX			<0.00200	<0.00198	0.00198	
Chloride by EPA 300		Extracted:	06.08.2020 17:08	06.08.2020 17:08		
		Analyzed:	06.08.2020 23:34	06.08.2020 23:40		
		Units/RL:	mg/kg RL	mg/kg RL		
Chloride			46.5 10.1	45.8 10.0		
TPH by SW8015 Mod		Extracted:	06.08.2020 13:30	06.08.2020 13:30		
		Analyzed:	06.08.2020 21:31	06.08.2020 21:51		
		Units/RL:	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)			<49.9 49.9	<50.3 50.3		
Diesel Range Organics (DRO)			<49.9 49.9	<50.3 50.3		
Motor Oil Range Hydrocarbons (MRO)			<49.9 49.9	<50.3 50.3		
Total GRO-DRO			<49.9 49.9	<50.3 50.3		
Total TPH			<49.9 49.9	<50.3 50.3		

Jessica Kramer

Jessica Kramer
Project Manager

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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



Analytical Report 663707

for

LT Environmental, Inc.

Project Manager: Dan Moir

Corral Canyon 008H

012920091

06.10.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.10.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663707**

Corral Canyon 008H

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) 663707. 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. 663707 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,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	06.04.2020 11:45	0 - 2 ft	663707-001
SW02	S	06.04.2020 12:00	0 - 2 ft	663707-002
SW03	S	06.04.2020 12:15	0 - 2 ft	663707-003
SW04	S	06.04.2020 12:30	0 - 2 ft	663707-004
SW05	S	06.04.2020 12:45	0 - 2 ft	663707-005
SW06	S	06.04.2020 13:00	0 - 2 ft	663707-006
SW07	S	06.04.2020 14:00	0 - 2 ft	663707-007
SW08	S	06.04.2020 14:15	0 - 2 ft	663707-008
SW09	S	06.05.2020 12:25	1 - 2 ft	663707-009
SW10	S	06.05.2020 12:30	0 - 4 ft	663707-010
SW11	S	06.05.2020 12:35	0 - 4 ft	663707-011
SW12	S	06.05.2020 12:40	0 - 4 ft	663707-012
SW13	S	06.05.2020 12:45	0 - 4 ft	663707-013
SW14	S	06.05.2020 12:50	0 - 4 ft	663707-014
SW15	S	06.05.2020 12:55	0 - 4 ft	663707-015
SW16	S	06.05.2020 13:00	0 - 4 ft	663707-016
SW17	S	06.05.2020 13:05	0 - 4 ft	663707-017
SW18	S	06.05.2020 13:10	0 - 4 ft	663707-018
SW19	S	06.05.2020 13:15	0 - 4 ft	663707-019
SW20	S	06.05.2020 13:20	0 - 4 ft	663707-020



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Corral Canyon 008H

Project ID: 012920091
Work Order Number(s): 663707

Report Date: 06.10.2020
Date Received: 06.08.2020

Sample receipt non conformances and comments:

V1.001 Revision (client email) Removed additional 0 from sample IDs Corrected sample depths to match
COC JK 06/10/20

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW01** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-001 Date Collected: 06.04.2020 11:45 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:00 Basis: Wet Weight
 Seq Number: 3128315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	157	10.0	mg/kg	06.08.2020 20:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.08.2020 14:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.08.2020 14:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.08.2020 14:19	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.08.2020 14:19	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.08.2020 14:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.08.2020 14:19	
o-Terphenyl	84-15-1	91	%	70-135	06.08.2020 14:19	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW01**
Lab Sample Id: 663707-001

Matrix: Soil
Date Collected: 06.04.2020 11:45

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 13:14

Basis: Wet Weight

Seq Number: 3128312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.08.2020 22:31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.08.2020 22:31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.08.2020 22:31	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.08.2020 22:31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.08.2020 22:31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.08.2020 22:31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.08.2020 22:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.08.2020 22:31		
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.08.2020 22:31		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW02** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-002 Date Collected: 06.04.2020 12:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:00 Basis: Wet Weight
 Seq Number: 3128315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	163	9.98	mg/kg	06.08.2020 20:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.08.2020 15:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.08.2020 15:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.08.2020 15:21	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.08.2020 15:21	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.08.2020 15:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.08.2020 15:21	
o-Terphenyl	84-15-1	87	%	70-135	06.08.2020 15:21	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW02**
Lab Sample Id: 663707-002

Matrix: Soil
Date Collected: 06.04.2020 12:00

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128312

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 13:14

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.08.2020 22:52	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.08.2020 22:52	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.08.2020 22:52	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.08.2020 22:52	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.08.2020 22:52	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.08.2020 22:52	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.08.2020 22:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.08.2020 22:52		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.08.2020 22:52		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW03** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-003 Date Collected: 06.04.2020 12:15 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:00 Basis: Wet Weight
 Seq Number: 3128315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.4	9.92	mg/kg	06.08.2020 20:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.08.2020 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.08.2020 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.08.2020 15:41	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.08.2020 15:41	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.08.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.08.2020 15:41	
o-Terphenyl	84-15-1	87	%	70-135	06.08.2020 15:41	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW03**
Lab Sample Id: 663707-003

Matrix: Soil
Date Collected: 06.04.2020 12:15

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128312

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 13:14

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.08.2020 23:12	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.08.2020 23:12	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.08.2020 23:12	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.08.2020 23:12	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.08.2020 23:12	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.08.2020 23:12	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.08.2020 23:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.08.2020 23:12		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.08.2020 23:12		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW04** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-004 Date Collected: 06.04.2020 12:30 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:00 Basis: Wet Weight
 Seq Number: 3128315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	248	9.96	mg/kg	06.08.2020 20:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.08.2020 16:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.08.2020 16:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.08.2020 16:02	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.08.2020 16:02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.08.2020 16:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.08.2020 16:02	
o-Terphenyl	84-15-1	90	%	70-135	06.08.2020 16:02	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW04**
Lab Sample Id: 663707-004

Matrix: Soil
Date Collected: 06.04.2020 12:30

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 13:14

Basis: Wet Weight

Seq Number: 3128312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.08.2020 23:33	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.08.2020 23:33	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.08.2020 23:33	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.08.2020 23:33	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.08.2020 23:33	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.08.2020 23:33	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.08.2020 23:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.08.2020 23:33	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.08.2020 23:33	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW05** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-005 Date Collected: 06.04.2020 12:45 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:00 Basis: Wet Weight
 Seq Number: 3128315

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	40.3	9.98	mg/kg	06.08.2020 20:58		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.08.2020 16:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.08.2020 16:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.08.2020 16:22	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.08.2020 16:22	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.08.2020 16:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.08.2020 16:22	
o-Terphenyl	84-15-1	91	%	70-135	06.08.2020 16:22	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW05**
Lab Sample Id: 663707-005

Matrix: Soil
Date Collected: 06.04.2020 12:45

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128312

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 13:14

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.08.2020 23:53	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.08.2020 23:53	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.08.2020 23:53	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.08.2020 23:53	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.08.2020 23:53	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.08.2020 23:53	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.08.2020 23:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.08.2020 23:53		
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.08.2020 23:53		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW06** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-006 Date Collected: 06.04.2020 13:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	262	10.0	mg/kg	06.08.2020 21:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 16:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 16:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 16:43	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 16:43	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 16:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.08.2020 16:43	
o-Terphenyl	84-15-1	88	%	70-135	06.08.2020 16:43	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW06**
Lab Sample Id: 663707-006

Matrix: Soil
Date Collected: 06.04.2020 13:00

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.09.2020 02:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.09.2020 02:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.09.2020 02:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.09.2020 02:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.09.2020 02:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.09.2020 02:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.09.2020 02:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.09.2020 02:57		
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.09.2020 02:57		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW07** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-007 Date Collected: 06.04.2020 14:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	138	9.92	mg/kg	06.08.2020 21:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 17:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 17:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 17:03	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 17:03	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 17:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.08.2020 17:03	
o-Terphenyl	84-15-1	90	%	70-135	06.08.2020 17:03	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW07**
Lab Sample Id: 663707-007

Matrix: Soil
Date Collected: 06.04.2020 14:00

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.09.2020 03:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.09.2020 03:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.09.2020 03:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.09.2020 03:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.09.2020 03:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.09.2020 03:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.09.2020 03:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.09.2020 03:17	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.09.2020 03:17	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW08** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-008 Date Collected: 06.04.2020 14:15 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.6	9.94	mg/kg	06.08.2020 21:56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 17:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 17:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 17:24	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 17:24	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 17:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	06.08.2020 17:24	
o-Terphenyl	84-15-1	89	%	70-135	06.08.2020 17:24	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW08**
Lab Sample Id: 663707-008

Matrix: Soil
Date Collected: 06.04.2020 14:15

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.09.2020 03:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.09.2020 03:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.09.2020 03:37	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.09.2020 03:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.09.2020 03:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.09.2020 03:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.09.2020 03:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	06.09.2020 03:37		
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.09.2020 03:37		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW09** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-009 Date Collected: 06.05.2020 12:25 Sample Depth: 1 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	357	9.94	mg/kg	06.08.2020 22:01		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.08.2020 17:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	158	50.3	mg/kg	06.08.2020 17:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.08.2020 17:45	U	1
Total GRO-DRO	PHC628	158	50.3	mg/kg	06.08.2020 17:45		1
Total TPH	PHC635	158	50.3	mg/kg	06.08.2020 17:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.08.2020 17:45	
o-Terphenyl	84-15-1	89	%	70-135	06.08.2020 17:45	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW09**
Lab Sample Id: 663707-009

Matrix: Soil
Date Collected: 06.05.2020 12:25

Date Received: 06.08.2020 11:00
Sample Depth: 1 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 03:58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 03:58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 03:58	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.09.2020 03:58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 03:58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 03:58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 03:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 03:58	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.09.2020 03:58	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW10** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-010 Date Collected: 06.05.2020 12:30 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	319	9.98	mg/kg	06.08.2020 22:07		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 18:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 18:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 18:05	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 18:05	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 18:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.08.2020 18:05	
o-Terphenyl	84-15-1	86	%	70-135	06.08.2020 18:05	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW10**
Lab Sample Id: 663707-010

Matrix: Soil
Date Collected: 06.05.2020 12:30

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 04:18	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 04:18	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 04:18	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.09.2020 04:18	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 04:18	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 04:18	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 04:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.09.2020 04:18	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 04:18	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW11** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-011 Date Collected: 06.05.2020 12:35 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	74.3	9.96	mg/kg	06.08.2020 22:24		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 18:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 18:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 18:46	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 18:46	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 18:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.08.2020 18:46	
o-Terphenyl	84-15-1	96	%	70-135	06.08.2020 18:46	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: SW11
Lab Sample Id: 663707-011

Matrix: Soil
Date Collected: 06.05.2020 12:35

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 04:39	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 04:39	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 04:39	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.09.2020 04:39	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 04:39	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 04:39	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 04:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.09.2020 04:39	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 04:39	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW12** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-012 Date Collected: 06.05.2020 12:40 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	859	9.98	mg/kg	06.08.2020 22:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.08.2020 19:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.08.2020 19:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.08.2020 19:07	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.08.2020 19:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.08.2020 19:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.08.2020 19:07	
o-Terphenyl	84-15-1	94	%	70-135	06.08.2020 19:07	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW12**
Lab Sample Id: 663707-012

Matrix: Soil
Date Collected: 06.05.2020 12:40

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.09.2020 04:59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.09.2020 04:59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.09.2020 04:59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.09.2020 04:59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.09.2020 04:59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.09.2020 04:59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.09.2020 04:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 04:59		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 04:59		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW13** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-013 Date Collected: 06.05.2020 12:45 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	115	9.88	mg/kg	06.08.2020 22:36		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.08.2020 19:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.08.2020 19:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.08.2020 19:27	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.08.2020 19:27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.08.2020 19:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.08.2020 19:27	
o-Terphenyl	84-15-1	94	%	70-135	06.08.2020 19:27	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW13**
Lab Sample Id: 663707-013

Matrix: Soil
Date Collected: 06.05.2020 12:45

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 05:19	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 05:19	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 05:19	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.09.2020 05:19	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 05:19	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 05:19	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 05:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.09.2020 05:19	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.09.2020 05:19	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW14** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-014 Date Collected: 06.05.2020 12:50 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.0	9.98	mg/kg	06.08.2020 22:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.08.2020 19:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.08.2020 19:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.08.2020 19:48	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.08.2020 19:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.08.2020 19:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.08.2020 19:48	
o-Terphenyl	84-15-1	95	%	70-135	06.08.2020 19:48	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW14**
Lab Sample Id: 663707-014

Matrix: Soil
Date Collected: 06.05.2020 12:50

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 05:40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 05:40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 05:40	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.09.2020 05:40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 05:40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 05:40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 05:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.09.2020 05:40		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 05:40		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW15** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-015 Date Collected: 06.05.2020 12:55 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.2	9.92	mg/kg	06.08.2020 22:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.08.2020 20:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.08.2020 20:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.08.2020 20:08	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.08.2020 20:08	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.08.2020 20:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.08.2020 20:08	
o-Terphenyl	84-15-1	96	%	70-135	06.08.2020 20:08	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW15**
Lab Sample Id: 663707-015

Matrix: Soil
Date Collected: 06.05.2020 12:55

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.09.2020 06:00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.09.2020 06:00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.09.2020 06:00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.09.2020 06:00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.09.2020 06:00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.09.2020 06:00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.09.2020 06:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 06:00		
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.09.2020 06:00		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW16** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-016 Date Collected: 06.05.2020 13:00 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	162	9.96	mg/kg	06.08.2020 22:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.08.2020 20:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.08.2020 20:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.08.2020 20:29	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.08.2020 20:29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.08.2020 20:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.08.2020 20:29	
o-Terphenyl	84-15-1	96	%	70-135	06.08.2020 20:29	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW16**
Lab Sample Id: 663707-016

Matrix: Soil
Date Collected: 06.05.2020 13:00

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.09.2020 07:01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.09.2020 07:01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.09.2020 07:01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.09.2020 07:01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.09.2020 07:01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.09.2020 07:01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.09.2020 07:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 07:01		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.09.2020 07:01		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW17** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-017 Date Collected: 06.05.2020 13:05 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.8	9.98	mg/kg	06.08.2020 23:11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.08.2020 20:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.08.2020 20:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.08.2020 20:49	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.08.2020 20:49	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.08.2020 20:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.08.2020 20:49	
o-Terphenyl	84-15-1	95	%	70-135	06.08.2020 20:49	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW17**
Lab Sample Id: 663707-017

Matrix: Soil
Date Collected: 06.05.2020 13:05

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 07:22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 07:22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 07:22	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.09.2020 07:22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 07:22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 07:22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 07:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.09.2020 07:22		
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.09.2020 07:22		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW18** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-018 Date Collected: 06.05.2020 13:10 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	114	10.1	mg/kg	06.08.2020 23:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 21:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 21:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 21:10	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 21:10	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 21:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.08.2020 21:10	
o-Terphenyl	84-15-1	97	%	70-135	06.08.2020 21:10	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW18**
Lab Sample Id: 663707-018

Matrix: Soil
Date Collected: 06.05.2020 13:10

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.09.2020 07:42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.09.2020 07:42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.09.2020 07:42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.09.2020 07:42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.09.2020 07:42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.09.2020 07:42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.09.2020 07:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.09.2020 07:42	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.09.2020 07:42	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW19** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-019 Date Collected: 06.05.2020 13:15 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.5	10.1	mg/kg	06.08.2020 23:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.08.2020 21:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.08.2020 21:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.08.2020 21:31	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.08.2020 21:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.08.2020 21:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.08.2020 21:31	
o-Terphenyl	84-15-1	96	%	70-135	06.08.2020 21:31	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW19**
Lab Sample Id: 663707-019

Matrix: Soil
Date Collected: 06.05.2020 13:15

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.09.2020 08:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.09.2020 08:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.09.2020 08:03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.09.2020 08:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.09.2020 08:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.09.2020 08:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.09.2020 08:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 08:03		
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.09.2020 08:03		



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW20** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663707-020 Date Collected: 06.05.2020 13:20 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	45.8	10.0	mg/kg	06.08.2020 23:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128309

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.08.2020 21:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.08.2020 21:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.08.2020 21:51	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.08.2020 21:51	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.08.2020 21:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.08.2020 21:51	
o-Terphenyl	84-15-1	94	%	70-135	06.08.2020 21:51	



Certificate of Analytical Results 663707

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW20**
Lab Sample Id: 663707-020

Matrix: Soil
Date Collected: 06.05.2020 13:20

Date Received: 06.08.2020 11:00
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 08:23	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 08:23	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 08:23	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.09.2020 08:23	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 08:23	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 08:23	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 08:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 08:23	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 08:23	



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3128315

MB Sample Id: 7705029-1-BLK

Matrix: Solid

LCS Sample Id: 7705029-1-BKS

Prep Method: E300P

Date Prep: 06.08.2020

LCSD Sample Id: 7705029-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	253	101	90-110	0	20	mg/kg	06.08.2020 18:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3128381

MB Sample Id: 7705031-1-BLK

Matrix: Solid

LCS Sample Id: 7705031-1-BKS

Prep Method: E300P

Date Prep: 06.08.2020

LCSD Sample Id: 7705031-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	253	101	90-110	0	20	mg/kg	06.08.2020 21:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3128315

Parent Sample Id: 663699-001

Matrix: Soil

MS Sample Id: 663699-001 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663699-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7430	202	7620	94	7630	99	90-110	0	20	mg/kg	06.08.2020 18:27	

Analytical Method: Chloride by EPA 300

Seq Number: 3128315

Parent Sample Id: 663704-002

Matrix: Soil

MS Sample Id: 663704-002 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663704-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.1	200	201	94	200	94	90-110	0	20	mg/kg	06.08.2020 19:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3128381

Parent Sample Id: 663707-006

Matrix: Soil

MS Sample Id: 663707-006 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663707-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	262	201	457	97	458	98	90-110	0	20	mg/kg	06.08.2020 21:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3128381

Parent Sample Id: 663707-016

Matrix: Soil

MS Sample Id: 663707-016 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663707-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	162	200	382	110	356	97	90-110	7	20	mg/kg	06.08.2020 22:59	

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

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

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

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128309

MB Sample Id: 7704999-1-BLK

Matrix: Solid

LCS Sample Id: 7704999-1-BKS

Prep Method: SW8015P

Date Prep: 06.08.2020

LCSD Sample Id: 7704999-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1040	104	1070	107	70-135	3	35	mg/kg	06.08.2020 13:38	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1060	106	70-135	1	35	mg/kg	06.08.2020 13:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		113		129		70-135	%	06.08.2020 13:38
o-Terphenyl	96		97		97		70-135	%	06.08.2020 13:38

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128309

Matrix: Solid

MB Sample Id: 7704999-1-BLK

Prep Method: SW8015P

Date Prep: 06.08.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.08.2020 13:17	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128309

Matrix: Soil

Parent Sample Id: 663707-001

MS Sample Id: 663707-001 S

Prep Method: SW8015P

Date Prep: 06.08.2020

MSD Sample Id: 663707-001 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)	<49.9	997	1060	106	1050	106	70-135	1	35	mg/kg	06.08.2020 14:39	
Diesel Range Organics (DRO)	<49.9	997	1040	104	1020	103	70-135	2	35	mg/kg	06.08.2020 14:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		128		70-135	%	06.08.2020 14:39
o-Terphenyl	95		93		70-135	%	06.08.2020 14:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128312

Matrix: Solid

MB Sample Id: 7705033-1-BLK

LCS Sample Id: 7705033-1-BKS

Prep Method: SW5035A

Date Prep: 06.08.2020

LCSD Sample Id: 7705033-1-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	0.111	111	0.110	110	70-130	1	35	mg/kg	06.08.2020 15:03	
Toluene	<0.00200	0.100	0.107	107	0.105	105	70-130	2	35	mg/kg	06.08.2020 15:03	
Ethylbenzene	<0.00200	0.100	0.100	100	0.0982	98	71-129	2	35	mg/kg	06.08.2020 15:03	
m,p-Xylenes	<0.00400	0.200	0.208	104	0.203	102	70-135	2	35	mg/kg	06.08.2020 15:03	
o-Xylene	<0.00200	0.100	0.105	105	0.103	103	71-133	2	35	mg/kg	06.08.2020 15:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		110		107		70-130	%	06.08.2020 15:03
4-Bromofluorobenzene	94		97		93		70-130	%	06.08.2020 15:03

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

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

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

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128363

MB Sample Id: 7705037-1-BLK

Matrix: Solid

LCS Sample Id: 7705037-1-BKS

Prep Method: SW5035A

Date Prep: 06.08.2020

LCSD Sample Id: 7705037-1-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	0.110	110	0.104	104	70-130	6	35	mg/kg	06.09.2020 01:15	
Toluene	<0.00200	0.100	0.104	104	0.100	100	70-130	4	35	mg/kg	06.09.2020 01:15	
Ethylbenzene	<0.00200	0.100	0.0979	98	0.0933	93	71-129	5	35	mg/kg	06.09.2020 01:15	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.191	96	70-135	5	35	mg/kg	06.09.2020 01:15	
o-Xylene	<0.00200	0.100	0.101	101	0.0977	98	71-133	3	35	mg/kg	06.09.2020 01:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		106		70-130	%	06.09.2020 01:15
4-Bromofluorobenzene	96		96		93		70-130	%	06.09.2020 01:15

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128312

Parent Sample Id: 663699-001

Matrix: Soil

MS Sample Id: 663699-001 S

Prep Method: SW5035A

Date Prep: 06.08.2020

MSD Sample Id: 663699-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.116	116	0.121	122	70-130	4	35	mg/kg	06.08.2020 15:44	
Toluene	<0.00199	0.0996	0.112	112	0.117	118	70-130	4	35	mg/kg	06.08.2020 15:44	
Ethylbenzene	<0.00199	0.0996	0.105	105	0.108	109	71-129	3	35	mg/kg	06.08.2020 15:44	
m,p-Xylenes	<0.00398	0.199	0.218	110	0.225	114	70-135	3	35	mg/kg	06.08.2020 15:44	
o-Xylene	<0.00199	0.0996	0.109	109	0.112	113	71-133	3	35	mg/kg	06.08.2020 15:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		70-130	%	06.08.2020 15:44
4-Bromofluorobenzene	97		98		70-130	%	06.08.2020 15:44

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128363

Parent Sample Id: 663707-006

Matrix: Soil

MS Sample Id: 663707-006 S

Prep Method: SW5035A

Date Prep: 06.08.2020

MSD Sample Id: 663707-006 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	0.100	100	0.0949	95	70-130	5	35	mg/kg	06.09.2020 01:55	
Toluene	<0.00200	0.0998	0.105	105	0.0988	99	70-130	6	35	mg/kg	06.09.2020 01:55	
Ethylbenzene	<0.00200	0.0998	0.0937	94	0.0887	89	71-129	5	35	mg/kg	06.09.2020 01:55	
m,p-Xylenes	<0.00399	0.200	0.196	98	0.185	92	70-135	6	35	mg/kg	06.09.2020 01:55	
o-Xylene	<0.00200	0.0998	0.0953	95	0.0907	91	71-133	5	35	mg/kg	06.09.2020 01:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	06.09.2020 01:55
4-Bromofluorobenzene	96		95		70-130	%	06.09.2020 01:55

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

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

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

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



Chain of Custody

Work Order No:

663707

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 Littlell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slc@ltenv.com, dmoir@ltenv.com, kkenedy@ltenv.com

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

Project Name:	Corral Canyon 008H	Turn Around		ANALYSIS REQUEST	Work Order Notes
Project Number:	012919305	Routine	☒		
P.O. Number:		Rush:			
Sampler's Name:	Spencer Lo	Due Date:			

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
	Temperature (°C):	3.2		Thermometer ID		
	Received Intact:	Yes	No	Correction Factor:	-0.2	
	Cooler Custody Seals:	Yes	No	Total Containers:	20	
	Sample Custody Seals:	Yes	No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers														Sample Comments
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)												
SW01	S	6/4/2020	1145	0'-2'	1	X	X	X											
SW02	S	6/4/2020	1200	0'-2'	1	X	X	X											
SW03	S	6/4/2020	1215	0'-2'	1	X	X	X											
SW04	S	6/4/2020	1230	0'-2'	1	X	X	X											
SW05	S	6/4/2020	1245	0'-2'	1	X	X	X											
SW06	S	6/4/2020	1300	0'-2'	1	X	X	X											
SW07	S	6/4/2020	1400	0'-2'	1	X	X	X											
SW08	S	6/4/2020	1415	0'-2'	1	X	X	X											
SW09	S	6/5/2020	1225	1'-2'	1	X	X	X											
SW10	S	6/5/2020	1230	0'-4'	1	X	X	X											

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/8/20/9:00am			6/8/20 1:00D



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)

Chain of Custody

Work Order No: 663707

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

Project Name:	Corral Canyon 008H	Turn Around	
Project Number:	012919305	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

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

6:49 AM

Sample Identification					Matrix	Date Sampled	Time Sampled	Depth	Numl	TPH (%)	BTEX	Chloro	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SW11					S	6/5/2020	1235	0'-4'	1	X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SIO2 Na Sr Ti Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/8/20 9:00am			6/8/20 11:00

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.08.2020 11.00.00 AM

Work Order #: 663707

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T NM 007

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



Martha Castro

Date: 06.08.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.08.2020



Project Id: 012920091
Contact: Kyle Littrell
Project Location:

Certificate of Analysis Summary 663709
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.11.2020 12:01
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663709-001	663709-002	663709-003	663709-004	663709-005	663709-006
	Field Id:	FS01	FS02	FS03	FS04	FS05	FS06
	Depth:	1- ft	1- ft	1- ft	2- ft	2- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.03.2020 13:00	06.03.2020 13:15	06.03.2020 13:30	06.03.2020 13:45	06.03.2020 14:00	06.03.2020 14:15
BTEX by EPA 8021B	Extracted:	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.08.2020 18:21	06.09.2020 10:28
	Analyzed:	06.09.2020 08:43	06.09.2020 09:04	06.09.2020 09:24	06.09.2020 12:08	06.09.2020 12:28	06.10.2020 14:35
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00198 0.00198	<0.00199 0.00199	<0.00197 0.00197	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
	Toluene	<0.00198 0.00198	<0.00199 0.00199	<0.00197 0.00197	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
Chloride by EPA 300	Ethylbenzene	<0.00198 0.00198	<0.00199 0.00199	<0.00197 0.00197	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
	m,p-Xylenes	<0.00397 0.00397	<0.00398 0.00398	<0.00394 0.00394	<0.00398 0.00398	<0.00397 0.00397	<0.00398 0.00398
	o-Xylene	<0.00198 0.00198	<0.00199 0.00199	<0.00197 0.00197	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
	Total Xylenes	<0.00198 0.00198	<0.00199 0.00199	<0.00197 0.00197	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
	Total BTEX	<0.00198 0.00198	<0.00199 0.00199	<0.00197 0.00197	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
TPH by SW8015 Mod	Extracted:	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:08	06.08.2020 17:11	06.08.2020 17:11
	Analyzed:	06.08.2020 23:45	06.08.2020 23:51	06.08.2020 23:57	06.09.2020 00:03	06.09.2020 00:37	06.09.2020 00:55
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	225 10.0	354 9.94	178 9.98	231 9.92	274 10.0	237 9.96
	Gasoline Range Hydrocarbons (GRO)	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30
Total TPH	Diesel Range Organics (DRO)	06.09.2020 12:28	06.09.2020 13:30	06.09.2020 13:51	06.09.2020 14:11	06.09.2020 14:32	06.09.2020 14:52
	Motor Oil Range Hydrocarbons (MRO)	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9
	Total GRO-DRO	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9
	Total TPH	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Project Id: 012920091
Contact: Kyle Littrell
Project Location:

Certificate of Analysis Summary 663709

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 008H

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.11.2020 12:01
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663709-007	663709-008	663709-009	663709-010	663709-011	663709-012
	Field Id:	FS07	FS08	FS09	FS10	FS11	FS12
	Depth:	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.03.2020 14:30	06.03.2020 14:45	06.03.2020 15:00	06.04.2020 13:15	06.04.2020 13:30	06.04.2020 13:45
BTEX by EPA 8021B	Extracted:	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28
	Analyzed:	06.10.2020 14:56	06.10.2020 15:16	06.10.2020 15:37	06.10.2020 15:57	06.10.2020 16:17	06.10.2020 16:38
	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	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
	Toluene	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	Ethylbenzene	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
	m,p-Xylenes	<0.00399 0.00399	<0.00403 0.00403	<0.00396 0.00396	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401
	o-Xylene	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
	Total Xylenes	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
	Total BTEX	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
TPH by SW8015 Mod	Extracted:	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11
	Analyzed:	06.09.2020 01:01	06.09.2020 01:06	06.09.2020 01:12	06.09.2020 01:29	06.09.2020 01:35	06.09.2020 01:41
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	187 9.92	222 9.92	56.4 9.88	263 9.90	63.5 9.96	148 9.98
	Gasoline Range Hydrocarbons (GRO)	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30
Total TPH	Diesel Range Organics (DRO)	06.09.2020 15:13	06.09.2020 15:33	06.09.2020 15:54	06.09.2020 16:15	06.09.2020 16:56	06.09.2020 17:16
	Motor Oil Range Hydrocarbons (MRO)	<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.1 50.1	<50.2 50.2
	Total GRO-DRO	<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.1 50.1	<50.2 50.2
	Total TPH	<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.1 50.1	<50.2 50.2

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer

Jessica Kramer
Project Manager



Project Id: 012920091
Contact: Kyle Littrell
Project Location:

Certificate of Analysis Summary 663709
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.11.2020 12:01
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663709-013	663709-014	663709-015	663709-016	663709-017	663709-018
	Field Id:	FS13	FS14	FS15	FS16	FS17	FS18
	Depth:	4- ft	4- ft	4- ft	4- ft	4- ft	4- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.05.2020 10:35	06.05.2020 10:45	06.05.2020 10:55	06.05.2020 11:05	06.05.2020 11:15	06.05.2020 11:25
BTEX by EPA 8021B	Extracted:	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28
	Analyzed:	06.10.2020 16:58	06.10.2020 17:19	06.10.2020 17:39	06.10.2020 18:40	06.10.2020 19:01	06.10.2020 19:21
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198
	Toluene	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198
Chloride by EPA 300	Extracted:	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11
	Analyzed:	06.09.2020 01:47	06.09.2020 01:53	06.09.2020 01:58	06.09.2020 02:04	06.09.2020 02:21	06.09.2020 02:27
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	386 9.88	97.5 10.0	17.6 10.0	355 9.94	12.5 9.98	26.7 10.0
	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.2 50.2	<50.3 50.3
TPH by SW8015 Mod	Extracted:	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 13:30	06.08.2020 17:30
	Analyzed:	06.08.2020 20:29	06.08.2020 20:49	06.08.2020 21:10	06.08.2020 21:31	06.08.2020 21:51	06.09.2020 17:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Diesel Range Organics (DRO)	<50.0 50.0	<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.2 50.2	<50.3 50.3
	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.2 50.2	<50.3 50.3
Total GRO-DRO	Total GRO-DRO	<50.0 50.0	<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.2 50.2	<50.3 50.3
	Total TPH	<50.0 50.0	<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.2 50.2	<50.3 50.3

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer

Jessica Kramer
Project Manager



Project Id: 012920091
Contact: Kyle Littrell
Project Location:

Certificate of Analysis Summary 663709
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Date Received in Lab: Mon 06.08.2020 11:00
Report Date: 06.11.2020 12:01
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663709-019	663709-020	663709-021	663709-022	663709-023	663709-024
	Field Id:	FS19	FS20	FS21	FS22	FS23	FS24
	Depth:	4- ft	4- ft	4- ft	4- ft	4- ft	4- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	06.05.2020 11:35	06.05.2020 11:45	06.05.2020 11:55	06.05.2020 12:05	06.05.2020 12:15	06.05.2020 13:40
BTEX by EPA 8021B	Extracted:	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28	06.09.2020 10:28
	Analyzed:	06.10.2020 19:41	06.10.2020 20:02	06.10.2020 20:22	06.10.2020 20:42	06.10.2020 21:03	06.10.2020 21:23
	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	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
	Toluene	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	Ethylbenzene	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
	m,p-Xylenes	<0.00398 0.00398	<0.00397 0.00397	<0.00395 0.00395	<0.00398 0.00398	<0.00400 0.00400	<0.00402 0.00402
	o-Xylene	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
	Total Xylenes	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
	Total BTEX	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
TPH by SW8015 Mod	Extracted:	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11	06.08.2020 17:11
	Analyzed:	06.09.2020 02:45	06.09.2020 02:50	06.09.2020 02:56	06.09.2020 03:02	06.09.2020 03:08	06.09.2020 03:13
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	77.3 10.0	15.2 9.92	24.5 9.92	27.8 9.98	17.4 9.96	361 9.98
	Gasoline Range Hydrocarbons (GRO)	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30	06.08.2020 17:30
Total TPH	Diesel Range Organics (DRO)	06.09.2020 17:57	06.09.2020 18:18	06.09.2020 18:38	06.09.2020 18:59	06.09.2020 19:20	06.09.2020 19:40
	Motor Oil Range Hydrocarbons (MRO)	<50.1 50.1	<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1
	Total GRO-DRO	<50.1 50.1	<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1
	Total TPH	<50.1 50.1	<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer

Jessica Kramer
Project Manager



Analytical Report 663709

for

LT Environmental, Inc.

Project Manager: Kyle Littrell

Corral Canyon 008H

012920091

06.11.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.11.2020

Project Manager: **Kyle Littrell**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663709**

Corral Canyon 008H

Project Address:

Kyle Littrell:

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) 663709. 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. 663709 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,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	06.03.2020 13:00	1 ft	663709-001
FS02	S	06.03.2020 13:15	1 ft	663709-002
FS03	S	06.03.2020 13:30	1 ft	663709-003
FS04	S	06.03.2020 13:45	2 ft	663709-004
FS05	S	06.03.2020 14:00	2 ft	663709-005
FS06	S	06.03.2020 14:15	2 ft	663709-006
FS07	S	06.03.2020 14:30	2 ft	663709-007
FS08	S	06.03.2020 14:45	2 ft	663709-008
FS09	S	06.03.2020 15:00	2 ft	663709-009
FS10	S	06.04.2020 13:15	2 ft	663709-010
FS11	S	06.04.2020 13:30	2 ft	663709-011
FS12	S	06.04.2020 13:45	2 ft	663709-012
FS13	S	06.05.2020 10:35	4 ft	663709-013
FS14	S	06.05.2020 10:45	4 ft	663709-014
FS15	S	06.05.2020 10:55	4 ft	663709-015
FS16	S	06.05.2020 11:05	4 ft	663709-016
FS17	S	06.05.2020 11:15	4 ft	663709-017
FS18	S	06.05.2020 11:25	4 ft	663709-018
FS19	S	06.05.2020 11:35	4 ft	663709-019
FS20	S	06.05.2020 11:45	4 ft	663709-020
FS21	S	06.05.2020 11:55	4 ft	663709-021
FS22	S	06.05.2020 12:05	4 ft	663709-022
FS23	S	06.05.2020 12:15	4 ft	663709-023
FS24	S	06.05.2020 13:40	4 ft	663709-024



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Corral Canyon 008H

Project ID: 012920091
Work Order Number(s): 663709

Report Date: 06.11.2020
Date Received: 06.08.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS01** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-001 Date Collected: 06.03.2020 13:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	225	10.0	mg/kg	06.08.2020 23:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.09.2020 12:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.09.2020 12:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.09.2020 12:28	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.09.2020 12:28	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.09.2020 12:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.09.2020 12:28	
o-Terphenyl	84-15-1	107	%	70-135	06.09.2020 12:28	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS01**
Lab Sample Id: 663709-001

Matrix: Soil
Date Collected: 06.03.2020 13:00

Date Received: 06.08.2020 11:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 08:43	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 08:43	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 08:43	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.09.2020 08:43	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 08:43	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 08:43	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 08:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 08:43		
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.09.2020 08:43		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS02** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-002 Date Collected: 06.03.2020 13:15 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	354	9.94	mg/kg	06.08.2020 23:51		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.09.2020 13:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.09.2020 13:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.09.2020 13:30	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.09.2020 13:30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.09.2020 13:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.09.2020 13:30	
o-Terphenyl	84-15-1	108	%	70-135	06.09.2020 13:30	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS02**
Lab Sample Id: 663709-002

Matrix: Soil
Date Collected: 06.03.2020 13:15

Date Received: 06.08.2020 11:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.09.2020 09:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.09.2020 09:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.09.2020 09:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.09.2020 09:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.09.2020 09:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.09.2020 09:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.09.2020 09:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.09.2020 09:04		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 09:04		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS03** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-003 Date Collected: 06.03.2020 13:30 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	178	9.98	mg/kg	06.08.2020 23:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.09.2020 13:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.09.2020 13:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.09.2020 13:51	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.09.2020 13:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.09.2020 13:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.09.2020 13:51	
o-Terphenyl	84-15-1	103	%	70-135	06.09.2020 13:51	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS03**
Lab Sample Id: 663709-003

Matrix: Soil
Date Collected: 06.03.2020 13:30

Date Received: 06.08.2020 11:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Seq Number: 3128363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00197	0.00197	mg/kg	06.09.2020 09:24	U	1
Toluene	108-88-3	<0.00197	0.00197	mg/kg	06.09.2020 09:24	U	1
Ethylbenzene	100-41-4	<0.00197	0.00197	mg/kg	06.09.2020 09:24	U	1
m,p-Xylenes	179601-23-1	<0.00394	0.00394	mg/kg	06.09.2020 09:24	U	1
o-Xylene	95-47-6	<0.00197	0.00197	mg/kg	06.09.2020 09:24	U	1
Total Xylenes	1330-20-7	<0.00197	0.00197	mg/kg	06.09.2020 09:24	U	1
Total BTEX		<0.00197	0.00197	mg/kg	06.09.2020 09:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.09.2020 09:24		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 09:24		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS04** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-004 Date Collected: 06.03.2020 13:45 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:08 Basis: Wet Weight
 Seq Number: 3128381

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	231	9.92	mg/kg	06.09.2020 00:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.09.2020 14:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.09.2020 14:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.09.2020 14:11	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.09.2020 14:11	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.09.2020 14:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.09.2020 14:11	
o-Terphenyl	84-15-1	103	%	70-135	06.09.2020 14:11	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS04**
Lab Sample Id: 663709-004

Matrix: Soil
Date Collected: 06.03.2020 13:45

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.09.2020 12:08	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.09.2020 12:08	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.09.2020 12:08	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.09.2020 12:08	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.09.2020 12:08	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.09.2020 12:08	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.09.2020 12:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 12:08		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.09.2020 12:08		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS05** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-005 Date Collected: 06.03.2020 14:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	274	10.0	mg/kg	06.09.2020 00:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.09.2020 14:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.09.2020 14:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.09.2020 14:32	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.09.2020 14:32	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.09.2020 14:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.09.2020 14:32	
o-Terphenyl	84-15-1	107	%	70-135	06.09.2020 14:32	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS05**
Lab Sample Id: 663709-005

Matrix: Soil
Date Collected: 06.03.2020 14:00

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.08.2020 18:21

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.09.2020 12:28	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.09.2020 12:28	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.09.2020 12:28	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.09.2020 12:28	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.09.2020 12:28	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.09.2020 12:28	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.09.2020 12:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.09.2020 12:28		
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.09.2020 12:28		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS06** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-006 Date Collected: 06.03.2020 14:15 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	237	9.96	mg/kg	06.09.2020 00:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.09.2020 14:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.09.2020 14:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.09.2020 14:52	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.09.2020 14:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.09.2020 14:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.09.2020 14:52	
o-Terphenyl	84-15-1	107	%	70-135	06.09.2020 14:52	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS06**
Lab Sample Id: 663709-006

Matrix: Soil
Date Collected: 06.03.2020 14:15

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.10.2020 14:35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.10.2020 14:35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.10.2020 14:35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.10.2020 14:35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.10.2020 14:35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.10.2020 14:35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.10.2020 14:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.10.2020 14:35	
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.10.2020 14:35	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS07** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-007 Date Collected: 06.03.2020 14:30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	187	9.92	mg/kg	06.09.2020 01:01		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.09.2020 15:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.09.2020 15:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.09.2020 15:13	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.09.2020 15:13	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.09.2020 15:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.09.2020 15:13	
o-Terphenyl	84-15-1	104	%	70-135	06.09.2020 15:13	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS07**
Lab Sample Id: 663709-007

Matrix: Soil
Date Collected: 06.03.2020 14:30

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.10.2020 14:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.10.2020 14:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.10.2020 14:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.10.2020 14:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.10.2020 14:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.10.2020 14:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.10.2020 14:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.10.2020 14:56		
4-Bromofluorobenzene	460-00-4	111	%	70-130	06.10.2020 14:56		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS08** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-008 Date Collected: 06.03.2020 14:45 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	222	9.92	mg/kg	06.09.2020 01:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.09.2020 15:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.09.2020 15:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.09.2020 15:33	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.09.2020 15:33	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.09.2020 15:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.09.2020 15:33	
o-Terphenyl	84-15-1	106	%	70-135	06.09.2020 15:33	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS08**
Lab Sample Id: 663709-008

Matrix: Soil
Date Collected: 06.03.2020 14:45

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.10.2020 15:16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.10.2020 15:16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.10.2020 15:16	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.10.2020 15:16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.10.2020 15:16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.10.2020 15:16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.10.2020 15:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.10.2020 15:16		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.10.2020 15:16		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS09** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-009 Date Collected: 06.03.2020 15:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.4	9.88	mg/kg	06.09.2020 01:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.09.2020 15:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.09.2020 15:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.09.2020 15:54	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.09.2020 15:54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.09.2020 15:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.09.2020 15:54	
o-Terphenyl	84-15-1	108	%	70-135	06.09.2020 15:54	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS09**
Lab Sample Id: 663709-009

Matrix: Soil
Date Collected: 06.03.2020 15:00

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.10.2020 15:37	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.10.2020 15:37	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.10.2020 15:37	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.10.2020 15:37	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.10.2020 15:37	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.10.2020 15:37	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.10.2020 15:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 15:37	
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.10.2020 15:37	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS10** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-010 Date Collected: 06.04.2020 13:15 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	263	9.90	mg/kg	06.09.2020 01:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.09.2020 16:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.09.2020 16:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.09.2020 16:15	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.09.2020 16:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.09.2020 16:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.09.2020 16:15	
o-Terphenyl	84-15-1	100	%	70-135	06.09.2020 16:15	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS10**
Lab Sample Id: 663709-010

Matrix: Soil
Date Collected: 06.04.2020 13:15

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.10.2020 15:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.10.2020 15:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.10.2020 15:57	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.10.2020 15:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.10.2020 15:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.10.2020 15:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.10.2020 15:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	06.10.2020 15:57		
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.10.2020 15:57		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS11** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-011 Date Collected: 06.04.2020 13:30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	63.5	9.96	mg/kg	06.09.2020 01:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.09.2020 16:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.09.2020 16:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.09.2020 16:56	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.09.2020 16:56	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.09.2020 16:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.09.2020 16:56	
o-Terphenyl	84-15-1	98	%	70-135	06.09.2020 16:56	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS11**
Lab Sample Id: 663709-011

Matrix: Soil
Date Collected: 06.04.2020 13:30

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.10.2020 16:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.10.2020 16:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.10.2020 16:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.10.2020 16:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.10.2020 16:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.10.2020 16:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.10.2020 16:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	06.10.2020 16:17	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.10.2020 16:17	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS12**
Lab Sample Id: 663709-012

Matrix: Soil
Date Collected: 06.04.2020 13:45

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3128382

Date Prep: 06.08.2020 17:11

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	9.98	mg/kg	06.09.2020 01:41		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3128399

Date Prep: 06.08.2020 17:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.09.2020 17:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.09.2020 17:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.09.2020 17:16	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.09.2020 17:16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.09.2020 17:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.09.2020 17:16	
o-Terphenyl	84-15-1	104	%	70-135	06.09.2020 17:16	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS12**
Lab Sample Id: 663709-012

Matrix: Soil
Date Collected: 06.04.2020 13:45

Date Received: 06.08.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.10.2020 16:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.10.2020 16:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.10.2020 16:38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.10.2020 16:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.10.2020 16:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.10.2020 16:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.10.2020 16:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.10.2020 16:38		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 16:38		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS13** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-013 Date Collected: 06.05.2020 10:35 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	386	9.88	mg/kg	06.09.2020 01:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128299

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.08.2020 20:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.08.2020 20:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.08.2020 20:29	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.08.2020 20:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.08.2020 20:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.08.2020 20:29	
o-Terphenyl	84-15-1	86	%	70-135	06.08.2020 20:29	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS13**
Lab Sample Id: 663709-013

Matrix: Soil
Date Collected: 06.05.2020 10:35

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.10.2020 16:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.10.2020 16:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.10.2020 16:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.10.2020 16:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.10.2020 16:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.10.2020 16:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.10.2020 16:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.10.2020 16:58		
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.10.2020 16:58		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS14** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-014 Date Collected: 06.05.2020 10:45 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	97.5	10.0	mg/kg	06.09.2020 01:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128299

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.08.2020 20:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.08.2020 20:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.08.2020 20:49	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.08.2020 20:49	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.08.2020 20:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	06.08.2020 20:49	
o-Terphenyl	84-15-1	90	%	70-135	06.08.2020 20:49	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS14**
Lab Sample Id: 663709-014

Matrix: Soil
Date Collected: 06.05.2020 10:45

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.10.2020 17:19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.10.2020 17:19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.10.2020 17:19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.10.2020 17:19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.10.2020 17:19	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.10.2020 17:19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.10.2020 17:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 17:19	
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.10.2020 17:19	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS15** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-015 Date Collected: 06.05.2020 10:55 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.6	10.0	mg/kg	06.09.2020 01:58		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128299

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.08.2020 21:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.08.2020 21:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.08.2020 21:10	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.08.2020 21:10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.08.2020 21:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.08.2020 21:10	
o-Terphenyl	84-15-1	87	%	70-135	06.08.2020 21:10	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS15**
Lab Sample Id: 663709-015

Matrix: Soil
Date Collected: 06.05.2020 10:55

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.10.2020 17:39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.10.2020 17:39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.10.2020 17:39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.10.2020 17:39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.10.2020 17:39	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.10.2020 17:39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.10.2020 17:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.10.2020 17:39	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.10.2020 17:39	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS16** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-016 Date Collected: 06.05.2020 11:05 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	355	9.94	mg/kg	06.09.2020 02:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128299

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.08.2020 21:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.08.2020 21:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.08.2020 21:31	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.08.2020 21:31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.08.2020 21:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.08.2020 21:31	
o-Terphenyl	84-15-1	87	%	70-135	06.08.2020 21:31	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS16**
Lab Sample Id: 663709-016

Matrix: Soil
Date Collected: 06.05.2020 11:05

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.10.2020 18:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.10.2020 18:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.10.2020 18:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.10.2020 18:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.10.2020 18:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.10.2020 18:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.10.2020 18:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 18:40		
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.10.2020 18:40		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS17** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-017 Date Collected: 06.05.2020 11:15 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.5	9.98	mg/kg	06.09.2020 02:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 13:30 Basis: Wet Weight
 Seq Number: 3128299

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.08.2020 21:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.08.2020 21:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.08.2020 21:51	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.08.2020 21:51	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.08.2020 21:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.08.2020 21:51	
o-Terphenyl	84-15-1	88	%	70-135	06.08.2020 21:51	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS17**
Lab Sample Id: 663709-017

Matrix: Soil
Date Collected: 06.05.2020 11:15

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3128593

Prep Method: SW5035A

% Moisture:

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.10.2020 19:01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.10.2020 19:01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.10.2020 19:01	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.10.2020 19:01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.10.2020 19:01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.10.2020 19:01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.10.2020 19:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.10.2020 19:01		
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.10.2020 19:01		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS18** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-018 Date Collected: 06.05.2020 11:25 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.7	10.0	mg/kg	06.09.2020 02:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.09.2020 17:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.09.2020 17:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.09.2020 17:37	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.09.2020 17:37	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.09.2020 17:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.09.2020 17:37	
o-Terphenyl	84-15-1	107	%	70-135	06.09.2020 17:37	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS18**
Lab Sample Id: 663709-018

Matrix: Soil
Date Collected: 06.05.2020 11:25

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.10.2020 19:21	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.10.2020 19:21	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.10.2020 19:21	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.10.2020 19:21	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.10.2020 19:21	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.10.2020 19:21	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.10.2020 19:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.10.2020 19:21		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 19:21		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS19** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-019 Date Collected: 06.05.2020 11:35 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	77.3	10.0	mg/kg	06.09.2020 02:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.09.2020 17:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.09.2020 17:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.09.2020 17:57	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.09.2020 17:57	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.09.2020 17:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.09.2020 17:57	
o-Terphenyl	84-15-1	104	%	70-135	06.09.2020 17:57	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS19**
Lab Sample Id: 663709-019

Matrix: Soil
Date Collected: 06.05.2020 11:35

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.10.2020 19:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.10.2020 19:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.10.2020 19:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.10.2020 19:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.10.2020 19:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.10.2020 19:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.10.2020 19:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.10.2020 19:41	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 19:41	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS20** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-020 Date Collected: 06.05.2020 11:45 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.2	9.92	mg/kg	06.09.2020 02:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.09.2020 18:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.09.2020 18:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.09.2020 18:18	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.09.2020 18:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.09.2020 18:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.09.2020 18:18	
o-Terphenyl	84-15-1	107	%	70-135	06.09.2020 18:18	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS20**
Lab Sample Id: 663709-020

Matrix: Soil
Date Collected: 06.05.2020 11:45

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.10.2020 20:02	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.10.2020 20:02	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.10.2020 20:02	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.10.2020 20:02	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.10.2020 20:02	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.10.2020 20:02	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.10.2020 20:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 20:02	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.10.2020 20:02	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: FS21
Lab Sample Id: 663709-021

Matrix: Soil
Date Collected: 06.05.2020 11:55

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3128382

Date Prep: 06.08.2020 17:11

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.5	9.92	mg/kg	06.09.2020 02:56		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3128399

Date Prep: 06.08.2020 17:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.09.2020 18:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.09.2020 18:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.09.2020 18:38	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.09.2020 18:38	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.09.2020 18:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.09.2020 18:38	
o-Terphenyl	84-15-1	102	%	70-135	06.09.2020 18:38	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS21**
Lab Sample Id: 663709-021

Matrix: Soil
Date Collected: 06.05.2020 11:55

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.10.2020 20:22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.10.2020 20:22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.10.2020 20:22	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	06.10.2020 20:22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.10.2020 20:22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.10.2020 20:22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.10.2020 20:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.10.2020 20:22		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 20:22		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS22** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-022 Date Collected: 06.05.2020 12:05 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.8	9.98	mg/kg	06.09.2020 03:02		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.09.2020 18:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.09.2020 18:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.09.2020 18:59	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.09.2020 18:59	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.09.2020 18:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.09.2020 18:59	
o-Terphenyl	84-15-1	107	%	70-135	06.09.2020 18:59	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS22**
Lab Sample Id: 663709-022

Matrix: Soil
Date Collected: 06.05.2020 12:05

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.10.2020 20:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.10.2020 20:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.10.2020 20:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.10.2020 20:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.10.2020 20:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.10.2020 20:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.10.2020 20:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.10.2020 20:42		
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.10.2020 20:42		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS23** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-023 Date Collected: 06.05.2020 12:15 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.4	9.96	mg/kg	06.09.2020 03:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.09.2020 19:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.09.2020 19:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.09.2020 19:20	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.09.2020 19:20	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.09.2020 19:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.09.2020 19:20	
o-Terphenyl	84-15-1	108	%	70-135	06.09.2020 19:20	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS23**
Lab Sample Id: 663709-023

Matrix: Soil
Date Collected: 06.05.2020 12:15

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.10.2020 21:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.10.2020 21:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.10.2020 21:03	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.10.2020 21:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.10.2020 21:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.10.2020 21:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.10.2020 21:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.10.2020 21:03		
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.10.2020 21:03		



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS24** Matrix: Soil Date Received: 06.08.2020 11:00
 Lab Sample Id: 663709-024 Date Collected: 06.05.2020 13:40 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.08.2020 17:11 Basis: Wet Weight
 Seq Number: 3128382

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	361	9.98	mg/kg	06.09.2020 03:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.08.2020 17:30 Basis: Wet Weight
 Seq Number: 3128399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.09.2020 19:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.09.2020 19:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.09.2020 19:40	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.09.2020 19:40	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.09.2020 19:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.09.2020 19:40	
o-Terphenyl	84-15-1	112	%	70-135	06.09.2020 19:40	



Certificate of Analytical Results 663709

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **FS24**
Lab Sample Id: 663709-024

Matrix: Soil
Date Collected: 06.05.2020 13:40

Date Received: 06.08.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.09.2020 10:28

Basis: Wet Weight

Seq Number: 3128593

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.10.2020 21:23	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.10.2020 21:23	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.10.2020 21:23	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.10.2020 21:23	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.10.2020 21:23	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.10.2020 21:23	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.10.2020 21:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.10.2020 21:23		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.10.2020 21:23		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3128381

MB Sample Id: 7705031-1-BLK

Matrix: Solid

LCS Sample Id: 7705031-1-BKS

Prep Method: E300P

Date Prep: 06.08.2020

LCSD Sample Id: 7705031-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	253	101	90-110	0	20	mg/kg	06.08.2020 21:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3128382

MB Sample Id: 7705032-1-BLK

Matrix: Solid

LCS Sample Id: 7705032-1-BKS

Prep Method: E300P

Date Prep: 06.08.2020

LCSD Sample Id: 7705032-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	254	102	90-110	1	20	mg/kg	06.09.2020 00:26	

Analytical Method: Chloride by EPA 300

Seq Number: 3128381

Parent Sample Id: 663707-006

Matrix: Soil

MS Sample Id: 663707-006 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663707-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	262	201	457	97	458	98	90-110	0	20	mg/kg	06.08.2020 21:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3128381

Parent Sample Id: 663707-016

Matrix: Soil

MS Sample Id: 663707-016 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663707-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	162	200	382	110	356	97	90-110	7	20	mg/kg	06.08.2020 22:59	

Analytical Method: Chloride by EPA 300

Seq Number: 3128382

Parent Sample Id: 663709-005

Matrix: Soil

MS Sample Id: 663709-005 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663709-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	274	200	461	94	463	95	90-110	0	20	mg/kg	06.09.2020 00:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3128382

Parent Sample Id: 663709-016

Matrix: Soil

MS Sample Id: 663709-016 S

Prep Method: E300P

Date Prep: 06.08.2020

MSD Sample Id: 663709-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	355	199	546	96	546	96	90-110	0	20	mg/kg	06.09.2020 02:10	

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

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

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

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128299

MB Sample Id: 7704998-1-BLK

Matrix: Solid

LCS Sample Id: 7704998-1-BKS

Prep Method: SW8015P

Date Prep: 06.08.2020

LCSD Sample Id: 7704998-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1000	100	1010	101	70-135	1	35	mg/kg	06.08.2020 13:38	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	1010	101	70-135	0	35	mg/kg	06.08.2020 13:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		109		107		70-135	%	06.08.2020 13:38
o-Terphenyl	90		95		93		70-135	%	06.08.2020 13:38

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128399

MB Sample Id: 7705004-1-BLK

Matrix: Solid

LCS Sample Id: 7705004-1-BKS

Prep Method: SW8015P

Date Prep: 06.08.2020

LCSD Sample Id: 7705004-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	944	94	974	97	70-135	3	35	mg/kg	06.09.2020 11:47	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	1040	104	70-135	3	35	mg/kg	06.09.2020 11:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		104		104		70-135	%	06.09.2020 11:47
o-Terphenyl	94		96		96		70-135	%	06.09.2020 11:47

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128299

Matrix: Solid

MB Sample Id: 7704998-1-BLK

Prep Method: SW8015P

Date Prep: 06.08.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.08.2020 13:17	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128399

Matrix: Solid

MB Sample Id: 7705004-1-BLK

Prep Method: SW8015P

Date Prep: 06.08.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.09.2020 11:27	

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

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

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

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128299

Parent Sample Id: 663699-002

Matrix: Soil

MS Sample Id: 663699-002 S

Prep Method: SW8015P

Date Prep: 06.08.2020

MSD Sample Id: 663699-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1090	109	997	100	70-135	9	35	mg/kg	06.08.2020 14:39	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1010	101	70-135	8	35	mg/kg	06.08.2020 14:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		107		70-135	%	06.08.2020 14:39
o-Terphenyl	102		95		70-135	%	06.08.2020 14:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128399

Parent Sample Id: 663709-001

Matrix: Soil

MS Sample Id: 663709-001 S

Prep Method: SW8015P

Date Prep: 06.08.2020

MSD Sample Id: 663709-001 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)	<49.9	998	996	100	1020	102	70-135	2	35	mg/kg	06.09.2020 12:49	
Diesel Range Organics (DRO)	<49.9	998	1060	106	1100	110	70-135	4	35	mg/kg	06.09.2020 12:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		123		70-135	%	06.09.2020 12:49
o-Terphenyl	111		116		70-135	%	06.09.2020 12:49

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128363

MB Sample Id: 7705037-1-BLK

Matrix: Solid

LCS Sample Id: 7705037-1-BKS

Prep Method: SW5035A

Date Prep: 06.08.2020

LCSD Sample Id: 7705037-1-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	0.110	110	0.104	104	70-130	6	35	mg/kg	06.09.2020 01:15	
Toluene	<0.00200	0.100	0.104	104	0.100	100	70-130	4	35	mg/kg	06.09.2020 01:15	
Ethylbenzene	<0.00200	0.100	0.0979	98	0.0933	93	71-129	5	35	mg/kg	06.09.2020 01:15	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.191	96	70-135	5	35	mg/kg	06.09.2020 01:15	
o-Xylene	<0.00200	0.100	0.101	101	0.0977	98	71-133	3	35	mg/kg	06.09.2020 01:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		106		70-130	%	06.09.2020 01:15
4-Bromofluorobenzene	96		96		93		70-130	%	06.09.2020 01:15

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

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

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

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128593

MB Sample Id: 7705040-1-BLK

Matrix: Solid

LCS Sample Id: 7705040-1-BKS

Prep Method: SW5035A

Date Prep: 06.09.2020

LCSD Sample Id: 7705040-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.101	101	70-130	6	35	mg/kg	06.10.2020 12:54	
Toluene	<0.00200	0.100	0.102	102	0.0962	96	70-130	6	35	mg/kg	06.10.2020 12:54	
Ethylbenzene	<0.00200	0.100	0.0958	96	0.0895	90	71-129	7	35	mg/kg	06.10.2020 12:54	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.182	91	70-135	7	35	mg/kg	06.10.2020 12:54	
o-Xylene	<0.00200	0.100	0.101	101	0.0933	93	71-133	8	35	mg/kg	06.10.2020 12:54	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	111		107		108		70-130			%	06.10.2020 12:54	
4-Bromofluorobenzene	97		93		94		70-130			%	06.10.2020 12:54	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128363

Parent Sample Id: 663707-006

Matrix: Soil

MS Sample Id: 663707-006 S

Prep Method: SW5035A

Date Prep: 06.08.2020

MSD Sample Id: 663707-006 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	0.100	100	0.0949	95	70-130	5	35	mg/kg	06.09.2020 01:55	
Toluene	<0.00200	0.0998	0.105	105	0.0988	99	70-130	6	35	mg/kg	06.09.2020 01:55	
Ethylbenzene	<0.00200	0.0998	0.0937	94	0.0887	89	71-129	5	35	mg/kg	06.09.2020 01:55	
m,p-Xylenes	<0.00399	0.200	0.196	98	0.185	92	70-135	6	35	mg/kg	06.09.2020 01:55	
o-Xylene	<0.00200	0.0998	0.0953	95	0.0907	91	71-133	5	35	mg/kg	06.09.2020 01:55	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			108		108		70-130			%	06.09.2020 01:55	
4-Bromofluorobenzene			96		95		70-130			%	06.09.2020 01:55	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128593

Parent Sample Id: 663709-006

Matrix: Soil

MS Sample Id: 663709-006 S

Prep Method: SW5035A

Date Prep: 06.09.2020

MSD Sample Id: 663709-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.105	105	0.126	126	70-130	18	35	mg/kg	06.10.2020 13:34	
Toluene	<0.00199	0.0996	0.101	101	0.121	121	70-130	18	35	mg/kg	06.10.2020 13:34	
Ethylbenzene	<0.00199	0.0996	0.0925	93	0.113	113	71-129	20	35	mg/kg	06.10.2020 13:34	
m,p-Xylenes	<0.00398	0.199	0.192	96	0.233	117	70-135	19	35	mg/kg	06.10.2020 13:34	
o-Xylene	<0.00199	0.0996	0.0951	95	0.116	116	71-133	20	35	mg/kg	06.10.2020 13:34	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			108		107		70-130			%	06.10.2020 13:34	
4-Bromofluorobenzene			94		93		70-130			%	06.10.2020 13:34	

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

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

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

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



Chain of Custody

Work Order No: 663709

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 3

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

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

Project Name:	Corral Canyon 008H	Turn Around
Project Number:	012919305	Routine ☒ Rush:
P.O. Number:		Due Date:
Sampler's Name:	Spencer Lo	

Temperature (°C):	3.2	Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒
Received Intact:	Yes ☒ No ☐	Thermometer ID:	711007		
Cooler Custody Seals:	Yes ☒ No ☐ N/A	Correction Factor:	-0.2		
Sample Custody Seals:	Yes ☒ No ☐ N/A	Total Containers:	24		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST													Work Order Notes
					Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)										
FS01	S	6/3/2020	1300	1'	1	X	X	X										
FS02	S	6/3/2020	1315	1'	1	X	X	X										
FS03	S	6/3/2020	1330	1'	1	X	X	X										
FS04	S	6/3/2020	1345	2'	1	X	X	X										
FS05	S	6/3/2020	1400	2'	1	X	X	X										
FS06	S	6/3/2020	1415	2'	1	X	X	X										
FS07	S	6/3/2020	1430	2'	1	X	X	X										
FS08	S	6/3/2020	1445	2'	1	X	X	X										
FS09	S	6/3/2020	1500	2'	1	X	X	X										
FS10	S	6/4/2020	1315	2'	1	X	X	X										

Total 200.7 / 6010 200.8 / 6020:

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time



Chain of Custody

Work Order No: 663709

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

www.xenco.com Page 2 of 3

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

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐ State of Project: Reporting Level: I ☐ Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other:	Work Order Comments
--	---------------------

Project Name:	Corral Canyon 008H	Turn Around	
Project Number:	012919305	Routine ☒	
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
	Received Intact:	Yes	No	Thermometer ID		
	Cooler Custody Seals:	Yes	No	Correction Factor:		
	Sample Custody Seals:	Yes	No	Total Containers:		
		Yes	No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers												
FS11	S	6/4/2020	1330	2'	1	X	X	X									
FS12	S	6/4/2020	1345	2'	1	X	X	X									
FS13	S	6/5/2020	1035	4'	1	X	X	X									
FS14	S	6/5/2020	1045	4'	1	X	X	X									
FS15	S	6/5/2020	1055	4'	1	X	X	X									
FS16	S	6/5/2020	1105	4'	1	X	X	X									
FS17	S	6/5/2020	1115	4'	1	X	X	X									
FS18	S	6/5/2020	1125	4'	1	X	X	X									
FS19	S	6/5/2020	1135	4'	1	X	X	X									
FS20	S	6/5/2020	1145	4'	1	X	X	X									

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/8/2019 10:00am			6/8/20 11:00

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
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-575-392-7550)

Chain of Custody

Work Order No:

663707

www.xenco.com Page 3 of 3

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

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

Project Name:	Corral Canyon 008H	Turn Around
Project Number:	012919305	Routine ☒
P.O. Number:		Rush:
Sampler's Name:	Spencer Lo	Due Date:

[illegible]

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

	TAT starts the day received by the
--	------------------------------------

[illegible]

	8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mn	Mg	Ni	K	Se	Ag	SiO ₂	Nb	G	Tl	Ga	H	V	Zr
--	-------	-------	----------	----	----	----	----	----	---	----	----	----	----	----	----	----	----	----	----	---	----	----	------------------	----	---	----	----	---	---	----

TCPLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 2451 / 2470 / 2474 : Hs

1001	270.1	1410	1411	mg
1002	270.1	1410	1411	mg
1003	270.1	1410	1411	mg
1004	270.1	1410	1411	mg
1005	270.1	1410	1411	mg
1006	270.1	1410	1411	mg
1007	270.1	1410	1411	mg
1008	270.1	1410	1411	mg
1009	270.1	1410	1411	mg
1010	270.1	1410	1411	mg
1011	270.1	1410	1411	mg
1012	270.1	1410	1411	mg
1013	270.1	1410	1411	mg
1014	270.1	1410	1411	mg
1015	270.1	1410	1411	mg
1016	270.1	1410	1411	mg
1017	270.1	1410	1411	mg
1018	270.1	1410	1411	mg
1019	270.1	1410	1411	mg
1020	270.1	1410	1411	mg
1021	270.1	1410	1411	mg
1022	270.1	1410	1411	mg
1023	270.1	1410	1411	mg
1024	270.1	1410	1411	mg
1025	270.1	1410	1411	mg
1026	270.1	1410	1411	mg
1027	270.1	1410	1411	mg
1028	270.1	1410	1411	mg
1029	270.1	1410	1411	mg
1030	270.1	1410	1411	mg
1031	270.1	1410	1411	mg
1032	270.1	1410	1411	mg
1033	270.1	1410	1411	mg
1034	270.1	1410	1411	mg
1035	270.1	1410	1411	mg
1036	270.1	1410	1411	mg
1037	270.1	1410	1411	mg
1038	270.1	1410	1411	mg
1039	270.1	1410	1411	mg
1040	270.1	1410	1411	mg
1041	270.1	1410	1411	mg
1042	270.1	1410	1411	mg
1043	270.1	1410	1411	mg
1044	270.1	1410	1411	mg
1045	270.1	1410	1411	mg
1046	270.1	1410	1411	mg
1047	270.1	1410	1411	mg
1048	270.1	1410	1411	mg
1049	270.1	1410	1411	mg
1050	270.1	1410	1411	mg
1051	270.1	1410	1411	mg
1052	270.1	1410	1411	mg
1053	270.1	1410	1411	mg
1054	270.1	1410	1411	mg
1055	270.1	1410	1411	mg
1056	270.1	1410	1411	mg
1057	270.1	1410	1411	mg
1058	270.1	1410	1411	mg
1059	270.1	1410	1411	mg
1060	270.1	1410	1411	mg
1061	270.1	1410	1411	mg
1062	270.1	1410	1411	mg
1063	270.1	1410	1411	mg
1064	270.1	1410	1411	mg
1065	270.1	1410	1411	mg
1066	270.1	1410	1411	mg
1067	270.1	1410	1411	mg
1068	270.1	1410	1411	mg
1069	270.1	1410	1411	mg
1070	270.1	1410	1411	mg
1071	270.1	1410	1411	mg
1072	270.1	1410	1411	mg
1073	270.1	1410	1411	mg
1074	270.1	1410	1411	mg
1075	270.1			

constitutes a valid purchase order from client company to Yenco, its affiliate and subcontractor.

|| not acquire any knowledge; it assigns standard terms and conditions to them; no minutes and subsidiary actors.

and not assume any responsibility or any losses or expenses incurred by the client if such losses are due to circumstances beyond the control

Each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated and a charge of \$5 for each sample submitted to Xenco, but not analyzed.

_____ previously regulated.

Red hv: (Signature)	
Date: _____	

Received by: (Signature) _____
Date/Time _____

[illegible][illegible]

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

[illegible][illegible]

Revised Date 05/14/18 Row 2018

Released to Imaging: 4/19/2021 12:01:24 PM

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.08.2020 11.00.00 AM

Work Order #: 663709

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T NM 007

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

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Martha Castro

Date: 06.08.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.08.2020

Certificate of Analysis Summary 664287
LT Environmental, Inc., Arvada, CO
Project Name: Corral Canyon 008H

Date Received in Lab: Thu 06.11.2020 14:20
Report Date: 06.15.2020 11:31
Project Manager: Jessica Kramer

Project Id: 012919305
Contact: Dan Moir
Project Location:



Analysis Requested		Lab Id: Field Id: Depth: Matrix: Sampled:	664287-001 SW21 1-2 ft SOIL 06.11.2020 10:00				
BTEX by EPA 8021B		Extracted: Analyzed: Units/RL:	06.12.2020 12:01 06.12.2020 17:37 mg/kg RL				
Benzene			<0.00201 0.00201				
Toluene			<0.00201 0.00201				
Ethylbenzene			<0.00201 0.00201				
m,p-Xylenes			<0.00402 0.00402				
o-Xylene			<0.00201 0.00201				
Total Xylenes			<0.00201 0.00201				
Total BTEX			<0.00201 0.00201				
Chloride by EPA 300		Extracted: Analyzed: Units/RL:	06.12.2020 16:00 06.12.2020 17:51 mg/kg RL				
Chloride			105 10.0				
TPH by SW8015 Mod		Extracted: Analyzed: Units/RL:	06.12.2020 12:00 06.12.2020 15:25 mg/kg RL				
Gasoline Range Hydrocarbons (GRO)			<50.1 50.1				
Diesel Range Organics (DRO)			<50.1 50.1				
Motor Oil Range Hydrocarbons (MRO)			<50.1 50.1				
Total GRO-DRO			<50.1 50.1				
Total TPH			<50.1 50.1				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer

Jessica Kramer
Project Manager



Analytical Report 664287

for

LT Environmental, Inc.

Project Manager: Dan Moir

Corral Canyon 008H

012919305

06.15.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.15.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **664287**

Corral Canyon 008H

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) 664287. 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. 664287 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,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 664287

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW21	S	06.11.2020 10:00	1 - 2 ft	664287-001



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Corral Canyon 008H

Project ID: 012919305
Work Order Number(s): 664287

Report Date: 06.15.2020
Date Received: 06.11.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 664287

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW21** Matrix: Soil Date Received: 06.11.2020 14:20
 Lab Sample Id: 664287-001 Date Collected: 06.11.2020 10:00 Sample Depth: 1 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.12.2020 16:00 Basis: Wet Weight
 Seq Number: 3128910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	105	10.0	mg/kg	06.12.2020 17:51		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.12.2020 12:00 Basis: Wet Weight
 Seq Number: 3128908

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.12.2020 15:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.12.2020 15:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.12.2020 15:25	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.12.2020 15:25	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.12.2020 15:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	06.12.2020 15:25	
o-Terphenyl	84-15-1	98	%	70-135	06.12.2020 15:25	



Certificate of Analytical Results 664287

LT Environmental, Inc., Arvada, CO

Corral Canyon 008H

Sample Id: **SW21**
Lab Sample Id: 664287-001

Matrix: Soil
Date Collected: 06.11.2020 10:00

Date Received: 06.11.2020 14:20
Sample Depth: 1 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.12.2020 12:01

Basis: Wet Weight

Seq Number: 3128788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.12.2020 17:37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.12.2020 17:37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.12.2020 17:37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.12.2020 17:37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.12.2020 17:37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.12.2020 17:37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.12.2020 17:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.12.2020 17:37		
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.12.2020 17:37		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3128910

MB Sample Id: 7705387-1-BLK

Matrix: Solid

LCS Sample Id: 7705387-1-BKS

Prep Method: E300P

Date Prep: 06.12.2020

LCSD Sample Id: 7705387-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	243	97	249	100	90-110	2	20	mg/kg	06.12.2020 16:41	

Analytical Method: Chloride by EPA 300

Seq Number: 3128910

Parent Sample Id: 664285-001

Matrix: Soil

MS Sample Id: 664285-001 S

Prep Method: E300P

Date Prep: 06.12.2020

MSD Sample Id: 664285-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	374	200	562	94	564	95	90-110	0	20	mg/kg	06.12.2020 16:58	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128908

MB Sample Id: 7705381-1-BLK

Matrix: Solid

LCS Sample Id: 7705381-1-BKS

Prep Method: SW8015P

Date Prep: 06.12.2020

LCSD Sample Id: 7705381-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	974	97	959	96	70-135	2	35	mg/kg	06.12.2020 12:43	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1090	109	70-135	0	35	mg/kg	06.12.2020 12:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		110		108		70-135	%	06.12.2020 12:43
o-Terphenyl	96		104		102		70-135	%	06.12.2020 12:43

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128908

Matrix: Solid

MB Sample Id: 7705381-1-BLK

Prep Method: SW8015P

Date Prep: 06.12.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.12.2020 12:23	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3128908

Matrix: Soil

Parent Sample Id: 664285-001

MS Sample Id: 664285-001 S

Prep Method: SW8015P

Date Prep: 06.12.2020

MSD Sample Id: 664285-001 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)	<49.8	995	941	95	956	96	70-135	2	35	mg/kg	06.12.2020 13:44	
Diesel Range Organics (DRO)	<49.8	995	1070	108	1070	107	70-135	0	35	mg/kg	06.12.2020 13:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		109		70-135	%	06.12.2020 13:44
o-Terphenyl	107		104		70-135	%	06.12.2020 13:44

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

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

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

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



LT Environmental, Inc.
Corral Canyon 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128788

MB Sample Id: 7705312-1-BLK

Matrix: Solid

LCS Sample Id: 7705312-1-BKS

Prep Method: SW5035A

Date Prep: 06.12.2020

LCSD Sample Id: 7705312-1-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	0.105	105	0.109	109	70-130	4	35	mg/kg	06.12.2020 10:08	
Toluene	<0.00200	0.100	0.0998	100	0.104	104	70-130	4	35	mg/kg	06.12.2020 10:08	
Ethylbenzene	<0.00200	0.100	0.0920	92	0.0972	97	71-129	5	35	mg/kg	06.12.2020 10:08	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.197	99	70-135	4	35	mg/kg	06.12.2020 10:08	
o-Xylene	<0.00200	0.100	0.0969	97	0.101	101	71-133	4	35	mg/kg	06.12.2020 10:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		109		70-130	%	06.12.2020 10:08
4-Bromofluorobenzene	96		93		92		70-130	%	06.12.2020 10:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3128788

Parent Sample Id: 664229-004

Matrix: Soil

MS Sample Id: 664229-004 S

Prep Method: SW5035A

Date Prep: 06.12.2020

MSD Sample Id: 664229-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.101	101	0.0996	99	70-130	1	35	mg/kg	06.12.2020 10:49	
Toluene	<0.00199	0.0996	0.0962	97	0.0950	94	70-130	1	35	mg/kg	06.12.2020 10:49	
Ethylbenzene	<0.00199	0.0996	0.0905	91	0.0887	88	71-129	2	35	mg/kg	06.12.2020 10:49	
m,p-Xylenes	<0.00398	0.199	0.184	92	0.181	90	70-135	2	35	mg/kg	06.12.2020 10:49	
o-Xylene	<0.00199	0.0996	0.0928	93	0.0910	90	71-133	2	35	mg/kg	06.12.2020 10:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		70-130	%	06.12.2020 10:49
4-Bromofluorobenzene	95		90		70-130	%	06.12.2020 10:49

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

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

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

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



Chain of Custody

Work Order No:

444187

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

www.xenco.com

Page 1 of 1

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

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

Project Name:	Corral Canyon 0084	Turn Around	
Project Number:	612919305	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Loc:	Yes	No
Temperature (°C):	30/2.8			Thermometer ID	TMM007	
Received In tact:	Yes	No			Correction Factor:	-0.2
Cooler Custody Seals:	Yes	No	N/A	Total Containers:		1
Sample Custody Seals:	Yes	No	N/A			

Sample Identification					Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP	BTEX (E	Chloride	Sample Comments
SW 21					S	6/11/20	1000	1-2	1	X	X	X	
Handwritten signature and initials across the grid													

Total 200.7 / 6010 200.8 / 6020:

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

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/11/20 @ 1411			6/11/20 14:20

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.11.2020 02:20.00 PM

Work Order #: 664287

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)?	2.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 06.11.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.15.2020

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 9039

CONDITIONS OF APPROVAL

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707	OGRID: 5380	Action Number: 9039	Action Type: C-141
OCD Reviewer chensley	Condition None		