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

November 30, 2018

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

RE: Closure Request
Ross Ranch 31 Federal #1H
Remediation Permit Number 2RP-4973
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following letter report detailing excavation of impacted soil and confirmation soil sampling activities at the Ross Ranch 31 Federal #1H well pad (Site) located in Unit Letter O, Section 31, Township 25 South, Range 30 East, in Eddy, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impact to soil after the well head stuffing box packing failed, causing the release of 1 barrel (bbl) of oil and 5 bbls of produced water onto the surface of the well pad and the pasture area west of the well pad. The release was discovered on September 4, 2018. Vacuum trucks were dispatched to the Site and used to recover the standing fluid; approximately 0.5 bbl of oil and 4 bbls of produced water were recovered. The well was blown down to the battery. The packing was replaced, and the well was returned to production. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on September 19, 2018 and was assigned Remediation Permit Number (RP) 2RP-4973 (Attachment 1). Based on the excavation activities and results of the confirmation soil sampling events, XTO is requesting no further action for this release.

BACKGROUND

The release occurred after August 14, 2018; therefore, LTE ranked the Site according to Table 1, the *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 196 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is C 01360, located approximately 1.21 miles southeast of the Site, with a depth to groundwater of 173 feet and a total depth of 770 feet. The water well is approximately 23 feet lower in elevation than the Site. The closest surface water to the Site is an unnamed dry wash located approximately 2,100 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater

than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride. A closure criteria of 600 mg/kg chloride was applied to the off-pad pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

SOIL SAMPLING

On October 1, 2018, LTE personnel inspected the Site and observed surface hydrocarbon staining in the release area west and southwest of the wellhead. The release extent was mapped using a handheld Global Positing System (GPS) unit and is depicted on Figure 2. LTE personnel collected three preliminary soil samples (SS01 through SS03) within the release area from a depth of 0.5-feet bgs. Soil samples SS01 and SS02 were collected from the impacted area on the well pad and soil sample SS03 was collected from the off-pad release area in the pasture west of the well pad. The soil samples were screened for volatile aromatic hydrocarbons and chlorides using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The soil samples were collected and placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results for soil samples SS01 and SS02 indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results for soil sample SS03 collected from the pasture area west of the well pad indicated that chloride concentrations were below 600 mg/kg and BTEX and TPH concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results are summarized in Table 1 and the laboratory analytical report is included in Attachment 2. Based on the SS03 soil sample laboratory analytical results, excavation was not required in the pasture area west of the well pad. Based on visual hydrocarbon staining and field screening results, excavation of impacted soil was warranted in the release area on the well pad.

EXCAVATION

During November 2018, LTE personnel returned to the Site to oversee the excavation of impacted soil. Excavation activities commenced on November 1, 2018, and concluded on November 9, 2018. To delineate hydrocarbon and chloride impacts to soil and direct excavation activities, LTE screened soil using a PID and Hach® chloride QuanTab® test strips. Impacted soil was excavated

from the well pad release area to depths ranging from 1-foot bgs to 3-feet bgs. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavation. Composite soil samples SW01 through SW05 were collected from the sidewalls of the excavation from depths of 0.5 foot to 1.5 feet bgs, and composite soil samples FS01 through FS34 were collected from the floor of the excavation from depths of 1 foot to 3 feet bgs. The 5-point composite samples were collected by depositing 5 aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thorough mixing.

Boreholes were advanced at three locations (BH01, BH02, and BH03) within the release area to assess the vertical extent of soil impact and delineate the depth of chloride impacts to a concentration of 600 mg/kg. Soil was field screened at 2-foot intervals in each borehole using a PID and Hach® chloride QuanTab® test strips. One soil sample was submitted for laboratory analysis from each borehole based on field screening results. Soil samples were submitted from boreholes BH01, BH02, and BH03 from depths of 7 feet, 3 feet, and 10 feet, respectively.

Discrete characterization soil samples were collected from three locations (SS03/SS03A, SS04, and SS05) to confirm the lateral and vertical extent of soil impacts on and off the well pad. Additional soil samples were collected from depths of 1 foot and 2 feet from the preliminary SS03/SS03A sample location. Soil samples were collected from depths of 0.5 feet and 1 foot bgs from the SS04 and SS05 sample locations.

All soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas.

The excavation measured approximately 7,500 square feet in area with a depth ranging from 1 foot to 3 feet bgs. The horizontal extent of the excavation is illustrated on Figure 2. Approximately 500 cubic yards of impacted soil were removed from the excavation. The impacted soil was transported and properly disposed of at the Lea Land Landfill Facility, in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated that the borehole soil samples, characterization soil samples, and confirmation soil samples collected from the final excavation extent were all compliant with the NMOCD Table 1 closure criteria for BTEX, TPH, and chloride. Laboratory analytical results for soil samples SS03 and SS05 collected from the pasture area west of the well pad indicated that chloride concentrations were below 600 mg/kg and BTEX and TPH concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

The impacted soil was excavated from the release area and laboratory analytical results for the confirmation soil samples indicate that BTEX, TPH, and chloride concentrations are compliant with the NMOCD Table 1 closure criteria. Additionally, laboratory analytical results for the soil samples collected from the pasture area west of the pad indicated that chloride concentrations were below 600 mg/kg and BTEX and TPH concentrations were below laboratory reporting limits which confirmed that no excavation was required in the pasture area. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for this release. Upon approval of the no further action request, XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. An updated NMOCD Form C-141 is included as Attachment 1. A photographic log of the Site is included as Attachment 3.

If you have any questions or comments, please do not hesitate to contact Ms. Adrian Baker at (432) 887-1255 or abaker@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Adrian Baker
Project Geologist

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

cc: Kyle Littrell, XTO
Maria Pruett, NMOCD
Jim Amos, BLM
Shelly Tucker, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-4973)
Attachment 2	Laboratory Analytical Reports
Attachment 3	Photographic Log

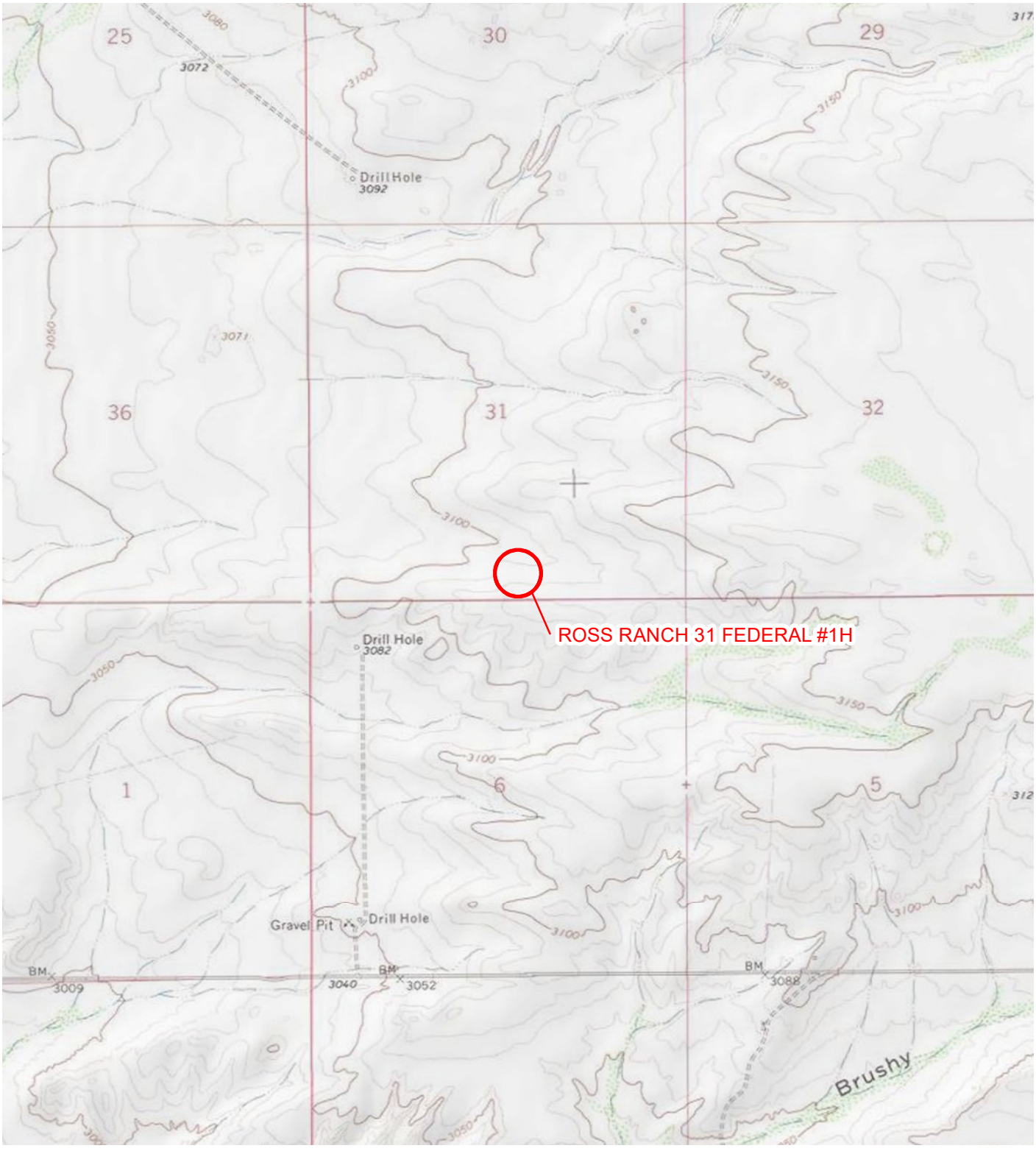

IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4973

FIGURE 1
SITE LOCATION MAP
ROSS RANCH 31 FEDERAL #1H
UNIT O SEC 31 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918155_ROSS RANCH 31 FEDERAL #1H\012918155_FIG01_SL_2018_4973.mxd

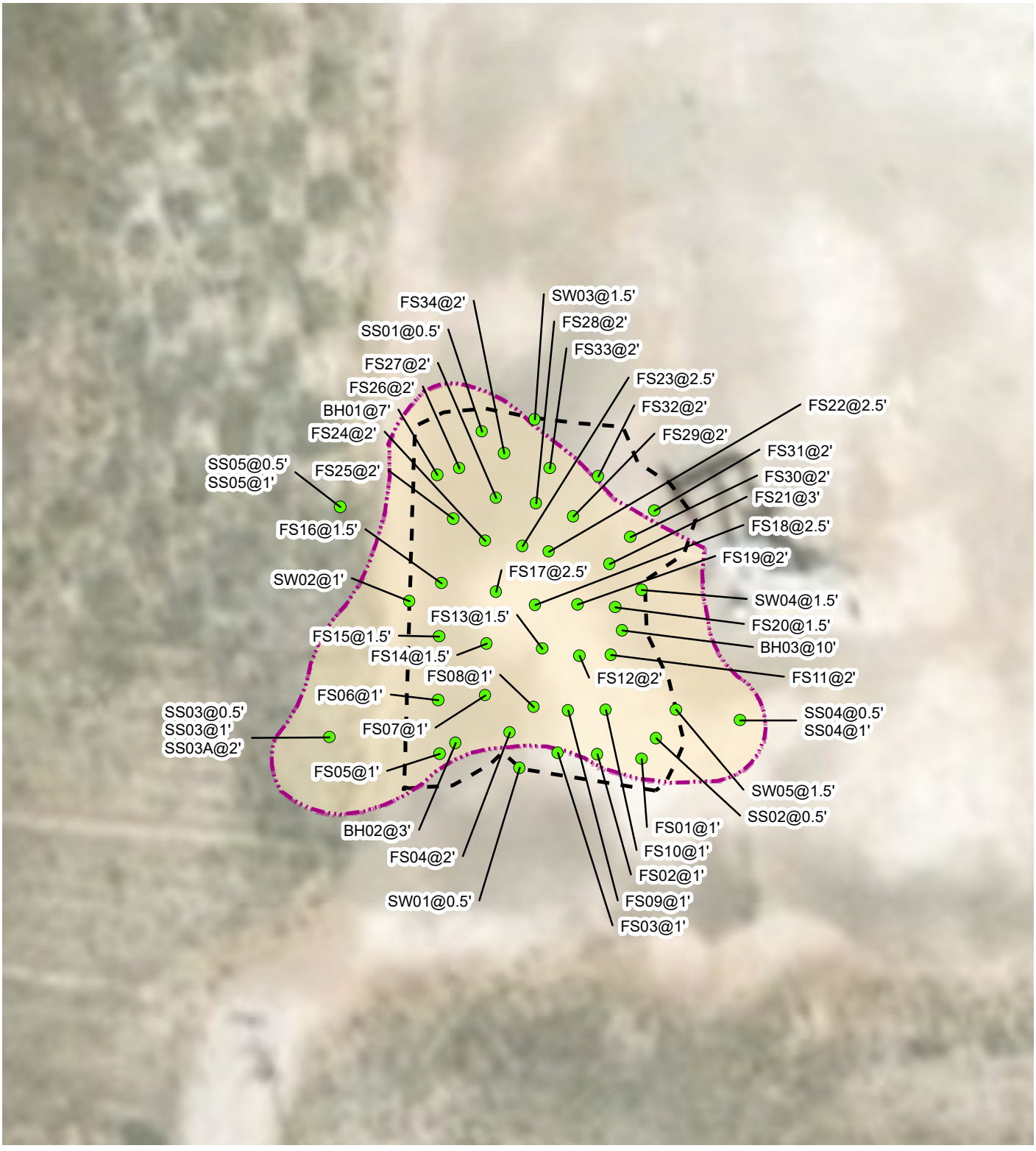

IMAGE COURTESY OF ESRI

LEGEND

- FINAL CONFIRMATION SOIL SAMPLE
- SPILL EXTENT
- EXCAVATION EXTENT

0 40 80
Feet

N

NOTE: REMEDIATION PERMIT NUMBER 2RP-4973

FIGURE 2
SOIL SAMPLE LOCATIONS
ROSS RANCH 31 FEDERAL #1H
UNIT O SEC 31 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918155_ROSS RANCH 31 FEDERAL #1H\012918155_FIG02_SITE_2018_4973.mxd

TABLE 1
SOIL ANALYTICAL RESULTS

ROSS RANCH 31 FEDERAL #1H
REMEDIATION PERMIT NUMBER 2RP-4973
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	10/01/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	6,600
SS02	0.5	10/01/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	2,850
SS03	0.5	10/01/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	<14.9	348
SS03A	2	11/01/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	129
BH01	7	11/08/2018	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<15.0	<15.0	<15.0	<15.0	<15.0	98.5
BH02	3	11/08/2018	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<15.0	<15.0	<15.0	<15.0	<15.0	43.7
BH03	10	11/08/2018	<0.0172	<0.0172	<0.0172	<0.0172	<0.0172	<15.0	<15.0	<15.0	<15.0	<15.0	130
FS01	1	11/09/2018	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	<15.0	29.7	<15.0	29.7	29.7	1,720
FS02	1	11/09/2018	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<15.0	105	21.1	105	126	1,840
FS03	1	11/09/2018	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<15.0	40.1	<15.0	40.1	40.1	2,430
FS04	2	11/09/2018	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<15.0	<15.0	<15.0	<15.0	<15.0	175
FS05	1	11/09/2018	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<15.0	<15.0	<15.0	<15.0	<15.0	1,630
FS06	1	11/09/2018	<0.0180	<0.0180	0.124	0.533	0.657	18.4	127	<14.9	145	145	854
FS07	1	11/09/2018	<0.0189	<0.0189	0.0189	<0.0189	0.0189	<15.0	30.9	<15.0	30.9	30.9	2,240
FS08	1	11/09/2018	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<14.9	46.5	<14.9	46.5	46.5	2,730
FS09	1	11/09/2018	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<15.0	<15.0	<15.0	<15.0	<15.0	1,270
FS10	1	11/09/2018	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<15.0	58.0	<15.0	58.0	58.0	2,520
FS11	2	11/09/2018	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<15.0	126	<15.0	126	126	773
FS12	2	11/09/2018	<0.0185	<0.0185	0.0203	0.0387	0.0590	<15.0	16.1	<15.0	16.1	16.1	859
FS13	1.5	11/09/2018	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<14.9	172	22.2	172	194	1,350
FS14	1.5	11/09/2018	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<15.0	102	15.1	102	117	1,020
FS15	1.5	11/09/2018	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<15.0	<15.0	<15.0	<15.0	<15.0	1,300
FS16	1.5	11/09/2018	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<15.0	<15.0	<15.0	<15.0	<15.0	865
FS17	2.5	11/09/2018	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<15.0	<15.0	<15.0	<15.0	<15.0	787
FS18	2.5	11/09/2018	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<14.9	<14.9	<14.9	<14.9	<14.9	307
FS19	2	11/09/2018	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<14.9	17.1	<14.9	17.1	17.1	2,250
FS20	1.5	11/09/2018	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<15.0	<15.0	<15.0	<15.0	<15.0	827

TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS

ROSS RANCH 31 FEDERAL #1H
REMEDIATION PERMIT NUMBER 2RP-4973
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
FS21	3	11/09/2018	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<15.0	<15.0	<15.0	<15.0	<15.0	1,510
FS22	2.5	11/09/2018	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<15.0	<15.0	<15.0	<15.0	<15.0	658
FS23	2.5	11/09/2018	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<15.0	71.8	<15.0	71.8	71.80	1,080
FS24	2	11/09/2018	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<14.9	<14.9	<14.9	<14.9	<14.9	305
FS25	2	11/09/2018	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<14.9	<14.9	<14.9	<14.9	<14.9	1,340
FS26	2	11/09/2018	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<15.0	<15.0	<15.0	<15.0	<15.0	2,020
FS27	2	11/09/2018	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<15.0	41.1	<15.0	41.1	41.1	865
FS28	2	11/09/2018	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<15.0	<15.0	<15.0	<15.0	<15.0	839
FS29	2	11/09/2018	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<15.0	<15.0	<15.0	<15.0	<15.0	475
FS30	2	11/09/2018	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<15.0	<15.0	<15.0	<15.0	<15.0	544
FS31	2	11/09/2018	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<15.0	<15.0	<15.0	<15.0	<15.0	312
FS32	2	11/09/2018	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<15.0	15.3	<15.0	15.3	15.3	2,030
FS33	2	11/09/2018	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<15.0	<15.0	<15.0	<15.0	<15.0	1,650
FS34	2	11/09/2018	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<14.9	<14.9	<14.9	<14.9	<14.9	916
SS03	1	11/09/2018	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<15.0	<15.0	<15.0	<15.0	<15.0	49.9
SS04	0.5	11/09/2018	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<15.0	<15.0	<15.0	<15.0	<15.0	1,540
SS04	1	11/09/2018	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<14.9	<14.9	<14.9	<14.9	<14.9	1,590
SS05	0.5	11/09/2018	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<14.9	<14.9	<14.9	<14.9	<14.9	398
SS05	1	11/09/2018	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<15.0	<15.0	<15.0	<15.0	<15.0	195
SW01	0.5	11/09/2018	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<15.0	<15.0	<15.0	<15.0	<15.0	1,590
SW02	1	11/09/2018	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<15.0	<15.0	<15.0	<15.0	<15.0	2,240
SW03	1.5	11/09/2018	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<15.0	<15.0	<15.0	<15.0	<15.0	1,650
SW04	1.5	11/09/2018	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<14.9	226	24.2	226	250	4,620
SW05	1.5	11/09/2018	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<15.0	229	23.1	229	252	3,680

TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS

ROSS RANCH 31 FEDERAL #1H
REMEDIATION PERMIT NUMBER 2RP-4973
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Remediation Action Levels			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000

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

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	NMAP1826378405
District RP	2 RP-4973
Facility ID	
Application ID	pMAP1826378161

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 32.079975 Longitude -103.919451
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Ross Ranch 31 Federal #1H	Site Type Production Well
Date Release Discovered 9/4/2018	API# *(if applicable)* 30-015-36775

Unit Letter	Section	Township	Range	County
O	31	25S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 0.5
☒ Produced Water	Volume Released (bbls) 5	Volume Recovered (bbls) 4
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The well head stuffing box packing failed. The well was blown down to the battery. The packing was replaced and the well was returned to production. Free standing fluids were recovered by vacuum truck.

State of New Mexico
Oil Conservation Division

Incident ID	NMAP1826378405
District RP	2 RP-4973
Facility ID	
Application ID	pMAP1826378161

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

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 9-19-18

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

OCD Only

Received by: Date: 09/20/18

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2
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?	173 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
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 Coordinator

Signature: Date: 9-19-18

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
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 Coordinator

Signature: Kyle Littrell Date: 12-3-18

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 601141

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Ross Ranch 31 Federal 1H

10-OCT-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

10-OCT-18

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

Reference: XENCO Report No(s): **601141**
Ross Ranch 31 Federal 1H
Project Address: Eddy, NM 2RP-4973

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 601141. 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. 601141 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	10-01-18 11:40	6 In	601141-001
SS02	S	10-01-18 11:50	6 In	601141-002
SS03	S	10-01-18 12:00	6 In	601141-003

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3065828 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 600814-015 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Ethylbenzene, Toluene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 600814-013, -014, -015, -016, -017.
The Laboratory Control Sample for Toluene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3065910 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 601141

LT Environmental, Inc., Arvada, CO

Project Name: Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy, NM 2RP-4973

Date Received in Lab: Wed Oct-03-18 10:32 am
Report Date: 10-OCT-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	601141-001		601141-002		601141-003			
	Field Id:	SS01		SS02		SS03			
	Depth:	6- In		6- In		6- In			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Oct-01-18 11:40		Oct-01-18 11:50		Oct-01-18 12:00			
BTEX by EPA 8021B	***Extracted:***	Oct-09-18 15:45		Oct-08-18 08:30		Oct-08-18 08:30			
	Analyzed:	Oct-09-18 22:12		Oct-08-18 16:45		Oct-08-18 17:05			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201		
Toluene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201		
Ethylbenzene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201		
m,p-Xylenes		<0.00398	0.00398	<0.00403	0.00403	<0.00402	0.00402		
o-Xylene		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201		
Total Xylenes		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201		
Total BTEX		<0.00199	0.00199	<0.00202	0.00202	<0.00201	0.00201		
Inorganic Anions by EPA 300	***Extracted:***	Oct-04-18 09:40		Oct-04-18 09:40		Oct-04-18 09:40			
	Analyzed:	Oct-04-18 10:58		Oct-04-18 11:04		Oct-04-18 11:09			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		6600	49.5	2850	25.2	348	4.95		
TPH by SW8015 Mod	***Extracted:***	Oct-05-18 11:00		Oct-05-18 11:00		Oct-05-18 11:00			
	Analyzed:	Oct-05-18 17:14		Oct-05-18 17:34		Oct-05-18 17:53			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9		
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9		
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9		

Jessica Kramer
Project Assistant

Certificate of Analytical Results 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.03.18 10.32
Lab Sample Id:	601141-001	Date Collected:	10.01.18 11.40	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	10.04.18 09.40	Basis:	Wet Weight
Seq Number:	3065325				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6600**	49.5	mg/kg	10.04.18 10.58		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.05.18 11.00	Basis:	Wet Weight
Seq Number:	3065664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.05.18 17.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.05.18 17.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.05.18 17.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.05.18 17.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.05.18 17.14	
o-Terphenyl	84-15-1	94	%	70-135	10.05.18 17.14	

Certificate of Analytical Results 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.03.18 10.32
Lab Sample Id:	601141-001	Date Collected:	10.01.18 11.40	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.09.18 15.45	Basis:	Wet Weight
Seq Number:	3065910				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.09.18 22.12	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.09.18 22.12	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.09.18 22.12	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.09.18 22.12	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.09.18 22.12	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.09.18 22.12	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.09.18 22.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	10.09.18 22.12	
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.09.18 22.12	

Certificate of Analytical Results 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.03.18 10.32
Lab Sample Id:	601141-002	Date Collected:	10.01.18 11.50	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	10.04.18 09.40	Basis:	Wet Weight
Seq Number:	3065325				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2850**	25.2	mg/kg	10.04.18 11.04		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.05.18 11.00	Basis:	Wet Weight
Seq Number:	3065664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.05.18 17.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.05.18 17.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.05.18 17.34	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.05.18 17.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.05.18 17.34	
o-Terphenyl	84-15-1	92	%	70-135	10.05.18 17.34	

Certificate of Analytical Results 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.03.18 10.32
Lab Sample Id:	601141-002	Date Collected:	10.01.18 11.50	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.08.18 08.30	Basis:	Wet Weight
Seq Number:	3065828				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.08.18 16.45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.08.18 16.45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.08.18 16.45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.08.18 16.45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.08.18 16.45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.08.18 16.45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.08.18 16.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	10.08.18 16.45	
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.08.18 16.45	

Certificate of Analytical Results 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	10.03.18 10.32
Lab Sample Id:	601141-003	Date Collected:	10.01.18 12.00	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	10.04.18 09.40	Basis:	Wet Weight
Seq Number:	3065325				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**348**	4.95	mg/kg	10.04.18 11.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.05.18 11.00	Basis:	Wet Weight
Seq Number:	3065664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	10.05.18 17.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	10.05.18 17.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	10.05.18 17.53	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	10.05.18 17.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.05.18 17.53	
o-Terphenyl	84-15-1	92	%	70-135	10.05.18 17.53	

Certificate of Analytical Results 601141

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	10.03.18 10.32
Lab Sample Id:	601141-003	Date Collected:	10.01.18 12.00	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.08.18 08.30	Basis:	Wet Weight
Seq Number:	3065828				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.08.18 17.05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.08.18 17.05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.08.18 17.05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.08.18 17.05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.08.18 17.05	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.08.18 17.05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.08.18 17.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	10.08.18 17.05	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.08.18 17.05	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 601141

LT Environmental, Inc.

Ross Ranch 31 Federal 1H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3065325 Matrix: Solid Date Prep: 10.04.18
MB Sample Id: 7663531-1-BLK LCS Sample Id: 7663531-1-BKS LCSD Sample Id: 7663531-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	249	100	90-110	0	20	mg/kg	10.04.18 09:50	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3065325 Matrix: Soil Date Prep: 10.04.18
Parent Sample Id: 600987-003 MS Sample Id: 600987-003 S MSD Sample Id: 600987-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.852	248	246	99	246	99	90-110	0	20	mg/kg	10.04.18 10:07	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3065325 Matrix: Soil Date Prep: 10.04.18
Parent Sample Id: 601153-002 MS Sample Id: 601153-002 S MSD Sample Id: 601153-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	98.6	250	348	100	351	101	90-110	1	20	mg/kg	10.04.18 11:26	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3065664 Matrix: Solid Date Prep: 10.05.18
MB Sample Id: 7663662-1-BLK LCS Sample Id: 7663662-1-BKS LCSD Sample Id: 7663662-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	994	99	938	94	70-135	6	20	mg/kg	10.05.18 11:21	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	1000	100	70-135	7	20	mg/kg	10.05.18 11:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		125		111		70-135	%	10.05.18 11:21
o-Terphenyl	103		110		101		70-135	%	10.05.18 11:21

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

QC Summary 601141

LT Environmental, Inc.

Ross Ranch 31 Federal 1H

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3065664 Matrix: Soil Date Prep: 10.05.18
Parent Sample Id: 601287-001 MS Sample Id: 601287-001 S MSD Sample Id: 601287-001 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)	<8.39	1050	937	89	926	88	70-135	1	20	mg/kg	10.05.18 12:19	
Diesel Range Organics (DRO)	<8.53	1050	1050	100	1060	101	70-135	1	20	mg/kg	10.05.18 12:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		108		70-135	%	10.05.18 12:19
o-Terphenyl	103		100		70-135	%	10.05.18 12:19

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3065828 Matrix: Solid Date Prep: 10.08.18
MB Sample Id: 7663817-1-BLK LCS Sample Id: 7663817-1-BKS LCSD Sample Id: 7663817-1-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	0.0958	96	0.0995	99	70-130	4	35	mg/kg	10.08.18 10:25	
Toluene	<0.00200	0.100	0.0985	99	0.102	101	70-130	3	35	mg/kg	10.08.18 10:25	
Ethylbenzene	<0.00200	0.100	0.0971	97	0.101	100	70-130	4	35	mg/kg	10.08.18 10:25	
m,p-Xylenes	<0.00401	0.200	0.187	94	0.194	96	70-130	4	35	mg/kg	10.08.18 10:25	
o-Xylene	<0.00200	0.100	0.0892	89	0.0930	92	70-130	4	35	mg/kg	10.08.18 10:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		92		93		70-130	%	10.08.18 10:25
4-Bromofluorobenzene	89		79		81		70-130	%	10.08.18 10:25

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3065910 Matrix: Solid Date Prep: 10.09.18
MB Sample Id: 7663826-1-BLK LCS Sample Id: 7663826-1-BKS LCSD Sample Id: 7663826-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.109	109	0.109	108	70-130	0	35	mg/kg	10.09.18 19:00	
Toluene	<0.00201	0.100	0.0997	100	0.0983	97	70-130	1	35	mg/kg	10.09.18 19:00	
Ethylbenzene	<0.00201	0.100	0.118	118	0.116	115	70-130	2	35	mg/kg	10.09.18 19:00	
m,p-Xylenes	<0.00402	0.201	0.235	117	0.233	115	70-130	1	35	mg/kg	10.09.18 19:00	
o-Xylene	<0.00201	0.100	0.119	119	0.117	116	70-130	2	35	mg/kg	10.09.18 19:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		103		106		70-130	%	10.09.18 19:00
4-Bromofluorobenzene	88		111		103		70-130	%	10.09.18 19:00

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

QC Summary 601141

LT Environmental, Inc.

Ross Ranch 31 Federal 1H

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

Seq Number: 3065828 Matrix: Soil Date Prep: 10.08.18

Parent Sample Id: 600814-015 MS Sample Id: 600814-015 S MSD Sample Id: 600814-015 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	0.0879	88	0.0746	75	70-130	16	35	mg/kg	10.08.18 11:06	
Toluene	<0.00200	0.0998	0.0810	81	0.0663	66	70-130	20	35	mg/kg	10.08.18 11:06	X
Ethylbenzene	<0.00200	0.0998	0.0714	72	0.0563	56	70-130	24	35	mg/kg	10.08.18 11:06	X
m,p-Xylenes	<0.00399	0.200	0.138	69	0.108	54	70-130	24	35	mg/kg	10.08.18 11:06	X
o-Xylene	<0.00200	0.0998	0.0655	66	0.0508	51	70-130	25	35	mg/kg	10.08.18 11:06	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		95		70-130	%	10.08.18 11:06
4-Bromofluorobenzene	86		83		70-130	%	10.08.18 11:06

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

Seq Number: 3065910 Matrix: Soil Date Prep: 10.09.18

Parent Sample Id: 601307-021 MS Sample Id: 601307-021 S MSD Sample Id: 601307-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0681	67	0.0683	68	70-130	0	35	mg/kg	10.09.18 19:43	X
Toluene	<0.00202	0.101	0.0607	60	0.0632	63	70-130	4	35	mg/kg	10.09.18 19:43	X
Ethylbenzene	<0.00202	0.101	0.0624	62	0.0675	67	70-130	8	35	mg/kg	10.09.18 19:43	X
m,p-Xylenes	<0.00403	0.202	0.117	58	0.125	62	70-130	7	35	mg/kg	10.09.18 19:43	X
o-Xylene	<0.00202	0.101	0.0619	61	0.0662	66	70-130	7	35	mg/kg	10.09.18 19:43	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		108		70-130	%	10.09.18 19:43
4-Bromofluorobenzene	108		107		70-130	%	10.09.18 19:43

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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www.xenco.com

Xenco Quote # | Xenco Job # 160141

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office

Company Address: 3300 N "A" St. Building 1 Unit 103 Midland, TX 79705

Email: abaker@ltenv.com Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name

Project Information

Project Name/Number: Ross Ranch 31 Federal 1H

Project Location: EDDY, NM 2RP-4973

Invoice To: XTO Energy - Kyle Littrell

PO Number:

Analytical Information

BTEX (only BTEX) 8021

TPH (DRO, GRO, MRO) 8015

Chloride 300.00

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX	TPH	Chloride	Field Comments
1	SS01	6"	10/01	11:40	S	1								X	X	X	X	
2	SS02	6"	10/01	11:50	S	1								X	X	X	X	
3	SS03	6"	10/01	12:00	S	1								X	X	X	X	
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 773582637846

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		10/02/2018 7:00	Pac Mt cooler			
2					10/2 15:30	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 0.5 Thermo. Corr. Factor 0.0

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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XENCO
PAC N MAIL
910 W PIERCE ST
CARLSBAD, NM 88220
UNITED STATES US

SHIP DATE: 02OCT18
ACTWGT: 26.00 LB
CAD: 101813706/INET4040
DIMS: 18x12x15 IN

BILL RECIPIENT

TO HOLD FOR XENCO
FEDEX EXPRESS SHIP CENTER
FEDEX SHIP CENTER
3600 COUNTY RD 1276 S
MIDLAND TX 79711
(806) 794-1296

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PO:
DEPT:

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41 MAFA

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After printing this label:
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C & G SCIENTIFIC
Client/Project
XTO ENERGY #14 JRU
Matrix
S
Sampled By
LEED
Analysis/Remarks
BTEX, TPH, Chloride
Date
8/26/14
Time
2:45
Sample ID
FCE
Weights
Jar, Cap, Jar + Sample Wt.
Wt. Water Added
Sample Received @ 4°

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/03/2018 10:32:00 AM

Work Order #: 601141

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.3
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**N/A**
#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)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 10/03/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 10/03/2018
Jessica Kramer

Analytical Report 604547

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Ross Ranch 31 Fed 1H

13-NOV-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

13-NOV-18

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

Reference: XENCO Report No(s): **604547**
Ross Ranch 31 Fed 1H
Project Address: Carlsbad, NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 604547. 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. 604547 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

Sample Cross Reference 604547

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Fed 1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS03A	S	11-01-18 15:30	2 ft	604547-001

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3069326 BTEX by EPA 8021B

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

Certificate of Analysis Summary 604547

LT Environmental, Inc., Arvada, CO

Project Name: Ross Ranch 31 Fed 1H

Project Id:
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Tue Nov-06-18 10:35 am
Report Date: 13-NOV-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	604547-001					
	Field Id:	SS03A					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Nov-01-18 15:30					
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-09-18 17:00					
	Analyzed:	Nov-11-18 00:46					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00399 0.00399					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Inorganic Anions by EPA 300	***Extracted:***	Nov-06-18 16:30					
	Analyzed:	Nov-07-18 00:16					
	Units/RL:	mg/kg RL					
Chloride		129 4.99					
TPH by SW8015 Mod	***Extracted:***	Nov-06-18 17:00					
	Analyzed:	Nov-07-18 04:32					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<14.9 14.9					
Diesel Range Organics (DRO)		<14.9 14.9					
Motor Oil Range Hydrocarbons (MRO)		<14.9 14.9					
Total TPH		<14.9 14.9					

Jessica Kramer
Project Assistant

Certificate of Analytical Results 604547

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Fed 1H

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	11.06.18 10.35
Lab Sample Id:	604547-001	Date Collected:	11.01.18 15.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.06.18 16.30	Basis:	Wet Weight
Seq Number:	3068881				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**129**	4.99	mg/kg	11.07.18 00.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.06.18 17.00	Basis:	Wet Weight
Seq Number:	3068827				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.07.18 04.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.07.18 04.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.07.18 04.32	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.07.18 04.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	11.07.18 04.32	
o-Terphenyl	84-15-1	97	%	70-135	11.07.18 04.32	

Certificate of Analytical Results 604547

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Fed 1H

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	11.06.18 10.35
Lab Sample Id:	604547-001	Date Collected:	11.01.18 15.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.09.18 17.00	Basis:	Wet Weight
Seq Number:	3069326			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.11.18 00.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.11.18 00.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.11.18 00.46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.11.18 00.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.11.18 00.46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.11.18 00.46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.11.18 00.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	74	%	70-130	11.11.18 00.46	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.11.18 00.46	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 604547

LT Environmental, Inc.

Ross Ranch 31 Fed 1H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3068881 Matrix: Solid Date Prep: 11.06.18
MB Sample Id: 7665613-1-BLK LCS Sample Id: 7665613-1-BKS LCSD Sample Id: 7665613-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	270	108	90-110	5	20	mg/kg	11.06.18 21:53	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3068881 Matrix: Soil Date Prep: 11.06.18
Parent Sample Id: 604417-001 MS Sample Id: 604417-001 S MSD Sample Id: 604417-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	206	250	460	102	440	94	90-110	4	20	mg/kg	11.06.18 23:23	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3068881 Matrix: Soil Date Prep: 11.06.18
Parent Sample Id: 604540-013 MS Sample Id: 604540-013 S MSD Sample Id: 604540-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.852	248	240	97	245	99	90-110	2	20	mg/kg	11.06.18 22:09	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3068827 Matrix: Solid Date Prep: 11.06.18
MB Sample Id: 7665644-1-BLK LCS Sample Id: 7665644-1-BKS LCSD Sample Id: 7665644-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1000	100	997	100	70-135	0	20	mg/kg	11.07.18 00:28	
Diesel Range Organics (DRO)	<8.13	1000	1060	106	1060	106	70-135	0	20	mg/kg	11.07.18 00:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		115		113		70-135	%	11.07.18 00:28
o-Terphenyl	102		98		100		70-135	%	11.07.18 00:28

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

QC Summary 604547

LT Environmental, Inc.

Ross Ranch 31 Fed 1H

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3068827 Matrix: Soil Date Prep: 11.06.18
Parent Sample Id: 604543-016 MS Sample Id: 604543-016 S MSD Sample Id: 604543-016 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)	<7.99	999	905	91	919	92	70-135	2	20	mg/kg	11.07.18 01:24	
Diesel Range Organics (DRO)	<8.12	999	1010	101	1020	102	70-135	1	20	mg/kg	11.07.18 01:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		116		70-135	%	11.07.18 01:24
o-Terphenyl	118		120		70-135	%	11.07.18 01:24

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069326 Matrix: Solid Date Prep: 11.09.18
MB Sample Id: 7665979-1-BLK LCS Sample Id: 7665979-1-BKS LCSD Sample Id: 7665979-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0835	84	0.100	100	70-130	18	35	mg/kg	11.10.18 07:49	
Toluene	<0.00199	0.0994	0.0866	87	0.0868	87	70-130	0	35	mg/kg	11.10.18 07:49	
Ethylbenzene	<0.00199	0.0994	0.110	111	0.101	101	70-130	9	35	mg/kg	11.10.18 07:49	
m,p-Xylenes	<0.00101	0.199	0.218	110	0.221	111	70-130	1	35	mg/kg	11.10.18 07:49	
o-Xylene	<0.00199	0.0994	0.0860	87	0.111	111	70-130	25	35	mg/kg	11.10.18 07:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		89		103		70-130	%	11.10.18 07:49
4-Bromofluorobenzene	70		74		74		70-130	%	11.10.18 07:49

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069326 Matrix: Soil Date Prep: 11.09.18
Parent Sample Id: 604546-001 MS Sample Id: 604546-001 S MSD Sample Id: 604546-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0771	77	0.0463	46	70-130	50	35	mg/kg	11.10.18 09:27	XF
Toluene	<0.00200	0.0998	0.0664	67	0.0406	41	70-130	48	35	mg/kg	11.10.18 09:27	XF
Ethylbenzene	<0.00200	0.0998	0.0740	74	0.0516	52	70-130	36	35	mg/kg	11.10.18 09:27	XF
m,p-Xylenes	<0.00399	0.200	0.148	74	0.101	51	70-130	38	35	mg/kg	11.10.18 09:27	XF
o-Xylene	<0.00200	0.0998	0.0769	77	0.0549	55	70-130	33	35	mg/kg	11.10.18 09:27	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		109		70-130	%	11.10.18 09:27
4-Bromofluorobenzene	77		89		70-130	%	11.10.18 09:27

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

CHAIN OF CUSTODY

Page 1 Of 1

Revision 2016.1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford, TX (281) 240-4200 | El Paso, TX (915) 585-3443 | Midland, TX (432) 704-5440 | Phoenix, AZ (480) 355-0900 | Service Center- Amarillo, TX (806)678-4514
Dallas, TX (214) 902-0300 | Lubbock, TX (806) 794-1296 | San Antonio, TX (210) 509-3334 | Service Center - Baton Rouge, LA (832) 712-8143 | Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote # | Xenco Job # 160547

Client / Reporting Information

Company Name / Branch: LTE
Company Address: Midland, Tx 79705
3300 N A Street Building 1 unit 103
Email: ABaker@LTEnv.com
Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Garrett Green

Project Information

Project Name/Number: Ross Ranch 31 Fed 1H
Project Location: Carlsbad, NM
Invoice To: XTO / Kyle Littrell
PO Number: 2RP-4973

Analytical Information

BTEX 8015 (Only BTEX) | TPH (MRO, GRO, DRO) 6021 | Chlorides (300.00)

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX	TPH	Chlorides	Field Comments
1	SS03A	2'	11/1/18	1530	S	1								X	X	X	X	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

11/2/18

Turnaround Time (Business days)

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

Data Deliverable Information

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

Notes:

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

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1	Garrett Green	11/2/18 1630	1			
2				2	11/5/18 532	2 11/6/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4 1035
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. 0.3 / Thermo. Corr. Factor 0.0

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 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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

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

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/06/2018 10:35:00 AM

Work Order #: 604547

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 11/06/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/06/2018
Jessica Kramer

Analytical Report 605308

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU Ross Ranch 31 Federal 1H

21-NOV-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

21-NOV-18

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

Reference: XENCO Report No(s): **605308**
PLU Ross Ranch 31 Federal 1H
Project Address: Eddy. NM 2RP-4973

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 605308. 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. 605308 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	11-09-18 12:18	1 ft	605308-001
FS02	S	11-09-18 12:25	1 ft	605308-002
FS03	S	11-09-18 12:30	1 ft	605308-003
FS04	S	11-09-18 15:40	2 ft	605308-004
FS05	S	11-09-18 12:38	1 ft	605308-005
FS06	S	11-09-18 12:40	1 ft	605308-006
FS07	S	11-09-18 12:45	1 ft	605308-007
FS08	S	11-09-18 12:50	1 ft	605308-008
FS09	S	11-09-18 12:55	1 ft	605308-009
FS10	S	11-09-18 13:07	1 ft	605308-010
FS11	S	11-09-18 13:10	2 ft	605308-011
FS12	S	11-09-18 16:10	2 ft	605308-012
FS13	S	11-09-18 13:20	1.5 ft	605308-013
FS14	S	11-09-18 13:25	1.5 ft	605308-014
FS15	S	11-09-18 13:30	1.5 ft	605308-015
FS16	S	11-09-18 13:35	1.5 ft	605308-016
FS17	S	11-09-18 16:20	2.5 ft	605308-017
FS18	S	11-09-18 16:30	2.5 ft	605308-018
FS19	S	11-09-18 13:50	2 ft	605308-019
FS20	S	11-09-18 14:00	1.5 ft	605308-020
FS21	S	11-09-18 14:05	3 ft	605308-021
FS22	S	11-09-18 16:35	2.5 ft	605308-022
FS23	S	11-09-18 16:40	2.5 ft	605308-023
FS24	S	11-09-18 16:45	2.0 ft	605308-024
FS25	S	11-09-18 14:25	2.0 ft	605308-025
FS26	S	11-09-18 14:30	2.0 ft	605308-026
FS27	S	11-09-18 16:55	2.0 ft	605308-027
FS28	S	11-09-18 14:40	2 ft	605308-028
FS29	S	11-09-18 14:45	2 ft	605308-029
FS30	S	11-09-18 14:50	2 ft	605308-030
FS31	S	11-09-18 14:55	2 ft	605308-031
FS32	S	11-09-18 15:00	2 ft	605308-032
FS33	S	11-09-18 15:05	2 ft	605308-033
FS34	S	11-09-18 15:10	2 ft	605308-034
SW01	S	11-09-18 17:15	6 In	605308-035
SW02	S	11-09-18 12:00	1 ft	605308-036
SW03	S	11-09-18 12:10	1.5 ft	605308-037
SW04	S	11-09-18 17:00	1.5 ft	605308-038
SW05	S	11-09-18 17:05	1.5 ft	605308-039

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU Ross Ranch 31 Federal 1H

Project ID:
Work Order Number(s): *605308*

Report Date: *21-NOV-18*
Date Received: *11/13/2018*

Sample receipt non conformances and comments:

Corrected sample depth for sample 039 (SW05) from 1-5ft to 1.5ft. JKR 11/21/18

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3069671 Inorganic Anions by EPA 300
Lab Sample ID 605308-012 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: 605308-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3069674 Inorganic Anions by EPA 300
Lab Sample ID 605308-031 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 605308-021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3069835 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 605308-006.

Batch: LBA-3070018 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 21-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605308-001		605308-002		605308-003		605308-004		605308-005		605308-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	1- ft		1- ft		1- ft		2- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-18 12:18		Nov-09-18 12:25		Nov-09-18 12:30		Nov-09-18 15:40		Nov-09-18 12:38		Nov-09-18 12:40	
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
	Analyzed:	Nov-16-18 00:28		Nov-16-18 02:05		Nov-16-18 02:29		Nov-16-18 02:53		Nov-16-18 03:17		Nov-16-18 03:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0173	0.0173	<0.0195	0.0195	<0.0190	0.0190	<0.0198	0.0198	<0.0199	0.0199	<0.0180	0.0180
Toluene		<0.0173	0.0173	<0.0195	0.0195	<0.0190	0.0190	<0.0198	0.0198	<0.0199	0.0199	<0.0180	0.0180
Ethylbenzene		<0.0173	0.0173	<0.0195	0.0195	<0.0190	0.0190	<0.0198	0.0198	<0.0199	0.0199	0.124	0.0180
m,p-Xylenes		<0.0347	0.0347	<0.0390	0.0390	<0.0381	0.0381	<0.0396	0.0396	<0.0398	0.0398	0.306	0.0360
o-Xylene		<0.0173	0.0173	<0.0195	0.0195	<0.0190	0.0190	<0.0198	0.0198	<0.0199	0.0199	0.227	0.0180
Total Xylenes		<0.0173	0.0173	<0.0195	0.0195	<0.0190	0.0190	<0.0198	0.0198	<0.0199	0.0199	0.533	0.0180
Total BTEX		<0.0173	0.0173	<0.0195	0.0195	<0.0190	0.0190	<0.0198	0.0198	<0.0199	0.0199	0.657	0.0180
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40	
	Analyzed:	Nov-14-18 18:05		Nov-14-18 18:12		Nov-14-18 18:18		Nov-14-18 17:47		Nov-14-18 18:24		Nov-14-18 18:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1720	25.0	1840	25.0	2430	24.9	175	4.98	1630	24.9	854	24.8
TPH by SW8015 Mod	***Extracted:***	Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00	
	Analyzed:	Nov-14-18 11:10		Nov-14-18 12:09		Nov-14-18 12:28		Nov-14-18 12:48		Nov-14-18 13:08		Nov-14-18 13:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	18.4	14.9
Diesel Range Organics (DRO)		29.7	15.0	105	15.0	40.1	15.0	<15.0	15.0	<15.0	15.0	127	14.9
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	21.1	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		29.7	15.0	126	15.0	40.1	15.0	<15.0	15.0	<15.0	15.0	145	14.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:

Contact: Adrian Baker

Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm

Report Date: 21-NOV-18

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605308-007		605308-008		605308-009		605308-010		605308-011		605308-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	1- ft		1- ft		1- ft		1- ft		2- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-18 12:45		Nov-09-18 12:50		Nov-09-18 12:55		Nov-09-18 13:07		Nov-09-18 13:10		Nov-09-18 16:10	
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
	Analyzed:	Nov-16-18 04:06		Nov-16-18 04:30		Nov-16-18 04:54		Nov-16-18 05:18		Nov-16-18 06:30		Nov-16-18 06:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0189	0.0189	<0.0198	0.0198	<0.0195	0.0195	<0.0200	0.0200	<0.0198	0.0198	<0.0185	0.0185
Toluene		<0.0189	0.0189	<0.0198	0.0198	<0.0195	0.0195	<0.0200	0.0200	<0.0198	0.0198	<0.0185	0.0185
Ethylbenzene		0.0189	0.0189	<0.0198	0.0198	<0.0195	0.0195	<0.0200	0.0200	<0.0198	0.0198	0.0203	0.0185
m,p-Xylenes		<0.0377	0.0377	<0.0395	0.0395	<0.0390	0.0390	<0.0400	0.0400	<0.0396	0.0396	<0.0369	0.0369
o-Xylene		<0.0189	0.0189	<0.0198	0.0198	<0.0195	0.0195	<0.0200	0.0200	<0.0198	0.0198	0.0387	0.0185
Total Xylenes		<0.0189	0.0189	<0.0198	0.0198	<0.0195	0.0195	<0.0200	0.0200	<0.0198	0.0198	0.0387	0.0185
Total BTEX		0.0189	0.0189	<0.0198	0.0198	<0.0195	0.0195	<0.0200	0.0200	<0.0198	0.0198	0.0590	0.0185
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40	
	Analyzed:	Nov-14-18 18:49		Nov-14-18 18:55		Nov-14-18 19:01		Nov-14-18 19:07		Nov-14-18 19:32		Nov-14-18 19:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2240	24.9	2730	24.9	1270	24.8	2520	24.9	773	24.9	859	4.95
TPH by SW8015 Mod	***Extracted:***	Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00	
	Analyzed:	Nov-14-18 13:47		Nov-14-18 14:07		Nov-14-18 14:27		Nov-14-18 14:47		Nov-14-18 15:47		Nov-14-18 16:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		30.9	15.0	46.5	14.9	<15.0	15.0	58.0	15.0	126	15.0	16.1	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		30.9	15.0	46.5	14.9	<15.0	15.0	58.0	15.0	126	15.0	16.1	15.0

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 21-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605308-013		605308-014		605308-015		605308-016		605308-017		605308-018	
	Field Id:	FS13		FS14		FS15		FS16		FS17		FS18	
	Depth:	1.5- ft		1.5- ft		1.5- ft		1.5- ft		2.5- ft		2.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-18 13:20		Nov-09-18 13:25		Nov-09-18 13:30		Nov-09-18 13:35		Nov-09-18 16:20		Nov-09-18 16:30	
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
	Analyzed:	Nov-16-18 07:19		Nov-16-18 07:43		Nov-16-18 08:07		Nov-16-18 08:31		Nov-16-18 08:56		Nov-16-18 09:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0182	0.0182	<0.0187	0.0187	<0.0193	0.0193	<0.0192	0.0192	<0.0193	0.0193	<0.0186	0.0186
Toluene		<0.0182	0.0182	<0.0187	0.0187	<0.0193	0.0193	<0.0192	0.0192	<0.0193	0.0193	<0.0186	0.0186
Ethylbenzene		<0.0182	0.0182	<0.0187	0.0187	<0.0193	0.0193	<0.0192	0.0192	<0.0193	0.0193	<0.0186	0.0186
m,p-Xylenes		<0.0364	0.0364	<0.0374	0.0374	<0.0385	0.0385	<0.0384	0.0384	<0.0385	0.0385	<0.0372	0.0372
o-Xylene		<0.0182	0.0182	<0.0187	0.0187	<0.0193	0.0193	<0.0192	0.0192	<0.0193	0.0193	<0.0186	0.0186
Total Xylenes		<0.0182	0.0182	<0.0187	0.0187	<0.0193	0.0193	<0.0192	0.0192	<0.0193	0.0193	<0.0186	0.0186
Total BTEX		<0.0182	0.0182	<0.0187	0.0187	<0.0193	0.0193	<0.0192	0.0192	<0.0193	0.0193	<0.0186	0.0186
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 14:40	
	Analyzed:	Nov-14-18 19:38		Nov-14-18 19:57		Nov-14-18 20:03		Nov-14-18 20:09		Nov-14-18 20:15		Nov-14-18 20:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1350	24.9	1020	5.00	1300	24.9	865	5.01	787	4.95	307	5.01
TPH by SW8015 Mod	***Extracted:***	Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00		Nov-14-18 09:00	
	Analyzed:	Nov-14-18 16:27		Nov-14-18 16:47		Nov-14-18 17:07		Nov-14-18 17:27		Nov-14-18 17:47		Nov-14-18 18:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics (DRO)		172	14.9	102	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Motor Oil Range Hydrocarbons (MRO)		22.2	14.9	15.1	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		194	14.9	117	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 21-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605308-019		605308-020		605308-021		605308-022		605308-023		605308-024	
	Field Id:	FS19		FS20		FS21		FS22		FS23		FS24	
	Depth:	2- ft		1.5- ft		3- ft		2.5- ft		2.5- ft		2.0- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-18 13:50		Nov-09-18 14:00		Nov-09-18 14:05		Nov-09-18 16:35		Nov-09-18 16:40		Nov-09-18 16:45	
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
	Analyzed:	Nov-16-18 09:46		Nov-16-18 10:10		Nov-16-18 13:22		Nov-16-18 14:59		Nov-16-18 15:35		Nov-16-18 15:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0188	0.0188	<0.0191	0.0191	<0.0189	0.0189	<0.0182	0.0182	<0.0182	0.0182	<0.0192	0.0192
Toluene		<0.0188	0.0188	<0.0191	0.0191	<0.0189	0.0189	<0.0182	0.0182	<0.0182	0.0182	<0.0192	0.0192
Ethylbenzene		<0.0188	0.0188	<0.0191	0.0191	<0.0189	0.0189	<0.0182	0.0182	<0.0182	0.0182	<0.0192	0.0192
m,p-Xylenes		<0.0377	0.0377	<0.0382	0.0382	<0.0377	0.0377	<0.0365	0.0365	<0.0364	0.0364	<0.0383	0.0383
o-Xylene		<0.0188	0.0188	<0.0191	0.0191	<0.0189	0.0189	<0.0182	0.0182	<0.0182	0.0182	<0.0192	0.0192
Total Xylenes		<0.0188	0.0188	<0.0191	0.0191	<0.0189	0.0189	<0.0182	0.0182	<0.0182	0.0182	<0.0192	0.0192
Total BTEX		<0.0188	0.0188	<0.0191	0.0191	<0.0189	0.0189	<0.0182	0.0182	<0.0182	0.0182	<0.0192	0.0192
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 14:40		Nov-14-18 14:40		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00	
	Analyzed:	Nov-14-18 20:28		Nov-14-18 20:34		Nov-14-18 21:29		Nov-14-18 21:11		Nov-14-18 21:36		Nov-14-18 21:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2250	25.1	827	4.95	1510	24.8	658	4.95	1080	5.00	305	4.95
TPH by SW8015 Mod	***Extracted:***	Nov-14-18 09:00		Nov-14-18 09:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00	
	Analyzed:	Nov-14-18 18:27		Nov-14-18 18:47		Nov-13-18 22:53		Nov-13-18 23:52		Nov-14-18 00:11		Nov-14-18 00:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics (DRO)		17.1	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	71.8	15.0	<14.9	14.9
Motor Oil Range Hydrocarbons (MRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		17.1	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	71.8	15.0	<14.9	14.9

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 21-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605308-025		605308-026		605308-027		605308-028		605308-029		605308-030	
	Field Id:	FS25		FS26		FS27		FS28		FS29		FS30	
	Depth:	2.0- ft		2.0- ft		2.0- ft		2- ft		2- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-18 14:25		Nov-09-18 14:30		Nov-09-18 16:55		Nov-09-18 14:40		Nov-09-18 14:45		Nov-09-18 14:50	
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
	Analyzed:	Nov-16-18 16:24		Nov-16-18 16:48		Nov-16-18 17:13		Nov-16-18 17:37		Nov-16-18 18:11		Nov-16-18 18:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0183	0.0183	<0.0183	0.0183	<0.0197	0.0197	<0.0196	0.0196	<0.0190	0.0190	<0.0196	0.0196
Toluene		<0.0183	0.0183	<0.0183	0.0183	<0.0197	0.0197	<0.0196	0.0196	<0.0190	0.0190	<0.0196	0.0196
Ethylbenzene		<0.0183	0.0183	<0.0183	0.0183	<0.0197	0.0197	<0.0196	0.0196	<0.0190	0.0190	<0.0196	0.0196
m,p-Xylenes		<0.0366	0.0366	<0.0366	0.0366	<0.0394	0.0394	<0.0392	0.0392	<0.0380	0.0380	<0.0392	0.0392
o-Xylene		<0.0183	0.0183	<0.0183	0.0183	<0.0197	0.0197	<0.0196	0.0196	<0.0190	0.0190	<0.0196	0.0196
Total Xylenes		<0.0183	0.0183	<0.0183	0.0183	<0.0197	0.0197	<0.0196	0.0196	<0.0190	0.0190	<0.0196	0.0196
Total BTEX		<0.0183	0.0183	<0.0183	0.0183	<0.0197	0.0197	<0.0196	0.0196	<0.0190	0.0190	<0.0196	0.0196
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00	
	Analyzed:	Nov-14-18 21:48		Nov-14-18 22:06		Nov-14-18 22:13		Nov-14-18 22:19		Nov-14-18 22:25		Nov-14-18 22:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1340	25.0	2020	24.9	865	5.00	839	5.00	475	4.97	544	4.98
TPH by SW8015 Mod	***Extracted:***	Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00	
	Analyzed:	Nov-14-18 00:51		Nov-14-18 01:10		Nov-14-18 01:30		Nov-14-18 01:49		Nov-14-18 02:09		Nov-14-18 02:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<14.9	14.9	<15.0	15.0	41.1	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<14.9	14.9	<15.0	15.0	41.1	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 21-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605308-031		605308-032		605308-033		605308-034		605308-035		605308-036	
	Field Id:	FS31		FS32		FS33		FS34		SW01		SW02	
	Depth:	2- ft		2- ft		2- ft		2- ft		6- In		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-18 14:55		Nov-09-18 15:00		Nov-09-18 15:05		Nov-09-18 15:10		Nov-09-18 17:15		Nov-09-18 12:00	
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
	Analyzed:	Nov-16-18 19:47		Nov-16-18 20:12		Nov-16-18 20:36		Nov-16-18 21:00		Nov-16-18 21:24		Nov-16-18 21:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0191	0.0191	<0.0198	0.0198	<0.0189	0.0189	<0.0181	0.0181	<0.0200	0.0200	<0.0200	0.0200
Toluene		<0.0191	0.0191	<0.0198	0.0198	<0.0189	0.0189	<0.0181	0.0181	<0.0200	0.0200	<0.0200	0.0200
Ethylbenzene		<0.0191	0.0191	<0.0198	0.0198	<0.0189	0.0189	<0.0181	0.0181	<0.0200	0.0200	<0.0200	0.0200
m,p-Xylenes		<0.0382	0.0382	<0.0396	0.0396	<0.0377	0.0377	<0.0362	0.0362	<0.0400	0.0400	<0.0400	0.0400
o-Xylene		<0.0191	0.0191	<0.0198	0.0198	<0.0189	0.0189	<0.0181	0.0181	<0.0200	0.0200	<0.0200	0.0200
Total Xylenes		<0.0191	0.0191	<0.0198	0.0198	<0.0189	0.0189	<0.0181	0.0181	<0.0200	0.0200	<0.0200	0.0200
Total BTEX		<0.0191	0.0191	<0.0198	0.0198	<0.0189	0.0189	<0.0181	0.0181	<0.0200	0.0200	<0.0200	0.0200
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00	
	Analyzed:	Nov-14-18 22:37		Nov-14-18 22:56		Nov-14-18 23:02		Nov-14-18 23:21		Nov-14-18 23:27		Nov-14-18 23:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		312	4.98	2030	25.0	1650	25.0	916	4.95	1590	25.0	2240	25.2
TPH by SW8015 Mod	***Extracted:***	Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00	
	Analyzed:	Nov-14-18 03:27		Nov-14-18 03:46		Nov-14-18 04:06		Nov-14-18 04:26		Nov-14-18 04:45		Nov-14-18 05:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	15.3	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	15.3	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0

Certificate of Analysis Summary 605308

LT Environmental, Inc., Arvada, CO

Project Name: PLU Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 21-NOV-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	605308-037		605308-038		605308-039			
	Field Id:	SW03		SW04		SW05			
	Depth:	1.5- ft		1.5- ft		1.5- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Nov-09-18 12:10		Nov-09-18 17:00		Nov-09-18 17:05			
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45			
	Analyzed:	Nov-16-18 22:12		Nov-16-18 22:37		Nov-16-18 23:01			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.0189	0.0189	<0.0194	0.0194	<0.0187	0.0187		
Toluene		<0.0189	0.0189	<0.0194	0.0194	<0.0187	0.0187		
Ethylbenzene		<0.0189	0.0189	<0.0194	0.0194	<0.0187	0.0187		
m,p-Xylenes		<0.0377	0.0377	<0.0388	0.0388	<0.0374	0.0374		
o-Xylene		<0.0189	0.0189	<0.0194	0.0194	<0.0187	0.0187		
Total Xylenes		<0.0189	0.0189	<0.0194	0.0194	<0.0187	0.0187		
Total BTEX		<0.0189	0.0189	<0.0194	0.0194	<0.0187	0.0187		
Inorganic Anions by EPA 300	***Extracted:***	Nov-14-18 13:00		Nov-14-18 13:00		Nov-14-18 13:00			
	Analyzed:	Nov-14-18 23:39		Nov-14-18 23:45		Nov-14-18 23:51			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		1650	25.0	4620	49.6	3680	25.0		
TPH by SW8015 Mod	***Extracted:***	Nov-13-18 16:00		Nov-13-18 16:00		Nov-13-18 16:00			
	Analyzed:	Nov-14-18 05:24		Nov-14-18 05:43		Nov-14-18 06:02			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0		
Diesel Range Organics (DRO)		<15.0	15.0	226	14.9	229	15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	24.2	14.9	23.1	15.0		
Total TPH		<15.0	15.0	250	14.9	252	15.0		

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-001	Date Collected:	11.09.18 12.18	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1720**	25.0	mg/kg	11.14.18 18.05		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 11.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	**29.7**	15.0	mg/kg	11.14.18 11.10		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 11.10	U	1
Total TPH	PHC635	**29.7**	15.0	mg/kg	11.14.18 11.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	11.14.18 11.10	
o-Terphenyl	84-15-1	88	%	70-135	11.14.18 11.10	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-001	Date Collected:	11.09.18 12.18	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0173	0.0173	mg/kg	11.16.18 00.28	U	1
Toluene	108-88-3	<0.0173	0.0173	mg/kg	11.16.18 00.28	U	1
Ethylbenzene	100-41-4	<0.0173	0.0173	mg/kg	11.16.18 00.28	U	1
m,p-Xylenes	179601-23-1	<0.0347	0.0347	mg/kg	11.16.18 00.28	U	1
o-Xylene	95-47-6	<0.0173	0.0173	mg/kg	11.16.18 00.28	U	1
Total Xylenes	1330-20-7	<0.0173	0.0173	mg/kg	11.16.18 00.28	U	1
Total BTEX		<0.0173	0.0173	mg/kg	11.16.18 00.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	11.16.18 00.28	
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.16.18 00.28	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-002	Date Collected:	11.09.18 12.25	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1840**	25.0	mg/kg	11.14.18 18.12		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 12.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	**105**	15.0	mg/kg	11.14.18 12.09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**21.1**	15.0	mg/kg	11.14.18 12.09		1
Total TPH	PHC635	**126**	15.0	mg/kg	11.14.18 12.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 12.09	
o-Terphenyl	84-15-1	95	%	70-135	11.14.18 12.09	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-002	Date Collected:	11.09.18 12.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0195	0.0195	mg/kg	11.16.18 02.05	U	1
Toluene	108-88-3	<0.0195	0.0195	mg/kg	11.16.18 02.05	U	1
Ethylbenzene	100-41-4	<0.0195	0.0195	mg/kg	11.16.18 02.05	U	1
m,p-Xylenes	179601-23-1	<0.0390	0.0390	mg/kg	11.16.18 02.05	U	1
o-Xylene	95-47-6	<0.0195	0.0195	mg/kg	11.16.18 02.05	U	1
Total Xylenes	1330-20-7	<0.0195	0.0195	mg/kg	11.16.18 02.05	U	1
Total BTEX		<0.0195	0.0195	mg/kg	11.16.18 02.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	68-120	11.16.18 02.05	
a,a,a-Trifluorotoluene	98-08-8	107	%	71-121	11.16.18 02.05	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-003	Date Collected:	11.09.18 12.30	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2430**	24.9	mg/kg	11.14.18 18.18		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 12.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	**40.1**	15.0	mg/kg	11.14.18 12.28		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 12.28	U	1
Total TPH	PHC635	**40.1**	15.0	mg/kg	11.14.18 12.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 12.28	
o-Terphenyl	84-15-1	92	%	70-135	11.14.18 12.28	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-003	Date Collected:	11.09.18 12.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0190	0.0190	mg/kg	11.16.18 02.29	U	1
Toluene	108-88-3	<0.0190	0.0190	mg/kg	11.16.18 02.29	U	1
Ethylbenzene	100-41-4	<0.0190	0.0190	mg/kg	11.16.18 02.29	U	1
m,p-Xylenes	179601-23-1	<0.0381	0.0381	mg/kg	11.16.18 02.29	U	1
o-Xylene	95-47-6	<0.0190	0.0190	mg/kg	11.16.18 02.29	U	1
Total Xylenes	1330-20-7	<0.0190	0.0190	mg/kg	11.16.18 02.29	U	1
Total BTEX		<0.0190	0.0190	mg/kg	11.16.18 02.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	68-120	11.16.18 02.29	
a,a,a-Trifluorotoluene	98-08-8	88	%	71-121	11.16.18 02.29	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-004	Date Collected:	11.09.18 15.40	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**175**	4.98	mg/kg	11.14.18 17.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 12.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 12.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 12.48	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 12.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 12.48	
o-Terphenyl	84-15-1	92	%	70-135	11.14.18 12.48	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-004	Date Collected:	11.09.18 15.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.16.18 02.53	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.16.18 02.53	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.16.18 02.53	U	1
m,p-Xylenes	179601-23-1	<0.0396	0.0396	mg/kg	11.16.18 02.53	U	1
o-Xylene	95-47-6	<0.0198	0.0198	mg/kg	11.16.18 02.53	U	1
Total Xylenes	1330-20-7	<0.0198	0.0198	mg/kg	11.16.18 02.53	U	1
Total BTEX		<0.0198	0.0198	mg/kg	11.16.18 02.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	68-120	11.16.18 02.53	
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.16.18 02.53	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-005	Date Collected:	11.09.18 12.38	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1630**	24.9	mg/kg	11.14.18 18.24		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 13.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 13.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 13.08	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 13.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 13.08	
o-Terphenyl	84-15-1	93	%	70-135	11.14.18 13.08	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-005	Date Collected:	11.09.18 12.38	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0199	0.0199	mg/kg	11.16.18 03.17	U	1
Toluene	108-88-3	<0.0199	0.0199	mg/kg	11.16.18 03.17	U	1
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	11.16.18 03.17	U	1
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	11.16.18 03.17	U	1
o-Xylene	95-47-6	<0.0199	0.0199	mg/kg	11.16.18 03.17	U	1
Total Xylenes	1330-20-7	<0.0199	0.0199	mg/kg	11.16.18 03.17	U	1
Total BTEX		<0.0199	0.0199	mg/kg	11.16.18 03.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	11.16.18 03.17	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	11.16.18 03.17	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-006	Date Collected:	11.09.18 12.40	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**854**	24.8	mg/kg	11.14.18 18.43		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**18.4**	14.9	mg/kg	11.14.18 13.27		1
Diesel Range Organics (DRO)	C10C28DRO	**127**	14.9	mg/kg	11.14.18 13.27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 13.27	U	1
Total TPH	PHC635	**145**	14.9	mg/kg	11.14.18 13.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	11.14.18 13.27	
o-Terphenyl	84-15-1	90	%	70-135	11.14.18 13.27	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-006	Date Collected:	11.09.18 12.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0180	0.0180	mg/kg	11.16.18 03.42	U	1
Toluene	108-88-3	<0.0180	0.0180	mg/kg	11.16.18 03.42	U	1
Ethylbenzene	100-41-4	**0.124**	0.0180	mg/kg	11.16.18 03.42		1
m,p-Xylenes	179601-23-1	**0.306**	0.0360	mg/kg	11.16.18 03.42		1
o-Xylene	95-47-6	**0.227**	0.0180	mg/kg	11.16.18 03.42		1
Total Xylenes	1330-20-7	**0.533**	0.0180	mg/kg	11.16.18 03.42		1
Total BTEX		**0.657**	0.0180	mg/kg	11.16.18 03.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	137	%	68-120	11.16.18 03.42	**
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.16.18 03.42	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-007	Date Collected:	11.09.18 12.45	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2240**	24.9	mg/kg	11.14.18 18.49		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 13.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**30.9**	15.0	mg/kg	11.14.18 13.47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 13.47	U	1
Total TPH	PHC635	**30.9**	15.0	mg/kg	11.14.18 13.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	11.14.18 13.47	
o-Terphenyl	84-15-1	103	%	70-135	11.14.18 13.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-007	Date Collected:	11.09.18 12.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	11.16.18 04.06	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	11.16.18 04.06	U	1
Ethylbenzene	100-41-4	**0.0189**	0.0189	mg/kg	11.16.18 04.06		1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	11.16.18 04.06	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	11.16.18 04.06	U	1
Total Xylenes	1330-20-7	<0.0189	0.0189	mg/kg	11.16.18 04.06	U	1
Total BTEX		**0.0189**	0.0189	mg/kg	11.16.18 04.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	68-120	11.16.18 04.06	
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.16.18 04.06	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-008	Date Collected:	11.09.18 12.50	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2730**	24.9	mg/kg	11.14.18 18.55		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 14.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	**46.5**	14.9	mg/kg	11.14.18 14.07		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 14.07	U	1
Total TPH	PHC635	**46.5**	14.9	mg/kg	11.14.18 14.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.14.18 14.07	
o-Terphenyl	84-15-1	89	%	70-135	11.14.18 14.07	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-008	Date Collected:	11.09.18 12.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.16.18 04.30	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.16.18 04.30	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.16.18 04.30	U	1
m,p-Xylenes	179601-23-1	<0.0395	0.0395	mg/kg	11.16.18 04.30	U	1
o-Xylene	95-47-6	<0.0198	0.0198	mg/kg	11.16.18 04.30	U	1
Total Xylenes	1330-20-7	<0.0198	0.0198	mg/kg	11.16.18 04.30	U	1
Total BTEX		<0.0198	0.0198	mg/kg	11.16.18 04.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	68-120	11.16.18 04.30	
a,a,a-Trifluorotoluene	98-08-8	88	%	71-121	11.16.18 04.30	

Certificate of Analytical Results 605308

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PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-009	Date Collected:	11.09.18 12.55	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1270**	24.8	mg/kg	11.14.18 19.01		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 14.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 14.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 14.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 14.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.14.18 14.27	
o-Terphenyl	84-15-1	89	%	70-135	11.14.18 14.27	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-009	Date Collected:	11.09.18 12.55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0195	0.0195	mg/kg	11.16.18 04.54	U	1
Toluene	108-88-3	<0.0195	0.0195	mg/kg	11.16.18 04.54	U	1
Ethylbenzene	100-41-4	<0.0195	0.0195	mg/kg	11.16.18 04.54	U	1
m,p-Xylenes	179601-23-1	<0.0390	0.0390	mg/kg	11.16.18 04.54	U	1
o-Xylene	95-47-6	<0.0195	0.0195	mg/kg	11.16.18 04.54	U	1
Total Xylenes	1330-20-7	<0.0195	0.0195	mg/kg	11.16.18 04.54	U	1
Total BTEX		<0.0195	0.0195	mg/kg	11.16.18 04.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	68-120	11.16.18 04.54	
a,a,a-Trifluorotoluene	98-08-8	111	%	71-121	11.16.18 04.54	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-010	Date Collected:	11.09.18 13.07	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2520**	24.9	mg/kg	11.14.18 19.07		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 14.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**58.0**	15.0	mg/kg	11.14.18 14.47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 14.47	U	1
Total TPH	PHC635	**58.0**	15.0	mg/kg	11.14.18 14.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.14.18 14.47	
o-Terphenyl	84-15-1	105	%	70-135	11.14.18 14.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-010	Date Collected:	11.09.18 13.07	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	11.16.18 05.18	U	1
Toluene	108-88-3	<0.0200	0.0200	mg/kg	11.16.18 05.18	U	1
Ethylbenzene	100-41-4	<0.0200	0.0200	mg/kg	11.16.18 05.18	U	1
m,p-Xylenes	179601-23-1	<0.0400	0.0400	mg/kg	11.16.18 05.18	U	1
o-Xylene	95-47-6	<0.0200	0.0200	mg/kg	11.16.18 05.18	U	1
Total Xylenes	1330-20-7	<0.0200	0.0200	mg/kg	11.16.18 05.18	U	1
Total BTEX		<0.0200	0.0200	mg/kg	11.16.18 05.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	68-120	11.16.18 05.18	
a,a,a-Trifluorotoluene	98-08-8	88	%	71-121	11.16.18 05.18	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-011	Date Collected:	11.09.18 13.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**773**	24.9	mg/kg	11.14.18 19.32		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 15.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**126**	15.0	mg/kg	11.14.18 15.47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 15.47	U	1
Total TPH	PHC635	**126**	15.0	mg/kg	11.14.18 15.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	11.14.18 15.47	
o-Terphenyl	84-15-1	89	%	70-135	11.14.18 15.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-011	Date Collected:	11.09.18 13.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.16.18 06.30	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.16.18 06.30	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.16.18 06.30	U	1
m,p-Xylenes	179601-23-1	<0.0396	0.0396	mg/kg	11.16.18 06.30	U	1
o-Xylene	95-47-6	<0.0198	0.0198	mg/kg	11.16.18 06.30	U	1
Total Xylenes	1330-20-7	<0.0198	0.0198	mg/kg	11.16.18 06.30	U	1
Total BTEX		<0.0198	0.0198	mg/kg	11.16.18 06.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	68-120	11.16.18 06.30	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	11.16.18 06.30	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-012	Date Collected:	11.09.18 16.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**859**	4.95	mg/kg	11.14.18 19.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 16.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	**16.1**	15.0	mg/kg	11.14.18 16.07		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 16.07	U	1
Total TPH	PHC635	**16.1**	15.0	mg/kg	11.14.18 16.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	11.14.18 16.07	
o-Terphenyl	84-15-1	86	%	70-135	11.14.18 16.07	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-012	Date Collected:	11.09.18 16.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	11.16.18 06.55	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	11.16.18 06.55	U	1
Ethylbenzene	100-41-4	**0.0203**	0.0185	mg/kg	11.16.18 06.55		1
m,p-Xylenes	179601-23-1	<0.0369	0.0369	mg/kg	11.16.18 06.55	U	1
o-Xylene	95-47-6	**0.0387**	0.0185	mg/kg	11.16.18 06.55		1
Total Xylenes	1330-20-7	**0.0387**	0.0185	mg/kg	11.16.18 06.55		1
Total BTEX		**0.0590**	0.0185	mg/kg	11.16.18 06.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	68-120	11.16.18 06.55	
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	11.16.18 06.55	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-013	Date Collected:	11.09.18 13.20	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1350**	24.9	mg/kg	11.14.18 19.38		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 16.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	**172**	14.9	mg/kg	11.14.18 16.27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**22.2**	14.9	mg/kg	11.14.18 16.27		1
Total TPH	PHC635	**194**	14.9	mg/kg	11.14.18 16.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.14.18 16.27	
o-Terphenyl	84-15-1	91	%	70-135	11.14.18 16.27	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-013	Date Collected:	11.09.18 13.20	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0182	0.0182	mg/kg	11.16.18 07.19	U	1
Toluene	108-88-3	<0.0182	0.0182	mg/kg	11.16.18 07.19	U	1
Ethylbenzene	100-41-4	<0.0182	0.0182	mg/kg	11.16.18 07.19	U	1
m,p-Xylenes	179601-23-1	<0.0364	0.0364	mg/kg	11.16.18 07.19	U	1
o-Xylene	95-47-6	<0.0182	0.0182	mg/kg	11.16.18 07.19	U	1
Total Xylenes	1330-20-7	<0.0182	0.0182	mg/kg	11.16.18 07.19	U	1
Total BTEX		<0.0182	0.0182	mg/kg	11.16.18 07.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	68-120	11.16.18 07.19	
a,a,a-Trifluorotoluene	98-08-8	110	%	71-121	11.16.18 07.19	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-014	Date Collected:	11.09.18 13.25	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1020**	5.00	mg/kg	11.14.18 19.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 16.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**102**	15.0	mg/kg	11.14.18 16.47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**15.1**	15.0	mg/kg	11.14.18 16.47		1
Total TPH	PHC635	**117**	15.0	mg/kg	11.14.18 16.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.14.18 16.47	
o-Terphenyl	84-15-1	87	%	70-135	11.14.18 16.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-014	Date Collected:	11.09.18 13.25	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0187	0.0187	mg/kg	11.16.18 07.43	U	1
Toluene	108-88-3	<0.0187	0.0187	mg/kg	11.16.18 07.43	U	1
Ethylbenzene	100-41-4	<0.0187	0.0187	mg/kg	11.16.18 07.43	U	1
m,p-Xylenes	179601-23-1	<0.0374	0.0374	mg/kg	11.16.18 07.43	U	1
o-Xylene	95-47-6	<0.0187	0.0187	mg/kg	11.16.18 07.43	U	1
Total Xylenes	1330-20-7	<0.0187	0.0187	mg/kg	11.16.18 07.43	U	1
Total BTEX		<0.0187	0.0187	mg/kg	11.16.18 07.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	68-120	11.16.18 07.43	
a,a,a-Trifluorotoluene	98-08-8	88	%	71-121	11.16.18 07.43	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-015	Date Collected:	11.09.18 13.30	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1300**	24.9	mg/kg	11.14.18 20.03		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 17.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 17.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 17.07	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 17.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	11.14.18 17.07	
o-Terphenyl	84-15-1	95	%	70-135	11.14.18 17.07	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-015	Date Collected:	11.09.18 13.30	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.16.18 08.07	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	11.16.18 08.07	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	11.16.18 08.07	U	1
m,p-Xylenes	179601-23-1	<0.0385	0.0385	mg/kg	11.16.18 08.07	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	11.16.18 08.07	U	1
Total Xylenes	1330-20-7	<0.0193	0.0193	mg/kg	11.16.18 08.07	U	1
Total BTEX		<0.0193	0.0193	mg/kg	11.16.18 08.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	68-120	11.16.18 08.07	
a,a,a-Trifluorotoluene	98-08-8	105	%	71-121	11.16.18 08.07	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-016	Date Collected:	11.09.18 13.35	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**865**	5.01	mg/kg	11.14.18 20.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 17.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 17.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 17.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 17.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	11.14.18 17.27	
o-Terphenyl	84-15-1	89	%	70-135	11.14.18 17.27	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-016	Date Collected:	11.09.18 13.35	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0192	0.0192	mg/kg	11.16.18 08.31	U	1
Toluene	108-88-3	<0.0192	0.0192	mg/kg	11.16.18 08.31	U	1
Ethylbenzene	100-41-4	<0.0192	0.0192	mg/kg	11.16.18 08.31	U	1
m,p-Xylenes	179601-23-1	<0.0384	0.0384	mg/kg	11.16.18 08.31	U	1
o-Xylene	95-47-6	<0.0192	0.0192	mg/kg	11.16.18 08.31	U	1
Total Xylenes	1330-20-7	<0.0192	0.0192	mg/kg	11.16.18 08.31	U	1
Total BTEX		<0.0192	0.0192	mg/kg	11.16.18 08.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	68-120	11.16.18 08.31	
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	11.16.18 08.31	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-017	Date Collected:	11.09.18 16.20	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**787**	4.95	mg/kg	11.14.18 20.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 17.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 17.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 17.47	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 17.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.14.18 17.47	
o-Terphenyl	84-15-1	86	%	70-135	11.14.18 17.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-017	Date Collected:	11.09.18 16.20	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.16.18 08.56	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	11.16.18 08.56	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	11.16.18 08.56	U	1
m,p-Xylenes	179601-23-1	<0.0385	0.0385	mg/kg	11.16.18 08.56	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	11.16.18 08.56	U	1
Total Xylenes	1330-20-7	<0.0193	0.0193	mg/kg	11.16.18 08.56	U	1
Total BTEX		<0.0193	0.0193	mg/kg	11.16.18 08.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	68-120	11.16.18 08.56	
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	11.16.18 08.56	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-018	Date Collected:	11.09.18 16.30	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**307**	5.01	mg/kg	11.14.18 20.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 18.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.14.18 18.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 18.07	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.14.18 18.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	11.14.18 18.07	
o-Terphenyl	84-15-1	82	%	70-135	11.14.18 18.07	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-018	Date Collected:	11.09.18 16.30	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0186	0.0186	mg/kg	11.16.18 09.21	U	1
Toluene	108-88-3	<0.0186	0.0186	mg/kg	11.16.18 09.21	U	1
Ethylbenzene	100-41-4	<0.0186	0.0186	mg/kg	11.16.18 09.21	U	1
m,p-Xylenes	179601-23-1	<0.0372	0.0372	mg/kg	11.16.18 09.21	U	1
o-Xylene	95-47-6	<0.0186	0.0186	mg/kg	11.16.18 09.21	U	1
Total Xylenes	1330-20-7	<0.0186	0.0186	mg/kg	11.16.18 09.21	U	1
Total BTEX		<0.0186	0.0186	mg/kg	11.16.18 09.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	68-120	11.16.18 09.21	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	11.16.18 09.21	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS19**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-019	Date Collected:	11.09.18 13.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2250**	25.1	mg/kg	11.14.18 20.28		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 18.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	**17.1**	14.9	mg/kg	11.14.18 18.27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 18.27	U	1
Total TPH	PHC635	**17.1**	14.9	mg/kg	11.14.18 18.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.14.18 18.27	
o-Terphenyl	84-15-1	90	%	70-135	11.14.18 18.27	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS19**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-019	Date Collected:	11.09.18 13.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0188	0.0188	mg/kg	11.16.18 09.46	U	1
Toluene	108-88-3	<0.0188	0.0188	mg/kg	11.16.18 09.46	U	1
Ethylbenzene	100-41-4	<0.0188	0.0188	mg/kg	11.16.18 09.46	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	11.16.18 09.46	U	1
o-Xylene	95-47-6	<0.0188	0.0188	mg/kg	11.16.18 09.46	U	1
Total Xylenes	1330-20-7	<0.0188	0.0188	mg/kg	11.16.18 09.46	U	1
Total BTEX		<0.0188	0.0188	mg/kg	11.16.18 09.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	68-120	11.16.18 09.46	
a,a,a-Trifluorotoluene	98-08-8	82	%	71-121	11.16.18 09.46	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS20**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-020	Date Collected:	11.09.18 14.00	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 14.40	Basis:	Wet Weight
Seq Number:	3069671				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**827**	4.95	mg/kg	11.14.18 20.34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.14.18 09.00	Basis:	Wet Weight
Seq Number:	3069681				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 18.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 18.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 18.47	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 18.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	11.14.18 18.47	
o-Terphenyl	84-15-1	87	%	70-135	11.14.18 18.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS20**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-020	Date Collected:	11.09.18 14.00	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3069835			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0191	0.0191	mg/kg	11.16.18 10.10	U	1
Toluene	108-88-3	<0.0191	0.0191	mg/kg	11.16.18 10.10	U	1
Ethylbenzene	100-41-4	<0.0191	0.0191	mg/kg	11.16.18 10.10	U	1
m,p-Xylenes	179601-23-1	<0.0382	0.0382	mg/kg	11.16.18 10.10	U	1
o-Xylene	95-47-6	<0.0191	0.0191	mg/kg	11.16.18 10.10	U	1
Total Xylenes	1330-20-7	<0.0191	0.0191	mg/kg	11.16.18 10.10	U	1
Total BTEX		<0.0191	0.0191	mg/kg	11.16.18 10.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	68-120	11.16.18 10.10	
a,a,a-Trifluorotoluene	98-08-8	87	%	71-121	11.16.18 10.10	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS21**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-021	Date Collected:	11.09.18 14.05	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1510**	24.8	mg/kg	11.14.18 21.29		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.13.18 22.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.13.18 22.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.13.18 22.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.13.18 22.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.13.18 22.53	
o-Terphenyl	84-15-1	89	%	70-135	11.13.18 22.53	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS21**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-021	Date Collected:	11.09.18 14.05	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	11.16.18 13.22	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	11.16.18 13.22	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	11.16.18 13.22	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	11.16.18 13.22	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	11.16.18 13.22	U	1
Total Xylenes	1330-20-7	<0.0189	0.0189	mg/kg	11.16.18 13.22	U	1
Total BTEX		<0.0189	0.0189	mg/kg	11.16.18 13.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	68-120	11.16.18 13.22	
a,a,a-Trifluorotoluene	98-08-8	84	%	71-121	11.16.18 13.22	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS22**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-022	Date Collected:	11.09.18 16.35	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**658**	4.95	mg/kg	11.14.18 21.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.13.18 23.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.13.18 23.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.13.18 23.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.13.18 23.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	11.13.18 23.52	
o-Terphenyl	84-15-1	95	%	70-135	11.13.18 23.52	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS22**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-022	Date Collected:	11.09.18 16.35	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0182	0.0182	mg/kg	11.16.18 14.59	U	1
Toluene	108-88-3	<0.0182	0.0182	mg/kg	11.16.18 14.59	U	1
Ethylbenzene	100-41-4	<0.0182	0.0182	mg/kg	11.16.18 14.59	U	1
m,p-Xylenes	179601-23-1	<0.0365	0.0365	mg/kg	11.16.18 14.59	U	1
o-Xylene	95-47-6	<0.0182	0.0182	mg/kg	11.16.18 14.59	U	1
Total Xylenes	1330-20-7	<0.0182	0.0182	mg/kg	11.16.18 14.59	U	1
Total BTEX		<0.0182	0.0182	mg/kg	11.16.18 14.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	68-120	11.16.18 14.59	
a,a,a-Trifluorotoluene	98-08-8	111	%	71-121	11.16.18 14.59	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS23**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-023	Date Collected:	11.09.18 16.40	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1080**	5.00	mg/kg	11.14.18 21.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 00.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	**71.8**	15.0	mg/kg	11.14.18 00.11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 00.11	U	1
Total TPH	PHC635	**71.8**	15.0	mg/kg	11.14.18 00.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 00.11	
o-Terphenyl	84-15-1	94	%	70-135	11.14.18 00.11	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS23**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-023	Date Collected:	11.09.18 16.40	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0182	0.0182	mg/kg	11.16.18 15.35	U	1
Toluene	108-88-3	<0.0182	0.0182	mg/kg	11.16.18 15.35	U	1
Ethylbenzene	100-41-4	<0.0182	0.0182	mg/kg	11.16.18 15.35	U	1
m,p-Xylenes	179601-23-1	<0.0364	0.0364	mg/kg	11.16.18 15.35	U	1
o-Xylene	95-47-6	<0.0182	0.0182	mg/kg	11.16.18 15.35	U	1
Total Xylenes	1330-20-7	<0.0182	0.0182	mg/kg	11.16.18 15.35	U	1
Total BTEX		<0.0182	0.0182	mg/kg	11.16.18 15.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	68-120	11.16.18 15.35	
a,a,a-Trifluorotoluene	98-08-8	85	%	71-121	11.16.18 15.35	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS24**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-024	Date Collected:	11.09.18 16.45	Sample Depth:	2.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**305**	4.95	mg/kg	11.14.18 21.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 00.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.14.18 00.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 00.31	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.14.18 00.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 00.31	
o-Terphenyl	84-15-1	94	%	70-135	11.14.18 00.31	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS24**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-024	Date Collected:	11.09.18 16.45	Sample Depth:	2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0192	0.0192	mg/kg	11.16.18 15.59	U	1
Toluene	108-88-3	<0.0192	0.0192	mg/kg	11.16.18 15.59	U	1
Ethylbenzene	100-41-4	<0.0192	0.0192	mg/kg	11.16.18 15.59	U	1
m,p-Xylenes	179601-23-1	<0.0383	0.0383	mg/kg	11.16.18 15.59	U	1
o-Xylene	95-47-6	<0.0192	0.0192	mg/kg	11.16.18 15.59	U	1
Total Xylenes	1330-20-7	<0.0192	0.0192	mg/kg	11.16.18 15.59	U	1
Total BTEX		<0.0192	0.0192	mg/kg	11.16.18 15.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	68-120	11.16.18 15.59	
a,a,a-Trifluorotoluene	98-08-8	105	%	71-121	11.16.18 15.59	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS25**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-025	Date Collected:	11.09.18 14.25	Sample Depth:	2.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1340**	25.0	mg/kg	11.14.18 21.48		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 00.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.14.18 00.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 00.51	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.14.18 00.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 00.51	
o-Terphenyl	84-15-1	93	%	70-135	11.14.18 00.51	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS25**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-025	Date Collected:	11.09.18 14.25	Sample Depth:	2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0183	0.0183	mg/kg	11.16.18 16.24	U	1
Toluene	108-88-3	<0.0183	0.0183	mg/kg	11.16.18 16.24	U	1
Ethylbenzene	100-41-4	<0.0183	0.0183	mg/kg	11.16.18 16.24	U	1
m,p-Xylenes	179601-23-1	<0.0366	0.0366	mg/kg	11.16.18 16.24	U	1
o-Xylene	95-47-6	<0.0183	0.0183	mg/kg	11.16.18 16.24	U	1
Total Xylenes	1330-20-7	<0.0183	0.0183	mg/kg	11.16.18 16.24	U	1
Total BTEX		<0.0183	0.0183	mg/kg	11.16.18 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	11.16.18 16.24	
a,a,a-Trifluorotoluene	98-08-8	107	%	71-121	11.16.18 16.24	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS26**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-026	Date Collected:	11.09.18 14.30	Sample Depth:	2.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2020**	24.9	mg/kg	11.14.18 22.06		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 01.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 01.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 01.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 01.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	11.14.18 01.10	
o-Terphenyl	84-15-1	94	%	70-135	11.14.18 01.10	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS26**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-026	Date Collected:	11.09.18 14.30	Sample Depth:	2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0183	0.0183	mg/kg	11.16.18 16.48	U	1
Toluene	108-88-3	<0.0183	0.0183	mg/kg	11.16.18 16.48	U	1
Ethylbenzene	100-41-4	<0.0183	0.0183	mg/kg	11.16.18 16.48	U	1
m,p-Xylenes	179601-23-1	<0.0366	0.0366	mg/kg	11.16.18 16.48	U	1
o-Xylene	95-47-6	<0.0183	0.0183	mg/kg	11.16.18 16.48	U	1
Total Xylenes	1330-20-7	<0.0183	0.0183	mg/kg	11.16.18 16.48	U	1
Total BTEX		<0.0183	0.0183	mg/kg	11.16.18 16.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	11.16.18 16.48	
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.16.18 16.48	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS27**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-027	Date Collected:	11.09.18 16.55	Sample Depth:	2.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**865**	5.00	mg/kg	11.14.18 22.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 01.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**41.1**	15.0	mg/kg	11.14.18 01.30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 01.30	U	1
Total TPH	PHC635	**41.1**	15.0	mg/kg	11.14.18 01.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	11.14.18 01.30	
o-Terphenyl	84-15-1	94	%	70-135	11.14.18 01.30	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS27**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-027	Date Collected:	11.09.18 16.55	Sample Depth:	2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0197	0.0197	mg/kg	11.16.18 17.13	U	1
Toluene	108-88-3	<0.0197	0.0197	mg/kg	11.16.18 17.13	U	1
Ethylbenzene	100-41-4	<0.0197	0.0197	mg/kg	11.16.18 17.13	U	1
m,p-Xylenes	179601-23-1	<0.0394	0.0394	mg/kg	11.16.18 17.13	U	1
o-Xylene	95-47-6	<0.0197	0.0197	mg/kg	11.16.18 17.13	U	1
Total Xylenes	1330-20-7	<0.0197	0.0197	mg/kg	11.16.18 17.13	U	1
Total BTEX		<0.0197	0.0197	mg/kg	11.16.18 17.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	68-120	11.16.18 17.13	
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.16.18 17.13	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS28**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-028	Date Collected:	11.09.18 14.40	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**839**	5.00	mg/kg	11.14.18 22.19		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 01.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 01.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 01.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 01.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 01.49	
o-Terphenyl	84-15-1	92	%	70-135	11.14.18 01.49	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS28**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-028	Date Collected:	11.09.18 14.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	11.16.18 17.37	U	1
Toluene	108-88-3	<0.0196	0.0196	mg/kg	11.16.18 17.37	U	1
Ethylbenzene	100-41-4	<0.0196	0.0196	mg/kg	11.16.18 17.37	U	1
m,p-Xylenes	179601-23-1	<0.0392	0.0392	mg/kg	11.16.18 17.37	U	1
o-Xylene	95-47-6	<0.0196	0.0196	mg/kg	11.16.18 17.37	U	1
Total Xylenes	1330-20-7	<0.0196	0.0196	mg/kg	11.16.18 17.37	U	1
Total BTEX		<0.0196	0.0196	mg/kg	11.16.18 17.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	11.16.18 17.37	
a,a,a-Trifluorotoluene	98-08-8	105	%	71-121	11.16.18 17.37	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS29**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-029	Date Collected:	11.09.18 14.45	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**475**	4.97	mg/kg	11.14.18 22.25		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 02.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 02.09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 02.09	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 02.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	11.14.18 02.09	
o-Terphenyl	84-15-1	98	%	70-135	11.14.18 02.09	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS29**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-029	Date Collected:	11.09.18 14.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0190	0.0190	mg/kg	11.16.18 18.11	U	1
Toluene	108-88-3	<0.0190	0.0190	mg/kg	11.16.18 18.11	U	1
Ethylbenzene	100-41-4	<0.0190	0.0190	mg/kg	11.16.18 18.11	U	1
m,p-Xylenes	179601-23-1	<0.0380	0.0380	mg/kg	11.16.18 18.11	U	1
o-Xylene	95-47-6	<0.0190	0.0190	mg/kg	11.16.18 18.11	U	1
Total Xylenes	1330-20-7	<0.0190	0.0190	mg/kg	11.16.18 18.11	U	1
Total BTEX		<0.0190	0.0190	mg/kg	11.16.18 18.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	68-120	11.16.18 18.11	
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	11.16.18 18.11	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS30**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-030	Date Collected:	11.09.18 14.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**544**	4.98	mg/kg	11.14.18 22.31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 02.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 02.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 02.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 02.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 02.28	
o-Terphenyl	84-15-1	91	%	70-135	11.14.18 02.28	

Certificate of Analytical Results 605308

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PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS30**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-030	Date Collected:	11.09.18 14.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	11.16.18 18.35	U	1
Toluene	108-88-3	<0.0196	0.0196	mg/kg	11.16.18 18.35	U	1
Ethylbenzene	100-41-4	<0.0196	0.0196	mg/kg	11.16.18 18.35	U	1
m,p-Xylenes	179601-23-1	<0.0392	0.0392	mg/kg	11.16.18 18.35	U	1
o-Xylene	95-47-6	<0.0196	0.0196	mg/kg	11.16.18 18.35	U	1
Total Xylenes	1330-20-7	<0.0196	0.0196	mg/kg	11.16.18 18.35	U	1
Total BTEX		<0.0196	0.0196	mg/kg	11.16.18 18.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	68-120	11.16.18 18.35	
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	11.16.18 18.35	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS31**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-031	Date Collected:	11.09.18 14.55	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**312**	4.98	mg/kg	11.14.18 22.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 03.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 03.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 03.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 03.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	11.14.18 03.27	
o-Terphenyl	84-15-1	93	%	70-135	11.14.18 03.27	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS31**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-031	Date Collected:	11.09.18 14.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0191	0.0191	mg/kg	11.16.18 19.47	U	1
Toluene	108-88-3	<0.0191	0.0191	mg/kg	11.16.18 19.47	U	1
Ethylbenzene	100-41-4	<0.0191	0.0191	mg/kg	11.16.18 19.47	U	1
m,p-Xylenes	179601-23-1	<0.0382	0.0382	mg/kg	11.16.18 19.47	U	1
o-Xylene	95-47-6	<0.0191	0.0191	mg/kg	11.16.18 19.47	U	1
Total Xylenes	1330-20-7	<0.0191	0.0191	mg/kg	11.16.18 19.47	U	1
Total BTEX		<0.0191	0.0191	mg/kg	11.16.18 19.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	68-120	11.16.18 19.47	
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.16.18 19.47	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS32**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-032	Date Collected:	11.09.18 15.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2030**	25.0	mg/kg	11.14.18 22.56		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 03.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.3**	15.0	mg/kg	11.14.18 03.46		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 03.46	U	1
Total TPH	PHC635	**15.3**	15.0	mg/kg	11.14.18 03.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 03.46	
o-Terphenyl	84-15-1	91	%	70-135	11.14.18 03.46	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS32**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-032	Date Collected:	11.09.18 15.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.16.18 20.12	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.16.18 20.12	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.16.18 20.12	U	1
m,p-Xylenes	179601-23-1	<0.0396	0.0396	mg/kg	11.16.18 20.12	U	1
o-Xylene	95-47-6	<0.0198	0.0198	mg/kg	11.16.18 20.12	U	1
Total Xylenes	1330-20-7	<0.0198	0.0198	mg/kg	11.16.18 20.12	U	1
Total BTEX		<0.0198	0.0198	mg/kg	11.16.18 20.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	68-120	11.16.18 20.12	
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.16.18 20.12	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS33**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-033	Date Collected:	11.09.18 15.05	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1650**	25.0	mg/kg	11.14.18 23.02		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 04.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 04.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 04.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 04.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	11.14.18 04.06	
o-Terphenyl	84-15-1	90	%	70-135	11.14.18 04.06	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS33**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-033	Date Collected:	11.09.18 15.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	11.16.18 20.36	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	11.16.18 20.36	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	11.16.18 20.36	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	11.16.18 20.36	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	11.16.18 20.36	U	1
Total Xylenes	1330-20-7	<0.0189	0.0189	mg/kg	11.16.18 20.36	U	1
Total BTEX		<0.0189	0.0189	mg/kg	11.16.18 20.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	68-120	11.16.18 20.36	
a,a,a-Trifluorotoluene	98-08-8	97	%	71-121	11.16.18 20.36	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS34**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-034	Date Collected:	11.09.18 15.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**916**	4.95	mg/kg	11.14.18 23.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 04.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.14.18 04.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 04.26	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.14.18 04.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 04.26	
o-Terphenyl	84-15-1	91	%	70-135	11.14.18 04.26	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**FS34**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-034	Date Collected:	11.09.18 15.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0181	0.0181	mg/kg	11.16.18 21.00	U	1
Toluene	108-88-3	<0.0181	0.0181	mg/kg	11.16.18 21.00	U	1
Ethylbenzene	100-41-4	<0.0181	0.0181	mg/kg	11.16.18 21.00	U	1
m,p-Xylenes	179601-23-1	<0.0362	0.0362	mg/kg	11.16.18 21.00	U	1
o-Xylene	95-47-6	<0.0181	0.0181	mg/kg	11.16.18 21.00	U	1
Total Xylenes	1330-20-7	<0.0181	0.0181	mg/kg	11.16.18 21.00	U	1
Total BTEX		<0.0181	0.0181	mg/kg	11.16.18 21.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	68-120	11.16.18 21.00	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	11.16.18 21.00	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-035	Date Collected:	11.09.18 17.15	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1590**	25.0	mg/kg	11.14.18 23.27		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 04.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 04.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 04.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 04.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	11.14.18 04.45	
o-Terphenyl	84-15-1	91	%	70-135	11.14.18 04.45	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-035	Date Collected:	11.09.18 17.15	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	11.16.18 21.24	U	1
Toluene	108-88-3	<0.0200	0.0200	mg/kg	11.16.18 21.24	U	1
Ethylbenzene	100-41-4	<0.0200	0.0200	mg/kg	11.16.18 21.24	U	1
m,p-Xylenes	179601-23-1	<0.0400	0.0400	mg/kg	11.16.18 21.24	U	1
o-Xylene	95-47-6	<0.0200	0.0200	mg/kg	11.16.18 21.24	U	1
Total Xylenes	1330-20-7	<0.0200	0.0200	mg/kg	11.16.18 21.24	U	1
Total BTEX		<0.0200	0.0200	mg/kg	11.16.18 21.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	68-120	11.16.18 21.24	
a,a,a-Trifluorotoluene	98-08-8	87	%	71-121	11.16.18 21.24	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-036	Date Collected:	11.09.18 12.00	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2240**	25.2	mg/kg	11.14.18 23.33		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 05.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 05.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 05.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 05.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 05.04	
o-Terphenyl	84-15-1	92	%	70-135	11.14.18 05.04	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-036	Date Collected:	11.09.18 12.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	11.16.18 21.48	U	1
Toluene	108-88-3	<0.0200	0.0200	mg/kg	11.16.18 21.48	U	1
Ethylbenzene	100-41-4	<0.0200	0.0200	mg/kg	11.16.18 21.48	U	1
m,p-Xylenes	179601-23-1	<0.0400	0.0400	mg/kg	11.16.18 21.48	U	1
o-Xylene	95-47-6	<0.0200	0.0200	mg/kg	11.16.18 21.48	U	1
Total Xylenes	1330-20-7	<0.0200	0.0200	mg/kg	11.16.18 21.48	U	1
Total BTEX		<0.0200	0.0200	mg/kg	11.16.18 21.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	68-120	11.16.18 21.48	
a,a,a-Trifluorotoluene	98-08-8	107	%	71-121	11.16.18 21.48	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-037	Date Collected:	11.09.18 12.10	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1650**	25.0	mg/kg	11.14.18 23.39		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 05.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 05.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 05.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 05.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 05.24	
o-Terphenyl	84-15-1	91	%	70-135	11.14.18 05.24	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-037	Date Collected:	11.09.18 12.10	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	11.16.18 22.12	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	11.16.18 22.12	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	11.16.18 22.12	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	11.16.18 22.12	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	11.16.18 22.12	U	1
Total Xylenes	1330-20-7	<0.0189	0.0189	mg/kg	11.16.18 22.12	U	1
Total BTEX		<0.0189	0.0189	mg/kg	11.16.18 22.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	68-120	11.16.18 22.12	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	11.16.18 22.12	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-038	Date Collected:	11.09.18 17.00	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4620**	49.6	mg/kg	11.14.18 23.45		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 05.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	**226**	14.9	mg/kg	11.14.18 05.43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**24.2**	14.9	mg/kg	11.14.18 05.43		1
Total TPH	PHC635	**250**	14.9	mg/kg	11.14.18 05.43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.14.18 05.43	
o-Terphenyl	84-15-1	98	%	70-135	11.14.18 05.43	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-038	Date Collected:	11.09.18 17.00	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0194	0.0194	mg/kg	11.16.18 22.37	U	1
Toluene	108-88-3	<0.0194	0.0194	mg/kg	11.16.18 22.37	U	1
Ethylbenzene	100-41-4	<0.0194	0.0194	mg/kg	11.16.18 22.37	U	1
m,p-Xylenes	179601-23-1	<0.0388	0.0388	mg/kg	11.16.18 22.37	U	1
o-Xylene	95-47-6	<0.0194	0.0194	mg/kg	11.16.18 22.37	U	1
Total Xylenes	1330-20-7	<0.0194	0.0194	mg/kg	11.16.18 22.37	U	1
Total BTEX		<0.0194	0.0194	mg/kg	11.16.18 22.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	68-120	11.16.18 22.37	
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.16.18 22.37	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-039	Date Collected:	11.09.18 17.05	Sample Depth:	1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.14.18 13.00	Basis:	Wet Weight
Seq Number:	3069674				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3680**	25.0	mg/kg	11.14.18 23.51		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 16.00	Basis:	Wet Weight
Seq Number:	3069548				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 06.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	**229**	15.0	mg/kg	11.14.18 06.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**23.1**	15.0	mg/kg	11.14.18 06.02		1
Total TPH	PHC635	**252**	15.0	mg/kg	11.14.18 06.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.14.18 06.02	
o-Terphenyl	84-15-1	97	%	70-135	11.14.18 06.02	

Certificate of Analytical Results 605308

LT Environmental, Inc., Arvada, CO

PLU Ross Ranch 31 Federal 1H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605308-039	Date Collected:	11.09.18 17.05	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0187	0.0187	mg/kg	11.16.18 23.01	U	1
Toluene	108-88-3	<0.0187	0.0187	mg/kg	11.16.18 23.01	U	1
Ethylbenzene	100-41-4	<0.0187	0.0187	mg/kg	11.16.18 23.01	U	1
m,p-Xylenes	179601-23-1	<0.0374	0.0374	mg/kg	11.16.18 23.01	U	1
o-Xylene	95-47-6	<0.0187	0.0187	mg/kg	11.16.18 23.01	U	1
Total Xylenes	1330-20-7	<0.0187	0.0187	mg/kg	11.16.18 23.01	U	1
Total BTEX		<0.0187	0.0187	mg/kg	11.16.18 23.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	68-120	11.16.18 23.01	
a,a,a-Trifluorotoluene	98-08-8	107	%	71-121	11.16.18 23.01	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 605308

LT Environmental, Inc.

PLU Ross Ranch 31 Federal 1H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069674 Matrix: Solid Date Prep: 11.14.18
MB Sample Id: 7666145-1-BLK LCS Sample Id: 7666145-1-BKS LCSD Sample Id: 7666145-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	264	106	275	110	90-110	4	20	mg/kg	11.14.18 20:58	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069671 Matrix: Solid Date Prep: 11.14.18
MB Sample Id: 7666138-1-BLK LCS Sample Id: 7666138-1-BKS LCSD Sample Id: 7666138-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	258	103	260	104	90-110	1	20	mg/kg	11.14.18 17:35	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069674 Matrix: Soil Date Prep: 11.14.18
Parent Sample Id: 605308-022 MS Sample Id: 605308-022 S MSD Sample Id: 605308-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	658	248	887	92	879	89	90-110	1	20	mg/kg	11.14.18 21:17	X

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069674 Matrix: Soil Date Prep: 11.14.18
Parent Sample Id: 605308-031 MS Sample Id: 605308-031 S MSD Sample Id: 605308-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	312	249	550	96	549	95	90-110	0	20	mg/kg	11.14.18 22:44	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069671 Matrix: Soil Date Prep: 11.14.18
Parent Sample Id: 605308-004 MS Sample Id: 605308-004 S MSD Sample Id: 605308-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	175	249	429	102	428	102	90-110	0	20	mg/kg	11.14.18 17:53	

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

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

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

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

QC Summary 605308

LT Environmental, Inc.

PLU Ross Ranch 31 Federal 1H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069671 Matrix: Soil Date Prep: 11.14.18
Parent Sample Id: 605308-012 MS Sample Id: 605308-012 S MSD Sample Id: 605308-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	859	248	1070	85	1080	89	90-110	1	20	mg/kg	11.14.18 19:20	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069548 Matrix: Solid Date Prep: 11.13.18
MB Sample Id: 7666089-1-BLK LCS Sample Id: 7666089-1-BKS LCSD Sample Id: 7666089-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1000	100	1120	112	70-135	11	20	mg/kg	11.13.18 22:13	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	1110	111	70-135	4	20	mg/kg	11.13.18 22:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		124		127		70-135	%	11.13.18 22:13
o-Terphenyl	104		122		109		70-135	%	11.13.18 22:13

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069681 Matrix: Solid Date Prep: 11.14.18
MB Sample Id: 7666152-1-BLK LCS Sample Id: 7666152-1-BKS LCSD Sample Id: 7666152-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	986	99	1030	103	70-135	4	20	mg/kg	11.14.18 10:31	
Diesel Range Organics (DRO)	<8.13	1000	1100	110	1160	116	70-135	5	20	mg/kg	11.14.18 10:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		126		120		70-135	%	11.14.18 10:31
o-Terphenyl	89		101		103		70-135	%	11.14.18 10:31

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069548 Matrix: Soil Date Prep: 11.13.18
Parent Sample Id: 605308-021 MS Sample Id: 605308-021 S MSD Sample Id: 605308-021 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)	<7.98	997	902	90	897	90	70-135	1	20	mg/kg	11.13.18 23:12	
Diesel Range Organics (DRO)	<8.10	997	968	97	969	97	70-135	0	20	mg/kg	11.13.18 23:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		116		70-135	%	11.13.18 23:12
o-Terphenyl	96		98		70-135	%	11.13.18 23:12

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

QC Summary 605308

LT Environmental, Inc.

PLU Ross Ranch 31 Federal 1H

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069681 Matrix: Soil Date Prep: 11.14.18
Parent Sample Id: 605308-001 MS Sample Id: 605308-001 S MSD Sample Id: 605308-001 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)	<8.00	1000	839	84	837	84	70-135	0	20	mg/kg	11.14.18 11:29	
Diesel Range Organics (DRO)	29.7	1000	967	94	957	93	70-135	1	20	mg/kg	11.14.18 11:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		100		70-135	%	11.14.18 11:29
o-Terphenyl	91		91		70-135	%	11.14.18 11:29

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069835 Matrix: Solid Date Prep: 11.15.18
MB Sample Id: 7666257-1-BLK LCS Sample Id: 7666257-1-BKS LCSD Sample Id: 7666257-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.80	90	1.87	94	55-120	4	20	mg/kg	11.15.18 22:30	
Toluene	<0.0200	2.00	1.82	91	1.86	93	77-120	2	20	mg/kg	11.15.18 22:30	
Ethylbenzene	<0.0200	2.00	2.01	101	1.96	98	77-120	3	20	mg/kg	11.15.18 22:30	
m,p-Xylenes	<0.0400	4.00	3.99	100	3.89	97	78-120	3	20	mg/kg	11.15.18 22:30	
o-Xylene	<0.0200	2.00	1.95	98	1.94	97	78-120	1	20	mg/kg	11.15.18 22:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	105		113		106		68-120	%	11.15.18 22:30
a,a,a-Trifluorotoluene	109		104		105		71-121	%	11.15.18 22:30

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3070018 Matrix: Solid Date Prep: 11.15.18
MB Sample Id: 7666395-1-BLK LCS Sample Id: 7666395-1-BKS LCSD Sample Id: 7666395-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.80	90	1.85	93	55-120	3	20	mg/kg	11.16.18 11:22	
Toluene	<0.0200	2.00	1.83	92	1.85	93	77-120	1	20	mg/kg	11.16.18 11:22	
Ethylbenzene	<0.0200	2.00	1.98	99	2.00	100	77-120	1	20	mg/kg	11.16.18 11:22	
m,p-Xylenes	<0.0400	4.00	3.92	98	3.95	99	78-120	1	20	mg/kg	11.16.18 11:22	
o-Xylene	<0.0200	2.00	1.96	98	1.96	98	78-120	0	20	mg/kg	11.16.18 11:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	108		91		107		68-120	%	11.16.18 11:22
a,a,a-Trifluorotoluene	108		85		102		71-121	%	11.16.18 11:22

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

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

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

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

QC Summary 605308

LT Environmental, Inc.

PLU Ross Ranch 31 Federal 1H

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

Seq Number: 3069835 Matrix: Soil Date Prep: 11.15.18

Parent Sample Id: 605308-001 MS Sample Id: 605308-001 S MSD Sample Id: 605308-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.76	88	1.78	90	54-120	1	25	mg/kg	11.16.18 00:53	
Toluene	<0.0200	2.00	1.76	88	1.81	91	57-120	3	25	mg/kg	11.16.18 00:53	
Ethylbenzene	<0.0200	2.00	1.80	90	1.87	94	58-131	4	25	mg/kg	11.16.18 00:53	
m,p-Xylenes	<0.0400	4.00	3.56	89	3.70	93	62-124	4	25	mg/kg	11.16.18 00:53	
o-Xylene	<0.00682	2.00	1.79	90	1.86	94	62-124	4	25	mg/kg	11.16.18 00:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	78		84		68-120	%	11.16.18 00:53
a,a,a-Trifluorotoluene	83		90		71-121	%	11.16.18 00:53

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

Seq Number: 3070018 Matrix: Soil Date Prep: 11.15.18

Parent Sample Id: 605308-021 MS Sample Id: 605308-021 S MSD Sample Id: 605308-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0182	1.82	1.65	91	1.72	89	54-120	4	25	mg/kg	11.16.18 13:48	
Toluene	<0.0182	1.82	1.69	93	1.77	91	57-120	5	25	mg/kg	11.16.18 13:48	
Ethylbenzene	<0.0182	1.82	1.83	101	1.87	96	58-131	2	25	mg/kg	11.16.18 13:48	
m,p-Xylenes	<0.0364	3.64	3.57	98	3.64	94	62-124	2	25	mg/kg	11.16.18 13:48	
o-Xylene	<0.0182	1.82	1.71	94	1.80	93	62-124	5	25	mg/kg	11.16.18 13:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	102		103		68-120	%	11.16.18 13:48
a,a,a-Trifluorotoluene	110		109		71-121	%	11.16.18 13:48

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

CHAIN OF CUSTODY

Page 1 Of 4

XENCO LABORATORIES

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Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote #: | Xenco Job #: 605308

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office
Company Address: 3300 N "A" St. Building 1 unit 103 Midland, TX 79705
Email: abaker@ltenv.com Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Lydia Lambach

Project Information

Project Name/Number: PLU Rois Ranch 31 Federal 11H
Project Location: EDDY, NM 2RP-4973
Invoice To: XTO Energy - Kyle Littrell
PO Number:

Analytical Information

BTEX (only BTEX) 8021
TPH (DRO, GRO, MRO) 8015
Chloride 300.0

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	FS01	1'	11/9/18	12:18	S	1									
2	FS02	1'		12:25											
3	FS03	1'		12:30											
4	FS04	2'		15:40											
5	FS05	1'		12:38											
6	FS06	1'		12:40											
7	FS07	1'		12:45											
8	FS08	1'		12:50											
9	FS09	1'		12:55											
10	FS10	1'		13:07											

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes: Composites

FED-EX / UPS: Tracking # 775706934042

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/14/18 7:30	1	2	11/12 15:30	2 11/13/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4 1355
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: ✓ Cooler Temp. 0.3 Thermo. Corr. Factor 0.0

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

Page 2 Of 4

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Setting the Standard since 1990

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Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote # | Xenco Job # 605308

Client / Reporting Information

Company Name / Branch: Ensolum, Inc. Permian Office
Company Address: 3300 N "A" St. Building 1 Unit 103 Midland, TX 79705
Email: abaker@ltenv.com Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Lynda Lambach

Project Information

Project Name/Number: PLU Ross Ranch 31 Federal 1H
Project Location: EDDY 2RP-4973
Invoice To: Kyle Littrell - XTO Energy
PO Number:

Analytical Information

BTEX 8021 (QM)
TPH 8015 (DRO, GRO)
Chloride 300.0

Matrix Codes

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

No.	Field ID / Point of Collection	Sample Depth	Collection Date	Collection Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	FS11	2'	11/09	13:10	S	1								X	
2	FS12	2'		16:10		1									
3	FS13	1.5'		13:20											
4	FS14	1.5'		13:25											
5	FS15	1.5'		13:30											
6	FS16	1.5'		13:35											
7	FS17	2.5'		16:20											
8	FS18	2.5'		16:30											
9	FS19	2'		13:50											
10	FS20	1.5'	↓	14:00	↓	↓								↓	

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 5 Day TAT
- ☐ Next Day EMERGENCY
- ☐ 7 Day TAT
- ☐ 2 Day EMERGENCY
- ☐ Contract TAT
- ☒ 3 Day EMERGENCY

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

Data Deliverable Information

- ☐ Level II Std QC
- ☐ Level IV (Full Data Pkg /raw data)
- ☐ Level III Std QC+ Forms
- ☐ TRRP Level IV
- ☐ Level 3 (CLP Forms)
- ☐ UST / RG -411
- ☐ TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/12/18 7:30	1	2	11/12 15:30	2 11/13/18 1355
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 0.3 IR 0.0 Thermo. Corr. Factor

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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Phoenix, Arizona (480-355-0900)
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Xenco Quote #
Xenco Job # 605308

Client / Reporting Information

Company Name / Branch: Ltenvironmental, Inc. Permian Office
Company Address: 3300 N "A" St. Building 1 Unit 103 Midland, TX 79705
Email: abaker@ltenv.com Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name Lynda Lanbach

Project Information

Project Name/Number: Ross Ranch 31 Federal 1H
Project Location: EDDY 2RP 4973
Invoice To: XTO Energy - Kyle Littrell
PO Number:

Analytical Information

BTEX 8021 (On Ly)
TPH 8015 (DRO, GRO)
Chloride 300.0

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	FS21	3'	11/09	14:05	S	1								X	
2	FS22	2.5'		16:35											
3	FS23	2.5'		16:40											
4	FS24	2.0'		16:45											
5	FS25	2.0'		14:25											
6	FS26	2.0'		14:30											
7	FS27	2.0'		16:55											
8	FS28	2'		14:40											
9	FS29	2.0'		14:45											
10	FS30	2'		14:50											

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/12/18 7:30	1	2	11/12 1530	2 11/13/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: Cooler Temp. 0.3 / 0.0 Thermo. Corr. Factor

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CHAIN OF CUSTODY

Page 4 Of 4

XENCO LABORATORIES

Setting the Standard since 1990

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Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote #: | Xenco Job #: 400538

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office
Company Address: 3300 N "A" St. Building 1 unit 103 Midland, TX 79705
Email: abaker@ltenv.com Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Jacob Laubach

Project Information

Project Name/Number: Ross Ranch 31 Federal 1H
Project Location: EDDY 2RP4973
Invoice To: XTO Energy Kyle Littrell
PO Number:

Analytical Information

No.	Field ID / Point of Collection	Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Preserved: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX (only BTEX) 8021	TPH (DRO, GRO, MRO) 8015	Chloride (300.0)	Field Comments
1	FS31	2'	11/09	14:55	S	1								X	X	X	X	
2	FS32	2'		15:00		1												
3	FS33	2'		15:05														
4	FS34	2'		15:10														
5	SW01 ~~FS35~~	6"		17:15														composite
6	SW02 ~~FS~~	1'		12:00														
7	SW03	1'		12:10														
8	SW04	1.5'		17:00														
9	SW05	1.5'		17:05														
10																		

Matrix Codes

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

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/12/2018 7:30	1	2	11/12 1530	2 11/13/18
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 1355
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: ✓ Cooler Temp. 0.3 Thermo. Corr. Factor 0.0

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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

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

Inter-Office Shipment

IOS Number **117189**

Date/Time: 11/13/18 14:35
Lab# From: **Midland**
Lab# To: **Lubbock**

Created by: Brianna Teel
Delivery Priority:
Air Bill No.: FED 773718259231

Please send report to: Jessica Kramer
Address: 1211 W. Florida Ave, Midland TX 79701
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
605308-001	S	FS01	11/09/18 12:18	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-002	S	FS02	11/09/18 12:25	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-003	S	FS03	11/09/18 12:30	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-004	S	FS04	11/09/18 15:40	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-005	S	FS05	11/09/18 12:38	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-006	S	FS06	11/09/18 12:40	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-007	S	FS07	11/09/18 12:45	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-008	S	FS08	11/09/18 12:50	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-009	S	FS09	11/09/18 12:55	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-010	S	FS10	11/09/18 13:07	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-011	S	FS11	11/09/18 13:10	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-012	S	FS12	11/09/18 16:10	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-013	S	FS13	11/09/18 13:20	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-014	S	FS14	11/09/18 13:25	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-015	S	FS15	11/09/18 13:30	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-016	S	FS16	11/09/18 13:35	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-017	S	FS17	11/09/18 16:20	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-018	S	FS18	11/09/18 16:30	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-019	S	FS19	11/09/18 13:50	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-020	S	FS20	11/09/18 14:00	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-021	S	FS21	11/09/18 14:05	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-022	S	FS22	11/09/18 16:35	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-023	S	FS23	11/09/18 16:40	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-024	S	FS24	11/09/18 16:45	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-025	S	FS25	11/09/18 14:25	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	

Inter-Office Shipment

IOS Number **117189**

Date/Time: 11/13/18 14:35
Lab# From: **Midland**
Lab# To: **Lubbock**

Created by: Brianna Teel
Delivery Priority:
Air Bill No.: FED 773718259231

Please send report to: Jessica Kramer
Address: 1211 W. Florida Ave, Midland TX 79701
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
605308-026	S	FS26	11/09/18 14:30	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-027	S	FS27	11/09/18 16:55	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-028	S	FS28	11/09/18 14:40	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-029	S	FS29	11/09/18 14:45	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-030	S	FS30	11/09/18 14:50	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-031	S	FS31	11/09/18 14:55	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-032	S	FS32	11/09/18 15:00	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-033	S	FS33	11/09/18 15:05	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-034	S	FS34	11/09/18 15:10	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-035	S	SW01	11/09/18 17:15	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-036	S	SW02	11/09/18 12:00	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-037	S	SW03	11/09/18 12:10	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-038	S	SW04	11/09/18 17:00	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605308-039	S	SW05	11/09/18 17:05	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By: Brianna Teel
Brianna Teel

Date Relinquished: 11/13/2018

Received By:
Ashley Derstine

Date Received: 11/14/2018 09:15

Cooler Temperature: 2.9

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Lubbock

IOS #: 117189

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

Sent By: Brianna Teel **Date Sent:** 11/13/2018 02:35 PM

Received By: Ashley Derstine **Date Received:** 11/14/2018 09:15 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.9	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: _____ Date: 11/14/2018
Ashley Derstine

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/13/2018 01:55:00 PM

Work Order #: 605308

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 11/13/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/14/2018
Jessica Kramer

Analytical Report 605310

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Ross Ranch 31 Federal 1H

19-NOV-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

19-NOV-18

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

Reference: XENCO Report No(s): **605310**
Ross Ranch 31 Federal 1H
Project Address: Eddy 2RP-4973

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 605310. 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. 605310 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	11-08-18 10:00	7 ft	605310-001
BH02	S	11-08-18 10:15	3 ft	605310-002
BH03	S	11-08-18 10:50	10 ft	605310-003
SS03	S	11-09-18 10:15	1 ft	605310-004
SS04	S	11-09-18 17:30	6 In	605310-005
SS04	S	11-09-18 17:33	1 ft	605310-006
SS05	S	11-09-18 10:40	6 In	605310-007
SS05	S	11-09-18 10:50	1 ft	605310-008

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3070018 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3070022 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 605310

LT Environmental, Inc., Arvada, CO

Project Name: Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 19-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	605310-001		605310-002		605310-003		605310-004		605310-005		605310-006	
	Field Id:	BH01		BH02		BH03		SS03		SS04		SS04	
	Depth:	7- ft		3- ft		10- ft		1- ft		6- In		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-08-18 10:00		Nov-08-18 10:15		Nov-08-18 10:50		Nov-09-18 10:15		Nov-09-18 17:30		Nov-09-18 17:33	
BTEX by EPA 8021B	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45		Nov-15-18 09:45	
SUB: T104704219-18-18	***Analyzed:***	Nov-16-18 23:26		Nov-17-18 04:17		Nov-17-18 02:40		Nov-17-18 04:41		Nov-17-18 05:05		Nov-17-18 05:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0197	0.0197	<0.0193	0.0193	<0.0172	0.0172	<0.0193	0.0193	<0.0199	0.0199	<0.0185	0.0185
Toluene		<0.0197	0.0197	<0.0193	0.0193	<0.0172	0.0172	<0.0193	0.0193	<0.0199	0.0199	<0.0185	0.0185
Ethylbenzene		<0.0197	0.0197	<0.0193	0.0193	<0.0172	0.0172	<0.0193	0.0193	<0.0199	0.0199	<0.0185	0.0185
m,p-Xylenes		<0.0394	0.0394	<0.0387	0.0387	<0.0343	0.0343	<0.0387	0.0387	<0.0398	0.0398	<0.0370	0.0370
o-Xylene		<0.0197	0.0197	<0.0193	0.0193	<0.0172	0.0172	<0.0193	0.0193	<0.0199	0.0199	<0.0185	0.0185
Total Xylenes		<0.0197	0.0197	<0.0193	0.0193	<0.0172	0.0172	<0.0193	0.0193	<0.0199	0.0199	<0.0185	0.0185
Total BTEX		<0.0197	0.0197	<0.0193	0.0193	<0.0172	0.0172	<0.0193	0.0193	<0.0199	0.0199	<0.0185	0.0185
Inorganic Anions by EPA 300	***Extracted:***	Nov-13-18 16:30		Nov-13-18 16:30		Nov-13-18 16:30		Nov-13-18 16:30		Nov-13-18 16:30		Nov-13-18 16:30	
	Analyzed:	Nov-13-18 20:06		Nov-13-18 18:09		Nov-13-18 19:23		Nov-13-18 20:11		Nov-13-18 20:16		Nov-13-18 20:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		98.5	24.8	43.7	5.00	130	5.00	49.9	25.0	1540	25.0	1590	24.8
TPH by SW8015 Mod	***Extracted:***	Nov-13-18 15:00		Nov-13-18 15:00		Nov-13-18 15:00		Nov-13-18 15:00		Nov-13-18 15:00		Nov-13-18 15:00	
	Analyzed:	Nov-13-18 22:43		Nov-13-18 23:02		Nov-13-18 23:22		Nov-13-18 23:41		Nov-14-18 07:13		Nov-14-18 07:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 605310

LT Environmental, Inc., Arvada, CO

Project Name: Ross Ranch 31 Federal 1H

Project Id:
Contact: Adrian Baker
Project Location: Eddy 2RP-4973

Date Received in Lab: Tue Nov-13-18 01:55 pm
Report Date: 19-NOV-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	605310-007		605310-008					
	Field Id:	SS05		SS05					
	Depth:	6- In		1- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Nov-09-18 10:40		Nov-09-18 10:50					
BTEX by EPA 8021B SUB: T104704219-18-18	***Extracted:***	Nov-15-18 09:45		Nov-15-18 09:45					
	Analyzed:	Nov-17-18 05:54		Nov-17-18 06:17					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.0177	0.0177	<0.0193	0.0193				
Toluene		<0.0177	0.0177	<0.0193	0.0193				
Ethylbenzene		<0.0177	0.0177	<0.0193	0.0193				
m,p-Xylenes		<0.0355	0.0355	<0.0386	0.0386				
o-Xylene		<0.0177	0.0177	<0.0193	0.0193				
Total Xylenes		<0.0177	0.0177	<0.0193	0.0193				
Total BTEX		<0.0177	0.0177	<0.0193	0.0193				
Inorganic Anions by EPA 300	***Extracted:***	Nov-13-18 16:30		Nov-13-18 16:30					
	Analyzed:	Nov-13-18 20:27		Nov-13-18 20:32					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		398	5.00	195	4.96				
TPH by SW8015 Mod	***Extracted:***	Nov-13-18 15:00		Nov-13-18 15:00					
	Analyzed:	Nov-14-18 07:51		Nov-14-18 08:10					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0				
Diesel Range Organics (DRO)		<14.9	14.9	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<14.9	14.9	<15.0	15.0				
Total TPH		<14.9	14.9	<15.0	15.0				

Jessica Kramer
Project Assistant

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-001	Date Collected:	11.08.18 10.00	Sample Depth:	7 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**98.5**	24.8	mg/kg	11.13.18 20.06		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.13.18 22.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.13.18 22.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.13.18 22.43	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.13.18 22.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	11.13.18 22.43	
o-Terphenyl	84-15-1	82	%	70-135	11.13.18 22.43	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-001	Date Collected:	11.08.18 10.00	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070018			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0197	0.0197	mg/kg	11.16.18 23.26	U	1
Toluene	108-88-3	<0.0197	0.0197	mg/kg	11.16.18 23.26	U	1
Ethylbenzene	100-41-4	<0.0197	0.0197	mg/kg	11.16.18 23.26	U	1
m,p-Xylenes	179601-23-1	<0.0394	0.0394	mg/kg	11.16.18 23.26	U	1
o-Xylene	95-47-6	<0.0197	0.0197	mg/kg	11.16.18 23.26	U	1
Total Xylenes	1330-20-7	<0.0197	0.0197	mg/kg	11.16.18 23.26	U	1
Total BTEX		<0.0197	0.0197	mg/kg	11.16.18 23.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	68-120	11.16.18 23.26	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	11.16.18 23.26	

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LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-002	Date Collected:	11.08.18 10.15	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.7**	5.00	mg/kg	11.13.18 18.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.13.18 23.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.13.18 23.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.13.18 23.02	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.13.18 23.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	11.13.18 23.02	
o-Terphenyl	84-15-1	86	%	70-135	11.13.18 23.02	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-002	Date Collected:	11.08.18 10.15	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.17.18 04.17	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	11.17.18 04.17	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	11.17.18 04.17	U	1
m,p-Xylenes	179601-23-1	<0.0387	0.0387	mg/kg	11.17.18 04.17	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	11.17.18 04.17	U	1
Total Xylenes	1330-20-7	<0.0193	0.0193	mg/kg	11.17.18 04.17	U	1
Total BTEX		<0.0193	0.0193	mg/kg	11.17.18 04.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	68-120	11.17.18 04.17	
a,a,a-Trifluorotoluene	98-08-8	106	%	71-121	11.17.18 04.17	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-003	Date Collected:	11.08.18 10.50	Sample Depth:	10 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**130**	5.00	mg/kg	11.13.18 19.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.13.18 23.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.13.18 23.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.13.18 23.22	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.13.18 23.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-135	11.13.18 23.22	
o-Terphenyl	84-15-1	78	%	70-135	11.13.18 23.22	

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LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-003	Date Collected:	11.08.18 10.50	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0172	0.0172	mg/kg	11.17.18 02.40	U	1
Toluene	108-88-3	<0.0172	0.0172	mg/kg	11.17.18 02.40	U	1
Ethylbenzene	100-41-4	<0.0172	0.0172	mg/kg	11.17.18 02.40	U	1
m,p-Xylenes	179601-23-1	<0.0343	0.0343	mg/kg	11.17.18 02.40	U	1
o-Xylene	95-47-6	<0.0172	0.0172	mg/kg	11.17.18 02.40	U	1
Total Xylenes	1330-20-7	<0.0172	0.0172	mg/kg	11.17.18 02.40	U	1
Total BTEX		<0.0172	0.0172	mg/kg	11.17.18 02.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	68-120	11.17.18 02.40	
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.17.18 02.40	

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LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-004	Date Collected:	11.09.18 10.15	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.9**	25.0	mg/kg	11.13.18 20.11		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.13.18 23.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.13.18 23.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.13.18 23.41	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.13.18 23.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	11.13.18 23.41	
o-Terphenyl	84-15-1	85	%	70-135	11.13.18 23.41	

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LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-004	Date Collected:	11.09.18 10.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.17.18 04.41	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	11.17.18 04.41	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	11.17.18 04.41	U	1
m,p-Xylenes	179601-23-1	<0.0387	0.0387	mg/kg	11.17.18 04.41	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	11.17.18 04.41	U	1
Total Xylenes	1330-20-7	<0.0193	0.0193	mg/kg	11.17.18 04.41	U	1
Total BTEX		<0.0193	0.0193	mg/kg	11.17.18 04.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	82	%	68-120	11.17.18 04.41	
a,a,a-Trifluorotoluene	98-08-8	85	%	71-121	11.17.18 04.41	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-005	Date Collected:	11.09.18 17.30	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1540**	25.0	mg/kg	11.13.18 20.16		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 07.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 07.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 07.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 07.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.14.18 07.13	
o-Terphenyl	84-15-1	88	%	70-135	11.14.18 07.13	

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LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-005	Date Collected:	11.09.18 17.30	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0199	0.0199	mg/kg	11.17.18 05.05	U	1
Toluene	108-88-3	<0.0199	0.0199	mg/kg	11.17.18 05.05	U	1
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	11.17.18 05.05	U	1
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	11.17.18 05.05	U	1
o-Xylene	95-47-6	<0.0199	0.0199	mg/kg	11.17.18 05.05	U	1
Total Xylenes	1330-20-7	<0.0199	0.0199	mg/kg	11.17.18 05.05	U	1
Total BTEX		<0.0199	0.0199	mg/kg	11.17.18 05.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	68-120	11.17.18 05.05	
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	11.17.18 05.05	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-006	Date Collected:	11.09.18 17.33	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1590**	24.8	mg/kg	11.13.18 20.22		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 07.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.14.18 07.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 07.32	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.14.18 07.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.14.18 07.32	
o-Terphenyl	84-15-1	88	%	70-135	11.14.18 07.32	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-006	Date Collected:	11.09.18 17.33	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	11.17.18 05.30	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	11.17.18 05.30	U	1
Ethylbenzene	100-41-4	<0.0185	0.0185	mg/kg	11.17.18 05.30	U	1
m,p-Xylenes	179601-23-1	<0.0370	0.0370	mg/kg	11.17.18 05.30	U	1
o-Xylene	95-47-6	<0.0185	0.0185	mg/kg	11.17.18 05.30	U	1
Total Xylenes	1330-20-7	<0.0185	0.0185	mg/kg	11.17.18 05.30	U	1
Total BTEX		<0.0185	0.0185	mg/kg	11.17.18 05.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	68-120	11.17.18 05.30	
a,a,a-Trifluorotoluene	98-08-8	84	%	71-121	11.17.18 05.30	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-007	Date Collected:	11.09.18 10.40	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**398**	5.00	mg/kg	11.13.18 20.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.14.18 07.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.14.18 07.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.14.18 07.51	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.14.18 07.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	11.14.18 07.51	
o-Terphenyl	84-15-1	87	%	70-135	11.14.18 07.51	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-007	Date Collected:	11.09.18 10.40	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0177	0.0177	mg/kg	11.17.18 05.54	U	1
Toluene	108-88-3	<0.0177	0.0177	mg/kg	11.17.18 05.54	U	1
Ethylbenzene	100-41-4	<0.0177	0.0177	mg/kg	11.17.18 05.54	U	1
m,p-Xylenes	179601-23-1	<0.0355	0.0355	mg/kg	11.17.18 05.54	U	1
o-Xylene	95-47-6	<0.0177	0.0177	mg/kg	11.17.18 05.54	U	1
Total Xylenes	1330-20-7	<0.0177	0.0177	mg/kg	11.17.18 05.54	U	1
Total BTEX		<0.0177	0.0177	mg/kg	11.17.18 05.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	68-120	11.17.18 05.54	
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.17.18 05.54	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-008	Date Collected:	11.09.18 10.50	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.13.18 16.30	Basis:	Wet Weight
Seq Number:	3069555				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**195**	4.96	mg/kg	11.13.18 20.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.13.18 15.00	Basis:	Wet Weight
Seq Number:	3069549				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.14.18 08.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.14.18 08.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.14.18 08.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.14.18 08.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.14.18 08.10	
o-Terphenyl	84-15-1	86	%	70-135	11.14.18 08.10	

Certificate of Analytical Results 605310

LT Environmental, Inc., Arvada, CO

Ross Ranch 31 Federal 1H

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	11.13.18 13.55
Lab Sample Id:	605310-008	Date Collected:	11.09.18 10.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	11.15.18 09.45	Basis:	Wet Weight
Seq Number:	3070022			SUB:	T104704219-18-18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.17.18 06.17	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	11.17.18 06.17	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	11.17.18 06.17	U	1
m,p-Xylenes	179601-23-1	<0.0386	0.0386	mg/kg	11.17.18 06.17	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	11.17.18 06.17	U	1
Total Xylenes	1330-20-7	<0.0193	0.0193	mg/kg	11.17.18 06.17	U	1
Total BTEX		<0.0193	0.0193	mg/kg	11.17.18 06.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	11.17.18 06.17	
a,a,a-Trifluorotoluene	98-08-8	108	%	71-121	11.17.18 06.17	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 605310

LT Environmental, Inc.

Ross Ranch 31 Federal 1H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069555 Matrix: Solid Date Prep: 11.13.18
MB Sample Id: 7666092-1-BLK LCS Sample Id: 7666092-1-BKS LCSD Sample Id: 7666092-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	255	102	90-110	0	20	mg/kg	11.13.18 17:59	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069555 Matrix: Soil Date Prep: 11.13.18
Parent Sample Id: 605310-002 MS Sample Id: 605310-002 S MSD Sample Id: 605310-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	43.7	250	306	105	309	106	90-110	1	20	mg/kg	11.13.18 18:15	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069555 Matrix: Soil Date Prep: 11.13.18
Parent Sample Id: 605310-003 MS Sample Id: 605310-003 S MSD Sample Id: 605310-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	130	250	363	93	360	92	90-110	1	20	mg/kg	11.13.18 19:29	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069549 Matrix: Solid Date Prep: 11.13.18
MB Sample Id: 7666090-1-BLK LCS Sample Id: 7666090-1-BKS LCSD Sample Id: 7666090-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	938	94	959	96	70-135	2	20	mg/kg	11.13.18 16:04	
Diesel Range Organics (DRO)	<8.13	1000	988	99	1010	101	70-135	2	20	mg/kg	11.13.18 16:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		123		126		70-135	%	11.13.18 16:04
o-Terphenyl	102		99		103		70-135	%	11.13.18 16:04

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

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

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

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

QC Summary 605310

LT Environmental, Inc.

Ross Ranch 31 Federal 1H

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069549 Matrix: Soil Date Prep: 11.13.18
Parent Sample Id: 605309-001 MS Sample Id: 605309-001 S MSD Sample Id: 605309-001 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)	<7.99	999	851	85	848	85	70-135	0	20	mg/kg	11.13.18 17:00	
Diesel Range Organics (DRO)	462	999	1330	87	1340	88	70-135	1	20	mg/kg	11.13.18 17:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		103		70-135	%	11.13.18 17:00
o-Terphenyl	94		89		70-135	%	11.13.18 17:00

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3070018 Matrix: Solid Date Prep: 11.15.18
MB Sample Id: 7666395-1-BLK LCS Sample Id: 7666395-1-BKS LCSD Sample Id: 7666395-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.80	90	1.85	93	55-120	3	20	mg/kg	11.16.18 11:22	
Toluene	<0.0200	2.00	1.83	92	1.85	93	77-120	1	20	mg/kg	11.16.18 11:22	
Ethylbenzene	<0.0200	2.00	1.98	99	2.00	100	77-120	1	20	mg/kg	11.16.18 11:22	
m,p-Xylenes	<0.0400	4.00	3.92	98	3.95	99	78-120	1	20	mg/kg	11.16.18 11:22	
o-Xylene	<0.0200	2.00	1.96	98	1.96	98	78-120	0	20	mg/kg	11.16.18 11:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	108		91		107		68-120	%	11.16.18 11:22
a,a,a-Trifluorotoluene	108		85		102		71-121	%	11.16.18 11:22

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3070022 Matrix: Solid Date Prep: 11.15.18
MB Sample Id: 7666398-1-BLK LCS Sample Id: 7666398-1-BKS LCSD Sample Id: 7666398-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.84	92	1.75	88	55-120	5	20	mg/kg	11.17.18 00:38	
Toluene	<0.0200	2.00	1.83	92	1.75	88	77-120	4	20	mg/kg	11.17.18 00:38	
Ethylbenzene	<0.0200	2.00	1.91	96	1.86	93	77-120	3	20	mg/kg	11.17.18 00:38	
m,p-Xylenes	<0.0400	4.00	3.80	95	3.68	92	78-120	3	20	mg/kg	11.17.18 00:38	
o-Xylene	<0.0200	2.00	1.93	97	1.88	94	78-120	3	20	mg/kg	11.17.18 00:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	86		84		80		68-120	%	11.17.18 00:38
a,a,a-Trifluorotoluene	88		82		80		71-121	%	11.17.18 00:38

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

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

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

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

QC Summary 605310

LT Environmental, Inc.

Ross Ranch 31 Federal 1H

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

Seq Number: 3070018 Matrix: Soil Date Prep: 11.15.18

Parent Sample Id: 605308-021 MS Sample Id: 605308-021 S MSD Sample Id: 605308-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0182	1.82	1.65	91	1.72	89	54-120	4	25	mg/kg	11.16.18 13:48	
Toluene	<0.0182	1.82	1.69	93	1.77	91	57-120	5	25	mg/kg	11.16.18 13:48	
Ethylbenzene	<0.0182	1.82	1.83	101	1.87	96	58-131	2	25	mg/kg	11.16.18 13:48	
m,p-Xylenes	<0.0364	3.64	3.57	98	3.64	94	62-124	2	25	mg/kg	11.16.18 13:48	
o-Xylene	<0.0182	1.82	1.71	94	1.80	93	62-124	5	25	mg/kg	11.16.18 13:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	102		103		68-120	%	11.16.18 13:48
a,a,a-Trifluorotoluene	110		109		71-121	%	11.16.18 13:48

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

Seq Number: 3070022 Matrix: Soil Date Prep: 11.15.18

Parent Sample Id: 605310-003 MS Sample Id: 605310-003 S MSD Sample Id: 605310-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0187	1.87	1.69	90	1.69	89	54-120	0	25	mg/kg	11.17.18 03:05	
Toluene	<0.0187	1.87	1.72	92	1.73	91	57-120	1	25	mg/kg	11.17.18 03:05	
Ethylbenzene	<0.0187	1.87	1.80	96	1.80	95	58-131	0	25	mg/kg	11.17.18 03:05	
m,p-Xylenes	<0.0373	3.73	3.56	95	3.57	94	62-124	0	25	mg/kg	11.17.18 03:05	
o-Xylene	<0.0187	1.87	1.75	94	1.76	93	62-124	1	25	mg/kg	11.17.18 03:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	84		74		68-120	%	11.17.18 03:05
a,a,a-Trifluorotoluene	89		81		71-121	%	11.17.18 03:05

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

CHAIN OF CUSTODY

Page 1 of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford, Texas (281-240-4200) | San Antonio, Texas (210-509-3334) | Phoenix, Arizona (480-355-0900)

Dallas Texas (214-902-0300) | Midland, Texas (432-704-5251)

www.xenco.com

Xenco Quote # | Xenco Job # 460510

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office

Company Address: 3300 N "A" St. Building 1 Unit 103 Midland, TX 79705

Email: abaker@ltenv.com | Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Cody Cardenas

Project Information

Project Name/Number: Rosi Ranch 31 Federal 1H

Project Location: EDDY 2RP-4973

Invoice To: RTO Energy - Kyle Littrell

PO Number:

Analytical Information

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX (only BTEX) 8021	TPH (DRO GRO Mpio) 8015	Chloride (300.00)
1	BH01	7'	11/08	10:00	S	1								X	X	X	X
2	BH02	3'		10:15	S	1								X	X	X	X
3	BH03	10'		10:50	S	1								X	X	X	X
4	SS03	1'	11/09	10:15	S	1											
5	SS04	6"	11/09	17:30	S	1											
6	SS04	1'		17:33	S	1											
7	SS05	6"		10:40	S	1											
8	SS05	1'		10:50	S	1											
9																	
10																	

Matrix Codes

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

Field Comments

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 773760936702

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/12/2018 7:30	1	2	11/12 15:30	2 11/13/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4 1355
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On ice: X Cooler Temp. 0.5 0.8 Thermo. Corr. Factor 0.8

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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Inter-Office Shipment

IOS Number **117198**

Date/Time: 11/13/18 14:43
Lab# From: **Midland**
Lab# To: **Lubbock**

Created by: Brianna Teel
Delivery Priority:
Air Bill No.: FED 773718259231

Please send report to: Jessica Kramer
Address: 1211 W. Florida Ave, Midland TX 79701
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
605310-001	S	BH01	11/08/18 10:00	SW8021B	BTEX by EPA 8021B	11/15/18	11/22/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-002	S	BH02	11/08/18 10:15	SW8021B	BTEX by EPA 8021B	11/15/18	11/22/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-003	S	BH03	11/08/18 10:50	SW8021B	BTEX by EPA 8021B	11/15/18	11/22/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-004	S	SS03	11/09/18 10:15	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-005	S	SS04	11/09/18 17:30	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-006	S	SS04	11/09/18 17:33	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-007	S	SS05	11/09/18 10:40	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	
605310-008	S	SS05	11/09/18 10:50	SW8021B	BTEX by EPA 8021B	11/15/18	11/23/18	JKR	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By: Brianna Teel
Brianna Teel

Date Relinquished: 11/13/2018

Received By: Ashley Derstine

Date Received: 11/14/2018 09:15

Cooler Temperature: 2.9

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Lubbock

IOS #: 117198

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

Sent By: Brianna Teel **Date Sent:** 11/13/2018 02:43 PM

Received By: Ashley Derstine **Date Received:** 11/14/2018 09:15 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.9	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: _____ Date: 11/14/2018
Ashley Derstine

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/13/2018 01:55:00 PM

Work Order #: 605310

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 11/13/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/14/2018
Jessica Kramer

View of the north and western excavation boundaries

Project: 012918155	XTO Energy, Inc. Ross Ranch 31 Federal #1H	LTE Advancing Opportunity
November 15, 2018	Photographic Log	

View of the excavation area western boundary

Project: 012918155	XTO Energy, Inc. Ross Ranch 31 Federal #1H	LTE Advancing Opportunity
November 15, 2018	Photographic Log	

View of the excavation southern boundary

Project: 012918155	XTO Energy, Inc. Ross Ranch 31 Federal #1H	LTE Advancing Opportunity
November 15, 2018	Photographic Log	