



LT Environmental, Inc.

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Midland, Texas 79705
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May 8, 2020

Mr. Bradford Billings
New Mexico Oil Conservation Division
1220 South St. Francis Drive, #3
Santa Fe, New Mexico 87505

**RE: Remediation Work Plan
XTO Energy, Inc.
Avalon Delaware Unit 816
Remediation Permit Number 2RP-2674
Eddy County, New Mexico**

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Remediation Work Plan detailing remediation activities completed to date and proposed remedial actions to address residual impacts at the Avalon Delaware Unit 816 (Site) resulting from a historical release of produced water and crude oil at the Site. The Site is located in Unit 5, Section 4, Township 21 South, Range 27 East, in Eddy County, New Mexico (Figure 1). This Remediation Work Plan summarizes completed investigation activities and proposes additional delineation of identified impacts.

The release is included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the New Mexico Oil Conservation Division (NMOCD) effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018. The release is categorized as a Tier IV site in the Compliance Agreement, meaning the release occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing.

RELEASE BACKGROUND

On September 27, 2014, corrosion of a flow line caused the release of approximately 60 barrels (bbls) of produced water and 5 barrels bbls of crude oil. The pasture area north of the Yates C Federal #019 well pad was affected by the release. XTO reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 on October 1, 2014 and was assigned Remediation Permit (RP) Number 2RP-2674 (Attachment 1). The release location referenced on initial C-141 (Section 5, Township 21 South, Range 27 East) is the location of the ADU 816 well not the location of the flow line release. The final C-141 and attached figures reference the release location in Unit 5, Section 4, Township 21 South, Range 27 East.



SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be approximately less than 50 feet below ground surface (bgs) based on the nearest groundwater well data and subsurface investigation results. The nearest permitted groundwater well with depth to water data is NMOSE water well CP 00746, located approximately 2,585 feet north of the Site. The groundwater well has a depth to groundwater of approximately 29 feet bgs and a total depth of approximately 70 feet bgs. Groundwater monitoring wells installed at the Site indicate depth to groundwater is approximately 38 feet bgs. The closest continuously flowing water or significant watercourse to the Site is an alkali lake located approximately 3,000 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a high potential karst area.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

HISTORICAL REMEDIATION ACTIVITIES

During November 2014, Environmental Plus, Inc. (EPI), an environmental consulting firm that is no longer in operation, conducted initial assessment and excavation activities at the Site. Impacted soil was excavated from the release area to an approximate depth of 4 feet bgs. Approximately 960 tons of impacted soil were removed from the excavation. Site assessment activities indicated chloride impacted soil remained in-place at a depth of 32 feet bgs. EPI submitted a Remediation Progress Report and Closure Proposal to NMOCD on March 31, 2015. EPI proposed continued excavation laterally until sidewall samples were below Remediation Action Levels and installation of a 20-mil liner in the base of the excavation at approximately 4 feet bgs. NMOCD did not approve EPI's closure proposal and required full delineation of chloride impacted soil. EPI's historical documentation including the Remediation Progress Report and Closure Proposal, release extent and soil sample location figures, site photos, NMOCD correspondence, and soil sample laboratory analytical results is provided in Attachment 2.



SITE ASSESSMENT AND DELINEATION ACTIVITIES

Based on NMOCD requirements to fully delineate chloride impacted soil at the Site, LTE conducted additional assessment activities between February and April 2020. The historical excavation remained open. The excavation measured approximately 6,500 square feet in area and was completed to a depth of 2 feet to 4 feet bgs. LTE oversaw the advancement of nineteen soil borings (BH01 through BH18) via sonic drilling rig to assess the lateral and vertical extent of impacted soil. Boreholes BH02, BH04, and BH05 were advanced within the open excavation from the prior remediation activities. Boreholes BH01 through BH19 were completed to depths ranging from 33 feet to 45 feet bgs. Groundwater was encountered in the soil borings at an approximate depth of 35 feet to 39 feet bgs. Delineation soil samples were collected from each borehole from depths ranging from 0.5 feet to 38 feet bgs. The deepest soil sample was collected from the interval directly above the water table. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The borehole and delineation soil sample locations are depicted on Figure 2.

Seven soil borings (BH02, BH08, BH13, and BH15 through BH18) were completed as monitoring wells (MW01 through MW07), to evaluate potential impacts to groundwater and determine groundwater flow direction at the Site. Groundwater monitoring wells were constructed in the boreholes by installing a screened casing across the groundwater interface and solid casing to the surface. The monitoring wells were constructed with 2-inch inside diameter (ID) Schedule 40 polyvinyl chloride (PVC) casing and 0.010-inch slotted screen. A 10-20 size silica sand pack was used to fill the annular space from the bottom of the screen to approximately 2 feet above the top of screen. The sand pack was overlain by hydrated bentonite chips to the ground surface. The monitoring wells were completed aboveground with a locking, steel monument cemented into the ground. Once installed, LTE surveyed the top-of-casing elevations so that groundwater flow direction could be determined. Depth to water measurements were collected utilizing an oil-water interface probe. After allowing to set for at least 24 hours, the wells were developed by purging a minimum of 10-casing volumes. At least 24 hours after well development, LTE collected groundwater samples from the monitoring wells. Sampling was conducted through the use of disposable bailers. The monitoring well locations are depicted on Figure 3. The depth to water measurements and groundwater elevation calculations are provided in Table 1. Groundwater elevation contour maps are provided as Figure 4 and Figure 5. Photographic documentation was conducted during the Site visits. Photographs are included in Attachment 4.

The delineation soil samples were submitted to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) by EPA Method 8015M/D, and chloride by EPA Method 300.0. The groundwater



samples were submitted to Xenco for analysis of chloride by EPA Method 300.0 and total dissolved solids (TDS) by Standard Method (SM) 2540C.

ANALYTICAL RESULTS AND DATA INTERPRETATION

Based on the release point location and calculated groundwater flow direction to the west-northwest, sample points BH10, BH18/MW03, and BH19 are considered background sample points and chloride concentrations in the soil and groundwater samples are representative of naturally occurring chloride concentrations at the Site.

Laboratory analytical results for the background soil samples collected from boreholes BH10, BH18, and BH19 indicated naturally occurring chloride concentrations ranging from 15.7 mg/kg to 860 mg/kg at depths ranging from 0.5 feet to 37 feet bgs. Laboratory analytical results for the background groundwater sample collected from monitoring well MW03 indicated a naturally occurring chloride concentration of 1,010 mg/L and a naturally occurring TDS concentration of 5,700 mg/L.

Laboratory analytical results for the delineation soil samples collected from boreholes BH01 through BH19 indicated that BTEX, GRO/DRO, and TPH were below laboratory detection limits. Chloride concentrations in the boreholes BH01 through BH09 and BH11 through BH17 ranged from below laboratory detection limits to 8,310 mg/kg. Vertical intervals with elevated chloride concentrations were highly variable across the boreholes, which is indicative of preferential pathways through soil with greater permeability/porosity. Chloride concentrations were vertically delineated to below 600 mg/kg above the water table in boreholes BH02, BH03, BH05 through BH10, BH13 through BH16, BH18, and BH19. Chloride concentrations in the soil sample collected from the interval directly above the water table exceeded 600 mg/kg in boreholes BH01, BH04, BH11, BH12, and BH17 at concentrations ranging from 612 mg/kg to 6,160 mg/kg, which indicates that chloride impacted soil extended vertically to groundwater.

Laboratory analytical results for the groundwater samples collected from monitoring wells MW01, MW02, MW04 through MW07 indicated chloride concentrations ranging from 1,880 mg/L to 6,430 mg/L and TDS concentrations ranging from 6,290 mg/L to 20,300 mg/L. The chloride and TDS concentrations in monitoring wells MW01, MW02, and MW04 through MW07 exceeded the background concentrations established in upgradient monitoring well MW03.

The soil sample laboratory analytical results are summarized in Table 2. The groundwater sample laboratory analytical results are summarized in Table 3. The complete laboratory analytical reports are included as Attachment 5.

PROPOSED REMEDIATION WORK PLAN

Based on the February through April 2020 site assessment activities described above, the extent of soil impact is much more extensive than anticipated and may include more than one historical



source. Additional remediation activities are warranted, but appropriate remediation cannot be designed until full delineation is determined. LTE proposes additional delineation of soil and groundwater impacts, as described below:

- Point of compliance (POC) has been achieved northeast of the release point by borehole BH10, east of the release point by borehole BH18, and south of the release point by BH19. Additional boreholes will be installed via sonic drilling rig until the full extent of chloride impacted soil has been delineated and POC has been achieved to the north, west, and southwest of the release point. Soil from the boreholes will be field screened for chloride using chloride QuanTab® test strips. Field screening results and observations for the boreholes will be logged on lithologic/soil sampling logs. Soil samples will be collected at 5-foot intervals from each borehole and submitted for laboratory analysis of chloride by EPA Method 300.0. The final vertical soil sample in each borehole will be collected from the interval directly above the water table.
- Groundwater monitoring wells will be completed in the final POC soil borings. Monitoring well completions will be conducted as described above. Proposed soil boring/monitoring well locations are depicted on the attached Figure 6.
- Two 4-inch wells will be installed near the known source area to potentially serve as future remediation wells.
- All new and existing monitoring wells will be sampled on a quarterly basis following the completion of final delineation activities. The groundwater samples will be analyzed for chloride and TDS by EPA Method 300.0 and SM 2540C, respectively. Analytical results will be monitored to ensure that chloride and TDS concentrations in groundwater are stable and not migrating beyond the POC wells.
- Once soil and groundwater impacts have been fully delineated and the full extent of the soil and groundwater plumes are known, additional remediation and/or groundwater abatement activities will be proposed.

LTE and XTO believe that full delineation of soil and groundwater impacts and quarterly groundwater monitoring are initial remediation activities that are protective of human health and the environment. The nearest water well is located 2,585 feet north and upgradient of the Site, alkali lakes are present to the southeast and southwest of the Site, indicating natural salinity in the area, and land use in the area is primarily oil and gas activities. The delineation activities, monitoring well installation, and soil excavation activities described above would be completed within 90 days of the date of approval of this work plan by NMOCD.

Upon completion of the above activities, a follow-up remediation work plan will be submitted to NMOCD to summarize the final investigation activities, provide soil and groundwater analytical results, and propose subsequent remediation. The follow-up remediation workplan will be submitted to the NMOCD within 60 days of completion of final delineation activities.



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

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink that reads 'Aimee Cole'.

Aimee Cole
Project Environmental Scientist

A handwritten signature in black ink that reads 'Ashley L. Ager'.

Ashley L. Ager, P.G.
Senior Geologist

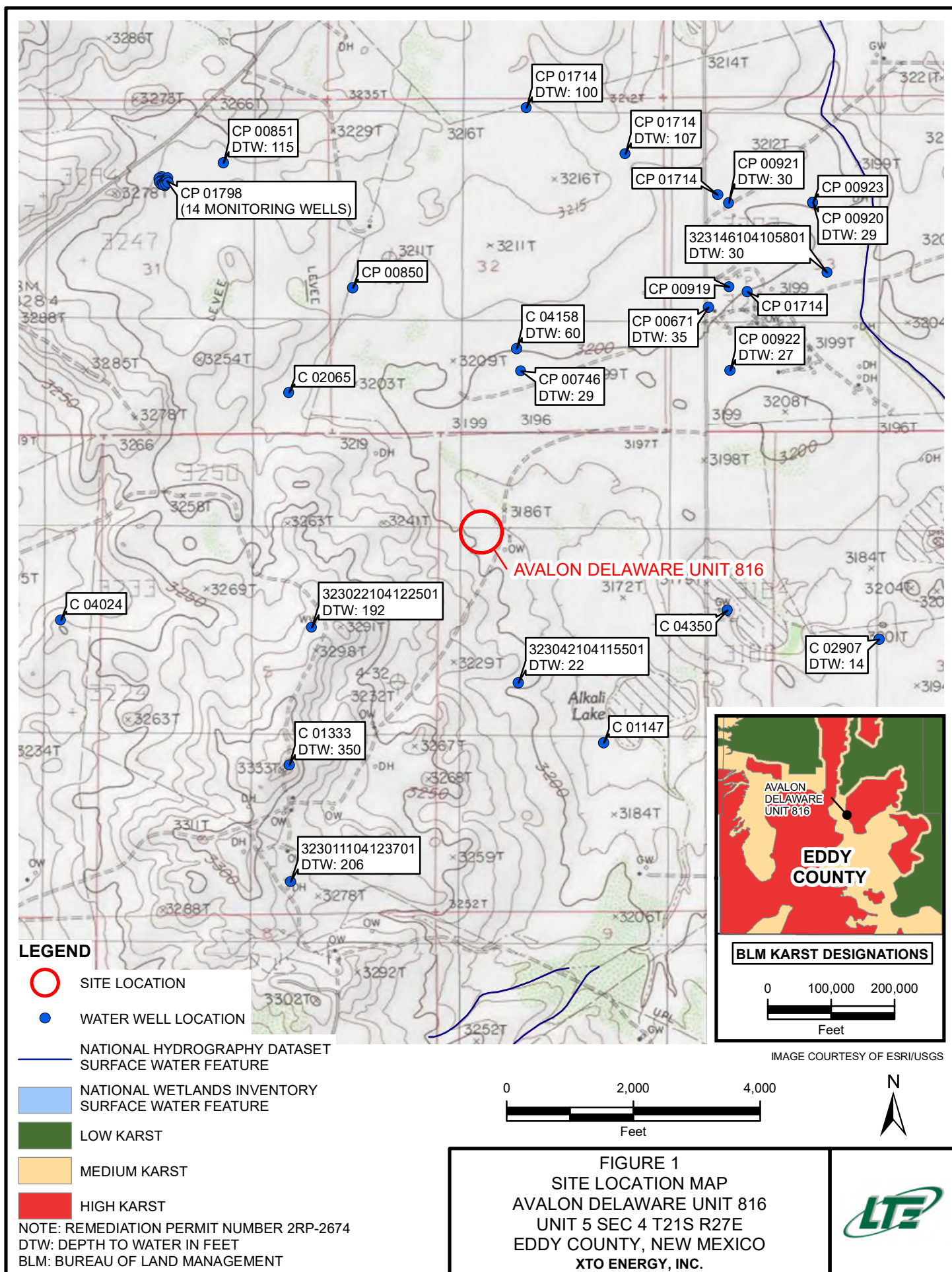
cc: Kyle Littrell, XTO
Mike Bratcher, NMOCD
Bureau of Land Management

Attachments:

- Figure 1 Site Location Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Groundwater Monitoring Well Locations
- Figure 4 Groundwater Elevation Map (4-2-2020)
- Figure 5 Groundwater Elevation Map (4-14-2020)
- Figure 6 Proposed Soil Boring/Monitoring Well Locations
- Table 1 Depth to Groundwater and Groundwater Elevation Data
- Table 2 Soil Analytical Results
- Table 3 Groundwater Analytical Results
- Attachment 1 Initial/Final NMOCD Form C-141 (2RP-2674)
- Attachment 2 Historical Documentation
- Attachment 3 Lithologic / Soil Sample Logs
- Attachment 4 Photographic Log
- Attachment 5 Laboratory Analytical Reports

FIGURES





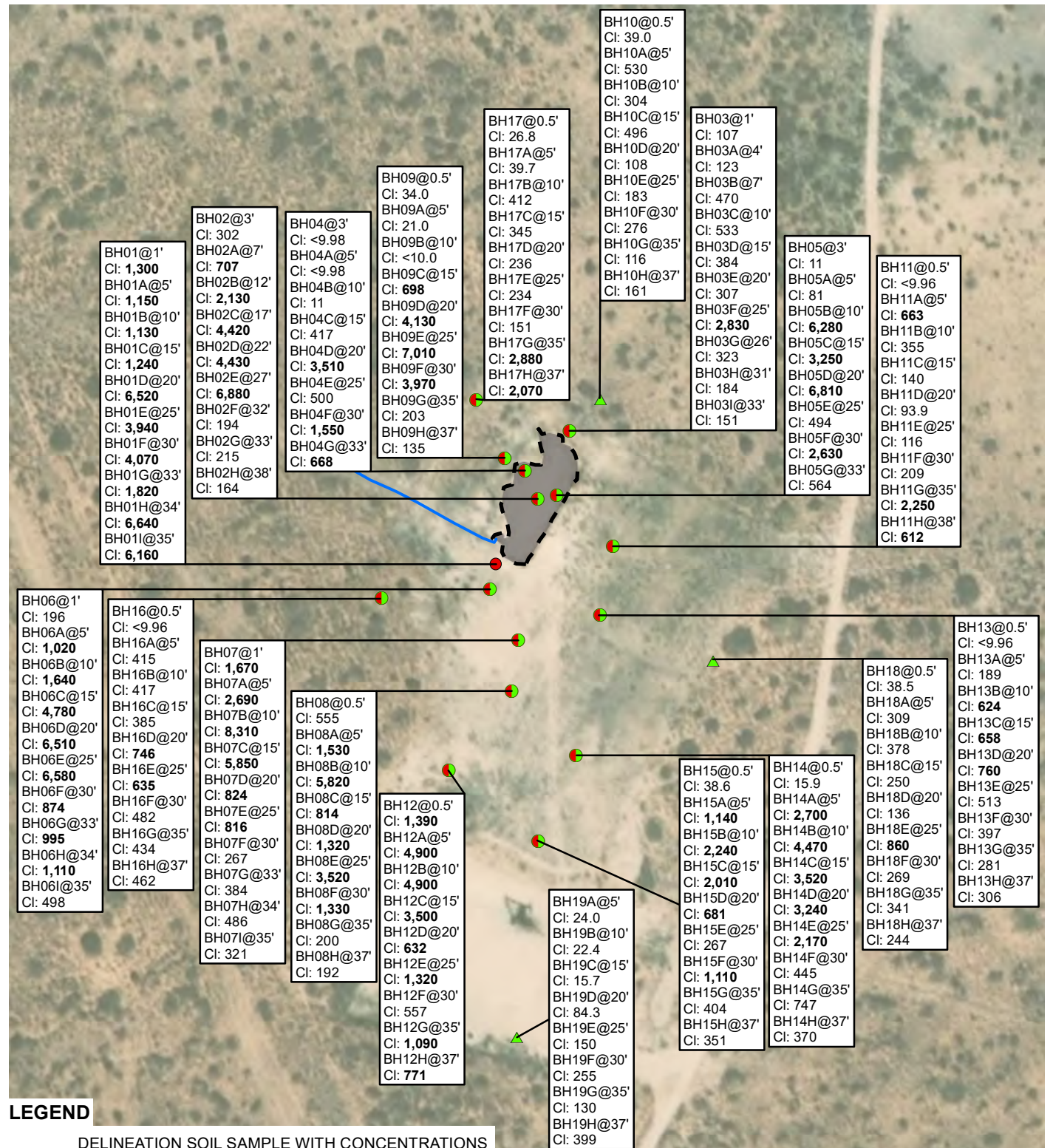
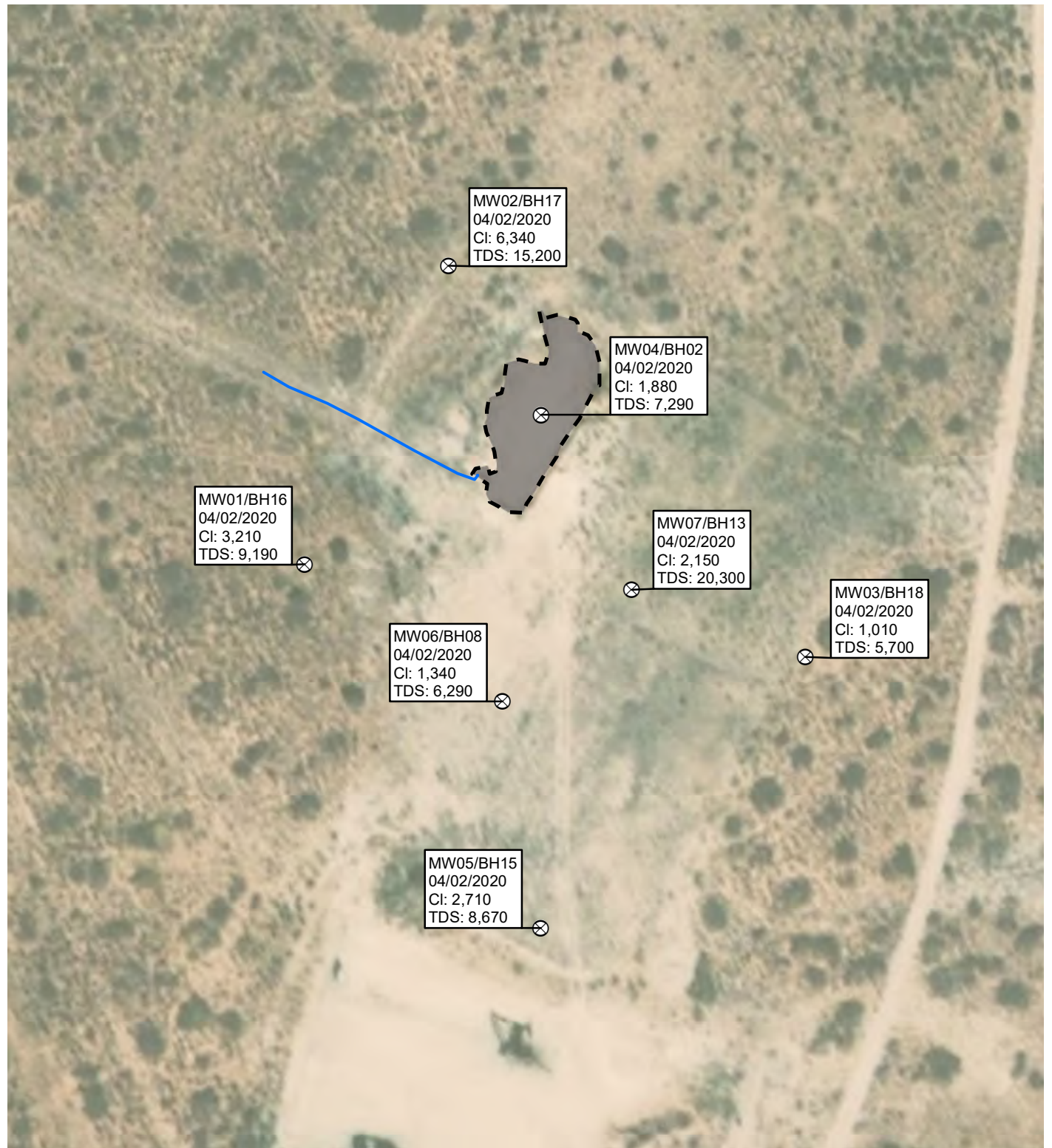


IMAGE COURTESY OF ESRI

**LEGEND**

⊗ MONITORING WELL

— WATER LINE

EXCAVATION EXTENT

Cl: CHLORIDE

TDS: TOTAL DISSOLVED SOLIDS

NE: NOT ESTABLISHED

NMWQCC: NEW MEXICO WATER

QUALITY CONTROL COMMISSION STANDARD

NOTE: REMEDIATION PERMIT NUMBER 2RP-2674

IMAGE COURTESY OF ESRI

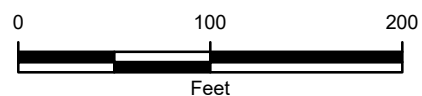


FIGURE 3
GROUNDWATER ANALYTICAL RESULTS
 AVALON DELAWARE UNIT 816
 UNIT 5 SEC 4 T21S R27E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



**LEGEND**

MONITORING WELL

CALCULATED GROUNDWATER
FLOW DIRECTIONRELATIVE GROUNDWATER ELEVATION CONTOUR
CONTOUR INTERVAL = 0.20 FEET

GROUNDWATER ELEVATIONS WERE MEASURED
ON APRIL 2, 2020
NOTE: REMEDIATION PERMIT NUMBER 2RP-2674

IMAGE COURTESY OF ESRI

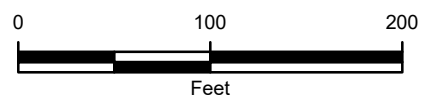


FIGURE 4
GROUNDWATER ELEVATION
AVALON DELAWARE UNIT 816
UNIT 5 SEC 5 T21S R27E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



**LEGEND**

MONITORING WELL

CALCULATED GROUNDWATER
FLOW DIRECTION

GROUNDWATER ELEVATION CONTOUR

CONTOUR INTERVAL = 10 FEET

GROUNDWATER ELEVATIONS WERE MEASURED
ON APRIL 14, 2020

NOTE: REMEDIATION PERMIT NUMBER 2RP-2674

IMAGE COURTESY OF ESRI

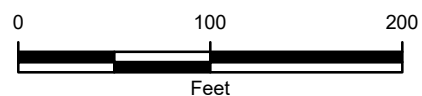


FIGURE 5 5
GROUNDWATER ELEVATION
AVOLON DELAWARE UNIT 816
UNIT 5 SEC 4 T21S R27E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



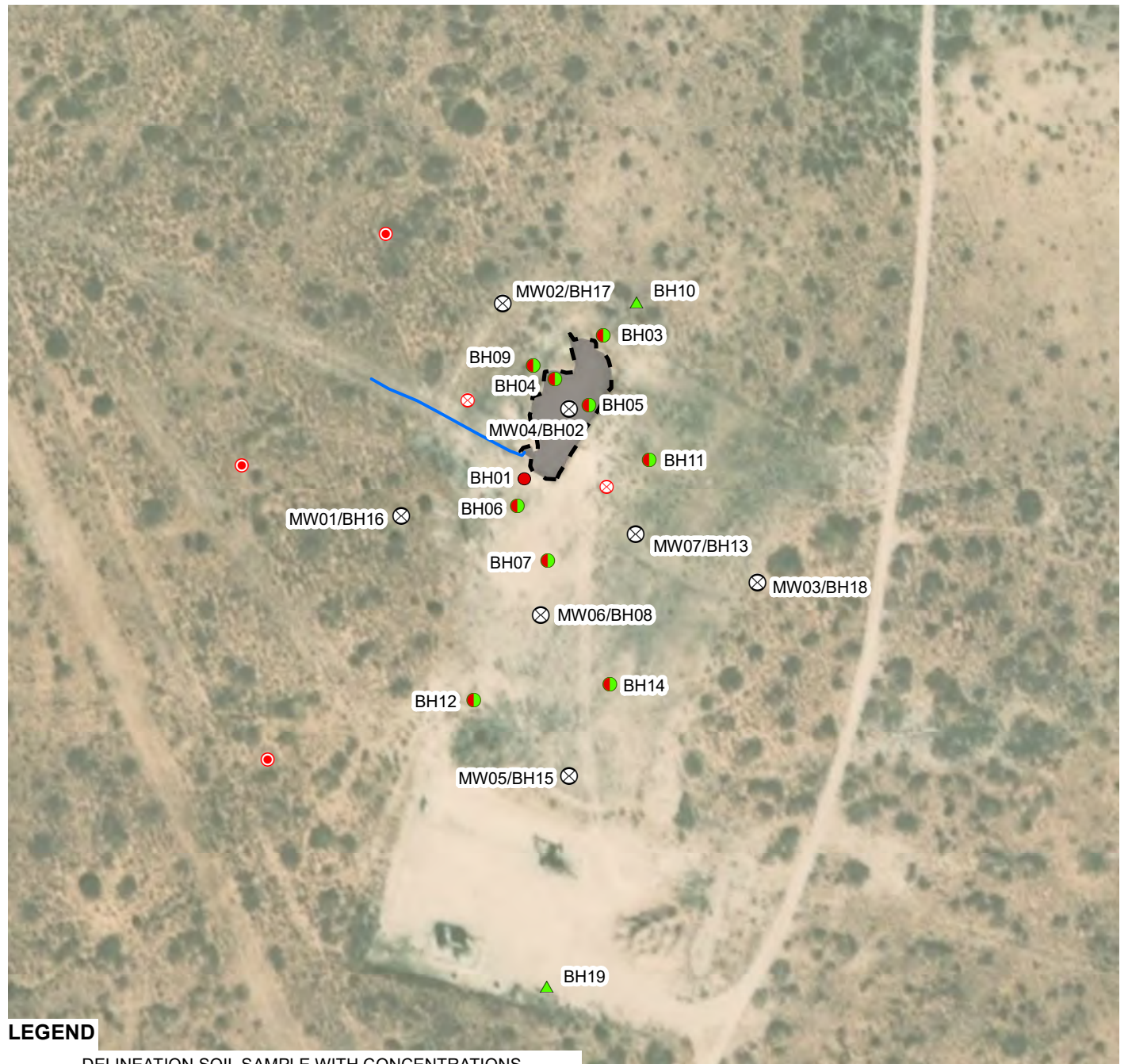


IMAGE COURTESY OF ESRI

LEGEND

- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING AT INITIAL DEPTHS AND HAS BEEN EXCAVATED
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- ⊗ EXISTING MONITORING WELL
- ▲ BACKGROUND SOIL SAMPLE
- PROPOSED SOIL BORING /MONITORING WELL
- ⊗ PROPOSED 4-INCH MONITORING WELL

— WATER LINE

[Dashed Box] EXCAVATION EXTENT

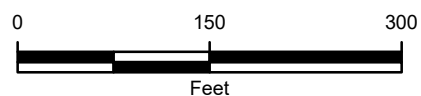
NOTE: REMEDIATION PERMIT
NUMBER 2RP-2674

FIGURE 6
PROPOSED SOIL BORING/MONITORING WELL LOCATIONS
 AVALON DELAWARE UNIT 816
 UNIT 5 SEC 4 T21S R27E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



TABLES



TABLE 1
 DEPTH TO GROUNDWATER AND GROUNDWATER ELEVATION DATA
 AVALON DELAWARE UNIT 816
 REMEDIATION PERMIT NUMBER 2RP-2674
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.

Well Name	Date	Wellhead Elevation, TOC (feet)	Wellhead Elevation, Ground Surface (feet)	DTW (feet)	Adjusted GWEL (feet)
MW01/BH16	4/2/2020	103.26	99.95	38.80	64.46
MW02/BH17	4/2/2020	98.23	94.95	33.64	64.59
MW03/BH18	4/2/2020	98.84	95.81	33.42	65.42
MW04/BH02	4/2/2020	94.56	91.63	29.85	64.71
MW05/MW15	4/2/2020	104.59	101.66	39.32	65.27
MW06/BH08	4/2/2020	102.75	99.79	38.13	64.62
MW07/BH13	4/2/2020	99.14	96.17	33.87	65.27

Well Name	Date	Wellhead Elevation, TOC (feet)	Wellhead Elevation, Ground Surface (feet)	DTW (feet)	Adjusted GWEL (feet)
MW01/BH16	4/14/2020	103.26	99.95	38.88	64.38
MW02/BH17	4/14/2020	98.23	94.95	33.71	64.52
MW03/BH18	4/14/2020	98.84	95.81	33.53	65.31
MW04/BH02	4/14/2020	94.56	91.63	29.95	64.61
MW05/MW15	4/14/2020	104.59	101.66	39.41	65.18
MW06/BH08	4/14/2020	102.75	99.79	38.24	64.51
MW07/BH13	4/14/2020	99.14	96.17	33.97	65.17

Notes:

TOC - top of casing

DTW - depth to water

GWEL - groundwater elevation

TABLE 2
SOIL ANALYTICAL RESULTS
AVALON DELAWARE UNIT 816
REMEDATION PERMIT NUMBER 2RP-2674
EDDY COUNTY, NEW MEXICO
XTO ENERGY

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10.0	NE	NE	NE	50.0	NE	NE	NE	NE	100	600
BH01	1	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	1,300
BH01A	5	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	1,150
BH01B	10	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	1,130
BH01C	15	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	1,240
BH01D	20	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	6,520
BH01E	25	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	3,940
BH01F	30	02/02/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	4,070
BH01G	33	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	1,820
BH01H	34	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	6,640
BH01I	35	02/02/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	6,160
BH02	3	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	302
BH02A	7	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	707
BH02B	12	02/01/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	2,130
BH02C	17	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	4,420
BH02D	22	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	4,430
BH02E	27	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	6,880
BH02F	32	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	194
BH02G	33	02/01/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	215
BH02H	38	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	164
BH03	1	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	107
BH03A	4	02/01/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	123
BH03B	7	02/01/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	470
BH03C	10	02/01/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	533
BH03D	15	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	384
BH03E	20	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	307
BH03F	25	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	2,830
BH03G	26	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	323
BH03H	31	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	184
BH03I	33	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	151
BH04	3	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	<9.98
BH04A	5	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<9.98
BH04B	10	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	11
BH04C	15	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	417
BH04D	20	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	3,510
BH04E	25	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	500
BH04F	30	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	1,550
BH04G	33	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	668

TABLE 2
SOIL ANALYTICAL RESULTS
AVALON DELAWARE UNIT 816
REMEDIATION PERMIT NUMBER 2RP-2674
EDDY COUNTY, NEW MEXICO
XTO ENERGY

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10.0	NE	NE	NE	50.0	NE	NE	NE	NE	100	600
BH05	3	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	11
BH05A	5	02/01/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	81
BH05B	10	02/01/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	6,280
BH05C	15	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	3,250
BH05D	20	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	6,810
BH05E	25	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	494
BH05F	30	02/01/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	2,630
BH05G	33	02/01/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	564
BH06	1	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	196
BH06A	5	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	1,020
BH06B	10	02/02/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	1,640
BH06C	15	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	4,780
BH06D	20	02/02/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	6,510
BH06E	25	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	6,580
BH06F	30	02/02/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	874
BH06G	33	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	995
BH06H	34	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,110
BH06I	35	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	498
BH07	1	02/02/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	1,670
BH07A	5	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	2,690
BH07B	10	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	8,310
BH07C	15	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	5,850
BH07D	20	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	824
BH07E	25	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	816
BH07F	30	02/02/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	267
BH07G	33	02/02/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	384
BH07H	34	02/02/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	486
BH07I	35	02/02/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	321
BH08	0.5	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	555
BH08A	5	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,530
BH08B	10	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	5,820
BH08C	15	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	814
BH08D	20	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	1,320
BH08E	25	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	3,520
BH08F	30	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	1,330
BH08G	35	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	200
BH08H	37	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	192

TABLE 2
SOIL ANALYTICAL RESULTS
AVALON DELAWARE UNIT 816
REMEDATION PERMIT NUMBER 2RP-2674
EDDY COUNTY, NEW MEXICO
XTO ENERGY

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10.0	NE	NE	NE	50.0	NE	NE	NE	NE	100	600
BH09	0.5	03/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	34.0
BH09A	5	03/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	21.0
BH09B	10	03/27/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	<10.0
BH09C	15	03/27/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	698
BH09D	20	03/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	4,130
BH09E	25	03/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	7,010
BH09F	30	03/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	3,970
BH09G	35	03/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	203
BH09H	37	03/27/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	135
BH10	0.5	03/25/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	39.0
BH10A	5	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	530
BH10B	10	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	304
BH10C	15	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	496
BH10D	20	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	108
BH10E	25	03/25/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	183
BH10F	30	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	276
BH10G	35	03/25/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	116
BH10H	37	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	161
BH11	0.5	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<9.96
BH11A	5	03/26/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	663
BH11B	10	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	355
BH11C	15	03/26/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	140
BH11D	20	03/26/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	93.9
BH11E	25	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	116
BH11F	30	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	209
BH11G	35	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	2,250
BH11H	38	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	612
BH12	0.5	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,390
BH12A	5	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	4,900
BH12B	10	03/28/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	4,900
BH12C	15	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	3,500
BH12D	20	03/28/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	632
BH12E	25	03/28/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	1,320
BH12F	30	03/28/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	557
BH12G	35	03/28/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	1,090
BH12H	37	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	771

TABLE 2
SOIL ANALYTICAL RESULTS
AVALON DELAWARE UNIT 816
REMEDIATION PERMIT NUMBER 2RP-2674
EDDY COUNTY, NEW MEXICO
XTO ENERGY

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10.0	NE	NE	NE	50.0	NE	NE	NE	NE	100	600
BH13	0.5	03/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	67.4	<50.0	67.4	67.4	<9.96
BH13A	5	03/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	189
BH13B	10	03/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	624
BH13C	15	03/27/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	658
BH13D	20	03/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	760
BH13E	25	03/27/2020	<0.00201	<0.00201	<0.00201	0.00201	0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	513
BH13F	30	03/27/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	397
BH13G	35	03/27/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	281
BH13H	37	03/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	306
BH14	0.5	03/28/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	15.9
BH14A	5	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	2,700
BH14B	10	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	4,470
BH14C	15	03/28/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	3,520
BH14D	20	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	3,240
BH14E	25	03/28/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	2,170
BH14F	30	03/28/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	445
BH14G	35	03/28/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	747
BH14H	37	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	370
BH15	0.5	03/28/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	38.6
BH15A	5	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	1,140
BH15B	10	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	2,240
BH15C	15	03/28/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	2,010
BH15D	20	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	681
BH15E	25	03/28/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	267
BH15F	30	03/28/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	1,110
BH15G	35	03/28/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	404
BH15H	37	03/28/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	351
BH16	0.5	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	<9.96
BH16A	5	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	415
BH16B	10	03/25/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	417
BH16C	15	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	385
BH16D	20	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	746
BH16E	25	03/25/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	635
BH16F	30	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	482
BH16G	35	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	434
BH16H	37	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	462

TABLE 2
SOIL ANALYTICAL RESULTS
AVALON DELAWARE UNIT 816
REMEDIATION PERMIT NUMBER 2RP-2674
EDDY COUNTY, NEW MEXICO
XTO ENERGY

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10.0	NE	NE	NE	50.0	NE	NE	NE	NE	100	600
BH17	0.5	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	26.8
BH17A	5	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	39.7
BH17B	10	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	412
BH17C	15	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	345
BH17D	20	03/25/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	236
BH17E	25	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	234
BH17F	30	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	151
BH17G	35	03/25/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	2,880
BH17H	37	03/25/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	2,070
BH18	0.5	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	38.5
BH18A	5	03/26/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	309
BH18B	10	03/26/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	378
BH18C	15	03/26/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	250
BH18D	20	03/26/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	136
BH18E	25	03/26/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	860
BH18F	30	03/26/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	269
BH18G	35	03/26/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	341
BH18H	37	03/26/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	244
BH19A	5	03/29/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	24.0
BH19B	10	03/29/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	22.4
BH19C	15	03/29/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	15.7
BH19D	20	03/29/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	84.3
BH19E	25	03/29/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	150
BH19F	30	03/29/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	255
BH19G	35	03/29/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	130
BH19H	37	03/29/2020	<0.00198	<0.00198	<0.00198	0.0188	0.0188	<49.9	<49.9	<49.9	<49.9	<49.9	399

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

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

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
AVALON DELAWARE UNIT 816
REMEDIATION PERMIT NUMBER 2RP-2674
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Date	Chloride (mg/L)	TDS (mg/L)
MW01	04/02/2020	3,210	9,190
MW02	04/02/2020	6,340	15,200
MW03	04/02/2020	1,010	5,700
MW04	04/02/2020	1,880	7,290
MW05	04/02/2020	2,710	8,670
MW06	04/02/2020	1,340	6,290
MW07	04/02/2020	2,150	20,300

Notes:

bgs - below ground surface

TDS - total dissolved solids

mg/L - milligrams per liter

ATTACHMENT 1: INITIAL/FINAL NMOC FORM C-141 (2RP-2674)



NM OIL CONSERVATION

ARTESIA DISTRICT

State of New Mexico

Energy Minerals and Natural Resources

DEC 17 2014

Form C-141

Revised August 8, 2011

N. French Dr., Hobbs, NM 88240

District II
811 S. First St., Artesia, NM 88210District III
1000 Rio Brazos Road, Aztec, NM 87410District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1435334041

OPERATOR

X Initial Report ☐ Final Report

Name of Company	XTO Energy Inc. 5880	Contact	John Robinson
Address	500 West Illinois, Suite 100 Midland TX 79701	Telephone No.	575-441-5199
Facility Name	ADU 816 (AVALON DELAWARE UNIT)	Facility Type	Injection Well
Surface Owner	Mineral Owner	API No.	3001524696

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	5	21S	27E	563	North	560	East	EDDY

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Oil and Produced Water	Volume of Release	5 Oil and 60 Water	Volume Recovered	None
Source of Release	Injection Line	Date and Hour of Occurrence	9-27-14 7:00am	Date and Hour of Discovery	9-27-14 7:00 am
Was Immediate Notice Given?	X Yes ☐ No ☐ Not Required	If YES, To Whom?	Jeff Robertson		
By Whom?	John Robinson	Date and Hour	9-27-14 3:00pm		
Was a Watercourse Reached?	☐ Yes X No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Corrosion on flow line. Shut in well

Describe Area Affected and Cleanup Action Taken.*

Pasture. No action taken yet

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <i>John Robinson</i>	OIL CONSERVATION DIVISION	
Printed Name: John Robinson	Approved by Environmental Specialist Signed By <i>[Signature]</i>	
Title: Maintenance Foreman	Approval Date:	Expiration Date:
E-mail Address: john_robinson@xtoenergy.com	Conditions of Approval:	Attached ☐
Date: 10-1-14	Phone: 575-441-5199	

* Attach Additional Sheets If Necessary

2RP-2674

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	
District RP	2RP-2674
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-2674
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.51834 Longitude -104.20101
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: ADU 816	Site Type: Injection Well
Date Release Discovered: 9/27/2014	API# (if applicable): 30-015-24696

Unit Letter	Section	Township	Range	County
5	4	21S	27E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 5	Volume Recovered (bbls): 0
☒ Produced Water	Volume Released (bbls): 60	Volume Recovered (bbls): 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Corrosion on injection line.

Incident ID	
District RP	2RP-2674
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Release volume was greater than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? By John Robinson to Jeff Robertson on 9/27/2014, at 3:00 pm.	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: N/A	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Kyle Littrell</u>	Title: <u>SH&E Supervisor</u>
Signature: _____	Date: <u>5-8-2020</u>
email: <u>Kyle.Littrell@xtoenergy.com</u>	Telephone: <u>432-221-7331</u>
<u>OCD Only</u> Received by: _____ Date: _____	

Incident ID	
District RP	2RP-2674
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</u> (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

Page 4

Incident ID	
District RP	2RP-2674
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: _____ Date: 5-8-2020

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

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	2RP-2674
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Kyle Littrell Title: SH&E Supervisor
Signature: _____ Date: 5-8-2020
email: Kyle.Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Jocelyn Harimon Date: 06/09/2022

☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 06/09/2022

ATTACHMENT 2: HISTORICAL DOCUMENTATION





ENVIRONMENTAL PLUS, INC.
CONSULTING AND ENVIRONMENTAL REMEDIATION

31 March 2015

Mr. Mike Bratcher
Environmental Specialist
NMOCD
811 S. First St.
Artesia, New Mexico 88210

RE: Remediation Progress Report and Closure Proposal
XTO Energy – ADU #816
UL-D, Section 4, Township 21 South, Range 27 East
Eddy County, New Mexico
NMOCD Reference # 2RP-2674

Mr. Bratcher:

The following *Remediation Progress Report and Closure Proposal* serves as a condensed update on remedial activities undertaken and closure proposal for the above referenced Site.

Remediation Progress:

EPI personnel mobilized on the site on November 10, 2014 to collect soil samples to determine the vertical extent of contamination. A total of eleven (11) soil samples were collected at varying depths from three (3) sample locations; SP1 – SP3. All samples were sent to Cardinal Labs for testing. Laboratory analytical results indicate Benzene and BTEX concentrations do not exceed NMOCD Recommended Remedial Action Levels (NMOCD RRALs) of 10 mg/Kg and 50 mg/Kg, respectively, at any depth. However TPH concentrations exceeded NMOCD RRALs of 250 mg/Kg in SP2 at one (1) foot bgs and SP3 at one (1) and four (4) feet bgs. Chloride concentrations exceeded NMOCD RRALs in all samples to a depth of four (4) feet bgs.

From November 11 through 20, 2014 approximately 960 tons of contaminated material were excavated and transported to state approved facility for disposal. At the conclusion of excavation activities six (6) soil samples, SW1 – SW6, were collected from excavation sidewalls and three (3) soil samples, B1 – B3, were collected from the excavation floor. Samples were sent to Cardinal Labs in Hobbs for testing.

On December 5, 2014 sample locations B1 – B3 from the excavation floor were re-drilled with soil samples collected at eighteen (18) feet bgs. Then on January 19, 2015 sample point SP2 was re-drilled with a soil sample collected at thirty-two (32) bgs. All samples were sent to Cardinal Labs for testing.

Laboratory analytical results indicate the excavation sidewalls and floor are void of Benzene, BTEX, and TPH concentrations in excess of NMOCD RRALs of 10 mg/Kg, 50 mg/Kg, and 100 mg/Kg respectively. However, Chloride concentrations exceed NMOCD RRALs of 250 mg/Kg in all samples other than SW3 and SW5 (reference *Figure 4* and *Table 2*).

**Closure Proposal:**

Sidewalls of the excavation will be excavated in two (2) foot increments until Chloride concentrations are below NMOCD RRALs. However, taking into consideration the vertical depth of contamination, it would require a very large excavation for removal of all Chloride impacted soil to a depth between approximately four (4) and thirty-two (32) vertical feet. In lieu of this, EPI proposes to place a twenty (20) mil thick polyethylene liner in the bottom of the excavated area (reference *Figure 5*). Bottom of the polyethylene liner will lay on a one (1) foot thick layer of clean top soil. Remainder of the excavation will be backfilled with selected top soil to finish grade. Top soil will be free of deleterious material or rocks or large clumps.

Backfilling will continue until the entire excavation is closed. Upon completion of backfill activities, the entire disturbed area will be contoured to blend with existing pasture area and protected against wind/water erosion. Disturbed areas will be disced and deep drill seeded with a mixture approved by the property owner. However, it is recommended completing this activity in late spring 2015 when ground conditions are more conducive to vegetative growth.

EPI and XTO personnel are aware this represents a “risk based” closure procedure, but feel it is justified under conditions as described above with the sheer volume of soil that would need to be excavated.

Following completion of remediation activities, EPI will provide a detailed *Final Closure Report* to XTO Energy and NMOCD personnel.

XTO Energy and EPI personnel would welcome an opportunity to briefly discuss the *Closure Proposal* at your earliest convenience. However, should you have any questions or concerns please feel free to contact me at (575) 394-3481 or via e-mail at ddominguezepi@gmail.com or Mr. John Robinson at (575) 441-5199 or via e-mail at john_robinson@xtoenergy.com. All official communication should be addressed to:

Mr. John Robinson
XTO Energy
P.O. Box 700
Eunice, New Mexico 88231

Sincerely,

ENVIRONMENTAL PLUS, INC.

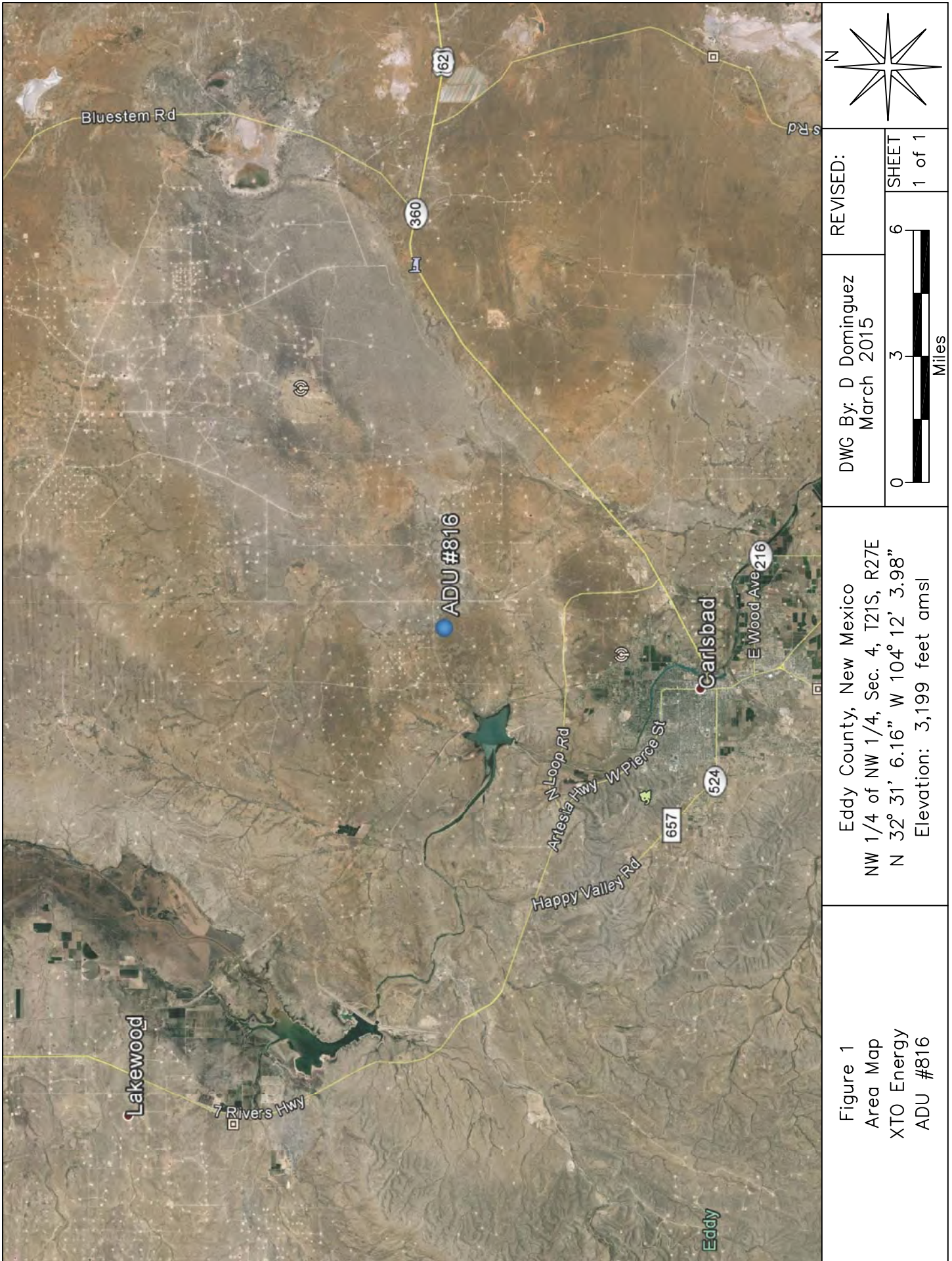
Daniel Dominguez
Environmental Consultant

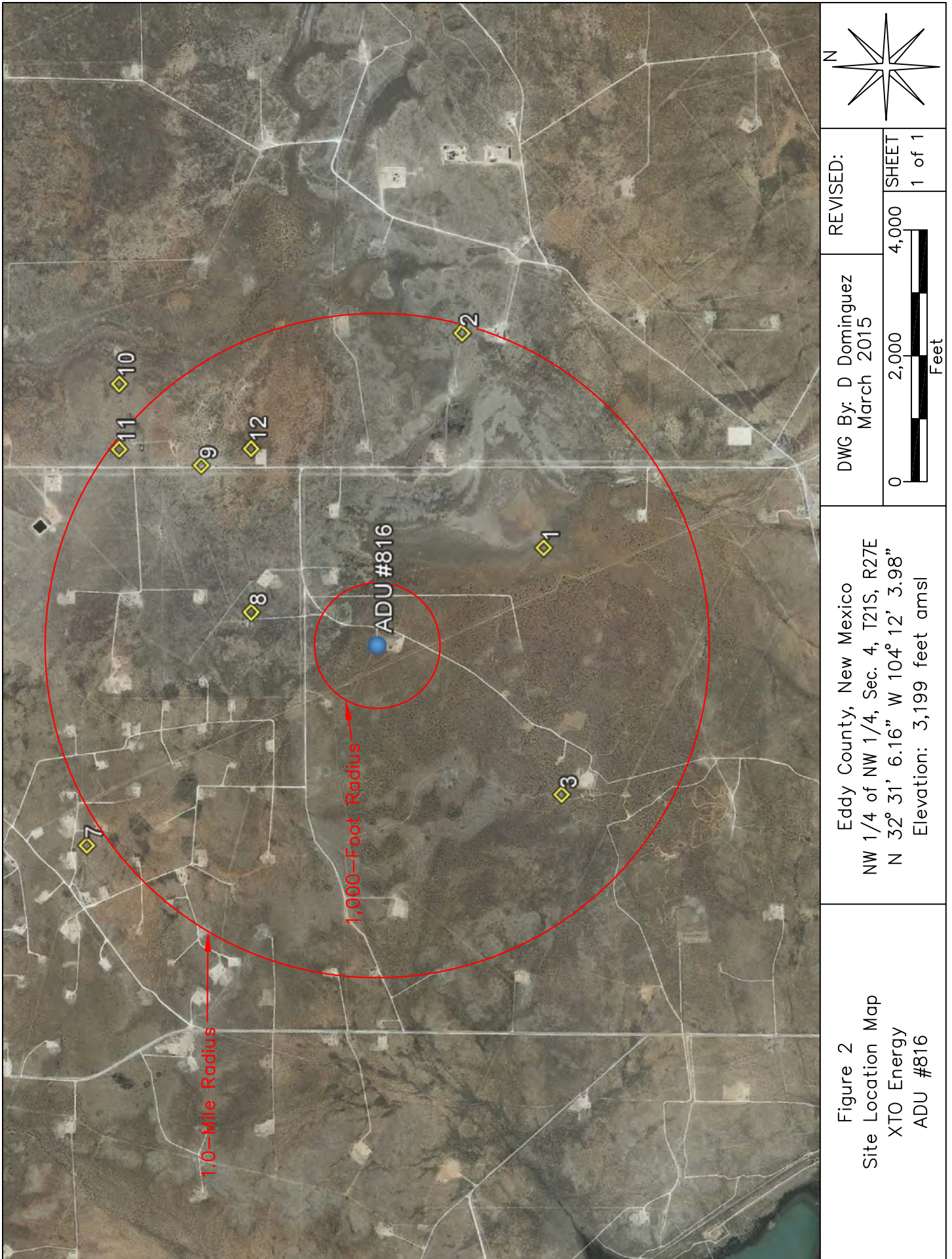


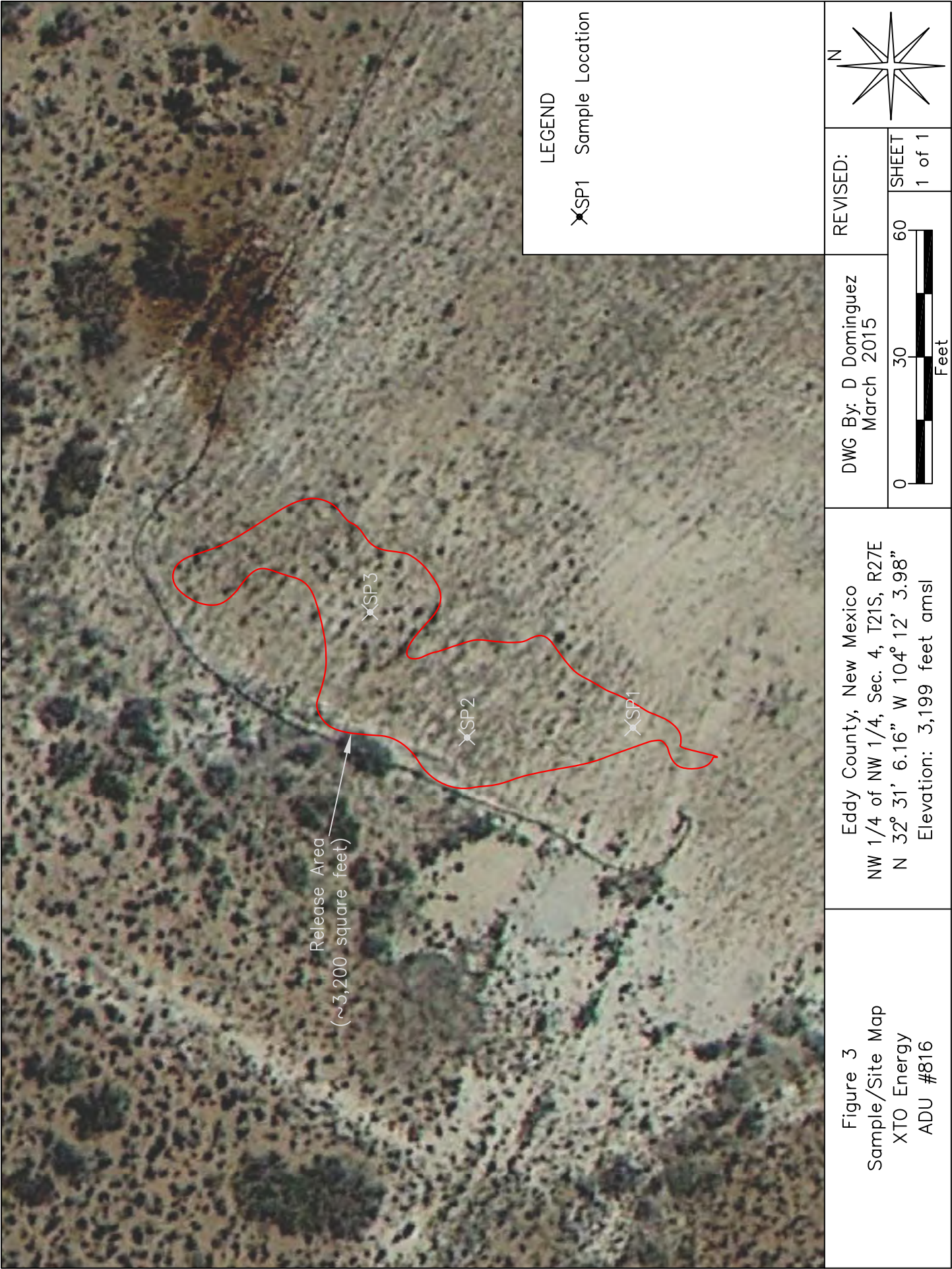
cc: John Robinson – XTO Energy
File

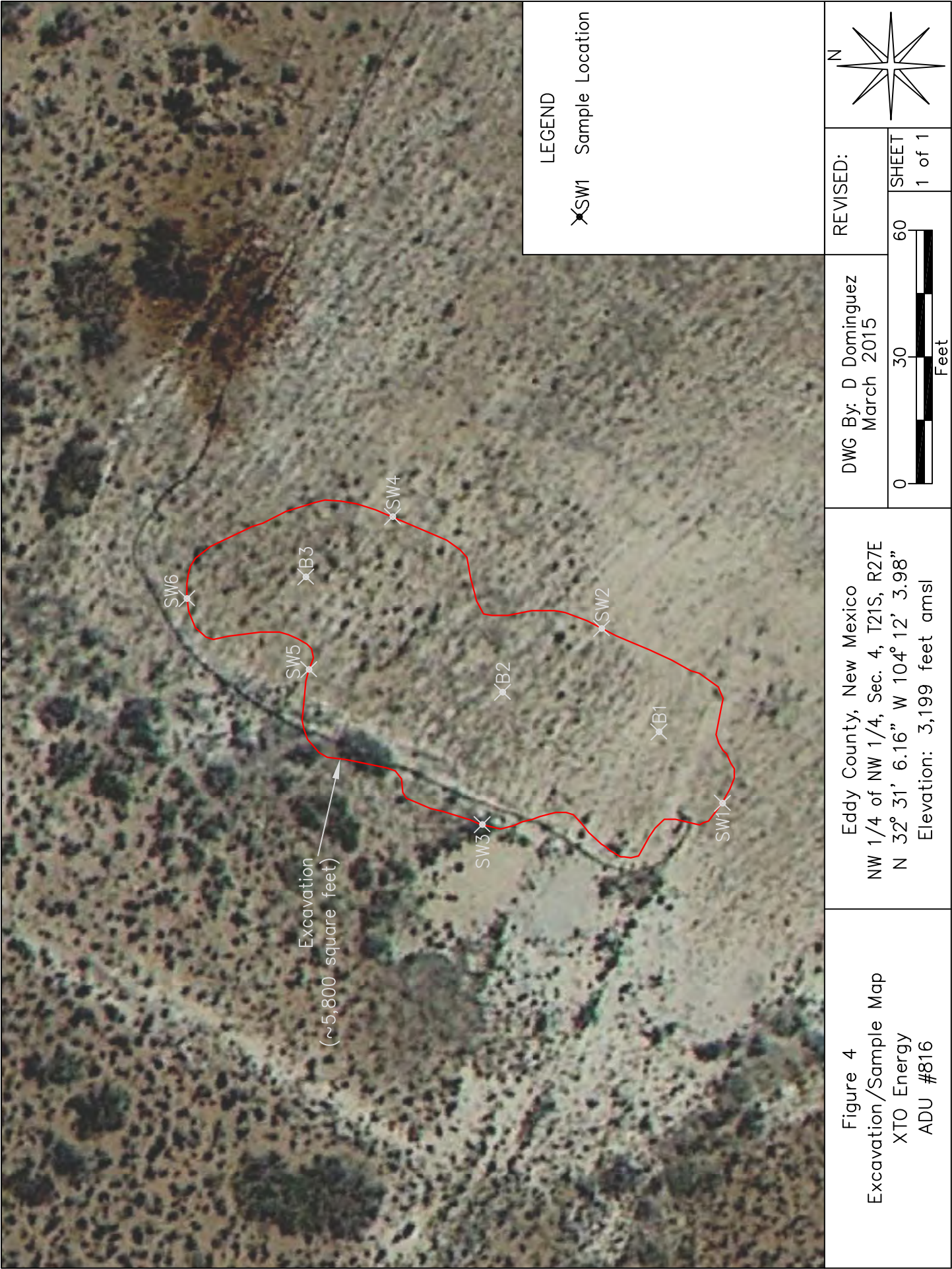
Encl.: Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Site/Sample Map
Figure 4 – Excavation/Sample Map
Figure 5 – Proposed Liner Location
Table 1 – Well Data
Table 2 – Summary of Soil Sample Field Testing and Laboratory Analytical Results
Attachment I – Photographs
Attachment II – Laboratory Analytical Results
Attachment III – Copy of Initial NMOCD Form C-141

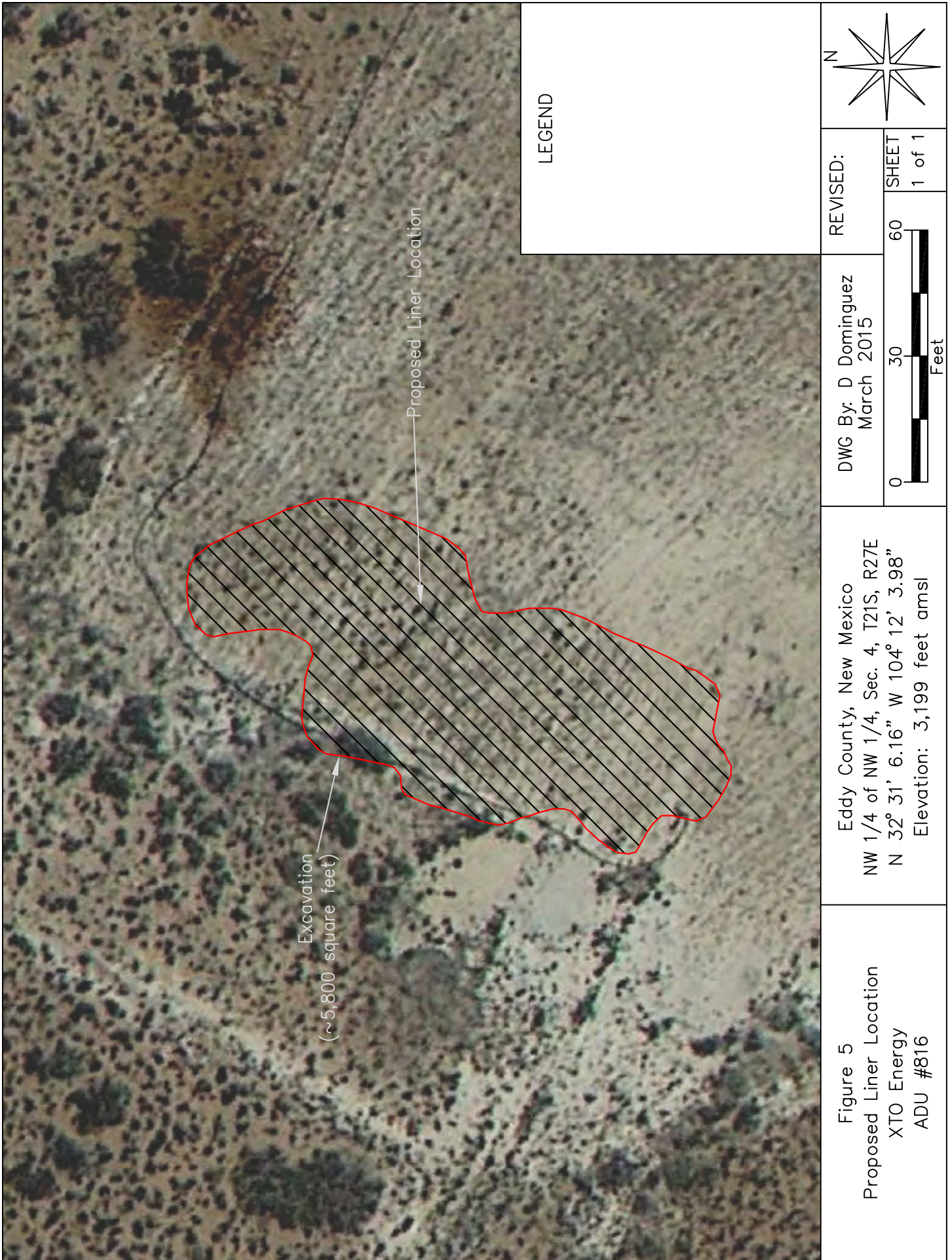
FIGURES











TABLES

TABLE 1
Well Data
XTO Energy - ADU #816

Ref #	Well Number	Use	Diversion ^A	Owner	q64	q16	q4	Sec	Twsp	Rng	Easting	Northing	Date Measured	Surface Elevation ^B	Depth to Water (ft bgs)
1	C 01147	STK	3	GERALD ELMORE				4	21S	27E	575637	3597162	--	3,181	--
2	C 02907	DOL	3	RITA NELSON	3	2	1	3	21S	27E	576959	3597669	29-Jan-03	3,201	14
3	C 01333	PRO	0	HUMBLE OIL & REFINING COMPANY	1	1	4	5	21S	27E	574128	3597045	11-May-66	3,327	350
7	CP 00851	SAN	3	EXXON CORPORATION	4	1	2	31	20S	28E	573791	3599940	14-Sep-95	3,248	115
8	CP 00746	STK	3	BRUCE RIGGS	1	3	4	32	20S	28E	575229	3598948	24-Jan-90	3,206	29
9	CP 00671	DOL	3	MARY WALKER		1	3	33	20S	28E	576129	3599260	05-Mar-85	3,209	35
10	CP 00920	STK	3	MATTHEW COX	2	4	1	33	20S	28E	576627	3599766	31-Dec-62	3,209	29
11	CP 00921	COM	13	MATTHEW COX	2	3	1	33	20S	28E	576223	3599763	31-Dec-49	3,210	30
12	CP 00922	STK	3	MATTHEW COX	2	3	3	33	20S	28E	576233	3598956	31-Dec-49	3,207	27
4	C 02482	DOM	3	VERNON W BRAMAN		3	4	8	21S	27E	574236	3594942	20-Jan-96	3,249	185
5	C 01330	STK	3	GERALD ELMORE	3	3	3	9	21S	27E	574941	3594849	18-Apr-66	3,240	80
6	C 01339	EXP	0	INDIAN HILLS GAS SYSTEM LTD.		1	4	9	21S	27E	575842	3595353	31-Aug-66	3,237	120

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1) and USGS Database

^A = In acre feet per annum

^B = Elevation interpolated from USGS topographical map based on referenced location.

STK = 72-12-1 Livestock watering

DOL = 72-12-1 Domestic and Livestock watering

PRO = 72-12-1 Prospecting or development of Natural Resource

DOM = 72-12-1 Domestic one household

EXP = Exploration

SAN = 72-12-1 Sanitary in conjunction with a commercial use

COM = Commercial

quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are smallest to biggest

-- = Data not provided on the NM iwaters website

Shaded area indicates wells not shown in Figure 2

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
XTO Energy
ADU #816

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
SP1	1	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	6,800
	2	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	10,000
	4	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	10,400
SP2	1	Excavated	10-Nov-14	--	4,000	<0.050	0.050	0.237	0.767	1.05	18.1	545	563	10,100
	2	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	0.053	0.360	0.477	<10.0	54	54	10,400
	3	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	6,530
	4	Excavated	10-Nov-14	--	3,200	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	3,600
SP3	1	Excavated	10-Nov-14	--	4,000	<0.050	0.129	0.166	2.530	2.82	<10.0	14,000	14,000	2,760
	2	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	3,880
	3	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	9,860
	4	Excavated	10-Nov-14	--	4,000	<0.050	<0.050	<0.050	0.261	<0.300	<10.0	527	527	9,200
SW1	2	In Situ	21-Nov-14	--	480	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	384
SW2	2	In Situ	21-Nov-14	--	400	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	288
SW3	2	In Situ	21-Nov-14	--	240	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	48
SW4	2	In Situ	21-Nov-14	--	560	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	416
SW5	2	In Situ	21-Nov-14	--	320	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	80
SW6	2	In Situ	21-Nov-14	--	400	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	288

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
XTO Energy
ADU #816

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
B1	4	In Situ	21-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	13,200
	18	In Situ	05-Dec-14	--	2,480	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	2,480
B2	4	In Situ	21-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	14,400
	18	In Situ	05-Dec-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	7,200
B3	4	In Situ	21-Nov-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	14,000
	18	In Situ	05-Dec-14	--	4,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<30.0	6,640
SP2A	32	In Situ	19-Jan-15	--	--	--	--	--	--	--	--	--	--	8,320
NMOCD Recommended Remedial Action Levels				100		10				50			100	250

-- = Not Analyzed

Bold values are in excess of NMOCD Recommended Remedial Action Levels

Shaded values indicates soil has been excavated

ATTACHMENTS

ATTACHMENT I
Photographs



Photograph #1 – Looking north-westerly across excavation



Photograph #2 – Looking north-westerly across excavation



Photograph #3 – Looking northerly across excavation



Photograph #4 – Looking northerly across excavation

ATTACHMENT II
Laboratory Analytical Results



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 25, 2014

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: ADU #816

Enclosed are the results of analyses for samples received by the laboratory on 11/19/14 15:48.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Hope S. Moreno". The signature is written in a cursive, flowing style.

Hope S. Moreno For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	11/19/2014	Sampling Date:	11/10/2014
Reported:	11/25/2014	Sampling Type:	Soil
Project Name:	ADU #816	Sampling Condition:	Cool & Intact
Project Number:	XTO	Sample Received By:	Jodi Henson
Project Location:	UL-D SEC. 4, T21S, R27E		

Sample ID: SP 1 (1') (H403562-01)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65		
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93		
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61		
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47		
Total BTEx	<0.300	0.300	11/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.3 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6880	16.0	11/20/2014	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 127 % 47.2-157

Surrogate: 1-Chlorooctadecane 135 % 52.1-176

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*=Accredited Analyte

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 1 (2') (H403562-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTEX	<0.300	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.9 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10000	16.0	11/20/2014	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 116 % 47.2-157

Surrogate: 1-Chlorooctadecane 128 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 1 (4') (H403562-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTEx	<0.300	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.3 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10400	16.0	11/20/2014	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 119 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 2 (1') (H403562-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	0.237	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	0.767	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTX	1.05	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 139 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10100	16.0	11/20/2014	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	18.1	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	545	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 120 % 47.2-157

Surrogate: 1-Chlorooctadecane 157 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
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 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 2 (2') (H403562-05)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	0.053	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	0.360	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTX	0.477	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10400	16.0	11/20/2014	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	54.0	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 128 % 47.2-157

Surrogate: 1-Chlorooctadecane 139 % 52.1-176

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 2 (3') (H403562-06)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65		
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93		
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61		
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47		
Total BTEX	<0.300	0.300	11/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.9 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6530	16.0	11/20/2014	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 128 % 47.2-157

Surrogate: 1-Chlorooctadecane 140 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 2 (4') (H403562-07)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65		
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93		
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61		
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47		
Total BTEX	<0.300	0.300	11/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.4 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3600	16.0	11/20/2014	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/21/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/21/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 126 % 47.2-157

Surrogate: 1-Chlorooctadecane 137 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 3 (1') (H403562-08)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	0.129	0.100	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	0.166	0.100	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	2.53	0.300	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTEx	2.82	0.600	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2760	16.0	11/20/2014	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<200	200	11/22/2014	ND	207	104	200	0.664	
DRO >C10-C28	14000	200	11/22/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 155 % 47.2-157

Surrogate: 1-Chlorooctadecane 423 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 3 (2') (H403562-09)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTEx	<0.300	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 90.4 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3880	16.0	11/20/2014	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/22/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/22/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 121 % 47.2-157

Surrogate: 1-Chlorooctadecane 132 % 52.1-176

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Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 3 (3') (H403562-10)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	<0.150	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTEX	<0.300	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.7 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9860	16.0	11/20/2014	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/22/2014	ND	207	104	200	0.664	
DRO >C10-C28	<10.0	10.0	11/22/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 125 % 47.2-157

Surrogate: 1-Chlorooctadecane 136 % 52.1-176

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Hope S. Moreno For Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/19/2014
 Reported: 11/25/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/10/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 3 (4') (H403562-11)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/24/2014	ND	1.76	88.0	2.00	4.65	
Toluene*	<0.050	0.050	11/24/2014	ND	1.62	81.2	2.00	4.93	
Ethylbenzene*	<0.050	0.050	11/24/2014	ND	1.56	78.2	2.00	4.61	
Total Xylenes*	0.261	0.150	11/24/2014	ND	4.72	78.7	6.00	4.47	
Total BTEX	<0.300	0.300	11/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.3 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9200	16.0	11/20/2014	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/22/2014	ND	207	104	200	0.664	
DRO >C10-C28	527	10.0	11/22/2014	ND	218	109	200	0.554	

Surrogate: 1-Chlorooctane 123 % 47.2-157

Surrogate: 1-Chlorooctadecane 141 % 52.1-176

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink that reads "Hope S. Moreno".

Hope S. Moreno For Celey D. Keene, Lab Director/Quality Manager

Chain of Custody Form

LAB
Cardinal

Checked By: 

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form

LAB

Cardinal

Company Name							Environmental Plus, Inc.																					
EPI Project Manager							Daniel Dominguez																					
Mailing Address							P.O. BOX 1558																					
City, State, Zip							Eunice New Mexico 88231																					
EPI Phone#/Fax#							575-394-3481 / 575-394-2601																					
Client Company							XTO																					
Facility Name							ADU #816																					
Location							UL-D Sec. 4, T21S, R27E																					
Project Reference																												
EPI Sampler Name							Dustin Crockett																					
LAB I.D. SAMPLE I.D.							 Attn: Daniel Dominguez P.O. Box 1558 Eunice, NM 88231																					
H403562							(G)RAB OR (C)OMP.	# CONTAINERS	GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl ⁻)	SULFATES (SO ₄ ⁼)	pH	TCLP	OTHER >>>	PAH	
11 SP3 (4')							G	1			X					X			10-Nov-14	10:45	X	X	X					
12																												
13																												
14																												
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16																												
17																												
18																												
19																												
20																												
Sampler Relinquished:							Date	Time	Received By:																			
Relinquished by:							Date	Time	Received By:																			
Delivered by:							Date	Time	Received By:																			
Sample Cool & Intact																												
Notes:																												



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 03, 2014

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: ADU #816

Enclosed are the results of analyses for samples received by the laboratory on 11/24/14 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	11/24/2014	Sampling Date:	11/21/2014
Reported:	12/03/2014	Sampling Type:	Soil
Project Name:	ADU #816	Sampling Condition:	Cool & Intact
Project Number:	XTO	Sample Received By:	Jodi Henson
Project Location:	UL-D SEC. 4, T21S, R27E		

Sample ID: SW 1 (2') (H403620-01)

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTEX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	11/25/2014	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 129 % 47.2-157

Surrogate: 1-Chlorooctadecane 147 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SW 2 (2') (H403620-02)

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTEX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	11/25/2014	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 117 % 47.2-157

Surrogate: 1-Chlorooctadecane 129 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SW 3 (2') (H403620-03)

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTEX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/25/2014	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 116 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

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Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SW 4 (2') (H403620-04)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	11/25/2014	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 126 % 47.2-157

Surrogate: 1-Chlorooctadecane 138 % 52.1-176

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Analytical Results For:

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Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SW 5 (2') (H403620-05)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/25/2014	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 126 % 47.2-157

Surrogate: 1-Chlorooctadecane 138 % 52.1-176

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Analytical Results For:

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Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SW 6 (2') (H403620-06)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	11/25/2014	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 120 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

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Analytical Results For:

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Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: B 1 (4') (H403620-07)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	13200	16.0	11/25/2014	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 119 % 47.2-157

Surrogate: 1-Chlorooctadecane 133 % 52.1-176

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Analytical Results For:

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Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: B 2 (4') (H403620-08)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4	
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1	
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64	
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1	
Total BTX	<0.300	0.300	12/02/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14400	16.0	11/25/2014	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/25/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/25/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 111 % 47.2-157

Surrogate: 1-Chlorooctadecane 126 % 52.1-176

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Analytical Results For:

Environmental Plus, Inc.
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 Fax To: (505) 394-2601

Received: 11/24/2014
 Reported: 12/03/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 11/21/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: B 3 (4') (H403620-09)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2014	ND	1.65	82.7	2.00	10.4		
Toluene*	<0.050	0.050	12/02/2014	ND	1.64	81.8	2.00	10.1		
Ethylbenzene*	<0.050	0.050	12/02/2014	ND	1.64	82.1	2.00	9.64		
Total Xylenes*	<0.150	0.150	12/02/2014	ND	5.00	83.4	6.00	10.1		
Total BTX	<0.300	0.300	12/02/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14000	16.0	11/25/2014	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/27/2014	ND	197	98.7	200	0.107	
DRO >C10-C28	<10.0	10.0	11/27/2014	ND	198	99.1	200	1.15	

Surrogate: 1-Chlorooctane 108 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a light blue rectangular background.

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.2100 Avenue O, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form

LAB Cardinal

Page 1 of 1

Company Name Environmental Plus, Inc.

EPI Project Manager Daniel Dominguez

Mailing Address P.O. BOX 1558

City, State, Zip Eunice New Mexico 88231

EPI Phone/Fax# 575-394-3481 / 575-394-2601

Client Company XTO

Facility Name ADU #816

Location UL-D Sec. 4, T21S, R27E

Project Reference

EPI Sampler Name Dustin Crockett

Attn: Daniel Dominguez
P.O. Box 1558
Eunice, NM 88231

Bill To

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	ANALYSIS REQUEST							
				GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER		BTEX 8021B	TPH 8015M	CHLORIDES (Cl ⁻)	SULFATES (SO ₄ ²⁻)	pH	TCLP	OTHER >>>	PAH
H403620	1 SW1 (2')	G	1			X					X		21-Nov-14	1:30	X	X	X				
	2 SW2 (2')	G	1			X					X		21-Nov-14	1:40	X	X	X				
	3 SW3 (2')	G	1			X					X		21-Nov-14	1:50	X	X	X				
	4 SW4 (2')	G	1			X					X		21-Nov-14	2:00	X	X	X				
	5 SW5 (2')	G	1			X					X		21-Nov-14	2:10	X	X	X				
	6 SW6 (2')	G	1			X					X		21-Nov-14	2:20	X	X	X				
	7 B1 (4')	G	1			X					X		21-Nov-14	3:15	X	X	X				
	8 B2 (4')	G	1			X					X		21-Nov-14	3:20	X	X	X				
	9 B3 (4')	G	1			X					X		21-Nov-14	3:25	X	X	X				
	10																				

Sample Relinquished:

Date: 11/24/14

Time: 7:00 AM

Received By: [Signature]

Checked By: [Signature]

E-mail results to: ddominguezepi@gmail.com & rbooneepi@gmail.com

NOTES:

Relinquished by:

Date: 11/24/14

Time: 3:40 PM

Received By: [Signature]

Checked By: [Signature]

E-mail results to: ddominguezepi@gmail.com & rbooneepi@gmail.com

NOTES:

Delivered by:

Date: 11/24/14

Time: 2:00 PM

Received By: [Signature]

Checked By: [Signature]

E-mail results to: ddominguezepi@gmail.com & rbooneepi@gmail.com

NOTES:

Delivered by:

Date: 11/24/14

Time: 2:00 PM

Received By: [Signature]

Checked By: [Signature]

E-mail results to: ddominguezepi@gmail.com & rbooneepi@gmail.com

NOTES:

Sample Cool & Intact

Yes

No

Checked By: [Signature]

E-mail results to: ddominguezepi@gmail.com & rbooneepi@gmail.com

NOTES:



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 15, 2014

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: ADU #816

Enclosed are the results of analyses for samples received by the laboratory on 12/08/14 15:46.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	12/08/2014	Sampling Date:	12/05/2014
Reported:	12/15/2014	Sampling Type:	Soil
Project Name:	ADU #816	Sampling Condition:	Cool & Intact
Project Number:	XTO	Sample Received By:	Jodi Henson
Project Location:	UL-D SEC. 4, T21S, R27E		

Sample ID: B 1 (18') (H403738-01)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25		
Toluene*	<0.050	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01		
Ethylbenzene*	<0.050	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87		
Total Xylenes*	<0.150	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73		
Total BTX	<0.300	0.300	12/11/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	12/09/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	<10.0	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 86.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 83.3 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 12/08/2014
 Reported: 12/15/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 12/05/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: B 2 (18') (H403738-02)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	<0.050	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	<0.050	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	<0.150	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTX	<0.300	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7200	16.0	12/09/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	<10.0	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 92.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 86.0 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 12/08/2014
 Reported: 12/15/2014
 Project Name: ADU #816
 Project Number: XTO
 Project Location: UL-D SEC. 4, T21S, R27E

Sampling Date: 12/05/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: B 3 (18') (H403738-03)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	<0.050	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	<0.050	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	<0.150	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTX	<0.300	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6640	16.0	12/09/2014	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	<10.0	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 88.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 85.4 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a light blue rectangular background.

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

P.O. Box 1558, Eunice, NM 88231

LAB
Cardinal

Chain of Custody Form

Page 1 of 1

[illegible]



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 20, 2015

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: ADU #816

Enclosed are the results of analyses for samples received by the laboratory on 01/20/15 10:04.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	01/20/2015	Sampling Date:	01/19/2015
Reported:	01/20/2015	Sampling Type:	Soil
Project Name:	ADU #816	Sampling Condition:	** (See Notes)
Project Number:	XTO	Sample Received By:	Jodi Henson
Project Location:	UL-D SEC. 4, T21S, R27E		

Sample ID: SP 2A (32') (H500178-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8320	16.0	01/20/2015	ND	400	100	400	0.00		

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a light blue rectangular background.

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form

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Page 4 of 4

[illegible]

From: [Hughes, Solomon](#)
To: [Daniel Dominguez](#)
Cc: [James Amos](#); [Robinson, John](#); [Bratcher, Mike, EMNRD](#); [Oberding, Tomas, EMNRD](#)
Subject: Re: ADU #816, SDE 31 #9
Date: Monday, April 13, 2015 11:58:44 AM

Daniel,

ADU 816

This closure request is approved as written. BLM approval does not relieve the operator of liability, should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, any other aspects of the natural environment, human health, or if the location does not properly reclaim. In such an event that location does not re-vegetate, or future issues with contaminants are encountered, the operator will be asked to address the location until contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

SDE 31-09

This closure request is approved as written. BLM approval does not relieve the operator of liability, should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, any other aspects of the natural environment, human health, or if the location does not properly reclaim. In such an event that location does not re-vegetate, or future issues with contaminants are encountered, the operator will be asked to address the location until contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

Bests,

Sol

Sol Hughes

Environmental Protection Division
Bureau of Land Management
620 E. Greene St
Carlsbad, NM

Office: 575.234.5951

Cell: 575.499.3378

On Mon, Apr 13, 2015 at 11:37 AM, Daniel Dominguez <ddominguezepi@gmail.com> wrote:

Gentlemen,

Attached in PDF is the Closure Proposal for the ADU #816 and the No Further Action Proposal for the SDE 31 #9. Both sites are operated by XTO Energy.

--

Sincerely,
ENVIRONMENTAL PLUS, INC.

Daniel Dominguez
Environmental Consultant/Safety Director

Environmental Plus, Inc.
P.O. Box 1558
2100 Avenue 'O'
Eunice, NM 88231
(575) 631-0401 (Cell)
(575) 394-3481 (Office)
(575) 394-2601 (fax)

From: Bratcher, Mike, EMNRD
To: "Daniel Dominguez"; john_robinson@xtoenergy.com
Cc: shughes@blm.gov; [Jim Amos \(jamos@blm.gov\)](mailto:jamos@blm.gov); [Patterson, Heather, EMNRD](#)
Subject: RE: ADU #816 Closure Proposal
Date: Wednesday, April 15, 2015 8:14:00 AM

RE: XTO Energy * Avalon Delaware Unit 816 * 30-015-24696 * A-5-21s-27e * Eddy County, NM
NMOCD Tracking Number: **2RP-2674** * Date of release/discovery: 9/27/14

Gentlemen,

Your request for closure of the above referenced release is **not** approved. OCD will require the site to fully delineated. Based on analytical data provided, the constituent of concern is chlorides. Target goal for chloride delineation is 250 mg/kg or, natural background levels. In the event groundwater is encountered during the delineation process, work is to cease and OCD notified immediately. Please notify the OCD District 2 office once delineation work has been scheduled.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Daniel Dominguez [<mailto:ddominguezepi@gmail.com>]
Sent: Wednesday, April 08, 2015 3:50 PM
To: Bratcher, Mike, EMNRD; john_robinson@xtoenergy.com
Subject: ADU #816 Closure Proposal

Mr. Bratcher,

Attached is the Closure Proposal for the ADU #816 operated by XTO Energy. We are proposing sidewall excavation to clean soil, placement of 20 mil poly liner in excavation and then backfill.

--

Sincerely,
ENVIRONMENTAL PLUS, INC.

Daniel Dominguez
Environmental Consultant/Safety Director

Environmental Plus, Inc.
P.O. Box 1558
2100 Avenue 'O'





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LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

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BH or MW Name:

BH01

Date:

2/1/20-2/2/20

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS,RK,WM

Method: Sonic

Lat/Long:

Field Screening:

Hole Diameter:

Total Depth: 35'

Chloride, PID

4"

Depth to Water:

Backfill or Well Construction Materials / Comments: All chloride tests include a 40% correction factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	1,282	0.4	N	BH01	0 1'	0.5	SP	SAND, dry, tan-pink, poorly graded, fine-very fine, some subrounded caliche gravel tan-off white, moderately consolidated, no stain, no odor	
D	1,489	0.4	N	BH01A	5'				
						6			
M	851	0.4	N	BH01B	10'	8.5	SM	SILTY sand, moist, tan-light brown, no plasticity, non cohesive, no stain, no odor	
						12			
M	593	1.1	N	BH01C	15'				
						18			
M	2,441	0.9	N	BH01D	20'				
						24			
M	3505	0.7	N	BH01E	25'				
						26			
M	>3505	0.6	N	BH01F	30'	30	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
M	3505	0.6	N	BH01G	33'				
M	9,195	0.1	N	BH01H	34'				
M	6182	0.4	N	BH01I	35'	35			
						36		Total Depth: 35 feet bgs	



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508 West Stevens Street
Carlsbad, New Mexico 88220

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BH or MW Name:

BH02/MW04

Date:

3/27/2020

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number: 012919221

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS

Method: Sonic Drill

Lat/Long: 32.5210648, -104.2049255

Field Screening:

Hatch chloride strips, PID

Hole Diameter:

6.15"

Total Depth: 45'

Depth to Water: 38'

Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
					0			Open Excavation	
						3	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, some gravel caliche, subrounded, tan-off white, no stain, no odor	
D	347	0.6	N	BH02	7'				
						9	SM	SILTY sand, moist, reddish-earthy brown, no plasticity, non cohesive, abundant clay pockets, reddish brown, high plasticity, cohesive, no stain, no odor	
M	3,018	1.2	N	BH02A	12'				
						15			
M	5,040	2.0	N	BH02B	17'				
						21			
M	5,488	2.0	N	BH02C	22'				
						27	CH	CLAY, moist, reddish brown, high plasticity, cohesive, abundant gypsum crystals (10-15mm), some sand pockets, gray-light gray, no stain, no odor	
M	285	0.4	N	BH02D	28				
M	235	0.1	N	BH02E	32'				
M	235	0.2	N	BH02F	33'				
						33			
M	235	0	N	BH02G	38'				
						40			
						45		Total depth 45 feet bgs	

10-20 silica sand fr

Screen from 35-45'

2-inch PVC screen and riser

Bentonite chips from 3-33' bgs



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508 West Stevens Street
Carlsbad, New Mexico 88220

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BH or MW Name:

BH03

Date:

2/1/2020

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS, RK

Method: Sonic Drill

Lat/Long:

Field Screening:

Hole Diameter:

Total Depth: 33'

Chloride, PID

4"

Depth to Water:

Backfill or Well Construction Materials / Comments:

Approximately 10' N of excavation/release extent

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	778	0.7	N	BH03	0	0.5	SP	SAND, dry, earthy brown, poorly graded, fine-very fine, few caliche gravel, off white, subrounded, moderately consolidated, no stain, no odor	
D	274	0.4	N	BH03A		4'			
D		0.4	N	BH03B	6	7'			
D	308	0.5	N	BH03C		10'	SM	SILTY sand, dry, earthy brown, no plasticity, non cohesive, abundant clay pockets, reddish brown, high plasticity, cohesive, no stain, no odor	
					12				
M	196	1.9	N	BH03D		15'			
					18				
D	436	2.0	N	BH03E		20'			
					24				
M	2128	0.4	N	BH03F		25'			
M	<124	0.1	N	BH03G		26'	CL	CLAY, moist, light brown-tan, low plasticity, cohesive, abundant silty sand pockets, tan, no stain, no odor	
					30				
M	235	0.1	N	BH03H		31'			
M	<124	0.0	N	BH03I		33'		Total Depth: 33 feet bgs	
					36				



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Compliance · Engineering · Remediation

BH or MW Name:

BH04

Date:

2/1/2020

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS, RK

Method: Sonic Drill

Lat/Long:

Field Screening:

Hole Diameter:

Total Depth: 33'

Chloride, PID

4"

Depth to Water:

Backfill or Well Construction Materials / Comments:

Borehole within excavation/release extent

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
					0			Open excavation	
D	<173	0.4	N	BH04		3'	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, some caliche gravel, subrounded, tan-off white, no stain, no odor	
D	<173	0.5	N	BH04A	6	5'			
M	<173	0.4	N	BH04B		10'	SM	SILTY sand, moist, light brown-brown, no plasticity, non cohesive, no stain, no odor	
					12				
M	<173	0.4	N	BH04C		15'			
					18				
M	>3505	0.9	N	BH04D		20'			
					24				
M	>3505	0.3	N	BH04E		25'			
						26'	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
M	929	0.2	N	BH04F	30'	30'			
M	<173	0.1	N	BH04G		33'		Total Depth: 33 feet bgs	
					36				



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BH or MW Name:

BH05

Date:

2/1/2020

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS, RK

Method: Sonic Drill

Lat/Long:

Field Screening:

Hole Diameter:

Total Depth: 33'

Chloride, PID

4"

Depth to Water:

Backfill or Well Construction Materials / Comments:

Borehole within excavation/release extent

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
					0				
D	<173	0.5	N	BH05		3'	SP	Open excavation	
M	<173	0.5	N	BH05A	6	5'		SAND, dry, light brown-pink, poorly graded, fine-very fine, some caliche gravel, subrounded, tan-off white, moderately consolidated, no stain, no odor	
M	2811	1.2	N	BH05B		9' 10'	SM	SILTY sand, moist, light brown-reddish brown, no plasticity, non cohesive, some clay pockets, reddish brown, low plasticity, cohesive, no stain, no odor	
					12				
M	2,044	0.5	N	BH05C		15'			
					18				
M	>3505	1.6	N	BH05D		20'			
					24				
M	929	1.6	N	BH05E		25'			
					27'		CH	CLAY, reddish brown, moist, high plasticity, cohesive, abundant silty sand pockets, light brown-tan, no plasticity, non cohesive, no stain, no odor	
M	<173	0.2	N	BH05F	30	30'			
M	392	1	N	BH05G		33'		Total Depth: 33 feet bgs	
					36				



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BH or MW Name:

BH06

Date:

2/2/2020

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: WM

Method: Sonic Drill

Lat/Long:

Field Screening:

Hole Diameter:

Total Depth: 35'

Chloride, PID

4"

Depth to Water:

Backfill or Well Construction Materials / Comments:

Approximately 30' S of excavation/release extent, uphill gradient of release 3-5' higher

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D			N	BH06	0	0	SP	SAND, dry, tan-brown, poorly graded, fine grain, trace silt, no stain, no odor	
D	1008	0.1	N	BH06A	6	5'			
D	1,719	0.1	N	BH06B	12	10'			
M	2279	0.5	N	BH06C	15'	15'	CL-S	CLAYSTONE, moist, light brown, poorly consolidated, few fine grain sand, poorly graded, no stain, no odor	
					18	18.5'	SW	SAND, moist, tan, well graded, medium grain, no stain, no odor	
M	3,091	0.1	N	BH06D	24	20'	CL	CLAY, moist, reddish brown, low plasticity, cohesive, few sand, no stain, no odor	
M	1058	0.5	N	BH06E		25'			
M	778	0.1	N	BH06F	30	30'			
M		0.2	N	BH06G		33'			
M			N	BH06H		34'			
M	593	0.3	N	BH06I		35'			
					36			Total Depth 35 feet bgs	



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BH or MW Name:

BH07

Date:

2/2/2020

Site Name: ADU 816

RP or Incident Number: 2RP-2674

LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: WM

Method: Sonic

Lat/Long:

Field Screening:

Chloride, PID

Hole Diameter: 4"

Total Depth: 35'

Depth to Water:

Backfill or Well Construction Materials / Comments:

Approximately 60' S of excavation/release extent, uphill gradient of release 6-7' higher

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D			N	BH07	0	0	SP	SAND, dry, tan-brown, poorly sorted, fine-medium grain, trace silt, trace caliche gravel, no stain, no odor	
D	2,128	0.1	N	BH07A	5				
					6				
						9'	SW	SAND, moist, reddish brown, well graded, medium-large grain, few silt, few caliche gravel, no odor, no stain	
M	7252	0.2	N	BH07B	10				
						11'	SW-S	SANDSTONE, moist, red-white, caliche pockets, low-medium consolidation, no stain, no odor	
					12				
M	6,182	0.6	N	BH07C	15				
					18				
M	3,399	0.3	N	BH07D	20				
						22.5'	SW	SAND, moist, reddish brown, well graded, medium-large grain, few silt, few caliche gravel, no odor, no stain	
M	2800	0.4	N	BH07E	24				
					25				
						28.5'	CH	CLAY, moist, reddish brown, high plasticity, cohesive, some sand, no odor, no odor	
M	2004	0.5	N	BH07F	30				
M		0.5	N	BH07G	33				
M			N	BH07H	34				
M	235	0.1	N	BH07I	35	35'		Total Depth 35 feet bgs	
					36				

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name: BH08/MW06		Date: 3/26/2020						
		Site Name: ADU 816								
		RP or Incident Number: 2RP-2674								
		LTE Job Number: 012919221								
LITHOLOGIC / SOIL SAMPLING LOG										
Lat/Long: 32.5210648, -104.2049255		Field Screening: Hatch chloride strips, PID		Hole Diameter: 6.15"	Method: Sonic drill Total Depth: 45' Depth to Water: 38'					
Comments: Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion	
D	<173	0.1	N	BH08	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, no stain, no odor	2-inch PVC screen and riser Bentonite chips from 0-33' bgs	
D	1,848	0.7	N	BH08A	5'	5	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor		
D	4,233	1.0	N	BH08B	10'	10				
D	649	0.4	N	BH08C	15'	15	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no odor		
D	1,383	0.5	N	BH08D	20'	20	CL	CLAY, moist, reddish brown, low plasticity, cohesive, abundant sand pockets, reddish brown, poorly graded, no stain, no odor		
M	3,018	2.8	N	BH08E	25'	25			10-20 silica sand from 33' Screen from 35-45' bgs	
M	1489	4.1	N	BH08F	30'	30				
M	<173	2.1	N	BH08G	35'	35	CH	CLAY, moist, reddish brown, high plasticity, cohesive, some sand pockets, reddish brown, poorly graded, no stain, no odor		
M	347	2.0	N	BH08H	37'	37				
						40				
						45		Total depth 45 feet bgs		

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name: BH09		Date: 3/27/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
		LTE Job Number: 012919221							
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 45'					
				Depth to Water: 38'					
Backfill or Well Construction Materials / Comments: bentonite chips (backfill), 4:1 dilution method for chloride and 40% correction factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	207	1	N	BH09	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, no stain, no odor	
D	173	0.4	N	BH09A	5'	5	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	173	0.3	N	BH09B	10'	10			
D	711	1.1	N	BH09C	15'	15	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, some clay pockets, low plasticity, cohesive, no stain, no odor	
M	6,468	0.1	N	BH09D	20'	20			
M	7,005	4.2	N	BH09E	25'	25			
M	6468	1.1	N	BH09F	30'	30	CL	CLAY, moist, reddish brown, low plasticity, cohesive, abundant sand pockets, reddish brown, poorly graded, no stain, no odor	
M	207	0.2	N	BH09G	35'	35			
M	173	1.2	N	BH09H	37'	37	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
						40			
						45		Total depth 45 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name: BH10		Date: 3/25/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
		LTE Job Number: 012919221							
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 37'					
				Depth to Water: 38'					
Backfill or Well Construction Materials / Comments: bentonite chips (backfill), 4:1 dilution method for chloride and 40% correction factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	0	N	BH10	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, abundant gravel caliche, subrounded, tan-off white, no stain, no odor	
D	274	0.4	N	BH10A	5'	5			
D	308	0.1	N	BH10B	10'	10			
M	347	0.7	N	BH10C	15'	15	SM	SILTY sand, dry, reddish brown, no plasticity, non cohesive, no stain, no odor	
M	436	1.3	N	BH10D	20'	20	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
M	173	0.8	N	BH10E	25'	25			
M	207	1.0	N	BH10F	30'	30			
M	<173	0.4	N	BH10G	35'	35			
M	235	1.9	N	BH10H	37'	37			
						40		Total depth 38 feet bgs	
						45			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name: BH11		Date: 3/26/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
		LTE Job Number: 012919221							
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Htach chloride strips, PID		6.15"					
				Total Depth: 45'					
				Depth to Water: 39'					
Backfill or Well Construction Materials / Comments: bentonite chips (backfill), 4:1 dilution method for chloride and 40% correction factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	1.3	N	BH11	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, no stain, no odor	
D	778	0.9	N	BH11A	5'	5			
D	274	0.5	N	BH11B	10'	10	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	207	1.3	N	BH11C	15'	15	SM	SILTY sand, dry, reddish brown, no plasticity, non cohesive, no stain, no odor	
D	<173	0.3	N	BH11D	20'	20	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, some clay pockets, low plasticity, cohesive, no stain, no odor	
M	207	1.7	N	BH11E	25'	25	CL	CLAY, moist, reddish brown, low plasticity, cohesive, abundant sand pockets, reddish brown, poorly graded, no stain, no odor	
M	392	0.8	N	BH11F	30'	30			
M	1282	1.0	N	BH11G	35'	35			
M	436	0.7	N	BH11H	37'	37	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
						40			
						45		Total depth 45 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name: BH12		Date: 3/28/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
		LTE Job Number: 012919221							
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 45'					
				Depth to Water: 38'					
Backfill or Well Construction Materials / Comments: bentonite chips (backfill), 4:1 dilution method for chloride and 40% correction factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	1,489	0.5	N	BH12	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, no stain, no odor	
D	5,958	0.9	N	BH12A	5'	5	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	3,018	1.5	N	BH12B	10'	10	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no odor	
D	2,441	1.8	N	BH12C	15'	15			
M	778	2.8	N	BH12D	20'	20			
M	929	3.2	N	BH12E	25'	25			
M	778	3.7	N	BH12F	30'	30	CL	CLAY, moist, reddish brown, high plasticity, cohesive, trace sand pockets, reddish brown, poorly graded, no stain, no odor	
M	929	1.8	N	BH12G	35'	35	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
M	929	1.9	N	BH12H	37'				
						40			
						45		Total depth 45 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name: BH13/MW07		Date: 3/27/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
		LTE Job Number: 012919221							
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening: Hatch chloride strips, PID		Hole Diameter: 6.15"	Method: Sonic drill Total Depth: 45' Depth to Water: 38'				
Comments: Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	173	7.3	N	BH13	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, no stain, no odor	2-inch PVC screen and riser Bentonite chips from 0-33' bgs
D	392	0.9	N	BH13A	5'	5			
D	778	3.5	N	BH13B	10'	10	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	649	6.5	N	BH13C	15'	15			
D	537	3.5	N	BH13D	20'	20			
D	778	8.7	N	BH13E	25'	25	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no odor	10-20 silica sand from 33'
M	593	5.1	N	BH13F	30'	30	CL	CLAY, moist, reddish brown, low plasticity, cohesive, abundant sand pockets, reddish brown, poorly graded, no stain, no odor	
M	347	0.2	N	BH13G	35'	35			
M	487	1.3	N	BH13H	37'	37	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	Screen from 35-45' bgs
						40			
						45		Total depth 45 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name:		Date:					
		BH14		3/28/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
LTE Job Number: 012919221									
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 45'					
				Depth to Water: 38'					
Backfill or Well Construction Materials / Comments: Bentonite chips (backfill), 4:1 dilution method for chloride and 40% correction factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	0.3	N	BH14	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, no stain, no odor	
D	2,620	0.7	N	BH14A	5'	5	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	2,620	0.6	N	BH14B	10'	10	SM	SILTY sand, dry, reddish brown, no plasticity, non cohesive, no stain, no odor	
D	2,441	0.9	N	BH14C	15'	15			
M	1,282	0.9	N	BH14D	20'	20			
M	778	1.0	N	BH14E	25'	25	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, some clay pockets, low plasticity, no stain, no odor	
							CL	CLAY, moist, reddish brown, high plasticity, cohesive, abundant sand pockets, reddish brown, poorly graded, no stain, no odor	
M	487	2.6	N	BH14F	30'	30	CH	CLAY, moist, reddish brown, high plasticity, cohesive, trace sand pockets, reddish brown, poorly graded, no stain, no odor	
M	851	0.7	N	BH14G	35'	35			
M	593	0	N	BH14H	37'	37			
						40			
						45		Total depth 45 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name:		Date:					
		BH15/MW05		3/28/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
LTE Job Number: 012919221									
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		Total Depth: 45'					
				Depth to Water: 38'					
Comments: Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	53	N	MW05	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, trace gravel caliche, subrounded, tan-off white, no stain, no odor	2-inch PVC screen and riser Bentonite chips from 0-33' bgs
D	1,092	0.5	N	MW05A	5'	5			
D	1,982	0.8	N	MW05B	10'	10	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	1,848	0.8	N	MW05C	15'	15	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, unconsolidated, no stain, no odor	
D	711	1.4	N	MW05D	20'	20			
D	274	1.0	N	MW05E	25'	25			
M	487	0.6	N	MW05F	30'	30	CL	CLAY, moist reddish brown, low plasticity, cohesive, some sand pockets, reddish brown, poorly graded, no stain, no odor	
M	649	0.2	N	MW05G	35'	35			
M	487	0.2	N	MW05H	37'	37	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
						40			
						45		Total depth 45 feet bgs	Screen from 35-45' bg

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name:		Date:					
		BH16/MW01		3/25/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
LTE Job Number: 012919221									
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255			Field Screening:		Logged By: FS				
			Hatch chloride strips, PID		Method: Sonic drill				
			Hole Diameter: 6.15"		Total Depth: 45'				
					Depth to Water: 38'				
Comments: Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	1.5	N	MW01	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, abundant gravel caliche, subrounded, tan-off white, no stain, no odor	2-inch PVC screen and riser Bentonite chips from 0-33' bgs
D	711	0.5	N	MW01A	5'	5			
D	778	0.3	N	MW01B	10'	10	SM	SILTY sand, dry, reddish brown, no plasticity, non cohesive, no stain, no odor	
D	778	0.3	N	MW01B	10'	10	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no odor	
D	711	1.8	N	MW01C	15'	15			
D	778	1.2	N	MW01D	20'	20			
M	649	0.1	N	MW01E	25'	25			
M	274	1.1	N	MW01F	30'	30			
M	308	0.4	N	MW01G	35'	35	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
M	594	0	N	MW01H	37'	37			
						40			10-20 silica sand from 33-45'
						45		Total depth 45 feet bgs	Screen from 35-45' bgs

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name:		Date:					
		BH17/MW02		3/25/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
LTE Job Number: 012919221									
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 50'					
				Depth to Water: 38'					
Comments: Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	0.5	N	MW02	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, abundant gravel caliche, subrounded, tan-off white, no stain, no odor	2-inch PVC screen and riser Bentonite chips from 0-33' bgs
D	<173	0.6	N	MW02A	5'	5			
D	392	0.7	N	MW02B	10'	10	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	436	2.6	N	MW02C	15'	15	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no odor	
M	274	1.8	N	MW02D	20'	20			
M	274	0.9	N	MW02E	25'	25			
M	<173	0.4	N	MW02F	30'	30			
							CH	CLAY, moist, reddish brown, high plasticity, cohesive, trace sand pockets, reddish brown, poorly graded, no stain, no odor	
M	778	0.3	N	MW02G	35'	35			10-20 silica sand from 33' Screen from 35-45' bgs
M	593	0	N	MW02H	37'				
						40			
						45			
						50		Total depth 50 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name:		Date:					
		BH18/MW03		3/26/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
LTE Job Number: 012919221									
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 46'					
				Depth to Water: 38'					
Comments: Well completed with a 2-in dia 0.010-in slot PVC pipe and solid riser. 10-20 silica sand filled annular space around screen and extended 2 ft. Remaining annular space filled with hydrated bentonite chips. Rise extends approx 2.5 ft beyond excavated surface. Top of casing is approx 2.5 ft from ground surface.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	<173	0.4	N	MW03	0.5'	0	SP	SAND, dry, light brown-pink, poorly graded, fine-very fine, abundant gravel caliche, subrounded, tan-off white, no stain, no odor	2-inch PVC screen and riser Bentonite chips from 0-33' bgs
D	436	0.3	N	MW03A	5'	5			
D	274	0.6	N	MW03B	10'	10	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	308	0.6	N	MW03C	15'	15	SM	SILTY sand, dry, reddish brown, no plasticity, non cohesive, no stain, no odor	
M	<173	0.5	N	MW03D	20'	20			
M	436	1.3	N	MW03E	25'	25	SP	SAND, moist, reddish brown, poorly graded, fine-very fine, no stain, no odor	
M	487	1.3	N	MW03F	30'	30			
							CH	CLAY, moist, reddish brown, high plasticity, cohesive, some sand pockets, reddish brown, poorly graded, no stain, no odor	
M	392	0.3	N	MW03G	35'	35			10-20 silica sand from Screen from 35-45' bg
M	308	0.1	N	MW03H	37'				
						40			
						45			
								Total depth 46 feet bgs	

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or MW Name:		Date:					
		BH19		3/29/2020					
		Site Name: ADU 816							
		RP or Incident Number: 2RP-2674							
LTE Job Number: 012919221									
LITHOLOGIC / SOIL SAMPLING LOG									
Lat/Long: 32.5210648, -104.2049255		Field Screening:		Hole Diameter:					
		Hatch chloride strips, PID		6.15"					
				Total Depth: 45'					
				Depth to Water: 38'					
Backfill or Well Construction Materials / Comments: Bentonite chips (backfill), 4:1 dilution method for chloride and 40% correction factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D	392	4.7	N	BH19	0.5'	0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, pad fill, no stain, no odor	
D	173	0.5	N	BH19A	5'	5	SP	SAND, dry, light brown-dark brown, poorly graded, fine-very fine, some gravel caliche, subrounded, tan-off white, white no stain, no odor	
D	235	0.7	N	BH19B	10'	10	SW	SAND, dry, light brown-reddish brown, well graded, sub angular, unconsolidated, no stain, no odor	
D	173	1.1	N	BH19C	15'	15	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no odor	
M	274	7.3	N	BH19D	20'	20			
M	308	3.7	N	BH14E	25'	25			
M	392	3.4	N	BH19F	30'	30			
M	274	3.9	N	BH19G	35'	35	CL	CLAY, moist, reddish brown, low plasticity, cohesive, trace sand pockets, reddish brown, poorly graded, no stain, no odor	
M	436	2	N	BH19H	37'	37	CH	CLAY, moist, reddish brown, high plasticity, cohesive, no stain, no odor	
						40			
						45		Total depth 45 feet bgs	

ATTACHMENT 4: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG



Photograph 1: View south of drilling and excavation area facing north.



Photograph 2: View of excavation and drilling area facing west.

PHOTOGRAPHIC LOG



Photograph 3: View southeast of excavation facing northwest.



Photograph 4: View west of excavation facing east.

PHOTOGRAPHIC LOG



Photograph 5: View of MW04 inside the excavation.



Photograph 6: View of MW01 in pasture north of excavation.

ATTACHMENT 5: LABORATORY ANALYTICAL REPORTS



Analytical Report 651153

for
LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

06-FEB-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



06-FEB-20

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **651153**

ADU 816

Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 651153. 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. 651153 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Assistant

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH02	S	02-01-20 10:58	3 ft	651153-001
BH02A	S	02-01-20 11:00	7 ft	651153-002
BH02B	S	02-01-20 11:03	12 ft	651153-003
BH02C	S	02-01-20 11:08	17 ft	651153-004
BH02D	S	02-01-20 11:12	22 ft	651153-005
BH02E	S	02-01-20 11:20	27 ft	651153-006
BH02F	S	02-01-20 11:22	32 ft	651153-007
BH02G	S	02-01-20 11:31	33 ft	651153-008
BH02H	S	02-01-20 11:40	38 ft	651153-009
BH03	S	02-01-20 12:10	1 ft	651153-010
BH03A	S	02-01-20 12:13	4 ft	651153-011
BH03B	S	02-01-20 12:20	7 ft	651153-012
BH03C	S	02-01-20 12:30	10 ft	651153-013
BH03D	S	02-01-20 12:33	15 ft	651153-014
BH03E	S	02-01-20 12:40	20 ft	651153-015
BH03F	S	02-01-20 12:42	25 ft	651153-016
BH03G	S	02-01-20 12:45	26 ft	651153-017
BH03H	S	02-01-20 12:50	31 ft	651153-018
BH03I	S	02-01-20 12:55	33 ft	651153-019
BH04	S	02-01-20 14:30	3 ft	651153-020
BH04A	S	02-01-20 14:35	5 ft	651153-021
BH04B	S	02-01-20 14:40	10 ft	651153-022
BH04C	S	02-01-20 14:45	15 ft	651153-023
BH04D	S	02-01-20 14:50	20 ft	651153-024
BH04E	S	02-01-20 14:56	25 ft	651153-025
BH04F	S	02-01-20 15:00	30 ft	651153-026
BH04G	S	02-01-20 15:05	33 ft	651153-027
BH05	S	02-01-20 16:15	3 ft	651153-028
BH05A	S	02-01-20 16:20	5 ft	651153-029
BH05B	S	02-01-20 16:31	10 ft	651153-030
BH05C	S	02-01-20 16:35	15 ft	651153-031
BH05D	S	02-01-20 16:37	20 ft	651153-032
BH05E	S	02-01-20 16:43	25 ft	651153-033
BH05F	S	02-01-20 16:50	30 ft	651153-034
BH05G	S	02-01-20 16:57	33 ft	651153-035



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU 816

Project ID: 012919221
Work Order Number(s): 651153

Report Date: 06-FEB-20
Date Received: 02/03/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3115436 BTEX by EPA 8021B

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

Batch: LBA-3115506 BTEX by EPA 8021B

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

Batch: LBA-3115507 BTEX by EPA 8021B

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



Certificate of Analysis Summary 651153

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	651153-001	651153-002	651153-003	651153-004	651153-005	651153-006
	Field Id:	BH02	BH02A	BH02B	BH02C	BH02D	BH02E
	Depth:	3- ft	7- ft	12- ft	17- ft	22- ft	27- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Feb-01-20 10:58	Feb-01-20 11:00	Feb-01-20 11:03	Feb-01-20 11:08	Feb-01-20 11:12	Feb-01-20 11:20
BTEX by EPA 8021B	Extracted:	Feb-03-20 16:00	Feb-03-20 16:00	Feb-03-20 16:00	Feb-03-20 16:00	Feb-03-20 16:00	Feb-03-20 16:00
	Analyzed:	Feb-04-20 00:08	Feb-04-20 00:29	Feb-04-20 00:49	Feb-04-20 01:10	Feb-04-20 01:30	Feb-04-20 01:50
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00397 0.00397	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	Extracted:	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19
	Analyzed:	Feb-04-20 17:27	Feb-04-20 17:32	Feb-04-20 17:38	Feb-04-20 17:44	Feb-04-20 18:03	Feb-04-20 18:09
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		302 49.6	707 49.9	2130 50.1	4420 101	4430 50.3	6880 49.9
TPH by SW8015 Mod	Extracted:	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00
	Analyzed:	Feb-04-20 02:38	Feb-04-20 02:38	Feb-04-20 02:58	Feb-04-20 03:18	Feb-04-20 03:18	Feb-04-20 03:39
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.2 50.2
Total TPH		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.2 50.2

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

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

Version: 1.9%

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651153

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	651153-007	651153-008	651153-009	651153-010	651153-011	651153-012
	Field Id:	BH02F	BH02G	BH02H	BH03	BH03A	BH03B
	Depth:	32- ft	33- ft	38- ft	1- ft	4- ft	7- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Feb-01-20 11:22	Feb-01-20 11:31	Feb-01-20 11:40	Feb-01-20 12:10	Feb-01-20 12:13	Feb-01-20 12:20
BTEX by EPA 8021B	Extracted:	Feb-03-20 16:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00
	Analyzed:	Feb-04-20 02:11	Feb-04-20 04:18	Feb-04-20 04:38	Feb-04-20 04:59	Feb-04-20 05:19	Feb-04-20 05:40
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
m,p-Xylenes		<0.00398 0.00398	<0.00404 0.00404	<0.00399 0.00399	<0.00400 0.00400	<0.00402 0.00402	<0.00402 0.00402
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Chloride by EPA 300	Extracted:	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19
	Analyzed:	Feb-04-20 18:15	Feb-04-20 18:22	Feb-04-20 18:35	Feb-04-20 18:40	Feb-04-20 18:56	Feb-04-20 19:02
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		194 10.0	215 9.92	164 9.96	107 9.98	123 10.1	470 10.1
TPH by SW8015 Mod	Extracted:	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00	Feb-03-20 17:00
	Analyzed:	Feb-04-20 03:39	Feb-04-20 03:59	Feb-04-20 03:59	Feb-04-20 04:19	Feb-04-20 04:19	Feb-04-20 04:39
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0
Total GRO-DRO		<49.9 49.9	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0
Total TPH		<49.9 49.9	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0

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Version: 1.9%

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651153

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651153-013	651153-014	651153-015	651153-016	651153-017	651153-018
	<i>Field Id:</i>	BH03C	BH03D	BH03E	BH03F	BH03G	BH03H
	<i>Depth:</i>	10- ft	15- ft	20- ft	25- ft	26- ft	31- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-01-20 12:30	Feb-01-20 12:33	Feb-01-20 12:40	Feb-01-20 12:42	Feb-01-20 12:45	Feb-01-20 12:50
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00
	<i>Analyzed:</i>	Feb-04-20 06:00	Feb-04-20 06:20	Feb-04-20 06:41	Feb-04-20 07:01	Feb-04-20 07:22	Feb-04-20 08:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00400 0.00400	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19	Feb-04-20 10:19
	<i>Analyzed:</i>	Feb-04-20 19:18	Feb-04-20 19:23	Feb-04-20 19:28	Feb-04-20 19:34	Feb-04-20 19:39	Feb-04-20 19:45
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		533 10.0	384 49.7	307 49.9	2830 49.6	323 49.9	184 9.96
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00
	<i>Analyzed:</i>	Feb-04-20 17:42	Feb-04-20 18:22	Feb-04-20 18:22	Feb-04-20 18:42	Feb-04-20 18:42	Feb-04-20 19:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.1 50.1
Diesel Range Organics (DRO)		<50.3 50.3	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.1 50.1
Total GRO-DRO		<50.3 50.3	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.1 50.1
Total TPH		<50.3 50.3	<50.2 50.2	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.1 50.1

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651153

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651153-019	651153-020	651153-021	651153-022	651153-023	651153-024
	<i>Field Id:</i>	BH03I	BH04	BH04A	BH04B	BH04C	BH04D
	<i>Depth:</i>	33- ft	3- ft	5- ft	10- ft	15- ft	20- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-01-20 12:55	Feb-01-20 14:30	Feb-01-20 14:35	Feb-01-20 14:40	Feb-01-20 14:45	Feb-01-20 14:50
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00
	<i>Analyzed:</i>	Feb-04-20 08:43	Feb-04-20 09:04	Feb-04-20 09:24	Feb-04-20 09:45	Feb-04-20 10:05	Feb-04-20 10:25
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00399 0.00399	<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 10:19	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23
	<i>Analyzed:</i>	Feb-04-20 19:50	Feb-05-20 12:06	Feb-05-20 12:22	Feb-05-20 12:27	Feb-05-20 12:33	Feb-05-20 12:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		151 9.98	<9.98 9.98	<9.98 9.98	11.3 9.92	417 49.4	3510 49.9
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00
	<i>Analyzed:</i>	Feb-04-20 19:02	Feb-04-20 19:21	Feb-04-20 19:21	Feb-04-20 19:41	Feb-04-20 20:01	Feb-04-20 20:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.2 50.2	<49.9 49.9	<50.2 50.2	<49.9 49.9	<50.1 50.1
Diesel Range Organics (DRO)		<50.3 50.3	<50.2 50.2	<49.9 49.9	<50.2 50.2	<49.9 49.9	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.2 50.2	<49.9 49.9	<50.2 50.2	<49.9 49.9	<50.1 50.1
Total GRO-DRO		<50.3 50.3	<50.2 50.2	<49.9 49.9	<50.2 50.2	<49.9 49.9	<50.1 50.1
Total TPH		<50.3 50.3	<50.2 50.2	<49.9 49.9	<50.2 50.2	<49.9 49.9	<50.1 50.1

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651153

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651153-025	651153-026	651153-027	651153-028	651153-029	651153-030
	<i>Field Id:</i>	BH04E	BH04F	BH04G	BH05	BH05A	BH05B
	<i>Depth:</i>	25- ft	30- ft	33- ft	3- ft	5- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-01-20 14:56	Feb-01-20 15:00	Feb-01-20 15:05	Feb-01-20 16:15	Feb-01-20 16:20	Feb-01-20 16:31
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 19:00	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41
	<i>Analyzed:</i>	Feb-04-20 10:46	Feb-04-20 11:06	Feb-04-20 11:27	Feb-04-20 05:14	Feb-04-20 05:35	Feb-04-20 05:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00400 0.00400	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401	<0.00398 0.00398	<0.00397 0.00397
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23
	<i>Analyzed:</i>	Feb-05-20 12:43	Feb-05-20 12:59	Feb-05-20 13:05	Feb-05-20 13:11	Feb-05-20 13:16	Feb-05-20 13:22
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		500 50.4	1550 50.1	668 49.9	11.2 10.1	80.7 50.4	6280 99.2
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:00
	<i>Analyzed:</i>	Feb-04-20 20:20	Feb-04-20 20:20	Feb-04-20 20:40	Feb-04-20 20:40	Feb-04-20 21:00	Feb-04-20 21:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.0 50.0	<49.8 49.8	<50.2 50.2
Diesel Range Organics (DRO)		<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.0 50.0	<49.8 49.8	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.0 50.0	<49.8 49.8	<50.2 50.2
Total GRO-DRO		<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.0 50.0	<49.8 49.8	<50.2 50.2
Total TPH		<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.0 50.0	<49.8 49.8	<50.2 50.2

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651153

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	651153-031	651153-032	651153-033	651153-034	651153-035	
	Field Id:	BH05C	BH05D	BH05E	BH05F	BH05G	
	Depth:	15- ft	20- ft	25- ft	30- ft	33- ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Feb-01-20 16:35	Feb-01-20 16:37	Feb-01-20 16:43	Feb-01-20 16:50	Feb-01-20 16:57	
BTEX by EPA 8021B	Extracted:	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	
	Analyzed:	Feb-04-20 06:15	Feb-04-20 06:36	Feb-04-20 06:56	Feb-04-20 07:17	Feb-04-20 07:37	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00399 0.00399	<0.00396 0.00396	<0.00399 0.00399	
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	
Chloride by EPA 300	Extracted:	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	
	Analyzed:	Feb-05-20 13:40	Feb-05-20 13:46	Feb-05-20 14:03	Feb-05-20 14:09	Feb-05-20 14:15	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		3250 49.9	6810 49.6	494 49.9	2630 50.4	564 10.0	
TPH by SW8015 Mod	Extracted:	Feb-04-20 17:00	Feb-04-20 17:00	Feb-04-20 17:35	Feb-04-20 17:30	Feb-04-20 17:30	
	Analyzed:	Feb-04-20 21:19	Feb-04-20 21:19	Feb-05-20 03:48	Feb-05-20 01:13	Feb-05-20 01:13	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	
Diesel Range Organics (DRO)		<50.0 50.0	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	
Total GRO-DRO		<50.0 50.0	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	
Total TPH		<50.0 50.0	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	

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Version: 1.0%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02**
Lab Sample Id: 651153-001

Matrix: Soil
Date Collected: 02.01.20 10.58

Date Received: 02.03.20 14.47
Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	302	49.6	mg/kg	02.04.20 17.27		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115454

Date Prep: 02.03.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 02.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 02.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 02.38	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 02.38	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 02.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.04.20 02.38	
o-Terphenyl	84-15-1	104	%	70-135	02.04.20 02.38	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02**
Lab Sample Id: 651153-001

Matrix: Soil
Date Collected: 02.01.20 10.58

Date Received: 02.03.20 14.47
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115436

Date Prep: 02.03.20 16.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 00.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 00.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 00.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 00.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 00.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 00.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 00.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.04.20 00.08		
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.04.20 00.08		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02A** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-002 Date Collected: 02.01.20 11.00 Sample Depth: 7 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	707	49.9	mg/kg	02.04.20 17.32		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.20 02.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.04.20 02.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.20 02.38	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.04.20 02.38	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.04.20 02.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.04.20 02.38	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 02.38	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02A**
 Lab Sample Id: 651153-002

Matrix: Soil
 Date Collected: 02.01.20 11.00

Date Received: 02.03.20 14.47
 Sample Depth: 7 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.00

Basis: Wet Weight

Seq Number: 3115436

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 00.29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 00.29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 00.29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 00.29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 00.29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 00.29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 00.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 00.29		
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.04.20 00.29		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02B** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-003 Date Collected: 02.01.20 11.03 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2130	50.1	mg/kg	02.04.20 17.38		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 02.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 02.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 02.58	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 02.58	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 02.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.04.20 02.58	
o-Terphenyl	84-15-1	100	%	70-135	02.04.20 02.58	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02B**
 Lab Sample Id: 651153-003

Matrix: Soil
 Date Collected: 02.01.20 11.03

Date Received: 02.03.20 14.47
 Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.00

Basis: Wet Weight

Seq Number: 3115436

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.04.20 00.49	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.04.20 00.49	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.04.20 00.49	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.04.20 00.49	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.04.20 00.49	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.04.20 00.49	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.04.20 00.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 00.49		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 00.49		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02C** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-004 Date Collected: 02.01.20 11.08 Sample Depth: 17 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4420	101	mg/kg	02.04.20 17.44		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 03.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 03.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 03.18	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 03.18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 03.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.04.20 03.18	
o-Terphenyl	84-15-1	101	%	70-135	02.04.20 03.18	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02C**
 Lab Sample Id: 651153-004

Matrix: Soil
 Date Collected: 02.01.20 11.08

Date Received: 02.03.20 14.47
 Sample Depth: 17 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.00

Basis: Wet Weight

Seq Number: 3115436

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 01.10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 01.10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 01.10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 01.10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 01.10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 01.10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 01.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 01.10		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 01.10		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02D** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-005 Date Collected: 02.01.20 11.12 Sample Depth: 22 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4430	50.3	mg/kg	02.04.20 18.03		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 03.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 03.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 03.18	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 03.18	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 03.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.04.20 03.18	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 03.18	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02D**
 Lab Sample Id: 651153-005

Matrix: Soil
 Date Collected: 02.01.20 11.12

Date Received: 02.03.20 14.47
 Sample Depth: 22 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.00

Basis: Wet Weight

Seq Number: 3115436

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 01.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 01.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 01.30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 01.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 01.30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 01.30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 01.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.04.20 01.30		
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.04.20 01.30		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02E** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-006 Date Collected: 02.01.20 11.20 Sample Depth: 27 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6880	49.9	mg/kg	02.04.20 18.09		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 03.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 03.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 03.39	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 03.39	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 03.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	02.04.20 03.39	
o-Terphenyl	84-15-1	117	%	70-135	02.04.20 03.39	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02E**
 Lab Sample Id: 651153-006

Matrix: Soil
 Date Collected: 02.01.20 11.20

Date Received: 02.03.20 14.47
 Sample Depth: 27 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.00

Basis: Wet Weight

Seq Number: 3115436

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 01.50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 01.50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 01.50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 01.50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 01.50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 01.50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 01.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.04.20 01.50		
1,4-Difluorobenzene	540-36-3	86	%	70-130	02.04.20 01.50		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02F**
Lab Sample Id: 651153-007

Matrix: Soil
Date Collected: 02.01.20 11.22

Date Received: 02.03.20 14.47
Sample Depth: 32 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	194	10.0	mg/kg	02.04.20 18.15		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115454

Date Prep: 02.03.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 03.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 03.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 03.39	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 03.39	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 03.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.04.20 03.39	
o-Terphenyl	84-15-1	98	%	70-135	02.04.20 03.39	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02F**
 Lab Sample Id: 651153-007

Matrix: Soil
 Date Collected: 02.01.20 11.22

Date Received: 02.03.20 14.47
 Sample Depth: 32 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.00

Basis: Wet Weight

Seq Number: 3115436

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 02.11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 02.11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 02.11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 02.11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 02.11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 02.11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 02.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.04.20 02.11		
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.04.20 02.11		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02G** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-008 Date Collected: 02.01.20 11.31 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	215	9.92	mg/kg	02.04.20 18.22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 03.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.04.20 03.59	
o-Terphenyl	84-15-1	97	%	70-135	02.04.20 03.59	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02G**
 Lab Sample Id: 651153-008

Matrix: Soil
 Date Collected: 02.01.20 11.31

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 04.18	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 04.18	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 04.18	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.04.20 04.18	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 04.18	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 04.18	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 04.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 04.18		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 04.18		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02H** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-009 Date Collected: 02.01.20 11.40 Sample Depth: 38 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	164	9.96	mg/kg	02.04.20 18.35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 03.59	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 03.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.04.20 03.59	
o-Terphenyl	84-15-1	98	%	70-135	02.04.20 03.59	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH02H**
Lab Sample Id: 651153-009

Matrix: Soil
Date Collected: 02.01.20 11.40

Date Received: 02.03.20 14.47
Sample Depth: 38 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115506

Date Prep: 02.03.20 19.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 04.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 04.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 04.38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 04.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 04.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 04.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 04.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 04.38		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 04.38		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03**
Lab Sample Id: 651153-010

Matrix: Soil
Date Collected: 02.01.20 12.10

Date Received: 02.03.20 14.47
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	107	9.98	mg/kg	02.04.20 18.40		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115454

Date Prep: 02.03.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 04.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	02.04.20 04.19	
o-Terphenyl	84-15-1	95	%	70-135	02.04.20 04.19	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03**
 Lab Sample Id: 651153-010

Matrix: Soil
 Date Collected: 02.01.20 12.10

Date Received: 02.03.20 14.47
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 04.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 04.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 04.59	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 04.59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 04.59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 04.59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 04.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 04.59		
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.04.20 04.59		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03A** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-011 Date Collected: 02.01.20 12.13 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	123	10.1	mg/kg	02.04.20 18.56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.03.20 17.00 Basis: Wet Weight
 Seq Number: 3115454

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 04.19	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 04.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.04.20 04.19	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 04.19	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03A**
 Lab Sample Id: 651153-011

Matrix: Soil
 Date Collected: 02.01.20 12.13

Date Received: 02.03.20 14.47
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 05.19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 05.19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 05.19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 05.19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 05.19	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 05.19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 05.19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 05.19		
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 05.19		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03B**
Lab Sample Id: 651153-012

Matrix: Soil
Date Collected: 02.01.20 12.20

Date Received: 02.03.20 14.47
Sample Depth: 7 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	470	10.1	mg/kg	02.04.20 19.02		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115454

Date Prep: 02.03.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 04.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 04.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 04.39	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 04.39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 04.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.04.20 04.39	
o-Terphenyl	84-15-1	98	%	70-135	02.04.20 04.39	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03B**
 Lab Sample Id: 651153-012

Matrix: Soil
 Date Collected: 02.01.20 12.20

Date Received: 02.03.20 14.47
 Sample Depth: 7 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 05.40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 05.40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 05.40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 05.40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 05.40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 05.40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 05.40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 05.40		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 05.40		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03C** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-013 Date Collected: 02.01.20 12.30 Sample Depth: 10 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	533	10.0	mg/kg	02.04.20 19.18		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.04.20 17.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.04.20 17.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.04.20 17.42	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.04.20 17.42	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.04.20 17.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.04.20 17.42	
o-Terphenyl	84-15-1	93	%	70-135	02.04.20 17.42	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03C**
Lab Sample Id: 651153-013

Matrix: Soil
Date Collected: 02.01.20 12.30

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 06.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 06.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 06.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 06.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 06.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 06.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 06.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 06.00		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 06.00		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03D**
Lab Sample Id: 651153-014

Matrix: Soil
Date Collected: 02.01.20 12.33

Date Received: 02.03.20 14.47
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	384	49.7	mg/kg	02.04.20 19.23		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 18.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 18.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 18.22	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 18.22	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 18.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.04.20 18.22	
o-Terphenyl	84-15-1	95	%	70-135	02.04.20 18.22	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03D**
Lab Sample Id: 651153-014

Matrix: Soil
Date Collected: 02.01.20 12.33

Date Received: 02.03.20 14.47
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115506

Date Prep: 02.03.20 19.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 06.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 06.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 06.20	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 06.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 06.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 06.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 06.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	02.04.20 06.20		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 06.20		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03E**
 Lab Sample Id: 651153-015

Matrix: Soil
 Date Collected: 02.01.20 12.40

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	307	49.9	mg/kg	02.04.20 19.28		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.20 18.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.04.20 18.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.20 18.22	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.04.20 18.22	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.04.20 18.22	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	105	%	70-135	02.04.20 18.22	
84-15-1	100	%	70-135	02.04.20 18.22	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03E**
 Lab Sample Id: 651153-015

Matrix: Soil
 Date Collected: 02.01.20 12.40

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 06.41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 06.41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 06.41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 06.41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 06.41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 06.41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 06.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 06.41		
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 06.41		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03F**
Lab Sample Id: 651153-016

Matrix: Soil
Date Collected: 02.01.20 12.42

Date Received: 02.03.20 14.47
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2830	49.6	mg/kg	02.04.20 19.34		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.20 18.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.04.20 18.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.20 18.42	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.04.20 18.42	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.04.20 18.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	02.04.20 18.42	
o-Terphenyl	84-15-1	121	%	70-135	02.04.20 18.42	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03F**
 Lab Sample Id: 651153-016

Matrix: Soil
 Date Collected: 02.01.20 12.42

Date Received: 02.03.20 14.47
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 07.01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 07.01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 07.01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 07.01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 07.01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 07.01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 07.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 07.01		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 07.01		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03G**
Lab Sample Id: 651153-017

Matrix: Soil
Date Collected: 02.01.20 12.45

Date Received: 02.03.20 14.47
Sample Depth: 26 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	323	49.9	mg/kg	02.04.20 19.39		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 18.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 18.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 18.42	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 18.42	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 18.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.04.20 18.42	
o-Terphenyl	84-15-1	101	%	70-135	02.04.20 18.42	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03G**
 Lab Sample Id: 651153-017

Matrix: Soil
 Date Collected: 02.01.20 12.45

Date Received: 02.03.20 14.47
 Sample Depth: 26 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 07.22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 07.22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 07.22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 07.22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 07.22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 07.22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 07.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 07.22		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 07.22		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03H** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-018 Date Collected: 02.01.20 12.50 Sample Depth: 31 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.19 Basis: Wet Weight
 Seq Number: 3115611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	184	9.96	mg/kg	02.04.20 19.45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 19.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 19.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 19.02	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 19.02	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 19.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.04.20 19.02	
o-Terphenyl	84-15-1	104	%	70-135	02.04.20 19.02	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03H**
Lab Sample Id: 651153-018

Matrix: Soil
Date Collected: 02.01.20 12.50

Date Received: 02.03.20 14.47
Sample Depth: 31 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115506

Date Prep: 02.03.20 19.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 08.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 08.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 08.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 08.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 08.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 08.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 08.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 08.23		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 08.23		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03I**
 Lab Sample Id: 651153-019

Matrix: Soil
 Date Collected: 02.01.20 12.55

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115611

Date Prep: 02.04.20 10.19

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	151	9.98	mg/kg	02.04.20 19.50		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.04.20 19.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.04.20 19.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.04.20 19.02	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.04.20 19.02	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.04.20 19.02	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	96	%	70-135	02.04.20 19.02	
84-15-1	95	%	70-135	02.04.20 19.02	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH03I**
 Lab Sample Id: 651153-019

Matrix: Soil
 Date Collected: 02.01.20 12.55

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 08.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 08.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 08.43	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 08.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 08.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 08.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 08.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 08.43		
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 08.43		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04**
 Lab Sample Id: 651153-020

Matrix: Soil
 Date Collected: 02.01.20 14.30

Date Received: 02.03.20 14.47
 Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 10.23

Basis: Wet Weight

Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	02.05.20 12.06	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.04.20 17.00

Basis: Wet Weight

Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 19.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 19.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 19.21	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 19.21	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 19.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.04.20 19.21	
o-Terphenyl	84-15-1	103	%	70-135	02.04.20 19.21	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04**
Lab Sample Id: 651153-020

Matrix: Soil
Date Collected: 02.01.20 14.30

Date Received: 02.03.20 14.47
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115506

Date Prep: 02.03.20 19.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 09.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 09.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 09.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 09.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 09.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 09.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 09.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 09.04		
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 09.04		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04A**
Lab Sample Id: 651153-021

Matrix: Soil
Date Collected: 02.01.20 14.35

Date Received: 02.03.20 14.47
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	02.05.20 12.22	U	1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 19.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 19.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 19.21	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 19.21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 19.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	02.04.20 19.21	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 19.21	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04A**
 Lab Sample Id: 651153-021

Matrix: Soil
 Date Collected: 02.01.20 14.35

Date Received: 02.03.20 14.47
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 09.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 09.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 09.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 09.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 09.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 09.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 09.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 09.24		
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 09.24		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04B**
Lab Sample Id: 651153-022

Matrix: Soil
Date Collected: 02.01.20 14.40

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.3	9.92	mg/kg	02.05.20 12.27		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 19.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 19.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 19.41	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 19.41	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 19.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.04.20 19.41	
o-Terphenyl	84-15-1	105	%	70-135	02.04.20 19.41	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04B**
 Lab Sample Id: 651153-022

Matrix: Soil
 Date Collected: 02.01.20 14.40

Date Received: 02.03.20 14.47
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 09.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 09.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 09.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 09.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 09.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 09.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 09.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 09.45		
4-Bromofluorobenzene	460-00-4	103	%	70-130	02.04.20 09.45		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04C**
Lab Sample Id: 651153-023

Matrix: Soil
Date Collected: 02.01.20 14.45

Date Received: 02.03.20 14.47
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	417	49.4	mg/kg	02.05.20 12.33		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 20.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 20.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 20.01	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 20.01	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 20.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.04.20 20.01	
o-Terphenyl	84-15-1	108	%	70-135	02.04.20 20.01	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04C**
 Lab Sample Id: 651153-023

Matrix: Soil
 Date Collected: 02.01.20 14.45

Date Received: 02.03.20 14.47
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 10.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 10.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 10.05	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.20 10.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 10.05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 10.05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 10.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 10.05		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 10.05		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04D**
 Lab Sample Id: 651153-024

Matrix: Soil
 Date Collected: 02.01.20 14.50

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3510	49.9	mg/kg	02.05.20 12.38		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 20.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 20.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 20.01	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 20.01	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 20.01	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	97	%	70-135	02.04.20 20.01	
84-15-1	94	%	70-135	02.04.20 20.01	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04D**
 Lab Sample Id: 651153-024

Matrix: Soil
 Date Collected: 02.01.20 14.50

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 10.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 10.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 10.25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 10.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 10.25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 10.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 10.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.04.20 10.25		
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 10.25		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04E** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-025 Date Collected: 02.01.20 14.56 Sample Depth: 25 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	500	50.4	mg/kg	02.05.20 12.43		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.20 20.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.04.20 20.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.20 20.20	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.04.20 20.20	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.04.20 20.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.04.20 20.20	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 20.20	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04E**
Lab Sample Id: 651153-025

Matrix: Soil
Date Collected: 02.01.20 14.56

Date Received: 02.03.20 14.47
Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115506

Prep Method: SW5030B

% Moisture:

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 10.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 10.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 10.46	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 10.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 10.46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 10.46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 10.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.04.20 10.46		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 10.46		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04F** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-026 Date Collected: 02.01.20 15.00 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1550	50.1	mg/kg	02.05.20 12.59		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 20.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 20.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 20.20	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 20.20	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 20.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.04.20 20.20	
o-Terphenyl	84-15-1	93	%	70-135	02.04.20 20.20	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04F**
 Lab Sample Id: 651153-026

Matrix: Soil
 Date Collected: 02.01.20 15.00

Date Received: 02.03.20 14.47
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 11.06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 11.06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 11.06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 11.06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 11.06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 11.06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 11.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 11.06		
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.04.20 11.06		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04G**
Lab Sample Id: 651153-027

Matrix: Soil
Date Collected: 02.01.20 15.05

Date Received: 02.03.20 14.47
Sample Depth: 33 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	668	49.9	mg/kg	02.05.20 13.05		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.04.20 20.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.04.20 20.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.04.20 20.40	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.04.20 20.40	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.04.20 20.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.04.20 20.40	
o-Terphenyl	84-15-1	98	%	70-135	02.04.20 20.40	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH04G**
 Lab Sample Id: 651153-027

Matrix: Soil
 Date Collected: 02.01.20 15.05

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 19.00

Basis: Wet Weight

Seq Number: 3115506

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 11.27	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 11.27	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 11.27	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 11.27	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 11.27	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 11.27	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 11.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.04.20 11.27		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 11.27		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-028 Date Collected: 02.01.20 16.15 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	10.1	mg/kg	02.05.20 13.11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 20.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 20.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 20.40	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 20.40	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 20.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.04.20 20.40	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 20.40	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05**
 Lab Sample Id: 651153-028

Matrix: Soil
 Date Collected: 02.01.20 16.15

Date Received: 02.03.20 14.47
 Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 05.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 05.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 05.14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.20 05.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 05.14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 05.14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 05.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 05.14		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 05.14		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05A** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-029 Date Collected: 02.01.20 16.20 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	80.7	50.4	mg/kg	02.05.20 13.16		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.20 21.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.04.20 21.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.20 21.00	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.04.20 21.00	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.04.20 21.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.04.20 21.00	
o-Terphenyl	84-15-1	100	%	70-135	02.04.20 21.00	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05A**
 Lab Sample Id: 651153-029

Matrix: Soil
 Date Collected: 02.01.20 16.20

Date Received: 02.03.20 14.47
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 05.35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 05.35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 05.35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 05.35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 05.35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 05.35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 05.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 05.35		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 05.35		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05B**
Lab Sample Id: 651153-030

Matrix: Soil
Date Collected: 02.01.20 16.31

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6280	99.2	mg/kg	02.05.20 13.22		10

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 21.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 21.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 21.00	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 21.00	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 21.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	02.04.20 21.00	
o-Terphenyl	84-15-1	94	%	70-135	02.04.20 21.00	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05B**
Lab Sample Id: 651153-030

Matrix: Soil
Date Collected: 02.01.20 16.31

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115507

Date Prep: 02.03.20 16.41

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.04.20 05.55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.04.20 05.55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.04.20 05.55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.04.20 05.55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.04.20 05.55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.04.20 05.55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.04.20 05.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 05.55		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 05.55		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05C** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-031 Date Collected: 02.01.20 16.35 Sample Depth: 15 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3250	49.9	mg/kg	02.05.20 13.40		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.00 Basis: Wet Weight
 Seq Number: 3115598

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 21.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 21.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 21.19	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 21.19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 21.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.04.20 21.19	
o-Terphenyl	84-15-1	104	%	70-135	02.04.20 21.19	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05C**
 Lab Sample Id: 651153-031

Matrix: Soil
 Date Collected: 02.01.20 16.35

Date Received: 02.03.20 14.47
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 06.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 06.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 06.15	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 06.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 06.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 06.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 06.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 06.15		
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 06.15		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05D**
 Lab Sample Id: 651153-032

Matrix: Soil
 Date Collected: 02.01.20 16.37

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6810	49.6	mg/kg	02.05.20 13.46		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115598

Date Prep: 02.04.20 17.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 21.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 21.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 21.19	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 21.19	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 21.19	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	103	%	70-135	02.04.20 21.19	
84-15-1	97	%	70-135	02.04.20 21.19	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05D**
 Lab Sample Id: 651153-032

Matrix: Soil
 Date Collected: 02.01.20 16.37

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 06.36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 06.36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 06.36	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 06.36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 06.36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 06.36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 06.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 06.36		
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 06.36		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05E** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-033 Date Collected: 02.01.20 16.43 Sample Depth: 25 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	494	49.9	mg/kg	02.05.20 14.03		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.35 Basis: Wet Weight
 Seq Number: 3115620

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.05.20 03.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.05.20 03.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.05.20 03.48	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.05.20 03.48	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.05.20 03.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.05.20 03.48	
o-Terphenyl	84-15-1	104	%	70-135	02.05.20 03.48	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05E**
 Lab Sample Id: 651153-033

Matrix: Soil
 Date Collected: 02.01.20 16.43

Date Received: 02.03.20 14.47
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 06.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 06.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 06.56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 06.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 06.56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 06.56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 06.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.04.20 06.56		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 06.56		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05F**
 Lab Sample Id: 651153-034

Matrix: Soil
 Date Collected: 02.01.20 16.50

Date Received: 02.03.20 14.47
 Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2630	50.4	mg/kg	02.05.20 14.09		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.05.20 01.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.05.20 01.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.05.20 01.13	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.05.20 01.13	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.05.20 01.13	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	108	%	70-135	02.05.20 01.13	
84-15-1	110	%	70-135	02.05.20 01.13	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05F**
 Lab Sample Id: 651153-034

Matrix: Soil
 Date Collected: 02.01.20 16.50

Date Received: 02.03.20 14.47
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.04.20 07.17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.04.20 07.17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.04.20 07.17	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.04.20 07.17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.04.20 07.17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.04.20 07.17	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.04.20 07.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 07.17		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 07.17		



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05G** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651153-035 Date Collected: 02.01.20 16.57 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	564	10.0	mg/kg	02.05.20 14.15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.30 Basis: Wet Weight
 Seq Number: 3115606

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.05.20 01.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.05.20 01.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.05.20 01.13	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.05.20 01.13	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.05.20 01.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.05.20 01.13	
o-Terphenyl	84-15-1	99	%	70-135	02.05.20 01.13	



Certificate of Analytical Results 651153

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH05G**
 Lab Sample Id: 651153-035

Matrix: Soil
 Date Collected: 02.01.20 16.57

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 07.37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 07.37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 07.37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 07.37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 07.37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 07.37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 07.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.04.20 07.37		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 07.37		



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3115611

MB Sample Id: 7695877-1-BLK

Matrix: Solid

LCS Sample Id: 7695877-1-BKS

Prep Method: E300P

Date Prep: 02.04.20

LCSD Sample Id: 7695877-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	244	98	251	100	90-110	3	20	mg/kg	02.04.20 16:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3115658

MB Sample Id: 7695878-1-BLK

Matrix: Solid

LCS Sample Id: 7695878-1-BKS

Prep Method: E300P

Date Prep: 02.04.20

LCSD Sample Id: 7695878-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	258	103	259	104	90-110	0	20	mg/kg	02.05.20 11:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3115611

Parent Sample Id: 651151-008

Matrix: Soil

MS Sample Id: 651151-008 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651151-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	36.4	201	214	88	220	91	90-110	3	20	mg/kg	02.04.20 17:15	X

Analytical Method: Chloride by EPA 300

Seq Number: 3115611

Parent Sample Id: 651153-010

Matrix: Soil

MS Sample Id: 651153-010 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651153-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	107	200	321	107	323	108	90-110	1	20	mg/kg	02.04.20 18:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3115658

Parent Sample Id: 651153-020

Matrix: Soil

MS Sample Id: 651153-020 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651153-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.67	200	210	101	212	101	90-110	1	20	mg/kg	02.05.20 12:11	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3115658

Parent Sample Id: 651153-030

Matrix: Soil

MS Sample Id: 651153-030 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651153-030 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6280	200	6470	95	6470	95	90-110	0	20	mg/kg	02.05.20 13:28	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115454

MB Sample Id: 7695898-1-BLK

Matrix: Solid

LCS Sample Id: 7695898-1-BKS

Prep Method: SW8015P

Date Prep: 02.03.20

LCSD Sample Id: 7695898-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1060	106	1110	111	70-135	5	35	mg/kg	02.04.20 00:37	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1120	112	70-135	2	35	mg/kg	02.04.20 00:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		109		113		70-135	%	02.04.20 00:37
o-Terphenyl	110		100		102		70-135	%	02.04.20 00:37

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115598

MB Sample Id: 7696010-1-BLK

Matrix: Solid

LCS Sample Id: 7696010-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696010-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1140	114	1020	102	70-135	11	35	mg/kg	02.04.20 17:23	
Diesel Range Organics (DRO)	<50.0	1000	1130	113	1050	105	70-135	7	35	mg/kg	02.04.20 17:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		126		111		70-135	%	02.04.20 17:23
o-Terphenyl	106		111		103		70-135	%	02.04.20 17:23

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

MB Sample Id: 7696012-1-BLK

Matrix: Solid

LCS Sample Id: 7696012-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696012-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1170	117	1030	103	70-135	13	35	mg/kg	02.04.20 21:58	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1040	104	70-135	4	35	mg/kg	02.04.20 21:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		131		112		70-135	%	02.04.20 21:58
o-Terphenyl	95		122		103		70-135	%	02.04.20 21:58

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

MB Sample Id: 7696023-1-BLK

Matrix: Solid

LCS Sample Id: 7696023-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696023-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1150	115	1090	109	70-135	5	35	mg/kg	02.05.20 03:29	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1080	108	70-135	9	35	mg/kg	02.05.20 03:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		120		119		70-135	%	02.05.20 03:29
o-Terphenyl	95		115		106		70-135	%	02.05.20 03:29

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115454

Matrix: Solid

MB Sample Id: 7695898-1-BLK

Prep Method: SW8015P

Date Prep: 02.03.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.04.20 00:17	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115598

Matrix: Solid

MB Sample Id: 7696010-1-BLK

Prep Method: SW8015P

Date Prep: 02.04.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.04.20 17:23	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

Matrix: Solid

MB Sample Id: 7696012-1-BLK

Prep Method: SW8015P

Date Prep: 02.04.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.04.20 21:39	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

Matrix: Solid

MB Sample Id: 7696023-1-BLK

Prep Method: SW8015P

Date Prep: 02.04.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.05.20 03:10	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115454

Parent Sample Id: 651151-001

Matrix: Soil

MS Sample Id: 651151-001 S

Prep Method: SW8015P

Date Prep: 02.03.20

MSD Sample Id: 651151-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	1140	113	1220	122	70-135	7	35	mg/kg	02.04.20 00:57	
Diesel Range Organics (DRO)	<50.3	1010	1180	117	1130	113	70-135	4	35	mg/kg	02.04.20 00:57	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		129		70-135	%	02.04.20 00:57
o-Terphenyl	109		122		70-135	%	02.04.20 00:57

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115598

Parent Sample Id: 651153-013

Matrix: Soil

MS Sample Id: 651153-013 S

Prep Method: SW8015P

Date Prep: 02.04.20

MSD Sample Id: 651153-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	1150	115	1060	106	70-135	8	35	mg/kg	02.04.20 18:03	
Diesel Range Organics (DRO)	<49.8	996	1190	119	1040	104	70-135	13	35	mg/kg	02.04.20 18:03	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		114		70-135	%	02.04.20 18:03
o-Terphenyl	121		102		70-135	%	02.04.20 18:03

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

Parent Sample Id: 651159-008

Matrix: Soil

MS Sample Id: 651159-008 S

Prep Method: SW8015P

Date Prep: 02.04.20

MSD Sample Id: 651159-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1180	118	1160	116	70-135	2	35	mg/kg	02.04.20 22:18	
Diesel Range Organics (DRO)	<50.2	1000	1180	118	1180	118	70-135	0	35	mg/kg	02.04.20 22:18	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		128		70-135	%	02.04.20 22:18
o-Terphenyl	115		113		70-135	%	02.04.20 22:18

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

Parent Sample Id: 651153-033

Matrix: Soil

MS Sample Id: 651153-033 S

Prep Method: SW8015P

Date Prep: 02.04.20

MSD Sample Id: 651153-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1110	111	1200	120	70-135	8	35	mg/kg	02.05.20 03:48	
Diesel Range Organics (DRO)	<50.1	1000	1100	110	1080	108	70-135	2	35	mg/kg	02.05.20 03:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		125		70-135	%	02.05.20 03:48
o-Terphenyl	108		121		70-135	%	02.05.20 03:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115436

MB Sample Id: 7695883-1-BLK

Matrix: Solid

LCS Sample Id: 7695883-1-BKS

Prep Method: SW5030B

Date Prep: 02.03.20

LCSD Sample Id: 7695883-1-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	0.120	120	0.114	114	70-130	5	35	mg/kg	02.03.20 17:20	
Toluene	<0.00200	0.100	0.110	110	0.105	105	70-130	5	35	mg/kg	02.03.20 17:20	
Ethylbenzene	<0.00200	0.100	0.107	107	0.101	101	71-129	6	35	mg/kg	02.03.20 17:20	
m,p-Xylenes	<0.00400	0.200	0.208	104	0.197	99	70-135	5	35	mg/kg	02.03.20 17:20	
o-Xylene	<0.00200	0.100	0.105	105	0.0995	100	71-133	5	35	mg/kg	02.03.20 17:20	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		110		109		70-130	%	02.03.20 17:20
4-Bromofluorobenzene	94		93		91		70-130	%	02.03.20 17:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115507

MB Sample Id: 7695884-1-BLK

Matrix: Solid

LCS Sample Id: 7695884-1-BKS

Prep Method: SW5030B

Date Prep: 02.03.20

LCSD Sample Id: 7695884-1-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	0.116	116	0.103	103	70-130	12	35	mg/kg	02.04.20 03:32	
Toluene	<0.00200	0.100	0.107	107	0.0936	94	70-130	13	35	mg/kg	02.04.20 03:32	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0888	89	71-129	15	35	mg/kg	02.04.20 03:32	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.174	87	70-135	15	35	mg/kg	02.04.20 03:32	
o-Xylene	<0.00200	0.100	0.103	103	0.0888	89	71-133	15	35	mg/kg	02.04.20 03:32	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		109		107		70-130	%	02.04.20 03:32
4-Bromofluorobenzene	95		91		93		70-130	%	02.04.20 03:32

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115506

MB Sample Id: 7695881-1-BLK

Matrix: Solid

LCS Sample Id: 7695881-1-BKS

Prep Method: SW5030B

Date Prep: 02.03.20

LCSD Sample Id: 7695881-1-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	0.0989	99	0.0991	99	70-130	0	35	mg/kg	02.04.20 02:36	
Toluene	<0.00200	0.100	0.0922	92	0.0954	95	70-130	3	35	mg/kg	02.04.20 02:36	
Ethylbenzene	<0.00200	0.100	0.0854	85	0.0917	92	71-129	7	35	mg/kg	02.04.20 02:36	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.188	94	70-135	8	35	mg/kg	02.04.20 02:36	
o-Xylene	<0.00200	0.100	0.0884	88	0.0948	95	71-133	7	35	mg/kg	02.04.20 02:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		105		104		70-130	%	02.04.20 02:36
4-Bromofluorobenzene	98		97		96		70-130	%	02.04.20 02:36

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115436

Parent Sample Id: 651144-021

Matrix: Soil

MS Sample Id: 651144-021 S

Prep Method: SW5030B

Date Prep: 02.03.20

MSD Sample Id: 651144-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0782	79	0.0948	95	70-130	19	35	mg/kg	02.03.20 18:00	
Toluene	<0.00198	0.0992	0.0739	74	0.0818	82	70-130	10	35	mg/kg	02.03.20 18:00	
Ethylbenzene	<0.00198	0.0992	0.0811	82	0.0743	75	71-129	9	35	mg/kg	02.03.20 18:00	
m,p-Xylenes	<0.00397	0.198	0.177	89	0.167	84	70-135	6	35	mg/kg	02.03.20 18:00	
o-Xylene	<0.00198	0.0992	0.0788	79	0.0884	89	71-133	11	35	mg/kg	02.03.20 18:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	02.03.20 18:00
4-Bromofluorobenzene	97		92		70-130	%	02.03.20 18:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115507

Parent Sample Id: 651153-028

Matrix: Soil

MS Sample Id: 651153-028 S

Prep Method: SW5030B

Date Prep: 02.03.20

MSD Sample Id: 651153-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0916	92	0.113	114	70-130	21	35	mg/kg	02.04.20 04:13	
Toluene	<0.00199	0.0996	0.0879	88	0.104	105	70-130	17	35	mg/kg	02.04.20 04:13	
Ethylbenzene	<0.00199	0.0996	0.0887	89	0.101	102	71-129	13	35	mg/kg	02.04.20 04:13	
m,p-Xylenes	<0.00398	0.199	0.177	89	0.197	99	70-135	11	35	mg/kg	02.04.20 04:13	
o-Xylene	<0.00199	0.0996	0.0893	90	0.0986	99	71-133	10	35	mg/kg	02.04.20 04:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		110		70-130	%	02.04.20 04:13
4-Bromofluorobenzene	96		96		70-130	%	02.04.20 04:13

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115506

Parent Sample Id: 651153-008

Matrix: Soil

MS Sample Id: 651153-008 S

Prep Method: SW5030B

Date Prep: 02.03.20

MSD Sample Id: 651153-008 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	0.101	101	0.0723	72	70-130	33	35	mg/kg	02.04.20 03:17	
Toluene	<0.00200	0.0998	0.0953	95	0.0739	74	70-130	25	35	mg/kg	02.04.20 03:17	
Ethylbenzene	<0.00200	0.0998	0.0906	91	0.0715	72	71-129	24	35	mg/kg	02.04.20 03:17	
m,p-Xylenes	<0.00399	0.200	0.185	93	0.149	75	70-135	22	35	mg/kg	02.04.20 03:17	
o-Xylene	<0.00200	0.0998	0.0919	92	0.0733	73	71-133	23	35	mg/kg	02.04.20 03:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		100		70-130	%	02.04.20 03:17
4-Bromofluorobenzene	99		99		70-130	%	02.04.20 03:17

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

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

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

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



Chain of Custody

Work Order No: 1651153

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199, Phoenix, AZ (480) 355-0800
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8900

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

Work Order Comments Program: ☐ PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund State of Project: _____ Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____	

Project Name:	ADU 816	Turn Around	☒
Project Number:	012919221	Rush:	☐
PO #:		Due Date:	
Sampler's Name:	Fatima Smith	Temp Blank:	☒ No ☐ Yes
SAMPLE RECEIPT	Temp Blank:	Wet Ice:	☒ No ☐ Yes
Temperature (°C):	0.16	Thermometer ID	T-NM-037
Received In tact:	☒ Yes ☐ No	Correction Factor:	-0.2
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	35
Sample Custody Seals:	☒ Yes ☐ No		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)
BH02	S	2/1/20	1058	3'	1	X	X	X
BH02A			1100	3'				
BH02B			1103	3'				
BH02C			1108	3'				
BH02D			1112	3'				
BH02E			1120	3'				
BH02F			1122	3'				
BH02G			1131	3'				
BH02H			1140	3'				
BH03			1210	1'				

ANALYSIS REQUEST									
Work Order Notes									
TAT starts the day received by the lab, if received by 4:30pm									
Sample Comments									

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
fatima	EW	2/3/20 14:47			



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 1651153www.xenco.com Page 2 of 4

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

Program: ☐ UST/PST ☐ PRP ☐ Brownfield ☐ RR ☐ Superfund State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level	Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:	ADU 816	Turn Around	
Project Number:	012919221	Routine:	☒
PO #:		Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
SAMPLE RECEIPT	Temp Blank:	Yes	No
Temperature (°C):	Yes	No	Soiled Thermometer ID
Received Intact:	Yes	No	
Cooler Custody Seals:	Yes	No	
Sample Custody Seals:	Yes	No	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8015)	Chloride (EPA 8015)	Sample Comments											
BH03A	S	2/1/20	1213	4'	1	X	X	X												
BH03B			1220	7'																
BH03C			1230	10'																
BH03D			1233	15'																
BH03E			1240	20'																
BH03F			1242	25'																
BH03G			1245	26'																
BH03H			1250	31'																
BH03I			1255	33'																
BH04	V	V	1430	3'	V	V	V	V												

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	2/3/20 14:42	2		
3			4		
5			6		



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 451153

www.xenco.com Page 3 of 4

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

Program: ☐ ST ☐ PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	Deliverables: EDD ☐ ADAPT ☐ Other: ☐

Project Name:	ADU 816	Turn Around	☒
Project Number:	012919221	Route:	☒
PO #:		Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):		Temp Blank:	Yes ☐ No ☒
Received Inact:	Yes ☐ No ☒	Wet Ice:	Yes ☒ No ☐
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:	
Sample Custody Seals:	Yes ☐ No ☒	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST											Work Order Notes	
BH04A	S	2/1/20	1435	5'	Number of Containers												TAT starts the day received by the lab, if received by 4:30pm
BH04B			1440	10'	TPH (EPA 8015)												
BH04C			1445	15'	BTEX (EPA 0=8021)												
BH04D			1450	20'	Chloride (EPA 300.0)												
BH04E			1456	25'													
BH04F			1500	30'													
BH04G			1505	33'													
BH05			1615	3'													
BH05A			1620	5'													
BH05B			1631	10'													

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:		8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		
1	4/2/20	4/3/20 14:47					
3							
5							

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 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 1651153

www.xenco.com Page 4 of 4

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

Project Name:	ADU 816	Turn Around	
Project Number:	012919221	Routine:	☒
PO #:		Rush:	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Well:	Yes	No
Received Intact:	Yes	No	Self	Thermometer ID		
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:		
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
BH05C	S	2/1/20	1635	15'	1	X	X	X		
BH05D			1637	20'		X	X	X		
BH05E			1643	25'		X	X	X		
BH05F			1650	30'		X	X	X		
BH05G			1657	33'		X	X	X		

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1					
2					
3					
4					
5					

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Analytical Report 651158

for
LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

06-FEB-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



06-FEB-20

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **651158**

ADU 816

Project Address: Eddy

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 651158. 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. 651158 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Assistant

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

Certified and approved by numerous States and Agencies.

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

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

**Sample Cross Reference 651158****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH07	S	02-02-20 14:00	1 ft	651158-001
BH07A	S	02-02-20 14:02	5 ft	651158-002
BH07B	S	02-02-20 14:03	10 ft	651158-003
BH07C	S	02-02-20 14:05	15 ft	651158-004
BH07D	S	02-02-20 14:06	20 ft	651158-005
BH07E	S	02-02-20 14:07	25 ft	651158-006
BH07F	S	02-02-20 14:08	30 ft	651158-007
BH07G	S	02-02-20 14:09	33 ft	651158-008
BH07H	S	02-02-20 14:11	34 ft	651158-009
BH07I	S	02-02-20 14:15	35 ft	651158-010



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU 816

Project ID: 012919221

Work Order Number(s): 651158

Report Date: 06-FEB-20

Date Received: 02/03/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3115507 BTEX by EPA 8021B

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



Certificate of Analysis Summary 651158

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651158-001	651158-002	651158-003	651158-004	651158-005	651158-006
	<i>Field Id:</i>	BH07	BH07A	BH07B	BH07C	BH07D	BH07E
	<i>Depth:</i>	1- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-02-20 14:00	Feb-02-20 14:02	Feb-02-20 14:03	Feb-02-20 14:05	Feb-02-20 14:06	Feb-02-20 14:07
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41
	<i>Analyzed:</i>	Feb-04-20 07:57	Feb-04-20 08:18	Feb-04-20 09:19	Feb-04-20 09:39	Feb-04-20 10:00	Feb-04-20 10:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00400 0.00400	<0.00399 0.00399	<0.00399 0.00399	<0.00399 0.00399	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 10:23	Feb-04-20 13:00	Feb-04-20 13:00
	<i>Analyzed:</i>	Feb-05-20 14:21	Feb-05-20 14:27	Feb-05-20 14:32	Feb-05-20 14:38	Feb-04-20 16:02	Feb-04-20 16:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1670 49.9	2690 50.1	8310 100	5850 50.0	824 9.98	816 10.1
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 17:30	Feb-04-20 17:30	Feb-04-20 17:30	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35
	<i>Analyzed:</i>	Feb-05-20 01:33	Feb-05-20 01:33	Feb-05-20 01:52	Feb-05-20 04:08	Feb-05-20 04:27	Feb-05-20 04:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total GRO-DRO		<50.1 50.1	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<50.1 50.1	<50.1 50.1	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.9 49.9

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

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

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651158

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	651158-007	651158-008	651158-009	651158-010		
	Field Id:	BH07F	BH07G	BH07H	BH07I		
	Depth:	30- ft	33- ft	34- ft	35- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	Feb-02-20 14:08	Feb-02-20 14:09	Feb-02-20 14:11	Feb-02-20 14:15		
BTEX by EPA 8021B	Extracted:	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41	Feb-03-20 16:41		
	Analyzed:	Feb-04-20 10:41	Feb-04-20 11:01	Feb-04-20 11:21	Feb-04-20 11:42		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00403 0.00403	<0.00402 0.00402		
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Chloride by EPA 300	Extracted:	Feb-04-20 13:00	Feb-04-20 13:00	Feb-04-20 13:00	Feb-04-20 13:00		
	Analyzed:	Feb-04-20 16:14	Feb-04-20 16:21	Feb-04-20 16:27	Feb-04-20 16:33		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		267 9.98	384 9.92	486 10.1	321 9.94		
TPH by SW8015 Mod	Extracted:	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35		
	Analyzed:	Feb-05-20 04:46	Feb-05-20 04:46	Feb-05-20 05:06	Feb-05-20 05:06		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.2 50.2	<50.3 50.3	<49.8 49.8		
Diesel Range Organics (DRO)		<50.0 50.0	<50.2 50.2	<50.3 50.3	<49.8 49.8		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.2 50.2	<50.3 50.3	<49.8 49.8		
Total GRO-DRO		<50.0 50.0	<50.2 50.2	<50.3 50.3	<49.8 49.8		
Total TPH		<50.0 50.0	<50.2 50.2	<50.3 50.3	<49.8 49.8		

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Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Assistant



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07**
Lab Sample Id: 651158-001

Matrix: Soil
Date Collected: 02.02.20 14.00

Date Received: 02.03.20 14.47
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1670	49.9	mg/kg	02.05.20 14.21		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.05.20 01.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.05.20 01.33	
o-Terphenyl	84-15-1	102	%	70-135	02.05.20 01.33	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07**
 Lab Sample Id: 651158-001

Matrix: Soil
 Date Collected: 02.02.20 14.00

Date Received: 02.03.20 14.47
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 07.57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 07.57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 07.57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 07.57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 07.57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 07.57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 07.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.04.20 07.57		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 07.57		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07A**
Lab Sample Id: 651158-002

Matrix: Soil
Date Collected: 02.02.20 14.02

Date Received: 02.03.20 14.47
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2690	50.1	mg/kg	02.05.20 14.27		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.05.20 01.33	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.05.20 01.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.05.20 01.33	
o-Terphenyl	84-15-1	99	%	70-135	02.05.20 01.33	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07A**
 Lab Sample Id: 651158-002

Matrix: Soil
 Date Collected: 02.02.20 14.02

Date Received: 02.03.20 14.47
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 08.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 08.18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 08.18	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 08.18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 08.18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 08.18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 08.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 08.18		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 08.18		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07B** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651158-003 Date Collected: 02.02.20 14.03 Sample Depth: 10 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.04.20 10.23 Basis: Wet Weight
 Seq Number: 3115658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8310	100	mg/kg	02.05.20 14.32		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.30 Basis: Wet Weight
 Seq Number: 3115606

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.05.20 01.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.05.20 01.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.05.20 01.52	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.05.20 01.52	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.05.20 01.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	02.05.20 01.52	
o-Terphenyl	84-15-1	112	%	70-135	02.05.20 01.52	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07B**
 Lab Sample Id: 651158-003

Matrix: Soil
 Date Collected: 02.02.20 14.03

Date Received: 02.03.20 14.47
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 09.19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 09.19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 09.19	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 09.19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 09.19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 09.19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 09.19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 09.19		
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.04.20 09.19		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07C**
Lab Sample Id: 651158-004

Matrix: Soil
Date Collected: 02.02.20 14.05

Date Received: 02.03.20 14.47
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115658

Date Prep: 02.04.20 10.23

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5850	50.0	mg/kg	02.05.20 14.38		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.05.20 04.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.05.20 04.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.05.20 04.08	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.05.20 04.08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.05.20 04.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.05.20 04.08	
o-Terphenyl	84-15-1	96	%	70-135	02.05.20 04.08	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07C**
 Lab Sample Id: 651158-004

Matrix: Soil
 Date Collected: 02.02.20 14.05

Date Received: 02.03.20 14.47
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 09.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 09.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 09.39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 09.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 09.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 09.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 09.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 09.39		
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 09.39		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07D**
Lab Sample Id: 651158-005

Matrix: Soil
Date Collected: 02.02.20 14.06

Date Received: 02.03.20 14.47
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115585

Date Prep: 02.04.20 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	824	9.98	mg/kg	02.04.20 16.02		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.05.20 04.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.05.20 04.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.05.20 04.27	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.05.20 04.27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.05.20 04.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.05.20 04.27	
o-Terphenyl	84-15-1	101	%	70-135	02.05.20 04.27	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07D**
 Lab Sample Id: 651158-005

Matrix: Soil
 Date Collected: 02.02.20 14.06

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 10.00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 10.00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 10.00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 10.00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 10.00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 10.00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 10.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 10.00		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 10.00		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07E**
Lab Sample Id: 651158-006

Matrix: Soil
Date Collected: 02.02.20 14.07

Date Received: 02.03.20 14.47
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115585

Date Prep: 02.04.20 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	816	10.1	mg/kg	02.04.20 16.08		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.05.20 04.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.05.20 04.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.05.20 04.27	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.05.20 04.27	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.05.20 04.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.05.20 04.27	
o-Terphenyl	84-15-1	96	%	70-135	02.05.20 04.27	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07E**
 Lab Sample Id: 651158-006

Matrix: Soil
 Date Collected: 02.02.20 14.07

Date Received: 02.03.20 14.47
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 10.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 10.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 10.20	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 10.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 10.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 10.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 10.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.04.20 10.20		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 10.20		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07F**
Lab Sample Id: 651158-007

Matrix: Soil
Date Collected: 02.02.20 14.08

Date Received: 02.03.20 14.47
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115585

Date Prep: 02.04.20 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	267	9.98	mg/kg	02.04.20 16.14		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.05.20 04.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.05.20 04.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.05.20 04.46	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.05.20 04.46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.05.20 04.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.05.20 04.46	
o-Terphenyl	84-15-1	102	%	70-135	02.05.20 04.46	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07F**
 Lab Sample Id: 651158-007

Matrix: Soil
 Date Collected: 02.02.20 14.08

Date Received: 02.03.20 14.47
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 10.41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 10.41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 10.41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 10.41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 10.41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 10.41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 10.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 10.41		
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 10.41		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07G**
 Lab Sample Id: 651158-008

Matrix: Soil
 Date Collected: 02.02.20 14.09

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 13.00

Basis: Wet Weight

Seq Number: 3115585

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	384	9.92	mg/kg	02.04.20 16.21		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.04.20 17.35

Basis: Wet Weight

Seq Number: 3115620

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.05.20 04.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.05.20 04.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.05.20 04.46	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.05.20 04.46	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.05.20 04.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.05.20 04.46	
o-Terphenyl	84-15-1	95	%	70-135	02.05.20 04.46	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07G**
 Lab Sample Id: 651158-008

Matrix: Soil
 Date Collected: 02.02.20 14.09

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 11.01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 11.01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 11.01	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 11.01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 11.01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 11.01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 11.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 11.01		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 11.01		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07H**
Lab Sample Id: 651158-009

Matrix: Soil
Date Collected: 02.02.20 14.11

Date Received: 02.03.20 14.47
Sample Depth: 34 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115585

Date Prep: 02.04.20 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	486	10.1	mg/kg	02.04.20 16.27		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.05.20 05.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.05.20 05.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.05.20 05.06	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.05.20 05.06	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.05.20 05.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.05.20 05.06	
o-Terphenyl	84-15-1	100	%	70-135	02.05.20 05.06	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07H**
Lab Sample Id: 651158-009

Matrix: Soil
Date Collected: 02.02.20 14.11

Date Received: 02.03.20 14.47
Sample Depth: 34 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115507

Date Prep: 02.03.20 16.41

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 11.21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 11.21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 11.21	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.04.20 11.21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 11.21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 11.21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 11.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.04.20 11.21		
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.04.20 11.21		



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07I**
 Lab Sample Id: 651158-010

Matrix: Soil
 Date Collected: 02.02.20 14.15

Date Received: 02.03.20 14.47
 Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115585

Date Prep: 02.04.20 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	321	9.94	mg/kg	02.04.20 16.33		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.05.20 05.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.05.20 05.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.05.20 05.06	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.05.20 05.06	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.05.20 05.06	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	99	%	70-135	02.05.20 05.06	
84-15-1	95	%	70-135	02.05.20 05.06	



Certificate of Analytical Results 651158

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH07I**
 Lab Sample Id: 651158-010

Matrix: Soil
 Date Collected: 02.02.20 14.15

Date Received: 02.03.20 14.47
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.03.20 16.41

Basis: Wet Weight

Seq Number: 3115507

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 11.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 11.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 11.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 11.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 11.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 11.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 11.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 11.42		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 11.42		



Flagging Criteria

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

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3115658

MB Sample Id: 7695878-1-BLK

Matrix: Solid

LCS Sample Id: 7695878-1-BKS

Prep Method: E300P

Date Prep: 02.04.20

LCSD Sample Id: 7695878-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	258	103	259	104	90-110	0	20	mg/kg	02.05.20 11:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3115585

MB Sample Id: 7695926-1-BLK

Matrix: Solid

LCS Sample Id: 7695926-1-BKS

Prep Method: E300P

Date Prep: 02.04.20

LCSD Sample Id: 7695926-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	255	102	90-110	0	20	mg/kg	02.04.20 13:42	

Analytical Method: Chloride by EPA 300

Seq Number: 3115658

Parent Sample Id: 651153-020

Matrix: Soil

MS Sample Id: 651153-020 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651153-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.67	200	210	101	212	101	90-110	1	20	mg/kg	02.05.20 12:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3115658

Parent Sample Id: 651153-030

Matrix: Soil

MS Sample Id: 651153-030 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651153-030 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6280	200	6470	95	6470	95	90-110	0	20	mg/kg	02.05.20 13:28	

Analytical Method: Chloride by EPA 300

Seq Number: 3115585

Parent Sample Id: 651256-001

Matrix: Soil

MS Sample Id: 651256-001 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651256-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10700	200	10900	100	10900	100	90-110	0	20	mg/kg	02.04.20 14:01	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3115585

Parent Sample Id: 651256-011

Matrix: Soil

MS Sample Id: 651256-011 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651256-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1230	200	1410	90	1400	85	90-110	1	20	mg/kg	02.04.20 15:26	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

MB Sample Id: 7696012-1-BLK

Matrix: Solid

LCS Sample Id: 7696012-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696012-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1170	117	1030	103	70-135	13	35	mg/kg	02.04.20 21:58	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1040	104	70-135	4	35	mg/kg	02.04.20 21:58	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		131		112		70-135	%	02.04.20 21:58
o-Terphenyl	95		122		103		70-135	%	02.04.20 21:58

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

MB Sample Id: 7696023-1-BLK

Matrix: Solid

LCS Sample Id: 7696023-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696023-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1150	115	1090	109	70-135	5	35	mg/kg	02.05.20 03:29	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1080	108	70-135	9	35	mg/kg	02.05.20 03:29	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		120		119		70-135	%	02.05.20 03:29
o-Terphenyl	95		115		106		70-135	%	02.05.20 03:29

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

Matrix: Solid

MB Sample Id: 7696012-1-BLK

Prep Method: SW8015P

Date Prep: 02.04.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.04.20 21:39	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.04.20

MB Sample Id: 7696023-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.05.20 03:10	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.04.20

Parent Sample Id: 651159-008

MS Sample Id: 651159-008 S

MSD Sample Id: 651159-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1180	118	1160	116	70-135	2	35	mg/kg	02.04.20 22:18	
Diesel Range Organics (DRO)	<50.2	1000	1180	118	1180	118	70-135	0	35	mg/kg	02.04.20 22:18	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		128		70-135	%	02.04.20 22:18
o-Terphenyl	115		113		70-135	%	02.04.20 22:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.04.20

Parent Sample Id: 651153-033

MS Sample Id: 651153-033 S

MSD Sample Id: 651153-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1110	111	1200	120	70-135	8	35	mg/kg	02.05.20 03:48	
Diesel Range Organics (DRO)	<50.1	1000	1100	110	1080	108	70-135	2	35	mg/kg	02.05.20 03:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		125		70-135	%	02.05.20 03:48
o-Terphenyl	108		121		70-135	%	02.05.20 03:48

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115507

MB Sample Id: 7695884-1-BLK

Matrix: Solid

LCS Sample Id: 7695884-1-BKS

Prep Method: SW5030B

Date Prep: 02.03.20

LCSD Sample Id: 7695884-1-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	0.116	116	0.103	103	70-130	12	35	mg/kg	02.04.20 03:32	
Toluene	<0.00200	0.100	0.107	107	0.0936	94	70-130	13	35	mg/kg	02.04.20 03:32	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0888	89	71-129	15	35	mg/kg	02.04.20 03:32	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.174	87	70-135	15	35	mg/kg	02.04.20 03:32	
o-Xylene	<0.00200	0.100	0.103	103	0.0888	89	71-133	15	35	mg/kg	02.04.20 03:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		109		107		70-130	%	02.04.20 03:32
4-Bromofluorobenzene	95		91		93		70-130	%	02.04.20 03:32

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115507

Parent Sample Id: 651153-028

Matrix: Soil

MS Sample Id: 651153-028 S

Prep Method: SW5030B

Date Prep: 02.03.20

MSD Sample Id: 651153-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0916	92	0.113	114	70-130	21	35	mg/kg	02.04.20 04:13	
Toluene	<0.00199	0.0996	0.0879	88	0.104	105	70-130	17	35	mg/kg	02.04.20 04:13	
Ethylbenzene	<0.00199	0.0996	0.0887	89	0.101	102	71-129	13	35	mg/kg	02.04.20 04:13	
m,p-Xylenes	<0.00398	0.199	0.177	89	0.197	99	70-135	11	35	mg/kg	02.04.20 04:13	
o-Xylene	<0.00199	0.0996	0.0893	90	0.0986	99	71-133	10	35	mg/kg	02.04.20 04:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		110		70-130	%	02.04.20 04:13
4-Bromofluorobenzene	96		96		70-130	%	02.04.20 04:13

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



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Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

Chain of Custody

Work Order No:

65158

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
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City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	wmather@ltenv.com, dmoir@ltenv.com

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

Project Name:	ABU 816	Turn Around	
Project Number:	02919221	Routine	H
P.O. Number:	EDDY	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	0.4	Thermometer ID				
Received Intact:	Yes	No	Correction Factor:			
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seals:	Yes	No	10			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST													Work Order Notes
BH07	S	2/2/2020	14:00	1'	1	X	X	X										discrete
BH07A	S	2/2/2020	14:02	5'	1	X	X	X										discrete
BH07B	S	2/2/2020	14:03	10'	1	X	X	X										discrete
BH07C	S	2/2/2020	14:05	15'	1	X	X	X										discrete
BH07D	S	2/2/2020	14:06	20'	1	X	X	X										discrete
BH07E	S	2/2/2020	14:07	25'	1	X	X	X										discrete
BH07F	S	2/2/2020	14:08	30'	1	X	X	X										discrete
BH07G	S	2/2/2020	14:09	33'	1	X	X	X										discrete
BH07H	S	2/2/2020	14:11	34'	1	X	X	X										discrete
BH07I	S	2/2/2020	14:15	35'	1	X	X	X										discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. <i>[Signature]</i>	<i>[Signature]</i>	2/3/20 14:47	2. <i>[Signature]</i>		
3. <i>[Signature]</i>			4. <i>[Signature]</i>		
5. <i>[Signature]</i>			6. <i>[Signature]</i>		

Analytical Report 651159

for
LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

06-FEB-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



06-FEB-20

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **651159**

ADU 816

Project Address: Eddy

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 651159. 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. 651159 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Assistant

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	02-02-20 13:30	1 ft	651159-001
BH01A	S	02-02-20 13:32	5 ft	651159-002
BH01B	S	02-02-20 13:33	10 ft	651159-003
BH01C	S	02-02-20 13:34	15 ft	651159-004
BH01D	S	02-02-20 13:35	20 ft	651159-005
BH01E	S	02-02-20 13:37	25 ft	651159-006
BH01F	S	02-02-20 13:38	30 ft	651159-007
BH01G	S	02-02-20 13:39	33 ft	651159-008
BH01H	S	02-02-20 08:30	34 ft	651159-009
BH01I	S	02-02-20 08:30	35 ft	651159-010
BH06	S	02-02-20 13:45	1 ft	651159-011
BH06A	S	02-02-20 13:46	5 ft	651159-012
BH06B	S	02-02-20 13:47	10 ft	651159-013
BH06C	S	02-02-20 13:49	15 ft	651159-014
BH06D	S	02-02-20 13:51	20 ft	651159-015
BH06E	S	02-02-20 13:51	25 ft	651159-016
BH06F	S	02-02-20 13:52	30 ft	651159-017
BH06G	S	02-02-20 13:54	33 ft	651159-018
BH06H	S	02-02-20 13:55	34 ft	651159-019
BH06I	S	02-02-20 13:58	35 ft	651159-020



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU 816

Project ID: 012919221
Work Order Number(s): 651159

Report Date: 06-FEB-20
Date Received: 02/03/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3115625 BTEX by EPA 8021B

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



Certificate of Analysis Summary 651159

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651159-001	651159-002	651159-003	651159-004	651159-005	651159-006
	<i>Field Id:</i>	BH01	BH01A	BH01B	BH01C	BH01D	BH01E
	<i>Depth:</i>	1- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-02-20 13:30	Feb-02-20 13:32	Feb-02-20 13:33	Feb-02-20 13:34	Feb-02-20 13:35	Feb-02-20 13:37
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00
	<i>Analyzed:</i>	Feb-04-20 14:57	Feb-04-20 15:18	Feb-04-20 15:38	Feb-04-20 15:59	Feb-04-20 16:19	Feb-04-20 16:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00404 0.00404	<0.00403 0.00403	<0.00404 0.00404	<0.00401 0.00401	<0.00400 0.00400	<0.00399 0.00399
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15
	<i>Analyzed:</i>	Feb-05-20 09:35	Feb-05-20 09:40	Feb-05-20 09:46	Feb-05-20 10:02	Feb-05-20 10:07	Feb-05-20 10:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1300 50.4	1150 50.1	1130 49.9	1240 49.7	6520 50.4	3940 49.6
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35	Feb-04-20 17:35
	<i>Analyzed:</i>	Feb-05-20 05:25	Feb-05-20 05:25	Feb-05-20 05:44	Feb-05-20 06:03	Feb-05-20 06:03	Feb-05-20 06:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.3 50.3
Diesel Range Organics (DRO)		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.3 50.3
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.3 50.3
Total GRO-DRO		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.3 50.3
Total TPH		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.3 50.3

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

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651159

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651159-007	651159-008	651159-009	651159-010	651159-011	651159-012
	<i>Field Id:</i>	BH01F	BH01G	BH01H	BH01I	BH06	BH06A
	<i>Depth:</i>	30- ft	33- ft	34- ft	35- ft	1- ft	5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-02-20 13:38	Feb-02-20 13:39	Feb-02-20 08:30	Feb-02-20 08:30	Feb-02-20 13:45	Feb-02-20 13:46
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00
	<i>Analyzed:</i>	Feb-04-20 17:00	Feb-04-20 17:20	Feb-04-20 19:03	Feb-04-20 18:01	Feb-04-20 19:23	Feb-04-20 19:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
m,p-Xylenes		<0.00402 0.00402	<0.00403 0.00403	<0.00404 0.00404	<0.00396 0.00396	<0.00399 0.00399	<0.00403 0.00403
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Total Xylenes		<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Total BTEX		<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15
	<i>Analyzed:</i>	Feb-05-20 10:18	Feb-05-20 10:23	Feb-05-20 10:39	Feb-05-20 10:45	Feb-05-20 10:50	Feb-05-20 11:06
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4070 49.4	1820 50.4	6640 50.4	6160 49.9	196 10.0	1020 50.4
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 17:35	Feb-04-20 17:30	Feb-04-20 12:00	Feb-04-20 12:00	Feb-04-20 12:00	Feb-04-20 12:00
	<i>Analyzed:</i>	Feb-05-20 06:23	Feb-04-20 22:18	Feb-04-20 16:23	Feb-04-20 16:23	Feb-04-20 16:43	Feb-04-20 16:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.3 50.3
Diesel Range Organics (DRO)		<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.3 50.3
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.3 50.3
Total GRO-DRO		<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.3 50.3
Total TPH		<50.0 50.0	<50.3 50.3	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.3 50.3

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

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

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651159

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	651159-013	651159-014	651159-015	651159-016	651159-017	651159-018
	<i>Field Id:</i>	BH06B	BH06C	BH06D	BH06E	BH06F	BH06G
	<i>Depth:</i>	10- ft	15- ft	20- ft	25- ft	30- ft	33- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-02-20 13:47	Feb-02-20 13:49	Feb-02-20 13:51	Feb-02-20 13:51	Feb-02-20 13:52	Feb-02-20 13:54
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00	Feb-04-20 11:00
	<i>Analyzed:</i>	Feb-04-20 20:04	Feb-04-20 20:24	Feb-04-20 20:45	Feb-04-20 21:05	Feb-04-20 21:25	Feb-04-20 21:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00400 0.00400	<0.00402 0.00402	<0.00400 0.00400	<0.00404 0.00404	<0.00400 0.00400
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-04-20 18:15	Feb-05-20 10:08
	<i>Analyzed:</i>	Feb-05-20 11:12	Feb-05-20 11:17	Feb-05-20 11:23	Feb-05-20 11:28	Feb-05-20 11:33	Feb-05-20 15:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1640 49.7	4780 49.9	6510 50.0	6580 50.4	874 50.1	995 49.9
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-20 12:00	Feb-04-20 17:30	Feb-04-20 17:30	Feb-04-20 17:30	Feb-04-20 17:30	Feb-04-20 17:30
	<i>Analyzed:</i>	Feb-04-20 17:03	Feb-04-20 22:38	Feb-04-20 22:57	Feb-04-20 22:57	Feb-04-20 23:17	Feb-04-20 23:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.1 50.1	<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<50.1 50.1	<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2
Total TPH		<50.1 50.1	<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2

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

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

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 651159

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Mon Feb-03-20 02:47 pm

Report Date: 06-FEB-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	651159-019	651159-020				
	Field Id:	BH06H	BH06I				
	Depth:	34- ft	35- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Feb-02-20 13:55	Feb-02-20 13:58				
BTEX by EPA 8021B	Extracted:	Feb-04-20 11:00	Feb-04-20 11:00				
	Analyzed:	Feb-04-20 22:06	Feb-04-20 22:27				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00200 0.00200	<0.00200 0.00200				
Toluene		<0.00200 0.00200	<0.00200 0.00200				
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200				
m,p-Xylenes		<0.00401 0.00401	<0.00401 0.00401				
o-Xylene		<0.00200 0.00200	<0.00200 0.00200				
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200				
Total BTEX		<0.00200 0.00200	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	Feb-05-20 10:08	Feb-05-20 10:08				
	Analyzed:	Feb-05-20 15:37	Feb-05-20 15:43				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		1110 49.9	498 9.92				
TPH by SW8015 Mod	Extracted:	Feb-04-20 17:30	Feb-04-20 17:30				
	Analyzed:	Feb-04-20 23:36	Feb-04-20 23:36				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9				
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9				
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9				
Total GRO-DRO		<49.9 49.9	<49.9 49.9				
Total TPH		<49.9 49.9	<49.9 49.9				

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

Jessica Kramer
Project Assistant



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01**
Lab Sample Id: 651159-001

Matrix: Soil
Date Collected: 02.02.20 13.30

Date Received: 02.03.20 14.47
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1300	50.4	mg/kg	02.05.20 09.35		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.05.20 05.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.05.20 05.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.05.20 05.25	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.05.20 05.25	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.05.20 05.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.05.20 05.25	
o-Terphenyl	84-15-1	103	%	70-135	02.05.20 05.25	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01**
 Lab Sample Id: 651159-001

Matrix: Soil
 Date Collected: 02.02.20 13.30

Date Received: 02.03.20 14.47
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 14.57	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 14.57	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 14.57	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.04.20 14.57	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 14.57	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 14.57	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 14.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 14.57		
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 14.57		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01A**
Lab Sample Id: 651159-002

Matrix: Soil
Date Collected: 02.02.20 13.32

Date Received: 02.03.20 14.47
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1150	50.1	mg/kg	02.05.20 09.40		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.05.20 05.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.05.20 05.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.05.20 05.25	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.05.20 05.25	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.05.20 05.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.05.20 05.25	
o-Terphenyl	84-15-1	97	%	70-135	02.05.20 05.25	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01A**
 Lab Sample Id: 651159-002

Matrix: Soil
 Date Collected: 02.02.20 13.32

Date Received: 02.03.20 14.47
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 15.18	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 15.18	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 15.18	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.04.20 15.18	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 15.18	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 15.18	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 15.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 15.18		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 15.18		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01B**
Lab Sample Id: 651159-003

Matrix: Soil
Date Collected: 02.02.20 13.33

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	49.9	mg/kg	02.05.20 09.46		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.05.20 05.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.05.20 05.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.05.20 05.44	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.05.20 05.44	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.05.20 05.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.05.20 05.44	
o-Terphenyl	84-15-1	96	%	70-135	02.05.20 05.44	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01B**
 Lab Sample Id: 651159-003

Matrix: Soil
 Date Collected: 02.02.20 13.33

Date Received: 02.03.20 14.47
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 15.38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 15.38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 15.38	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.04.20 15.38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 15.38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 15.38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 15.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 15.38		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 15.38		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01C**
Lab Sample Id: 651159-004

Matrix: Soil
Date Collected: 02.02.20 13.34

Date Received: 02.03.20 14.47
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1240	49.7	mg/kg	02.05.20 10.02		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.05.20 06.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.05.20 06.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.05.20 06.03	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.05.20 06.03	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.05.20 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.05.20 06.03	
o-Terphenyl	84-15-1	103	%	70-135	02.05.20 06.03	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01C**
 Lab Sample Id: 651159-004

Matrix: Soil
 Date Collected: 02.02.20 13.34

Date Received: 02.03.20 14.47
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 15.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 15.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 15.59	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.20 15.59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 15.59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 15.59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 15.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 15.59		
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.04.20 15.59		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01D**
Lab Sample Id: 651159-005

Matrix: Soil
Date Collected: 02.02.20 13.35

Date Received: 02.03.20 14.47
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6520	50.4	mg/kg	02.05.20 10.07		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.05.20 06.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.05.20 06.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.05.20 06.03	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.05.20 06.03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.05.20 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.05.20 06.03	
o-Terphenyl	84-15-1	96	%	70-135	02.05.20 06.03	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01D**
 Lab Sample Id: 651159-005

Matrix: Soil
 Date Collected: 02.02.20 13.35

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 16.19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 16.19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 16.19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 16.19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 16.19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 16.19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 16.19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	02.04.20 16.19		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 16.19		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01E**
 Lab Sample Id: 651159-006

Matrix: Soil
 Date Collected: 02.02.20 13.37

Date Received: 02.03.20 14.47
 Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3940	49.6	mg/kg	02.05.20 10.13		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.05.20 06.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.05.20 06.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.05.20 06.23	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.05.20 06.23	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.05.20 06.23	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	102	%	70-135	02.05.20 06.23	
84-15-1	100	%	70-135	02.05.20 06.23	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01E**
 Lab Sample Id: 651159-006

Matrix: Soil
 Date Collected: 02.02.20 13.37

Date Received: 02.03.20 14.47
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 16.40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 16.40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 16.40	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 16.40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 16.40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 16.40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 16.40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 16.40		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.04.20 16.40		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01F**
Lab Sample Id: 651159-007

Matrix: Soil
Date Collected: 02.02.20 13.38

Date Received: 02.03.20 14.47
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4070	49.4	mg/kg	02.05.20 10.18		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115620

Date Prep: 02.04.20 17.35

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.05.20 06.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.05.20 06.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.05.20 06.23	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.05.20 06.23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.05.20 06.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.05.20 06.23	
o-Terphenyl	84-15-1	98	%	70-135	02.05.20 06.23	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01F**
 Lab Sample Id: 651159-007

Matrix: Soil
 Date Collected: 02.02.20 13.38

Date Received: 02.03.20 14.47
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 17.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 17.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 17.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 17.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 17.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 17.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 17.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 17.00		
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 17.00		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01G**
Lab Sample Id: 651159-008

Matrix: Soil
Date Collected: 02.02.20 13.39

Date Received: 02.03.20 14.47
Sample Depth: 33 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1820	50.4	mg/kg	02.05.20 10.23		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.04.20 22.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.04.20 22.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.04.20 22.18	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.04.20 22.18	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.04.20 22.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	02.04.20 22.18	
o-Terphenyl	84-15-1	110	%	70-135	02.04.20 22.18	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01G**
 Lab Sample Id: 651159-008

Matrix: Soil
 Date Collected: 02.02.20 13.39

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 17.20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 17.20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 17.20	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.04.20 17.20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 17.20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 17.20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 17.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 17.20		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 17.20		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01H**
Lab Sample Id: 651159-009

Matrix: Soil
Date Collected: 02.02.20 08.30

Date Received: 02.03.20 14.47
Sample Depth: 34 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6640	50.4	mg/kg	02.05.20 10.39		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115592

Date Prep: 02.04.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 16.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 16.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 16.23	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 16.23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 16.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.04.20 16.23	
o-Terphenyl	84-15-1	93	%	70-135	02.04.20 16.23	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01H**
 Lab Sample Id: 651159-009

Matrix: Soil
 Date Collected: 02.02.20 08.30

Date Received: 02.03.20 14.47
 Sample Depth: 34 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 19.03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 19.03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 19.03	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.04.20 19.03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 19.03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 19.03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 19.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.20 19.03		
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 19.03		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01I**
Lab Sample Id: 651159-010

Matrix: Soil
Date Collected: 02.02.20 08.30

Date Received: 02.03.20 14.47
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6160	49.9	mg/kg	02.05.20 10.45		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115592

Date Prep: 02.04.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 16.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 16.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 16.23	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 16.23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 16.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.04.20 16.23	
o-Terphenyl	84-15-1	92	%	70-135	02.04.20 16.23	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH01I**
 Lab Sample Id: 651159-010

Matrix: Soil
 Date Collected: 02.02.20 08.30

Date Received: 02.03.20 14.47
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.04.20 18.01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.04.20 18.01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.04.20 18.01	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.04.20 18.01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.04.20 18.01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.04.20 18.01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.04.20 18.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 18.01		
1,4-Difluorobenzene	540-36-3	101	%	70-130	02.04.20 18.01		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06**
Lab Sample Id: 651159-011

Matrix: Soil
Date Collected: 02.02.20 13.45

Date Received: 02.03.20 14.47
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	196	10.0	mg/kg	02.05.20 10.50		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115592

Date Prep: 02.04.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 16.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 16.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 16.43	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 16.43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	02.04.20 16.43	
o-Terphenyl	84-15-1	94	%	70-135	02.04.20 16.43	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06**
Lab Sample Id: 651159-011

Matrix: Soil
Date Collected: 02.02.20 13.45

Date Received: 02.03.20 14.47
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 19.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 19.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 19.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 19.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 19.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 19.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 19.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.04.20 19.23		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.04.20 19.23		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06A**
Lab Sample Id: 651159-012

Matrix: Soil
Date Collected: 02.02.20 13.46

Date Received: 02.03.20 14.47
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1020	50.4	mg/kg	02.05.20 11.06		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115592

Date Prep: 02.04.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.04.20 16.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.04.20 16.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.04.20 16.43	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.04.20 16.43	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.04.20 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.04.20 16.43	
o-Terphenyl	84-15-1	100	%	70-135	02.04.20 16.43	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06A**
 Lab Sample Id: 651159-012

Matrix: Soil
 Date Collected: 02.02.20 13.46

Date Received: 02.03.20 14.47
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 19.44	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 19.44	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 19.44	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.04.20 19.44	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 19.44	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 19.44	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 19.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	02.04.20 19.44		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 19.44		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06B**
Lab Sample Id: 651159-013

Matrix: Soil
Date Collected: 02.02.20 13.47

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1640	49.7	mg/kg	02.05.20 11.12		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115592

Date Prep: 02.04.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 17.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 17.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 17.03	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 17.03	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 17.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.04.20 17.03	
o-Terphenyl	84-15-1	102	%	70-135	02.04.20 17.03	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06B**
Lab Sample Id: 651159-013

Matrix: Soil
Date Collected: 02.02.20 13.47

Date Received: 02.03.20 14.47
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115625

Date Prep: 02.04.20 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 20.04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 20.04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 20.04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 20.04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 20.04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 20.04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 20.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 20.04		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 20.04		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06C**
Lab Sample Id: 651159-014

Matrix: Soil
Date Collected: 02.02.20 13.49

Date Received: 02.03.20 14.47
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4780	49.9	mg/kg	02.05.20 11.17		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.20 22.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.20 22.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.20 22.38	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.04.20 22.38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.20 22.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.04.20 22.38	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 22.38	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06C**
 Lab Sample Id: 651159-014

Matrix: Soil
 Date Collected: 02.02.20 13.49

Date Received: 02.03.20 14.47
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 20.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 20.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 20.24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 20.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 20.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 20.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 20.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 20.24		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.04.20 20.24		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06D**
Lab Sample Id: 651159-015

Matrix: Soil
Date Collected: 02.02.20 13.51

Date Received: 02.03.20 14.47
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6510	50.0	mg/kg	02.05.20 11.23		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 22.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 22.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 22.57	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 22.57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 22.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.04.20 22.57	
o-Terphenyl	84-15-1	102	%	70-135	02.04.20 22.57	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06D**
 Lab Sample Id: 651159-015

Matrix: Soil
 Date Collected: 02.02.20 13.51

Date Received: 02.03.20 14.47
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 20.45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 20.45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 20.45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 20.45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 20.45	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 20.45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 20.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 20.45		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 20.45		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06E**
Lab Sample Id: 651159-016

Matrix: Soil
Date Collected: 02.02.20 13.51

Date Received: 02.03.20 14.47
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6580	50.4	mg/kg	02.05.20 11.28		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 22.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 22.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 22.57	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 22.57	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 22.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.04.20 22.57	
o-Terphenyl	84-15-1	101	%	70-135	02.04.20 22.57	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06E**
 Lab Sample Id: 651159-016

Matrix: Soil
 Date Collected: 02.02.20 13.51

Date Received: 02.03.20 14.47
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 21.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 21.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 21.05	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 21.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 21.05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 21.05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 21.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 21.05		
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.04.20 21.05		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06F**
Lab Sample Id: 651159-017

Matrix: Soil
Date Collected: 02.02.20 13.52

Date Received: 02.03.20 14.47
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115603

Date Prep: 02.04.20 18.15

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	874	50.1	mg/kg	02.05.20 11.33		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.04.20 23.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.04.20 23.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.04.20 23.17	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.04.20 23.17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.04.20 23.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.04.20 23.17	
o-Terphenyl	84-15-1	111	%	70-135	02.04.20 23.17	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06F**
 Lab Sample Id: 651159-017

Matrix: Soil
 Date Collected: 02.02.20 13.52

Date Received: 02.03.20 14.47
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.04.20 21.25	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.04.20 21.25	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.04.20 21.25	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.04.20 21.25	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.04.20 21.25	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.04.20 21.25	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.04.20 21.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 21.25		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 21.25		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06G**
Lab Sample Id: 651159-018

Matrix: Soil
Date Collected: 02.02.20 13.54

Date Received: 02.03.20 14.47
Sample Depth: 33 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115697

Date Prep: 02.05.20 10.08

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	995	49.9	mg/kg	02.05.20 15.13		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.04.20 23.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.04.20 23.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.04.20 23.17	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.04.20 23.17	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.04.20 23.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.04.20 23.17	
o-Terphenyl	84-15-1	96	%	70-135	02.04.20 23.17	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06G**
 Lab Sample Id: 651159-018

Matrix: Soil
 Date Collected: 02.02.20 13.54

Date Received: 02.03.20 14.47
 Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 21.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 21.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 21.46	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 21.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 21.46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 21.46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 21.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 21.46		
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.20 21.46		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06H** Matrix: Soil Date Received: 02.03.20 14.47
 Lab Sample Id: 651159-019 Date Collected: 02.02.20 13.55 Sample Depth: 34 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 02.05.20 10.08 Basis: Wet Weight
 Seq Number: 3115697

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1110	49.9	mg/kg	02.05.20 15.37		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 02.04.20 17.30 Basis: Wet Weight
 Seq Number: 3115606

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 23.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.04.20 23.36	
o-Terphenyl	84-15-1	100	%	70-135	02.04.20 23.36	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06H**
Lab Sample Id: 651159-019

Matrix: Soil
Date Collected: 02.02.20 13.55

Date Received: 02.03.20 14.47
Sample Depth: 34 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3115625

Date Prep: 02.04.20 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 22.06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 22.06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 22.06	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.20 22.06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 22.06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 22.06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 22.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.04.20 22.06		
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.04.20 22.06		



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06I**
Lab Sample Id: 651159-020

Matrix: Soil
Date Collected: 02.02.20 13.58

Date Received: 02.03.20 14.47
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3115697

Date Prep: 02.05.20 10.08

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	498	9.92	mg/kg	02.05.20 15.43		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3115606

Date Prep: 02.04.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.04.20 23.36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.20 23.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.04.20 23.36	
o-Terphenyl	84-15-1	95	%	70-135	02.04.20 23.36	



Certificate of Analytical Results 651159

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH06I**
 Lab Sample Id: 651159-020

Matrix: Soil
 Date Collected: 02.02.20 13.58

Date Received: 02.03.20 14.47
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.04.20 11.00

Basis: Wet Weight

Seq Number: 3115625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 22.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 22.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 22.27	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.20 22.27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 22.27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 22.27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 22.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.04.20 22.27		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.04.20 22.27		



Flagging Criteria

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

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3115603

MB Sample Id: 7695977-1-BLK

Matrix: Solid

LCS Sample Id: 7695977-1-BKS

Prep Method: E300P

Date Prep: 02.04.20

LCSD Sample Id: 7695977-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	259	104	260	104	90-110	0	20	mg/kg	02.05.20 08:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3115607

MB Sample Id: 7695986-1-BLK

Matrix: Solid

LCS Sample Id: 7695986-1-BKS

Prep Method: E300P

Date Prep: 02.05.20

LCSD Sample Id: 7695986-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	261	104	259	104	90-110	1	20	mg/kg	02.05.20 15:02	

Analytical Method: Chloride by EPA 300

Seq Number: 3115603

Parent Sample Id: 651159-008

Matrix: Soil

MS Sample Id: 651159-008 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651159-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1820	200	2010	95	2030	104	90-110	1	20	mg/kg	02.05.20 10:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3115603

Parent Sample Id: 651331-001

Matrix: Soil

MS Sample Id: 651331-001 S

Prep Method: E300P

Date Prep: 02.04.20

MSD Sample Id: 651331-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	227	199	434	104	440	107	90-110	1	20	mg/kg	02.05.20 09:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3115697

Parent Sample Id: 651159-018

Matrix: Soil

MS Sample Id: 651159-018 S

Prep Method: E300P

Date Prep: 02.05.20

MSD Sample Id: 651159-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	995	200	1200	103	1210	108	90-110	1	20	mg/kg	02.05.20 15:19	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3115697

Parent Sample Id: 651336-004

Matrix: Soil

MS Sample Id: 651336-004 S

Prep Method: E300P

Date Prep: 02.05.20

MSD Sample Id: 651336-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	255	202	462	102	455	101	90-110	2	20	mg/kg	02.05.20 16:42	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115592

MB Sample Id: 7695996-1-BLK

Matrix: Solid

LCS Sample Id: 7695996-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7695996-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1130	113	1110	111	70-135	2	35	mg/kg	02.04.20 13:03	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1120	112	70-135	5	35	mg/kg	02.04.20 13:03	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		117		113		70-135	%	02.04.20 13:03
o-Terphenyl	109		107		101		70-135	%	02.04.20 13:03

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

MB Sample Id: 7696012-1-BLK

Matrix: Solid

LCS Sample Id: 7696012-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696012-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1170	117	1030	103	70-135	13	35	mg/kg	02.04.20 21:58	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1040	104	70-135	4	35	mg/kg	02.04.20 21:58	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		131		112		70-135	%	02.04.20 21:58
o-Terphenyl	95		122		103		70-135	%	02.04.20 21:58

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

MB Sample Id: 7696023-1-BLK

Matrix: Solid

LCS Sample Id: 7696023-1-BKS

Prep Method: SW8015P

Date Prep: 02.04.20

LCSD Sample Id: 7696023-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1150	115	1090	109	70-135	5	35	mg/kg	02.05.20 03:29	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1080	108	70-135	9	35	mg/kg	02.05.20 03:29	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		120		119		70-135	%	02.05.20 03:29
o-Terphenyl	95		115		106		70-135	%	02.05.20 03:29

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115592

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.04.20

MB Sample Id: 7695996-1-BLK

Parameter

MB
Result

Units

Analysis
Date

Flag

Motor Oil Range Hydrocarbons (MRO)

<50.0

mg/kg

02.04.20 12:43

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.04.20

MB Sample Id: 7696012-1-BLK

Parameter

MB
Result

Units

Analysis
Date

Flag

Motor Oil Range Hydrocarbons (MRO)

<50.0

mg/kg

02.04.20 21:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.04.20

MB Sample Id: 7696023-1-BLK

Parameter

MB
Result

Units

Analysis
Date

Flag

Motor Oil Range Hydrocarbons (MRO)

<50.0

mg/kg

02.05.20 03:10

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115592

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.04.20

Parent Sample Id: 651256-001

MS Sample Id: 651256-001 S

MSD Sample Id: 651256-001 SD

Parameter

Parent
ResultSpike
AmountMS
ResultMS
%RecMSD
ResultMSD
%Rec

Limits

%RPD RPD

Limit

Units

Analysis
Date

Flag

Gasoline Range Hydrocarbons (GRO)

<50.0

1000

1150

115

1120

112

70-135

3

35

mg/kg

02.04.20 13:23

Diesel Range Organics (DRO)

325

1000

1160

84

1210

89

70-135

4

35

mg/kg

02.04.20 13:23

Surrogate

MS
%RecMS
FlagMSD
%RecMSD
Flag

Limits

Units

Analysis
Date

1-Chlorooctane

125

121

70-135

%

02.04.20 13:23

o-Terphenyl

111

116

70-135

%

02.04.20 13:23

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115606

Parent Sample Id: 651159-008

Matrix: Soil

MS Sample Id: 651159-008 S

Prep Method: SW8015P

Date Prep: 02.04.20

MSD Sample Id: 651159-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1180	118	1160	116	70-135	2	35	mg/kg	02.04.20 22:18	
Diesel Range Organics (DRO)	<50.2	1000	1180	118	1180	118	70-135	0	35	mg/kg	02.04.20 22:18	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		128		70-135	%	02.04.20 22:18
o-Terphenyl	115		113		70-135	%	02.04.20 22:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115620

Parent Sample Id: 651153-033

Matrix: Soil

MS Sample Id: 651153-033 S

Prep Method: SW8015P

Date Prep: 02.04.20

MSD Sample Id: 651153-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1110	111	1200	120	70-135	8	35	mg/kg	02.05.20 03:48	
Diesel Range Organics (DRO)	<50.1	1000	1100	110	1080	108	70-135	2	35	mg/kg	02.05.20 03:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		125		70-135	%	02.05.20 03:48
o-Terphenyl	108		121		70-135	%	02.05.20 03:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115625

MB Sample Id: 7695935-1-BLK

Matrix: Solid

LCS Sample Id: 7695935-1-BKS

Prep Method: SW5030B

Date Prep: 02.04.20

LCSD Sample Id: 7695935-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.105	105	0.0960	96	70-130	9	35	mg/kg	02.04.20 13:15	
Toluene	<0.00200	0.100	0.101	101	0.0921	92	70-130	9	35	mg/kg	02.04.20 13:15	
Ethylbenzene	<0.00200	0.100	0.0974	97	0.0897	90	71-129	8	35	mg/kg	02.04.20 13:15	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.185	93	70-135	8	35	mg/kg	02.04.20 13:15	
o-Xylene	<0.00200	0.100	0.0995	100	0.0920	92	71-133	8	35	mg/kg	02.04.20 13:15	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		104		102		70-130	%	02.04.20 13:15
4-Bromofluorobenzene	96		95		96		70-130	%	02.04.20 13:15

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3115625

Parent Sample Id: 651159-001

Matrix: Soil

MS Sample Id: 651159-001 S

Prep Method: SW5030B

Date Prep: 02.04.20

MSD Sample Id: 651159-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.114	113	0.101	101	70-130	12	35	mg/kg	02.04.20 13:56	
Toluene	<0.00202	0.101	0.109	108	0.0928	93	70-130	16	35	mg/kg	02.04.20 13:56	
Ethylbenzene	<0.00202	0.101	0.102	101	0.0815	82	71-129	22	35	mg/kg	02.04.20 13:56	
m,p-Xylenes	<0.00403	0.202	0.210	104	0.167	84	70-135	23	35	mg/kg	02.04.20 13:56	
o-Xylene	<0.00202	0.101	0.104	103	0.0833	83	71-133	22	35	mg/kg	02.04.20 13:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		70-130	%	02.04.20 13:56
4-Bromofluorobenzene	101		99		70-130	%	02.04.20 13:56

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



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

Chain of Custody

Work Order No:

651159

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Page 1 of 2

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

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

Project Name:	ADU 816	Turn Around	
Project Number:	02919221	Routine	
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):	0.0	Temp Blank:	☒ Yes ☐ No
Received Intact:	Yes	Thermometer ID	5-214-003
Cooler Custody Seals:	Yes	Correction Factor:	-0.2
Sample Custody Seals:	Yes	Total Containers:	20

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST											Work Order Notes
					Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)								
BH01	S	2/2/2020	13:30	1'	1	X	X	X								discrete
BH01A	S	2/2/2020	13:32	5'	1	X	X	X								discrete
BH01B	S	2/2/2020	13:33	10'	1	X	X	X								discrete
BH01C	S	2/2/2020	13:34	15'	1	X	X	X								discrete
BH01D	S	2/2/2020	13:35	20'	1	X	X	X								discrete
BH01E	S	2/2/2020	13:37	25'	1	X	X	X								discrete
BH01F	S	2/2/2020	13:38	30'	1	X	X	X								discrete
BH01G	S	2/2/2020	13:39	33'	1	X	X	X								discrete
BH01H	S	2/2/2020	8:30	34'	1	X	X	X								discrete
BH01I	S	2/2/2020	8:30	35'	1	X	X	X								discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	2/3/20/4:47			
		4			
		6			



Chain of Custody

Work Order No:

451 159

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

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Page 2 of 2

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

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

Project Name:	ADU 816	Turn Around:	1
Project Number:	012919221	Routine:	
P.O. Number:	EDDY	Rush:	
Sampler's Name:	William Mather	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
BH06	S	2/2/2020	13:45	1'	1	X	X	X		discrete
BH06A	S	2/2/2020	13:46	5'	1	X	X	X		discrete
BH06B	S	2/2/2020	13:47	10'	1	X	X	X		discrete
BH06C	S	2/2/2020	13:49	15'	1	X	X	X		discrete
BH06D	S	2/2/2020	13:51	20'	1	X	X	X		discrete
BH06E	S	2/2/2020	13:51	25'	1	X	X	X		discrete
BH06F	S	2/2/2020	13:52	30'	1	X	X	X		discrete
BH06G	S	2/2/2020	13:54	33'	1	X	X	X		discrete
BH06H	S	2/2/2020	13:55	34'	1	X	X	X		discrete
BH06I	S	2/2/2020	13:58	35'	1	X	X	X		discrete

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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

1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	2/3/20 14:47 ¹²			
		4			
		6			

Analytical Report 656968

for
LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

31-MAR-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



31-MAR-20

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **656968**

ADU 816

Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 656968. 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. 656968 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW01	S	03-25-20 11:50	0.5 ft	656968-001
MW01A	S	03-25-20 11:58	5 ft	656968-002
MW01B	S	03-25-20 12:11	10 ft	656968-003
MW01C	S	03-25-20 12:15	15 ft	656968-004
MW01D	S	03-25-20 12:20	20 ft	656968-005
MW01E	S	03-25-20 12:28	25 ft	656968-006
MW01F	S	03-25-20 12:30	30 ft	656968-007
MW01G	S	03-25-20 12:32	35 ft	656968-008
MW01H	S	03-25-20 12:35	37 ft	656968-009
MW02	S	03-25-20 14:22	0.5 ft	656968-010
MW02A	S	03-25-20 14:25	5 ft	656968-011
MW02B	S	03-25-20 14:30	10 ft	656968-012
MW02C	S	03-25-20 14:32	15 ft	656968-013
MW02D	S	03-25-20 14:38	20 ft	656968-014
MW02E	S	03-25-20 14:40	25 ft	656968-015
MW02F	S	03-25-20 14:45	30 ft	656968-016
MW02G	S	03-25-20 14:48	35 ft	656968-017
MW02H	S	03-25-20 14:50	37 ft	656968-018
BH10	S	03-25-20 16:18	0.5 ft	656968-019
BH10A	S	03-25-20 16:25	5 ft	656968-020
BH10B	S	03-25-20 16:28	10 ft	656968-021
BH10C	S	03-25-20 16:30	15 ft	656968-022
BH10D	S	03-25-20 16:35	20 ft	656968-023
BH10E	S	03-25-20 16:38	25 ft	656968-024
BH10F	S	03-25-20 16:40	30 ft	656968-025
BH10G	S	03-25-20 16:43	35 ft	656968-026
BH10H	S	03-25-20 16:50	37 ft	656968-027



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU 816

Project ID: 012919221
Work Order Number(s): 656968

Report Date: 31-MAR-20
Date Received: 03/26/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121125 BTEX by EPA 8021B

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

Batch: LBA-3121157 BTEX by EPA 8021B

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

Batch: LBA-3121285 BTEX by EPA 8021B

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



Certificate of Analysis Summary 656968

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Mar-26-20 08:45 am

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	656968-001	656968-002	656968-003	656968-004	656968-005	656968-006
	Field Id:	MW01	MW01A	MW01B	MW01C	MW01D	MW01E
	Depth:	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-25-20 11:50	Mar-25-20 11:58	Mar-25-20 12:11	Mar-25-20 12:15	Mar-25-20 12:20	Mar-25-20 12:28
BTEX by EPA 8021B	Extracted:	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00
	Analyzed:	Mar-26-20 18:10	Mar-26-20 18:30	Mar-26-20 18:50	Mar-26-20 19:11	Mar-26-20 19:31	Mar-26-20 19:52
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401	<0.00402 0.00402	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Chloride by EPA 300	Extracted:	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00
	Analyzed:	Mar-26-20 17:09	Mar-26-20 17:15	Mar-26-20 17:33	Mar-26-20 17:40	Mar-26-20 17:58	Mar-26-20 18:04
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.96 9.96	415 49.8	417 49.9	385 49.9	746 49.6	635 50.1
TPH by SW8015 Mod	Extracted:	Mar-26-20 18:00	Mar-26-20 18:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00
	Analyzed:	Mar-27-20 12:03	Mar-27-20 13:05	Mar-27-20 14:06	Mar-27-20 15:08	Mar-27-20 15:29	Mar-27-20 15:50
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.2 50.2	<50.1 50.1
Diesel Range Organics (DRO)		<50.3 50.3	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.2 50.2	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.2 50.2	<50.1 50.1
Total GRO-DRO		<50.3 50.3	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.2 50.2	<50.1 50.1
Total TPH		<50.3 50.3	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.2 50.2	<50.1 50.1

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

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 656968

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Mar-26-20 08:45 am

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	656968-007	656968-008	656968-009	656968-010	656968-011	656968-012
	<i>Field Id:</i>	MW01F	MW01G	MW01H	MW02	MW02A	MW02B
	<i>Depth:</i>	30- ft	35- ft	37- ft	0.5- ft	5- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-25-20 12:30	Mar-25-20 12:32	Mar-25-20 12:35	Mar-25-20 14:22	Mar-25-20 14:25	Mar-25-20 14:30
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00
	<i>Analyzed:</i>	Mar-26-20 22:55	Mar-26-20 23:16	Mar-26-20 23:36	Mar-26-20 23:56	Mar-27-20 00:17	Mar-27-20 00:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202
m,p-Xylenes		<0.00398 0.00398	<0.00404 0.00404	<0.00404 0.00404	<0.00398 0.00398	<0.00403 0.00403	<0.00403 0.00403
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 11:00	Mar-26-20 21:00
	<i>Analyzed:</i>	Mar-26-20 18:11	Mar-26-20 18:17	Mar-26-20 18:24	Mar-26-20 18:31	Mar-26-20 18:37	Mar-27-20 12:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		482 50.3	434 10.0	462 9.96	26.8 9.96	39.7 10.0	412 50.4
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00
	<i>Analyzed:</i>	Mar-27-20 16:10	Mar-27-20 16:31	Mar-27-20 16:52	Mar-27-20 17:13	Mar-27-20 17:33	Mar-27-20 17:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.2 50.2	<50.2 50.2
Diesel Range Organics (DRO)		<50.3 50.3	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.2 50.2	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.2 50.2	<50.2 50.2
Total GRO-DRO		<50.3 50.3	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.2 50.2	<50.2 50.2
Total TPH		<50.3 50.3	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.2 50.2	<50.2 50.2

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

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 656968

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Mar-26-20 08:45 am

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	656968-013	656968-014	656968-015	656968-016	656968-017	656968-018
	<i>Field Id:</i>	MW02C	MW02D	MW02E	MW02F	MW02G	MW02H
	<i>Depth:</i>	15- ft	20- ft	25- ft	30- ft	35- ft	37- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-25-20 14:32	Mar-25-20 14:38	Mar-25-20 14:40	Mar-25-20 14:45	Mar-25-20 14:48	Mar-25-20 14:50
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-27-20 11:00
	<i>Analyzed:</i>	Mar-27-20 00:58	Mar-27-20 01:18	Mar-27-20 01:38	Mar-27-20 01:59	Mar-27-20 03:00	Mar-27-20 13:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Toluene		<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398	<0.00404 0.00404	<0.00402 0.00402	<0.00404 0.00404	<0.00402 0.00402
o-Xylene		<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Total Xylenes		<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Total BTEX		<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00
	<i>Analyzed:</i>	Mar-27-20 12:17	Mar-27-20 12:23	Mar-27-20 12:29	Mar-27-20 12:46	Mar-27-20 12:52	Mar-27-20 12:57
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		345 49.9	236 50.1	234 50.4	151 49.9	2880 49.8	2070 49.6
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00
	<i>Analyzed:</i>	Mar-27-20 18:35	Mar-27-20 18:56	Mar-27-20 19:17	Mar-27-20 19:37	Mar-27-20 19:58	Mar-27-20 20:19
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.2 50.2
Total TPH		<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.2 50.2

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 656968

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Mar-26-20 08:45 am

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	656968-019	656968-020	656968-021	656968-022	656968-023	656968-024
	<i>Field Id:</i>	BH10	BH10A	BH10B	BH10C	BH10D	BH10E
	<i>Depth:</i>	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-25-20 16:18	Mar-25-20 16:25	Mar-25-20 16:28	Mar-25-20 16:30	Mar-25-20 16:35	Mar-25-20 16:38
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	Mar-27-20 11:00	Mar-27-20 11:00	Mar-27-20 11:00
	<i>Analyzed:</i>	Mar-27-20 03:20	Mar-27-20 03:41	Mar-27-20 04:01	Mar-27-20 14:11	Mar-27-20 14:32	Mar-27-20 14:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00
	<i>Analyzed:</i>	Mar-27-20 13:03	Mar-27-20 13:09	Mar-27-20 13:14	Mar-27-20 13:20	Mar-27-20 13:38	Mar-27-20 13:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		39.0 10.0	530 10.0	304 49.9	496 49.8	108 9.96	183 9.94
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 12:00	Mar-27-20 17:30	Mar-27-20 17:30
	<i>Analyzed:</i>	Mar-27-20 20:39	Mar-27-20 20:59	Mar-27-20 21:20	Mar-27-20 21:41	Mar-28-20 00:03	Mar-28-20 01:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.1 50.1
Diesel Range Organics (DRO)		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.1 50.1
Total GRO-DRO		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.1 50.1
Total TPH		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.1 50.1

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 656968

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Mar-26-20 08:45 am

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	656968-025	656968-026	656968-027			
	<i>Field Id:</i>	BH10F	BH10G	BH10H			
	<i>Depth:</i>	30- ft	35- ft	37- ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Mar-25-20 16:40	Mar-25-20 16:43	Mar-25-20 16:50			
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-27-20 11:00	Mar-27-20 11:00	Mar-27-20 11:00			
	<i>Analyzed:</i>	Mar-27-20 15:12	Mar-27-20 15:33	Mar-27-20 15:53			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202			
Toluene		<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202			
Ethylbenzene		<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202			
m,p-Xylenes		<0.00404 0.00404	<0.00396 0.00396	<0.00404 0.00404			
o-Xylene		<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202			
Total Xylenes		<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202			
Total BTEX		<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202			
Chloride by EPA 300	<i>Extracted:</i>	Mar-26-20 21:00	Mar-26-20 21:00	Mar-26-20 21:00			
	<i>Analyzed:</i>	Mar-27-20 14:02	Mar-27-20 14:09	Mar-27-20 14:15			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		276 49.6	116 10.0	161 10.0			
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-27-20 17:30	Mar-27-20 17:30	Mar-27-20 17:30			
	<i>Analyzed:</i>	Mar-28-20 01:24	Mar-28-20 01:45	Mar-28-20 02:05			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2			
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2			
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2			
Total GRO-DRO		<50.2 50.2	<49.8 49.8	<50.2 50.2			
Total TPH		<50.2 50.2	<49.8 49.8	<50.2 50.2			

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

Jessica Kramer
Project Manager



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01**
Lab Sample Id: 656968-001

Matrix: Soil
Date Collected: 03.25.20 11.50

Date Received: 03.26.20 08.45
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.96	9.96	mg/kg	03.26.20 17.09	U	1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121224

Date Prep: 03.26.20 18.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.27.20 12.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.27.20 12.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.27.20 12.03	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	03.27.20 12.03	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.27.20 12.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	03.27.20 12.03	
o-Terphenyl	84-15-1	123	%	70-135	03.27.20 12.03	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01**
 Lab Sample Id: 656968-001

Matrix: Soil
 Date Collected: 03.25.20 11.50

Date Received: 03.26.20 08.45
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.00

Basis: Wet Weight

Seq Number: 3121125

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 18.10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 18.10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 18.10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 18.10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 18.10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 18.10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 18.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.26.20 18.10		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 18.10		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01A**
Lab Sample Id: 656968-002

Matrix: Soil
Date Collected: 03.25.20 11.58

Date Received: 03.26.20 08.45
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	415	49.8	mg/kg	03.26.20 17.15		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121224

Date Prep: 03.26.20 18.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.27.20 13.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.27.20 13.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.27.20 13.05	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.27.20 13.05	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.27.20 13.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	03.27.20 13.05	
o-Terphenyl	84-15-1	118	%	70-135	03.27.20 13.05	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01A**
 Lab Sample Id: 656968-002

Matrix: Soil
 Date Collected: 03.25.20 11.58

Date Received: 03.26.20 08.45
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.00

Basis: Wet Weight

Seq Number: 3121125

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 18.30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 18.30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 18.30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 18.30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 18.30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 18.30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 18.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 18.30		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 18.30		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01B** Matrix: Soil Date Received: 03.26.20 08.45
 Lab Sample Id: 656968-003 Date Collected: 03.25.20 12.11 Sample Depth: 10 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.26.20 11.00 Basis: Wet Weight
 Seq Number: 3121143

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	417	49.9	mg/kg	03.26.20 17.33		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.27.20 12.00 Basis: Wet Weight
 Seq Number: 3121223

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 14.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 14.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 14.06	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 14.06	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 14.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	03.27.20 14.06	
o-Terphenyl	84-15-1	114	%	70-135	03.27.20 14.06	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01B**
 Lab Sample Id: 656968-003

Matrix: Soil
 Date Collected: 03.25.20 12.11

Date Received: 03.26.20 08.45
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.00

Basis: Wet Weight

Seq Number: 3121125

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 18.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 18.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 18.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 18.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 18.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.26.20 18.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.26.20 18.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 18.50		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 18.50		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01C**
Lab Sample Id: 656968-004

Matrix: Soil
Date Collected: 03.25.20 12.15

Date Received: 03.26.20 08.45
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	385	49.9	mg/kg	03.26.20 17.40		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.27.20 15.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.27.20 15.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.27.20 15.08	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.27.20 15.08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.27.20 15.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	03.27.20 15.08	
o-Terphenyl	84-15-1	113	%	70-135	03.27.20 15.08	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01C**
 Lab Sample Id: 656968-004

Matrix: Soil
 Date Collected: 03.25.20 12.15

Date Received: 03.26.20 08.45
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.00

Basis: Wet Weight

Seq Number: 3121125

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.26.20 19.11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.26.20 19.11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.26.20 19.11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.26.20 19.11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.26.20 19.11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.26.20 19.11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.26.20 19.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 19.11		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 19.11		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01D**
Lab Sample Id: 656968-005

Matrix: Soil
Date Collected: 03.25.20 12.20

Date Received: 03.26.20 08.45
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	746	49.6	mg/kg	03.26.20 17.58		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 15.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 15.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 15.29	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 15.29	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 15.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	03.27.20 15.29	
o-Terphenyl	84-15-1	104	%	70-135	03.27.20 15.29	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01D**
 Lab Sample Id: 656968-005

Matrix: Soil
 Date Collected: 03.25.20 12.20

Date Received: 03.26.20 08.45
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.00

Basis: Wet Weight

Seq Number: 3121125

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.26.20 19.31	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.26.20 19.31	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.26.20 19.31	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.26.20 19.31	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.26.20 19.31	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.26.20 19.31	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.26.20 19.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.26.20 19.31		
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.26.20 19.31		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01E** Matrix: Soil Date Received: 03.26.20 08.45
 Lab Sample Id: 656968-006 Date Collected: 03.25.20 12.28 Sample Depth: 25 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.26.20 11.00 Basis: Wet Weight
 Seq Number: 3121143

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	635	50.1	mg/kg	03.26.20 18.04		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.27.20 12.00 Basis: Wet Weight
 Seq Number: 3121223

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.27.20 15.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.27.20 15.50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.27.20 15.50	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.27.20 15.50	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.27.20 15.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	03.27.20 15.50	
o-Terphenyl	84-15-1	112	%	70-135	03.27.20 15.50	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01E**
 Lab Sample Id: 656968-006

Matrix: Soil
 Date Collected: 03.25.20 12.28

Date Received: 03.26.20 08.45
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.00

Basis: Wet Weight

Seq Number: 3121125

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 19.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 19.52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 19.52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 19.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 19.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.26.20 19.52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.26.20 19.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 19.52		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 19.52		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01F**
Lab Sample Id: 656968-007

Matrix: Soil
Date Collected: 03.25.20 12.30

Date Received: 03.26.20 08.45
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	482	50.3	mg/kg	03.26.20 18.11		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.27.20 16.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.27.20 16.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.27.20 16.10	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	03.27.20 16.10	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.27.20 16.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	03.27.20 16.10	
o-Terphenyl	84-15-1	90	%	70-135	03.27.20 16.10	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01F**
 Lab Sample Id: 656968-007

Matrix: Soil
 Date Collected: 03.25.20 12.30

Date Received: 03.26.20 08.45
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 22.55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 22.55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 22.55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 22.55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 22.55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 22.55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 22.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 22.55		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 22.55		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01G**
Lab Sample Id: 656968-008

Matrix: Soil
Date Collected: 03.25.20 12.32

Date Received: 03.26.20 08.45
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	434	10.0	mg/kg	03.26.20 18.17		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.27.20 16.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.27.20 16.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.27.20 16.31	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	03.27.20 16.31	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.27.20 16.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.27.20 16.31	
o-Terphenyl	84-15-1	103	%	70-135	03.27.20 16.31	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01G**
 Lab Sample Id: 656968-008

Matrix: Soil
 Date Collected: 03.25.20 12.32

Date Received: 03.26.20 08.45
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.26.20 23.16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.26.20 23.16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.26.20 23.16	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.26.20 23.16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.26.20 23.16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.26.20 23.16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.26.20 23.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 23.16		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.26.20 23.16		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01H**
Lab Sample Id: 656968-009

Matrix: Soil
Date Collected: 03.25.20 12.35

Date Received: 03.26.20 08.45
Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	462	9.96	mg/kg	03.26.20 18.24		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.27.20 16.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.27.20 16.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.27.20 16.52	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.27.20 16.52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.27.20 16.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	03.27.20 16.52	
o-Terphenyl	84-15-1	82	%	70-135	03.27.20 16.52	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW01H**
Lab Sample Id: 656968-009

Matrix: Soil
Date Collected: 03.25.20 12.35

Date Received: 03.26.20 08.45
Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3121157

Date Prep: 03.26.20 18.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.26.20 23.36	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.26.20 23.36	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.26.20 23.36	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.26.20 23.36	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.26.20 23.36	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.26.20 23.36	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.26.20 23.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 23.36		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 23.36		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02**
Lab Sample Id: 656968-010

Matrix: Soil
Date Collected: 03.25.20 14.22

Date Received: 03.26.20 08.45
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.8	9.96	mg/kg	03.26.20 18.31		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.27.20 17.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.27.20 17.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.27.20 17.13	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	03.27.20 17.13	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.27.20 17.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.27.20 17.13	
o-Terphenyl	84-15-1	87	%	70-135	03.27.20 17.13	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02**
 Lab Sample Id: 656968-010

Matrix: Soil
 Date Collected: 03.25.20 14.22

Date Received: 03.26.20 08.45
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 23.56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 23.56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 23.56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 23.56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 23.56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 23.56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 23.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.26.20 23.56		
4-Bromofluorobenzene	460-00-4	91	%	70-130	03.26.20 23.56		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02A**
Lab Sample Id: 656968-011

Matrix: Soil
Date Collected: 03.25.20 14.25

Date Received: 03.26.20 08.45
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121143

Date Prep: 03.26.20 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.7	10.0	mg/kg	03.26.20 18.37		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 17.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 17.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 17.33	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 17.33	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 17.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	03.27.20 17.33	
o-Terphenyl	84-15-1	85	%	70-135	03.27.20 17.33	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02A**
 Lab Sample Id: 656968-011

Matrix: Soil
 Date Collected: 03.25.20 14.25

Date Received: 03.26.20 08.45
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 00.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 00.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 00.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.27.20 00.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 00.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 00.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 00.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.27.20 00.17		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 00.17		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02B**
Lab Sample Id: 656968-012

Matrix: Soil
Date Collected: 03.25.20 14.30

Date Received: 03.26.20 08.45
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	412	50.4	mg/kg	03.27.20 12.00		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 17.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 17.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 17.54	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 17.54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 17.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	03.27.20 17.54	
o-Terphenyl	84-15-1	70	%	70-135	03.27.20 17.54	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02B**
 Lab Sample Id: 656968-012

Matrix: Soil
 Date Collected: 03.25.20 14.30

Date Received: 03.26.20 08.45
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 00.37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 00.37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 00.37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.27.20 00.37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 00.37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 00.37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 00.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 00.37		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.27.20 00.37		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02C**
Lab Sample Id: 656968-013

Matrix: Soil
Date Collected: 03.25.20 14.32

Date Received: 03.26.20 08.45
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	345	49.9	mg/kg	03.27.20 12.17		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.27.20 18.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.27.20 18.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.27.20 18.35	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	03.27.20 18.35	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.27.20 18.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	03.27.20 18.35	
o-Terphenyl	84-15-1	71	%	70-135	03.27.20 18.35	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02C**
 Lab Sample Id: 656968-013

Matrix: Soil
 Date Collected: 03.25.20 14.32

Date Received: 03.26.20 08.45
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.27.20 00.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.27.20 00.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.27.20 00.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.27.20 00.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.27.20 00.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.27.20 00.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.27.20 00.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.27.20 00.58		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 00.58		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02D**
Lab Sample Id: 656968-014

Matrix: Soil
Date Collected: 03.25.20 14.38

Date Received: 03.26.20 08.45
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	236	50.1	mg/kg	03.27.20 12.23		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 18.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 18.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 18.56	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 18.56	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 18.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	03.27.20 18.56	
o-Terphenyl	84-15-1	112	%	70-135	03.27.20 18.56	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02D**
 Lab Sample Id: 656968-014

Matrix: Soil
 Date Collected: 03.25.20 14.38

Date Received: 03.26.20 08.45
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.27.20 01.18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.27.20 01.18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.27.20 01.18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.27.20 01.18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.27.20 01.18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.27.20 01.18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.27.20 01.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.27.20 01.18		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 01.18		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02E**
Lab Sample Id: 656968-015

Matrix: Soil
Date Collected: 03.25.20 14.40

Date Received: 03.26.20 08.45
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	234	50.4	mg/kg	03.27.20 12.29		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.27.20 19.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.27.20 19.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.27.20 19.17	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.27.20 19.17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.27.20 19.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.27.20 19.17	
o-Terphenyl	84-15-1	91	%	70-135	03.27.20 19.17	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02E**
 Lab Sample Id: 656968-015

Matrix: Soil
 Date Collected: 03.25.20 14.40

Date Received: 03.26.20 08.45
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 01.38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 01.38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 01.38	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.27.20 01.38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 01.38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 01.38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 01.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.27.20 01.38		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 01.38		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02F** Matrix: Soil Date Received: 03.26.20 08.45
 Lab Sample Id: 656968-016 Date Collected: 03.25.20 14.45 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.26.20 21.00 Basis: Wet Weight
 Seq Number: 3121332

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	151	49.9	mg/kg	03.27.20 12.46		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.27.20 12.00 Basis: Wet Weight
 Seq Number: 3121223

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.27.20 19.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.27.20 19.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.27.20 19.37	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.27.20 19.37	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.27.20 19.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	03.27.20 19.37	
o-Terphenyl	84-15-1	107	%	70-135	03.27.20 19.37	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02F**
 Lab Sample Id: 656968-016

Matrix: Soil
 Date Collected: 03.25.20 14.45

Date Received: 03.26.20 08.45
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.27.20 01.59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.27.20 01.59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.27.20 01.59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.27.20 01.59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.27.20 01.59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.27.20 01.59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.27.20 01.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.27.20 01.59		
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.27.20 01.59		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02G**
Lab Sample Id: 656968-017

Matrix: Soil
Date Collected: 03.25.20 14.48

Date Received: 03.26.20 08.45
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2880	49.8	mg/kg	03.27.20 12.52		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.27.20 19.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.27.20 19.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.27.20 19.58	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.27.20 19.58	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.27.20 19.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	03.27.20 19.58	
o-Terphenyl	84-15-1	114	%	70-135	03.27.20 19.58	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02G**
 Lab Sample Id: 656968-017

Matrix: Soil
 Date Collected: 03.25.20 14.48

Date Received: 03.26.20 08.45
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 03.00	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 03.00	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 03.00	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.27.20 03.00	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 03.00	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 03.00	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 03.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.27.20 03.00		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 03.00		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02H**
Lab Sample Id: 656968-018

Matrix: Soil
Date Collected: 03.25.20 14.50

Date Received: 03.26.20 08.45
Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2070	49.6	mg/kg	03.27.20 12.57		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 20.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 20.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 20.19	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 20.19	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 20.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	03.27.20 20.19	
o-Terphenyl	84-15-1	112	%	70-135	03.27.20 20.19	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW02H**
 Lab Sample Id: 656968-018

Matrix: Soil
 Date Collected: 03.25.20 14.50

Date Received: 03.26.20 08.45
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.27.20 13.51	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.27.20 13.51	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.27.20 13.51	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.27.20 13.51	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.27.20 13.51	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.27.20 13.51	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.27.20 13.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	03.27.20 13.51		
1,4-Difluorobenzene	540-36-3	114	%	70-130	03.27.20 13.51		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10**
Lab Sample Id: 656968-019

Matrix: Soil
Date Collected: 03.25.20 16.18

Date Received: 03.26.20 08.45
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.0	10.0	mg/kg	03.27.20 13.03		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.27.20 20.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.27.20 20.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.27.20 20.39	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.27.20 20.39	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.27.20 20.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	03.27.20 20.39	
o-Terphenyl	84-15-1	127	%	70-135	03.27.20 20.39	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10**
 Lab Sample Id: 656968-019

Matrix: Soil
 Date Collected: 03.25.20 16.18

Date Received: 03.26.20 08.45
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 03.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 03.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 03.20	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.27.20 03.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 03.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.27.20 03.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.27.20 03.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 03.20		
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.27.20 03.20		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10A**
Lab Sample Id: 656968-020

Matrix: Soil
Date Collected: 03.25.20 16.25

Date Received: 03.26.20 08.45
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	530	10.0	mg/kg	03.27.20 13.09		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.27.20 20.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.27.20 20.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.27.20 20.59	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.27.20 20.59	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.27.20 20.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	03.27.20 20.59	
o-Terphenyl	84-15-1	121	%	70-135	03.27.20 20.59	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10A**
 Lab Sample Id: 656968-020

Matrix: Soil
 Date Collected: 03.25.20 16.25

Date Received: 03.26.20 08.45
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.27.20 03.41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.27.20 03.41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.27.20 03.41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.27.20 03.41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.27.20 03.41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.27.20 03.41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.27.20 03.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 03.41		
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.27.20 03.41		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10B**
Lab Sample Id: 656968-021

Matrix: Soil
Date Collected: 03.25.20 16.28

Date Received: 03.26.20 08.45
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	304	49.9	mg/kg	03.27.20 13.14		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 21.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 21.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 21.20	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 21.20	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 21.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	03.27.20 21.20	
o-Terphenyl	84-15-1	115	%	70-135	03.27.20 21.20	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10B**
 Lab Sample Id: 656968-021

Matrix: Soil
 Date Collected: 03.25.20 16.28

Date Received: 03.26.20 08.45
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.27.20 04.01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.27.20 04.01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.27.20 04.01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.27.20 04.01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.27.20 04.01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.27.20 04.01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.27.20 04.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.27.20 04.01		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 04.01		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10C**
Lab Sample Id: 656968-022

Matrix: Soil
Date Collected: 03.25.20 16.30

Date Received: 03.26.20 08.45
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	496	49.8	mg/kg	03.27.20 13.20		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121223

Date Prep: 03.27.20 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 21.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 21.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 21.41	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.27.20 21.41	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 21.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	03.27.20 21.41	
o-Terphenyl	84-15-1	114	%	70-135	03.27.20 21.41	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10C**
 Lab Sample Id: 656968-022

Matrix: Soil
 Date Collected: 03.25.20 16.30

Date Received: 03.26.20 08.45
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.27.20 14.11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.27.20 14.11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.27.20 14.11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.27.20 14.11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.27.20 14.11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.27.20 14.11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.27.20 14.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.27.20 14.11		
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.27.20 14.11		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10D**
Lab Sample Id: 656968-023

Matrix: Soil
Date Collected: 03.25.20 16.35

Date Received: 03.26.20 08.45
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	108	9.96	mg/kg	03.27.20 13.38		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121273

Date Prep: 03.27.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.28.20 00.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.28.20 00.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.28.20 00.03	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.28.20 00.03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.28.20 00.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	03.28.20 00.03	
o-Terphenyl	84-15-1	125	%	70-135	03.28.20 00.03	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10D**
Lab Sample Id: 656968-023

Matrix: Soil
Date Collected: 03.25.20 16.35

Date Received: 03.26.20 08.45
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.27.20 14.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.27.20 14.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.27.20 14.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.27.20 14.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.27.20 14.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.27.20 14.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.27.20 14.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	03.27.20 14.32		
1,4-Difluorobenzene	540-36-3	113	%	70-130	03.27.20 14.32		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10E** Matrix: Soil Date Received: 03.26.20 08.45
 Lab Sample Id: 656968-024 Date Collected: 03.25.20 16.38 Sample Depth: 25 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.26.20 21.00 Basis: Wet Weight
 Seq Number: 3121332

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	183	9.94	mg/kg	03.27.20 13.56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.27.20 17.30 Basis: Wet Weight
 Seq Number: 3121273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.28.20 01.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.28.20 01.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.28.20 01.04	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.28.20 01.04	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.28.20 01.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	03.28.20 01.04	
o-Terphenyl	84-15-1	126	%	70-135	03.28.20 01.04	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10E**
 Lab Sample Id: 656968-024

Matrix: Soil
 Date Collected: 03.25.20 16.38

Date Received: 03.26.20 08.45
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 14.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 14.52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 14.52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.27.20 14.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 14.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.27.20 14.52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.27.20 14.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	03.27.20 14.52		
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.27.20 14.52		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10F**
Lab Sample Id: 656968-025

Matrix: Soil
Date Collected: 03.25.20 16.40

Date Received: 03.26.20 08.45
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	276	49.6	mg/kg	03.27.20 14.02		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121273

Date Prep: 03.27.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.28.20 01.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.28.20 01.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.28.20 01.24	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.28.20 01.24	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.28.20 01.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	03.28.20 01.24	
o-Terphenyl	84-15-1	123	%	70-135	03.28.20 01.24	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10F**
 Lab Sample Id: 656968-025

Matrix: Soil
 Date Collected: 03.25.20 16.40

Date Received: 03.26.20 08.45
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 15.12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 15.12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 15.12	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.27.20 15.12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 15.12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 15.12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 15.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.27.20 15.12		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.27.20 15.12		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10G**
Lab Sample Id: 656968-026

Matrix: Soil
Date Collected: 03.25.20 16.43

Date Received: 03.26.20 08.45
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	116	10.0	mg/kg	03.27.20 14.09		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121273

Date Prep: 03.27.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.28.20 01.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.28.20 01.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.28.20 01.45	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.28.20 01.45	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.28.20 01.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	03.28.20 01.45	
o-Terphenyl	84-15-1	132	%	70-135	03.28.20 01.45	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10G**
 Lab Sample Id: 656968-026

Matrix: Soil
 Date Collected: 03.25.20 16.43

Date Received: 03.26.20 08.45
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.27.20 15.33	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.27.20 15.33	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.27.20 15.33	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.27.20 15.33	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.27.20 15.33	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.27.20 15.33	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.27.20 15.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.27.20 15.33		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.27.20 15.33		



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10H**
Lab Sample Id: 656968-027

Matrix: Soil
Date Collected: 03.25.20 16.50

Date Received: 03.26.20 08.45
Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121332

Date Prep: 03.26.20 21.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	161	10.0	mg/kg	03.27.20 14.15		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121273

Date Prep: 03.27.20 17.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.28.20 02.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.28.20 02.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.28.20 02.05	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.28.20 02.05	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.28.20 02.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	03.28.20 02.05	
o-Terphenyl	84-15-1	128	%	70-135	03.28.20 02.05	



Certificate of Analytical Results 656968

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH10H**
 Lab Sample Id: 656968-027

Matrix: Soil
 Date Collected: 03.25.20 16.50

Date Received: 03.26.20 08.45
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 11.00

Basis: Wet Weight

Seq Number: 3121285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 15.53	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 15.53	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 15.53	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.27.20 15.53	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 15.53	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 15.53	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 15.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.27.20 15.53		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.27.20 15.53		



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121143

MB Sample Id: 7699820-1-BLK

Matrix: Solid

LCS Sample Id: 7699820-1-BKS

Prep Method: E300P

Date Prep: 03.26.20

LCSD Sample Id: 7699820-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	255	102	255	102	90-110	0	20	mg/kg	03.26.20 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3121332

MB Sample Id: 7699895-1-BLK

Matrix: Solid

LCS Sample Id: 7699895-1-BKS

Prep Method: E300P

Date Prep: 03.26.20

LCSD Sample Id: 7699895-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	258	103	90-110	0	20	mg/kg	03.27.20 11:30	

Analytical Method: Chloride by EPA 300

Seq Number: 3121143

Parent Sample Id: 656942-017

Matrix: Soil

MS Sample Id: 656942-017 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 656942-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	208	104	208	105	90-110	0	20	mg/kg	03.26.20 15:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3121143

Parent Sample Id: 656968-002

Matrix: Soil

MS Sample Id: 656968-002 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 656968-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	415	200	631	108	634	110	90-110	0	20	mg/kg	03.26.20 17:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3121332

Parent Sample Id: 656968-012

Matrix: Soil

MS Sample Id: 656968-012 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 656968-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	412	198	609	99	612	101	90-110	0	20	mg/kg	03.27.20 12:06	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121332

Parent Sample Id: 656968-022

Matrix: Soil

MS Sample Id: 656968-022 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 656968-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	496	202	710	106	709	105	90-110	0	20	mg/kg	03.27.20 13:26	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121224

MB Sample Id: 7699850-1-BLK

Matrix: Solid

LCS Sample Id: 7699850-1-BKS

Prep Method: SW8015P

Date Prep: 03.26.20

LCSD Sample Id: 7699850-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	999	100	985	99	70-135	1	35	mg/kg	03.27.20 11:22	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1180	118	70-135	6	35	mg/kg	03.27.20 11:22	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		127		126		70-135	%	03.27.20 11:22
o-Terphenyl	121		120		132		70-135	%	03.27.20 11:22

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121223

MB Sample Id: 7699928-1-BLK

Matrix: Solid

LCS Sample Id: 7699928-1-BKS

Prep Method: SW8015P

Date Prep: 03.27.20

LCSD Sample Id: 7699928-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	716	72	877	88	70-135	20	35	mg/kg	03.27.20 13:25	
Diesel Range Organics (DRO)	<50.0	1000	768	77	997	100	70-135	26	35	mg/kg	03.27.20 13:25	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		92		114		70-135	%	03.27.20 13:25
o-Terphenyl	107		84		112		70-135	%	03.27.20 13:25

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121273

MB Sample Id: 7699944-1-BLK

Matrix: Solid

LCS Sample Id: 7699944-1-BKS

Prep Method: SW8015P

Date Prep: 03.27.20

LCSD Sample Id: 7699944-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	961	96	70-135	6	35	mg/kg	03.27.20 23:22	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1120	112	70-135	7	35	mg/kg	03.27.20 23:22	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		130		122		70-135	%	03.27.20 23:22
o-Terphenyl	113		131		124		70-135	%	03.27.20 23:22

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121224

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.26.20

MB Sample Id: 7699850-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

03.27.20 11:01

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121223

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.27.20

MB Sample Id: 7699928-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

03.27.20 13:05

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121273

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.27.20

MB Sample Id: 7699944-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

03.27.20 23:02

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121224

Matrix: Soil

Prep Method: SW8015P

Date Prep: 03.26.20

Parent Sample Id: 656968-001

MS Sample Id: 656968-001 S

MSD Sample Id: 656968-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<50.0

Spike
Amount

1000

MS
Result

947

MS
%Rec

95

MSD
Result

977

MSD
%Rec

98

Limits

70-135

%RPD

3

RPD

35

Limit

mg/kg

Units

03.27.20 12:24

Flag

Diesel Range Organics (DRO)

<50.0

1000

1130

113

1140

114

70-135

1

35

mg/kg

03.27.20 12:24

Surrogate

1-Chlorooctane

MS
%Rec

127

MS
FlagMSD
%Rec

126

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

03.27.20 12:24

o-Terphenyl

129

130

70-135

%

03.27.20 12:24

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121223

Parent Sample Id: 656968-003

Matrix: Soil

MS Sample Id: 656968-003 S

Prep Method: SW8015P

Date Prep: 03.27.20

MSD Sample Id: 656968-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	882	88	912	91	70-135	3	35	mg/kg	03.27.20 14:27	
Diesel Range Organics (DRO)	<50.2	1000	971	97	1020	102	70-135	5	35	mg/kg	03.27.20 14:27	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		115		70-135	%	03.27.20 14:27
o-Terphenyl	111		113		70-135	%	03.27.20 14:27

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121273

Parent Sample Id: 656968-023

Matrix: Soil

MS Sample Id: 656968-023 S

Prep Method: SW8015P

Date Prep: 03.27.20

MSD Sample Id: 656968-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	1040	103	990	99	70-135	5	35	mg/kg	03.28.20 00:23	
Diesel Range Organics (DRO)	<50.3	1010	1100	109	1020	102	70-135	8	35	mg/kg	03.28.20 00:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		128		70-135	%	03.28.20 00:23
o-Terphenyl	118		132		70-135	%	03.28.20 00:23

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121125

MB Sample Id: 7699817-1-BLK

Matrix: Solid

LCS Sample Id: 7699817-1-BKS

Prep Method: SW5030B

Date Prep: 03.26.20

LCSD Sample Id: 7699817-1-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	0.114	114	0.109	109	70-130	4	35	mg/kg	03.26.20 10:41	
Toluene	<0.00200	0.100	0.110	110	0.106	106	70-130	4	35	mg/kg	03.26.20 10:41	
Ethylbenzene	<0.00200	0.100	0.104	104	0.100	100	71-129	4	35	mg/kg	03.26.20 10:41	
m,p-Xylenes	<0.00400	0.200	0.216	108	0.208	104	70-135	4	35	mg/kg	03.26.20 10:41	
o-Xylene	<0.00200	0.100	0.108	108	0.104	104	71-133	4	35	mg/kg	03.26.20 10:41	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		109		108		70-130	%	03.26.20 10:41
4-Bromofluorobenzene	96		92		95		70-130	%	03.26.20 10:41

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121157

MB Sample Id: 7699887-1-BLK

Matrix: Solid

LCS Sample Id: 7699887-1-BKS

Prep Method: SW5030B

Date Prep: 03.26.20

LCSD Sample Id: 7699887-1-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	0.108	108	0.106	106	70-130	2	35	mg/kg	03.26.20 21:13	
Toluene	<0.00200	0.100	0.102	102	0.101	101	70-130	1	35	mg/kg	03.26.20 21:13	
Ethylbenzene	<0.00200	0.100	0.0957	96	0.0945	95	71-129	1	35	mg/kg	03.26.20 21:13	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.194	97	70-135	2	35	mg/kg	03.26.20 21:13	
o-Xylene	<0.00200	0.100	0.100	100	0.0994	99	71-133	1	35	mg/kg	03.26.20 21:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		109		109		70-130	%	03.26.20 21:13
4-Bromofluorobenzene	95		91		94		70-130	%	03.26.20 21:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121285

MB Sample Id: 7699890-1-BLK

Matrix: Solid

LCS Sample Id: 7699890-1-BKS

Prep Method: SW5030B

Date Prep: 03.27.20

LCSD Sample Id: 7699890-1-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	0.108	108	0.121	121	70-130	11	35	mg/kg	03.27.20 11:49	
Toluene	<0.00200	0.100	0.0985	99	0.125	125	70-130	24	35	mg/kg	03.27.20 11:49	
Ethylbenzene	<0.00200	0.100	0.0923	92	0.117	117	71-129	24	35	mg/kg	03.27.20 11:49	
m,p-Xylenes	<0.00400	0.200	0.180	90	0.227	114	70-135	23	35	mg/kg	03.27.20 11:49	
o-Xylene	<0.00200	0.100	0.0903	90	0.115	115	71-133	24	35	mg/kg	03.27.20 11:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	116		109		110		70-130	%	03.27.20 11:49
4-Bromofluorobenzene	92		85		87		70-130	%	03.27.20 11:49

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121125

Parent Sample Id: 656941-001

Matrix: Soil

MS Sample Id: 656941-001 S

Prep Method: SW5030B

Date Prep: 03.26.20

MSD Sample Id: 656941-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.104	105	0.118	118	70-130	13	35	mg/kg	03.26.20 15:47	
Toluene	<0.00198	0.0992	0.0998	101	0.109	109	70-130	9	35	mg/kg	03.26.20 15:47	
Ethylbenzene	<0.00198	0.0992	0.0938	95	0.0929	93	71-129	1	35	mg/kg	03.26.20 15:47	
m,p-Xylenes	<0.00397	0.198	0.193	97	0.184	92	70-135	5	35	mg/kg	03.26.20 15:47	
o-Xylene	<0.00198	0.0992	0.0981	99	0.0905	91	71-133	8	35	mg/kg	03.26.20 15:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		112		70-130	%	03.26.20 15:47
4-Bromofluorobenzene	93		97		70-130	%	03.26.20 15:47

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121157

Parent Sample Id: 656968-007

Matrix: Soil

MS Sample Id: 656968-007 S

Prep Method: SW5030B

Date Prep: 03.26.20

MSD Sample Id: 656968-007 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	0.108	107	0.110	111	70-130	2	35	mg/kg	03.26.20 21:54	
Toluene	<0.00202	0.101	0.102	101	0.104	105	70-130	2	35	mg/kg	03.26.20 21:54	
Ethylbenzene	<0.00202	0.101	0.0962	95	0.0972	98	71-129	1	35	mg/kg	03.26.20 21:54	
m,p-Xylenes	<0.00404	0.202	0.197	98	0.201	102	70-135	2	35	mg/kg	03.26.20 21:54	
o-Xylene	<0.00202	0.101	0.0988	98	0.102	103	71-133	3	35	mg/kg	03.26.20 21:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		70-130	%	03.26.20 21:54
4-Bromofluorobenzene	94		92		70-130	%	03.26.20 21:54

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121285

Parent Sample Id: 656968-018

Matrix: Soil

MS Sample Id: 656968-018 S

Prep Method: SW5030B

Date Prep: 03.27.20

MSD Sample Id: 656968-018 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	0.122	121	0.124	123	70-130	2	35	mg/kg	03.27.20 12:29	
Toluene	<0.00202	0.101	0.111	110	0.111	110	70-130	0	35	mg/kg	03.27.20 12:29	
Ethylbenzene	<0.00202	0.101	0.104	103	0.102	101	71-129	2	35	mg/kg	03.27.20 12:29	
m,p-Xylenes	<0.00404	0.202	0.202	100	0.196	97	70-135	3	35	mg/kg	03.27.20 12:29	
o-Xylene	<0.00202	0.101	0.0998	99	0.102	101	71-133	2	35	mg/kg	03.27.20 12:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		110		70-130	%	03.27.20 12:29
4-Bromofluorobenzene	86		87		70-130	%	03.27.20 12:29

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

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

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

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



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0030, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6707

Atlanta, GA (770) 449-8800

Work Order No:

0: test 9107
9th 165169108

Page 1 of 2

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

Work Order Comments									
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project: _____ Reporting Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐ Y Deliverables: EDD ☐ ADAPT ☐ Other: _____									

Project Name:		ADU 816		Turn Around	
Project Number:		012919221		Routine: ☒	
PO #:		ZRP-2674		Rush:	
Sampler's Name:		Fatima Smith		Due Date:	
SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature ($^{\circ}$ C):		Thermometer ID			
Received Inact:		☒ Yes ☐ No			
Cooler Custody Seals:		Yes	☒ NO	N/A	Correction Factor:
Sample Custody Seals:		Yes	☒ NO	N/A	Total Containers:
					-0.2
					27

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E)	BTEX (C)	Chloride	Sample Comments
MW01	S	3/25/20	1150	0.5	1	X	X	X	
MW01A			1158	5					
MW01B			1211	10					
MW01C			1215	15					
MW01D			1220	20					
MW01E			1228	25					
MW01F			1230	30					
MW01G			1232	35					
MW01H			1235	37					
MW02	V	V	1422	0.5	V	V	V	V	

Circle Method(s) and Metal(s) to be analyzed	200.7 / 6010	200.8 / 6020:
8RCRA	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
13PPM	Texas 11	
TC1P/SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xeno 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 Xeno. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/26/20 5:00am			3/26/20 8:45



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 506-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7555, Carlsbad, NM (505) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (905) 756-0147, Delray Beach, FL (561) 889-6701
Atlanta, GA (770) 449-8800

Atlanta, GA (770) 449-8800

Work Order No:

~~456789~~
5569108

Page 2 of 3
www.xenco.com

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian Office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 86220
Phone:	(432) 236-3849	Email:	dsmith@ltenv.com , dmoir@ltenv.com

Work Order Comments			
Program:	UST/PST ☐	PRP ☐	Brownfield ☐ RR ☐ Superfund ☐
State of Project:			
Reporting Level	☐ Level ☐	PST/UD ☐	TRR ☐ Level ☐
Deliverables:	EDD ☐	AdAPT ☐	Other: ☐

Project Name:	ADU 816			Turn Around			
Project Number:	012919221			Routine: ☒			
PO #:	2RP-2674			Rush:			
Sampler's Name:	Fatima Smith			Due Date:			
SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No	
	Temperature (°C):	Thermometer ID					
Received Intact:	Yes	No	Seal				
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:			
Sample Custody Seals:	Yes	No	N/A	Total Containers:			

[illegible][illegible]

Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010	200.8 / 6020:
8RCRA 13PPM	8RCRA 13PPM	8RCRA 13PPM
TCLP / SPLP 6010:	TCLP / SPLP 6010:	TCLP / SPLP 6010:
8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
1631 / 245.1 / 7470 / 7471 : Hg	1631 / 245.1 / 7470 / 7471 : Hg	1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document 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 contractors beyond the control of service. Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	3/26/2016:00am	2 <i>[Signature]</i>	<i>[Signature]</i>	3/26/2016:00am
3			4		
5			6		



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-5443, Lubbock, TX (806) 794-1266
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 335-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 669-6707

Atlanta, GA (770) 449-8800

Work Order No.

0: 1050968
an
gza

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

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRd ☐ Superfund ☐	
State of Project:	
Reporting: Level I ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐ Y	
Deliverables: EDD ☐ Adapt ☐ Other:	

Project Name:	ADU 816				Turn Around
Project Number:	012919221				Routine: ☒
PO #:	ZRP-2674				Rush:
Sampler's Name:	Fatima Smith				Due Date:
SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes
	Temp (°C):	Thermometer ID			
Received intact:	Yes	No	N/A		
Cooler Custody Seals:	Yes	No	N/A		
Sample Custody Seals:	Yes	No	N/A		
	Total Containers:				

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E)	BTEX (E)	Chloride
BHIOB	S	3/25/20	1628	10	1	X	X	X
BHIOC			1630	15		X	X	
BHIOD			1635	20		X	X	
BHIOE			1638	25		X	X	
BHIOF			1640	30		X	X	
BHIOG			1643	35		X	X	
BHIOH			1650	37		X	X	

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

notice: signature of this document and reimbursement of samples constitutes a valid purchase order from client company to Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xeno 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 Xeno. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	3/26/2008: 11:00	<i>[Signature]</i>	<i>[Signature]</i>	3/26/2008: 4:45
2 <i>[Signature]</i>					
3					
4					
5					
6					

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 03.26.2020 08.45.00 AM

Work Order #: 656968

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 03.26.2020

Checklist reviewed by:



Jessica Kramer

Date: 03.27.2020

Analytical Report 657203

for
LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

31-MAR-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



31-MAR-20

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

Reference: XENCO Report No(s): **657203**
ADU 816
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 657203. 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. 657203 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer
Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW03	S	03-26-20 09:08	0.5 ft	657203-001
MW03A	S	03-26-20 09:10	5 ft	657203-002
3B	S	03-26-20 09:15	10 ft	657203-003
MW03C	S	03-26-20 09:17	15 ft	657203-004
MW03D	S	03-26-20 09:19	20 ft	657203-005
MW03E	S	03-26-20 09:25	25 ft	657203-006
MW03F	S	03-26-20 09:27	30 ft	657203-007
MW03G	S	03-26-20 09:28	35 ft	657203-008
MW03H	S	03-26-20 09:30	37 ft	657203-009
BH11	S	03-26-20 14:28	0.5 ft	657203-010
BH11A	S	03-26-20 14:30	5 ft	657203-011
BH11B	S	03-26-20 14:35	10 ft	657203-012
BH11C	S	03-26-20 14:37	15 ft	657203-013
BH11D	S	03-26-20 14:47	20 ft	657203-014
BH11E	S	03-26-20 14:49	25 ft	657203-015
BH11F	S	03-26-20 15:08	30 ft	657203-016
BH11G	S	03-26-20 15:11	35 ft	657203-017
BH11H	S	03-26-20 15:20	38 ft	657203-018
BH08	S	03-26-20 16:48	0.5 ft	657203-019
BH08A	S	03-26-20 16:50	5 ft	657203-020
BH08B	S	03-26-20 16:52	10 ft	657203-021
BH08C	S	03-26-20 16:55	15 ft	657203-022
BH08D	S	03-26-20 16:59	20 ft	657203-023
BH08E	S	03-26-20 17:05	25 ft	657203-024
BH08F	S	03-26-20 17:10	30 ft	657203-025
BH08G	S	03-26-20 17:15	35 ft	657203-026
BH08H	S	03-26-20 17:19	37 ft	657203-027



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU 816

Project ID: 012919221
Work Order Number(s): 657203

Report Date: 31-MAR-20
Date Received: 03/27/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121408 BTEX by EPA 8021B

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

Batch: LBA-3121410 BTEX by EPA 8021B

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



Certificate of Analysis Summary 657203

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Mar-27-20 03:40 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657203-001	657203-002	657203-003	657203-004	657203-005	657203-006
	<i>Field Id:</i>	MW03	MW03A	3B	MW03C	MW03D	MW03E
	<i>Depth:</i>	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-26-20 09:08	Mar-26-20 09:10	Mar-26-20 09:15	Mar-26-20 09:17	Mar-26-20 09:19	Mar-26-20 09:25
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28
	<i>Analyzed:</i>	Mar-30-20 14:06	Mar-30-20 14:26	Mar-30-20 14:47	Mar-30-20 15:07	Mar-30-20 15:28	Mar-30-20 15:48
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202
m,p-Xylenes		<0.00400 0.00400	<0.00403 0.00403	<0.00396 0.00396	<0.00400 0.00400	<0.00397 0.00397	<0.00404 0.00404
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25
	<i>Analyzed:</i>	Mar-30-20 11:13	Mar-30-20 11:30	Mar-30-20 11:35	Mar-30-20 11:41	Mar-30-20 11:47	Mar-30-20 11:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		38.5 10.1	309 9.92	378 9.98	250 9.98	136 9.92	860 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-30-20 15:00	Mar-30-20 15:00	Mar-30-20 15:00	Mar-30-20 15:00	Mar-30-20 15:00	Mar-30-20 15:00
	<i>Analyzed:</i>	Mar-30-20 23:17	Mar-30-20 23:38	Mar-30-20 23:58	Mar-31-20 00:18	Mar-31-20 00:38	Mar-31-20 00:58
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<49.9 49.9	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.8 49.8
Total GRO-DRO		<49.9 49.9	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.8 49.8
Total TPH		<49.9 49.9	<50.2 50.2	<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.8 49.8

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

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657203

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Mar-27-20 03:40 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657203-007	657203-008	657203-009	657203-010	657203-011	657203-012
	<i>Field Id:</i>	MW03F	MW03G	MW03H	BH11	BH11A	BH11B
	<i>Depth:</i>	30- ft	35- ft	37- ft	0.5- ft	5- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-26-20 09:27	Mar-26-20 09:28	Mar-26-20 09:30	Mar-26-20 14:28	Mar-26-20 14:30	Mar-26-20 14:35
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 08:28
	<i>Analyzed:</i>	Mar-30-20 17:10	Mar-30-20 17:30	Mar-30-20 17:50	Mar-30-20 18:11	Mar-30-20 18:31	Mar-30-20 18:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00404 0.00404	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25
	<i>Analyzed:</i>	Mar-30-20 11:58	Mar-30-20 12:15	Mar-30-20 12:21	Mar-30-20 12:50	Mar-30-20 12:56	Mar-30-20 13:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		269 9.98	341 10.1	244 9.92	<9.96 9.96	663 9.98	355 49.6
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00
	<i>Analyzed:</i>	Mar-30-20 17:31	Mar-30-20 18:32	Mar-30-20 18:53	Mar-30-20 19:13	Mar-30-20 19:34	Mar-30-20 19:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.3 50.3	<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.1 50.1	<50.3 50.3	<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.3 50.3	<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<50.1 50.1	<50.3 50.3	<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.2 50.2
Total TPH		<50.1 50.1	<50.3 50.3	<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.2 50.2

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657203

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Mar-27-20 03:40 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657203-013	657203-014	657203-015	657203-016	657203-017	657203-018
	<i>Field Id:</i>	BH11C	BH11D	BH11E	BH11F	BH11G	BH11H
	<i>Depth:</i>	15- ft	20- ft	25- ft	30- ft	35- ft	38- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-26-20 14:37	Mar-26-20 14:47	Mar-26-20 14:49	Mar-26-20 15:08	Mar-26-20 15:11	Mar-26-20 15:20
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 09:32	Mar-30-20 08:28	Mar-30-20 08:28	Mar-30-20 09:32
	<i>Analyzed:</i>	Mar-30-20 19:12	Mar-30-20 19:32	Mar-30-20 13:08	Mar-30-20 19:53	Mar-30-20 20:13	Mar-30-20 13:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 07:25	Mar-30-20 11:31	Mar-30-20 11:31
	<i>Analyzed:</i>	Mar-30-20 13:07	Mar-30-20 13:13	Mar-30-20 13:19	Mar-30-20 13:24	Mar-30-20 13:59	Mar-30-20 14:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		140 9.98	93.9 10.0	116 10.0	209 10.0	2250 49.8	612 9.96
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00
	<i>Analyzed:</i>	Mar-30-20 20:15	Mar-30-20 20:35	Mar-30-20 20:55	Mar-30-20 21:16	Mar-30-20 21:56	Mar-30-20 22:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1
Diesel Range Organics (DRO)		<49.9 49.9	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1
Total GRO-DRO		<49.9 49.9	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1
Total TPH		<49.9 49.9	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657203

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Mar-27-20 03:40 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657203-019	657203-020	657203-021	657203-022	657203-023	657203-024
	<i>Field Id:</i>	BH08	BH08A	BH08B	BH08C	BH08D	BH08E
	<i>Depth:</i>	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-26-20 16:48	Mar-26-20 16:50	Mar-26-20 16:52	Mar-26-20 16:55	Mar-26-20 16:59	Mar-26-20 17:05
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-30-20 09:32	Mar-30-20 09:32	Mar-30-20 09:32	Mar-30-20 09:32	Mar-30-20 09:32	Mar-30-20 09:32
	<i>Analyzed:</i>	Mar-30-20 13:49	Mar-30-20 14:09	Mar-30-20 14:29	Mar-30-20 14:50	Mar-30-20 15:10	Mar-30-20 15:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401	<0.00400 0.00400	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	Mar-30-20 11:31	Mar-30-20 11:31	Mar-30-20 11:31	Mar-30-20 11:31	Mar-30-20 11:31	Mar-30-20 11:31
	<i>Analyzed:</i>	Mar-30-20 14:21	Mar-30-20 14:27	Mar-30-20 14:33	Mar-30-20 14:50	Mar-30-20 14:55	Mar-30-20 15:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		555 49.6	1530 50.4	5820 50.3	814 9.94	1320 9.90	3520 49.5
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 13:00
	<i>Analyzed:</i>	Mar-30-20 22:37	Mar-30-20 22:57	Mar-30-20 23:17	Mar-30-20 23:38	Mar-30-20 23:58	Mar-31-20 00:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.8 49.8
Diesel Range Organics (DRO)		<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.8 49.8
Total GRO-DRO		<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.8 49.8
Total TPH		<50.1 50.1	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.8 49.8

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657203

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri Mar-27-20 03:40 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657203-025	657203-026	657203-027			
	<i>Field Id:</i>	BH08F	BH08G	BH08H			
	<i>Depth:</i>	30- ft	35- ft	37- ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Mar-26-20 17:10	Mar-26-20 17:15	Mar-26-20 17:19			
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-30-20 09:32	Mar-30-20 09:32	Mar-30-20 09:32			
	<i>Analyzed:</i>	Mar-30-20 15:51	Mar-30-20 16:11	Mar-30-20 17:12			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	<0.00401 0.00401			
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Chloride by EPA 300	<i>Extracted:</i>	Mar-30-20 11:31	Mar-30-20 11:31	Mar-30-20 11:31			
	<i>Analyzed:</i>	Mar-30-20 15:07	Mar-30-20 15:13	Mar-30-20 15:19			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		1330 9.98	200 9.88	192 9.98			
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-30-20 13:00	Mar-30-20 13:00	Mar-30-20 17:30			
	<i>Analyzed:</i>	Mar-31-20 00:38	Mar-31-20 00:58	Mar-31-20 06:43			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.0 50.0	<50.2 50.2			
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<50.2 50.2			
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<50.2 50.2			
Total GRO-DRO		<50.2 50.2	<50.0 50.0	<50.2 50.2			
Total TPH		<50.2 50.2	<50.0 50.0	<50.2 50.2			

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Jessica Kramer
Project Manager



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-001 Date Collected: 03.26.20 09.08 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 07.25 Basis: Wet Weight
 Seq Number: 3121414

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.5	10.1	mg/kg	03.30.20 11.13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 15.00 Basis: Wet Weight
 Seq Number: 3121443

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.30.20 23.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.30.20 23.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.30.20 23.17	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.30.20 23.17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.30.20 23.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.30.20 23.17	
o-Terphenyl	84-15-1	102	%	70-135	03.30.20 23.17	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03**
 Lab Sample Id: 657203-001

Matrix: Soil
 Date Collected: 03.26.20 09.08

Date Received: 03.27.20 15.40
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 14.06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 14.06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 14.06	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.30.20 14.06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 14.06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 14.06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 14.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.30.20 14.06		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 14.06		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03A**
Lab Sample Id: 657203-002

Matrix: Soil
Date Collected: 03.26.20 09.10

Date Received: 03.27.20 15.40
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	309	9.92	mg/kg	03.30.20 11.30		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121443

Date Prep: 03.30.20 15.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.30.20 23.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.30.20 23.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.30.20 23.38	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.30.20 23.38	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.30.20 23.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.30.20 23.38	
o-Terphenyl	84-15-1	102	%	70-135	03.30.20 23.38	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03A**
 Lab Sample Id: 657203-002

Matrix: Soil
 Date Collected: 03.26.20 09.10

Date Received: 03.27.20 15.40
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.30.20 14.26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.30.20 14.26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.30.20 14.26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.30.20 14.26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.30.20 14.26	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.30.20 14.26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.30.20 14.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 14.26		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.30.20 14.26		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **3B** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-003 Date Collected: 03.26.20 09.15 Sample Depth: 10 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 07.25 Basis: Wet Weight
 Seq Number: 3121414

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	378	9.98	mg/kg	03.30.20 11.35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 15.00 Basis: Wet Weight
 Seq Number: 3121443

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.30.20 23.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.30.20 23.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.30.20 23.58	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.30.20 23.58	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.30.20 23.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.30.20 23.58	
o-Terphenyl	84-15-1	104	%	70-135	03.30.20 23.58	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **3B** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-003 Date Collected: 03.26.20 09.15 Sample Depth: 10 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 08.28 Basis: Wet Weight
 Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.30.20 14.47	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.30.20 14.47	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.30.20 14.47	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.30.20 14.47	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.30.20 14.47	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.30.20 14.47	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.30.20 14.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.30.20 14.47		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 14.47		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03C**
Lab Sample Id: 657203-004

Matrix: Soil
Date Collected: 03.26.20 09.17

Date Received: 03.27.20 15.40
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	250	9.98	mg/kg	03.30.20 11.41		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121443

Date Prep: 03.30.20 15.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 00.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.20 00.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 00.18	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.31.20 00.18	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.20 00.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.31.20 00.18	
o-Terphenyl	84-15-1	99	%	70-135	03.31.20 00.18	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03C**
 Lab Sample Id: 657203-004

Matrix: Soil
 Date Collected: 03.26.20 09.17

Date Received: 03.27.20 15.40
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 15.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 15.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 15.07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.30.20 15.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 15.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 15.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 15.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.30.20 15.07		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 15.07		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03D**
Lab Sample Id: 657203-005

Matrix: Soil
Date Collected: 03.26.20 09.19

Date Received: 03.27.20 15.40
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	136	9.92	mg/kg	03.30.20 11.47		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121443

Date Prep: 03.30.20 15.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 00.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.20 00.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 00.38	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.31.20 00.38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.20 00.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.31.20 00.38	
o-Terphenyl	84-15-1	96	%	70-135	03.31.20 00.38	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03D**
 Lab Sample Id: 657203-005

Matrix: Soil
 Date Collected: 03.26.20 09.19

Date Received: 03.27.20 15.40
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.30.20 15.28	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.30.20 15.28	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.30.20 15.28	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.30.20 15.28	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.30.20 15.28	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.30.20 15.28	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.30.20 15.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	03.30.20 15.28		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.30.20 15.28		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03E**
Lab Sample Id: 657203-006

Matrix: Soil
Date Collected: 03.26.20 09.25

Date Received: 03.27.20 15.40
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	860	10.0	mg/kg	03.30.20 11.52		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121443

Date Prep: 03.30.20 15.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.31.20 00.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.31.20 00.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.31.20 00.58	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.31.20 00.58	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.31.20 00.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.31.20 00.58	
o-Terphenyl	84-15-1	105	%	70-135	03.31.20 00.58	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03E**
 Lab Sample Id: 657203-006

Matrix: Soil
 Date Collected: 03.26.20 09.25

Date Received: 03.27.20 15.40
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.30.20 15.48	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.30.20 15.48	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.30.20 15.48	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.30.20 15.48	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.30.20 15.48	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.30.20 15.48	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.30.20 15.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 15.48		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.30.20 15.48		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03F**
Lab Sample Id: 657203-007

Matrix: Soil
Date Collected: 03.26.20 09.27

Date Received: 03.27.20 15.40
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	269	9.98	mg/kg	03.30.20 11.58		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 17.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 17.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 17.31	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 17.31	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 17.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.30.20 17.31	
o-Terphenyl	84-15-1	106	%	70-135	03.30.20 17.31	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03F**
 Lab Sample Id: 657203-007

Matrix: Soil
 Date Collected: 03.26.20 09.27

Date Received: 03.27.20 15.40
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.30.20 17.10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.30.20 17.10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.30.20 17.10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.30.20 17.10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.30.20 17.10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.30.20 17.10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.30.20 17.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	03.30.20 17.10		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.30.20 17.10		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03G**
Lab Sample Id: 657203-008

Matrix: Soil
Date Collected: 03.26.20 09.28

Date Received: 03.27.20 15.40
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	341	10.1	mg/kg	03.30.20 12.15		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.30.20 18.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.30.20 18.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.30.20 18.32	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	03.30.20 18.32	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.30.20 18.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.30.20 18.32	
o-Terphenyl	84-15-1	99	%	70-135	03.30.20 18.32	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03G**
 Lab Sample Id: 657203-008

Matrix: Soil
 Date Collected: 03.26.20 09.28

Date Received: 03.27.20 15.40
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.30.20 17.30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.30.20 17.30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.30.20 17.30	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.30.20 17.30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.30.20 17.30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.30.20 17.30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.30.20 17.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 17.30		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.30.20 17.30		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03H** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-009 Date Collected: 03.26.20 09.30 Sample Depth: 37 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 07.25 Basis: Wet Weight
 Seq Number: 3121414

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	244	9.92	mg/kg	03.30.20 12.21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 13.00 Basis: Wet Weight
 Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 18.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 18.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 18.53	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 18.53	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 18.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.30.20 18.53	
o-Terphenyl	84-15-1	102	%	70-135	03.30.20 18.53	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW03H**
 Lab Sample Id: 657203-009

Matrix: Soil
 Date Collected: 03.26.20 09.30

Date Received: 03.27.20 15.40
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.30.20 17.50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.30.20 17.50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.30.20 17.50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.30.20 17.50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.30.20 17.50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.30.20 17.50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.30.20 17.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.30.20 17.50		
4-Bromofluorobenzene	460-00-4	91	%	70-130	03.30.20 17.50		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11**
Lab Sample Id: 657203-010

Matrix: Soil
Date Collected: 03.26.20 14.28

Date Received: 03.27.20 15.40
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.96	9.96	mg/kg	03.30.20 12.50	U	1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.30.20 19.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.30.20 19.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.30.20 19.13	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.30.20 19.13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.30.20 19.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.30.20 19.13	
o-Terphenyl	84-15-1	100	%	70-135	03.30.20 19.13	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11**
 Lab Sample Id: 657203-010

Matrix: Soil
 Date Collected: 03.26.20 14.28

Date Received: 03.27.20 15.40
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 18.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 18.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 18.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 18.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 18.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 18.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 18.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.30.20 18.11		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.30.20 18.11		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11A**
Lab Sample Id: 657203-011

Matrix: Soil
Date Collected: 03.26.20 14.30

Date Received: 03.27.20 15.40
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	663	9.98	mg/kg	03.30.20 12.56		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 19.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 19.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 19.34	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 19.34	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 19.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.30.20 19.34	
o-Terphenyl	84-15-1	101	%	70-135	03.30.20 19.34	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11A**
 Lab Sample Id: 657203-011

Matrix: Soil
 Date Collected: 03.26.20 14.30

Date Received: 03.27.20 15.40
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.30.20 18.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.30.20 18.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.30.20 18.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.30.20 18.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.30.20 18.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.30.20 18.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.30.20 18.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.30.20 18.31		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.30.20 18.31		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11B**
Lab Sample Id: 657203-012

Matrix: Soil
Date Collected: 03.26.20 14.35

Date Received: 03.27.20 15.40
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	355	49.6	mg/kg	03.30.20 13.02		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.30.20 19.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.30.20 19.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.30.20 19.54	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.30.20 19.54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.30.20 19.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	03.30.20 19.54	
o-Terphenyl	84-15-1	100	%	70-135	03.30.20 19.54	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11B**
 Lab Sample Id: 657203-012

Matrix: Soil
 Date Collected: 03.26.20 14.35

Date Received: 03.27.20 15.40
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 18.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 18.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 18.51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 18.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 18.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 18.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 18.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.30.20 18.51		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 18.51		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11C** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-013 Date Collected: 03.26.20 14.37 Sample Depth: 15 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 07.25 Basis: Wet Weight
 Seq Number: 3121414

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	140	9.98	mg/kg	03.30.20 13.07		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 13.00 Basis: Wet Weight
 Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.30.20 20.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.30.20 20.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.30.20 20.15	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.30.20 20.15	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.30.20 20.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.30.20 20.15	
o-Terphenyl	84-15-1	108	%	70-135	03.30.20 20.15	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11C**
 Lab Sample Id: 657203-013

Matrix: Soil
 Date Collected: 03.26.20 14.37

Date Received: 03.27.20 15.40
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.30.20 19.12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.30.20 19.12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.30.20 19.12	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.30.20 19.12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.30.20 19.12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.30.20 19.12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.30.20 19.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.30.20 19.12		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 19.12		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11D**
Lab Sample Id: 657203-014

Matrix: Soil
Date Collected: 03.26.20 14.47

Date Received: 03.27.20 15.40
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	93.9	10.0	mg/kg	03.30.20 13.13		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.30.20 20.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.30.20 20.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.30.20 20.35	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.30.20 20.35	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.30.20 20.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.30.20 20.35	
o-Terphenyl	84-15-1	104	%	70-135	03.30.20 20.35	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11D**
 Lab Sample Id: 657203-014

Matrix: Soil
 Date Collected: 03.26.20 14.47

Date Received: 03.27.20 15.40
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.30.20 19.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.30.20 19.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.30.20 19.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.30.20 19.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.30.20 19.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.30.20 19.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.30.20 19.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.30.20 19.32		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 19.32		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11E**
Lab Sample Id: 657203-015

Matrix: Soil
Date Collected: 03.26.20 14.49

Date Received: 03.27.20 15.40
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	116	10.0	mg/kg	03.30.20 13.19		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 20.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 20.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 20.55	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 20.55	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 20.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.30.20 20.55	
o-Terphenyl	84-15-1	106	%	70-135	03.30.20 20.55	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11E**
 Lab Sample Id: 657203-015

Matrix: Soil
 Date Collected: 03.26.20 14.49

Date Received: 03.27.20 15.40
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 13.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 13.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 13.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 13.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 13.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 13.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 13.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	121	%	70-130	03.30.20 13.08		
1,4-Difluorobenzene	540-36-3	104	%	70-130	03.30.20 13.08		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11F**
Lab Sample Id: 657203-016

Matrix: Soil
Date Collected: 03.26.20 15.08

Date Received: 03.27.20 15.40
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121414

Date Prep: 03.30.20 07.25

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	209	10.0	mg/kg	03.30.20 13.24		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.30.20 21.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.30.20 21.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.30.20 21.16	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.30.20 21.16	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.30.20 21.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.30.20 21.16	
o-Terphenyl	84-15-1	105	%	70-135	03.30.20 21.16	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11F**
 Lab Sample Id: 657203-016

Matrix: Soil
 Date Collected: 03.26.20 15.08

Date Received: 03.27.20 15.40
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 19.53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 19.53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 19.53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 19.53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 19.53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 19.53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 19.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.30.20 19.53		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.30.20 19.53		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11G**
 Lab Sample Id: 657203-017

Matrix: Soil
 Date Collected: 03.26.20 15.11

Date Received: 03.27.20 15.40
 Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121417

Date Prep: 03.30.20 11.31

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2250	49.8	mg/kg	03.30.20 13.59		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 21.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 21.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 21.56	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 21.56	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 21.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	03.30.20 21.56	
o-Terphenyl	84-15-1	104	%	70-135	03.30.20 21.56	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11G**
 Lab Sample Id: 657203-017

Matrix: Soil
 Date Collected: 03.26.20 15.11

Date Received: 03.27.20 15.40
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 08.28

Basis: Wet Weight

Seq Number: 3121408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 20.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 20.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 20.13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 20.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 20.13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 20.13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 20.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.30.20 20.13		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.30.20 20.13		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11H** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-018 Date Collected: 03.26.20 15.20 Sample Depth: 38 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 11.31 Basis: Wet Weight
 Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	612	9.96	mg/kg	03.30.20 14.16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 13.00 Basis: Wet Weight
 Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 22.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 22.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 22.17	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 22.17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 22.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	03.30.20 22.17	
o-Terphenyl	84-15-1	108	%	70-135	03.30.20 22.17	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH11H**
 Lab Sample Id: 657203-018

Matrix: Soil
 Date Collected: 03.26.20 15.20

Date Received: 03.27.20 15.40
 Sample Depth: 38 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 13.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 13.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 13.28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 13.28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 13.28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 13.28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 13.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	03.30.20 13.28		
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.30.20 13.28		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08**

Matrix: Soil

Date Received: 03.27.20 15.40

Lab Sample Id: 657203-019

Date Collected: 03.26.20 16.48

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 11.31

Basis: Wet Weight

Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	555	49.6	mg/kg	03.30.20 14.21		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 13.00

Basis: Wet Weight

Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 22.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 22.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 22.37	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 22.37	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 22.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	03.30.20 22.37	
o-Terphenyl	84-15-1	102	%	70-135	03.30.20 22.37	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08**
 Lab Sample Id: 657203-019

Matrix: Soil
 Date Collected: 03.26.20 16.48

Date Received: 03.27.20 15.40
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 13.49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 13.49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 13.49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 13.49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 13.49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 13.49	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 13.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	03.30.20 13.49		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.30.20 13.49		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08A** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-020 Date Collected: 03.26.20 16.50 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 11.31 Basis: Wet Weight
 Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1530	50.4	mg/kg	03.30.20 14.27		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 13.00 Basis: Wet Weight
 Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.30.20 22.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.30.20 22.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.30.20 22.57	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.30.20 22.57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.30.20 22.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.30.20 22.57	
o-Terphenyl	84-15-1	104	%	70-135	03.30.20 22.57	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08A**
 Lab Sample Id: 657203-020

Matrix: Soil
 Date Collected: 03.26.20 16.50

Date Received: 03.27.20 15.40
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 14.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 14.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 14.09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 14.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 14.09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 14.09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 14.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.30.20 14.09		
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.30.20 14.09		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08B**
Lab Sample Id: 657203-021

Matrix: Soil
Date Collected: 03.26.20 16.52

Date Received: 03.27.20 15.40
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121417

Date Prep: 03.30.20 11.31

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5820	50.3	mg/kg	03.30.20 14.33		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 23.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 23.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 23.17	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 23.17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 23.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.30.20 23.17	
o-Terphenyl	84-15-1	105	%	70-135	03.30.20 23.17	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08B**
 Lab Sample Id: 657203-021

Matrix: Soil
 Date Collected: 03.26.20 16.52

Date Received: 03.27.20 15.40
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 14.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 14.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 14.29	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 14.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 14.29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 14.29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 14.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.30.20 14.29		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.30.20 14.29		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08C**
 Lab Sample Id: 657203-022

Matrix: Soil
 Date Collected: 03.26.20 16.55

Date Received: 03.27.20 15.40
 Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 11.31

Basis: Wet Weight

Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	814	9.94	mg/kg	03.30.20 14.50		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 13.00

Basis: Wet Weight

Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 23.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 23.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 23.38	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	03.30.20 23.38	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 23.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	03.30.20 23.38	
o-Terphenyl	84-15-1	110	%	70-135	03.30.20 23.38	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08C**
 Lab Sample Id: 657203-022

Matrix: Soil
 Date Collected: 03.26.20 16.55

Date Received: 03.27.20 15.40
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 14.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 14.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 14.50	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.30.20 14.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 14.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 14.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 14.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.30.20 14.50		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.30.20 14.50		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08D** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-023 Date Collected: 03.26.20 16.59 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 11.31 Basis: Wet Weight
 Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	9.90	mg/kg	03.30.20 14.55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 13.00 Basis: Wet Weight
 Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.30.20 23.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.30.20 23.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.30.20 23.58	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.30.20 23.58	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.30.20 23.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	03.30.20 23.58	
o-Terphenyl	84-15-1	105	%	70-135	03.30.20 23.58	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08D**
 Lab Sample Id: 657203-023

Matrix: Soil
 Date Collected: 03.26.20 16.59

Date Received: 03.27.20 15.40
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 15.10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 15.10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 15.10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 15.10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 15.10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 15.10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 15.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.30.20 15.10		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.30.20 15.10		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08E**
Lab Sample Id: 657203-024

Matrix: Soil
Date Collected: 03.26.20 17.05

Date Received: 03.27.20 15.40
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121417

Date Prep: 03.30.20 11.31

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3520	49.5	mg/kg	03.30.20 15.01		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.31.20 00.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.31.20 00.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.31.20 00.18	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	03.31.20 00.18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.31.20 00.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.31.20 00.18	
o-Terphenyl	84-15-1	108	%	70-135	03.31.20 00.18	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08E**
 Lab Sample Id: 657203-024

Matrix: Soil
 Date Collected: 03.26.20 17.05

Date Received: 03.27.20 15.40
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 15.31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 15.31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 15.31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 15.31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 15.31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 15.31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 15.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.30.20 15.31		
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.30.20 15.31		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08F**
Lab Sample Id: 657203-025

Matrix: Soil
Date Collected: 03.26.20 17.10

Date Received: 03.27.20 15.40
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121417

Date Prep: 03.30.20 11.31

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1330	9.98	mg/kg	03.30.20 15.07		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121425

Date Prep: 03.30.20 13.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 00.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 00.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 00.38	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.31.20 00.38	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 00.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.31.20 00.38	
o-Terphenyl	84-15-1	107	%	70-135	03.31.20 00.38	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08F**
 Lab Sample Id: 657203-025

Matrix: Soil
 Date Collected: 03.26.20 17.10

Date Received: 03.27.20 15.40
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 15.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 15.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 15.51	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.30.20 15.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 15.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 15.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 15.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.30.20 15.51		
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.30.20 15.51		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08G**
 Lab Sample Id: 657203-026

Matrix: Soil
 Date Collected: 03.26.20 17.15

Date Received: 03.27.20 15.40
 Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 11.31

Basis: Wet Weight

Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	200	9.88	mg/kg	03.30.20 15.13		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 13.00

Basis: Wet Weight

Seq Number: 3121425

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 00.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 00.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 00.58	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	03.31.20 00.58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.20 00.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.31.20 00.58	
o-Terphenyl	84-15-1	102	%	70-135	03.31.20 00.58	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08G**
 Lab Sample Id: 657203-026

Matrix: Soil
 Date Collected: 03.26.20 17.15

Date Received: 03.27.20 15.40
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 16.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 16.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 16.11	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 16.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 16.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 16.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 16.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.30.20 16.11		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.30.20 16.11		



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08H** Matrix: Soil Date Received: 03.27.20 15.40
 Lab Sample Id: 657203-027 Date Collected: 03.26.20 17.19 Sample Depth: 37 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.30.20 11.31 Basis: Wet Weight
 Seq Number: 3121417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	192	9.98	mg/kg	03.30.20 15.19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.30.20 17.30 Basis: Wet Weight
 Seq Number: 3121465

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 06.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 06.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 06.43	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	03.31.20 06.43	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 06.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	03.31.20 06.43	
o-Terphenyl	84-15-1	114	%	70-135	03.31.20 06.43	



Certificate of Analytical Results 657203

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH08H**
 Lab Sample Id: 657203-027

Matrix: Soil
 Date Collected: 03.26.20 17.19

Date Received: 03.27.20 15.40
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 09.32

Basis: Wet Weight

Seq Number: 3121410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 17.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 17.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 17.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 17.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 17.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.30.20 17.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.30.20 17.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.30.20 17.12		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.30.20 17.12		



Flagging Criteria

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

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121414

MB Sample Id: 7700053-1-BLK

Matrix: Solid

LCS Sample Id: 7700053-1-BKS

Prep Method: E300P

Date Prep: 03.30.20

LCSD Sample Id: 7700053-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	261	104	90-110	0	20	mg/kg	03.30.20 10:27	

Analytical Method: Chloride by EPA 300

Seq Number: 3121417

MB Sample Id: 7700056-1-BLK

Matrix: Solid

LCS Sample Id: 7700056-1-BKS

Prep Method: E300P

Date Prep: 03.30.20

LCSD Sample Id: 7700056-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	261	104	262	105	90-110	0	20	mg/kg	03.30.20 13:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3121414

Parent Sample Id: 657202-001

Matrix: Soil

MS Sample Id: 657202-001 S

Prep Method: E300P

Date Prep: 03.30.20

MSD Sample Id: 657202-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.8	200	228	96	227	96	90-110	0	20	mg/kg	03.30.20 10:44	

Analytical Method: Chloride by EPA 300

Seq Number: 3121414

Parent Sample Id: 657203-007

Matrix: Soil

MS Sample Id: 657203-007 S

Prep Method: E300P

Date Prep: 03.30.20

MSD Sample Id: 657203-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	269	200	486	109	477	106	90-110	2	20	mg/kg	03.30.20 12:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3121417

Parent Sample Id: 657203-017

Matrix: Soil

MS Sample Id: 657203-017 S

Prep Method: E300P

Date Prep: 03.30.20

MSD Sample Id: 657203-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2250	202	2440	94	2450	99	90-110	0	20	mg/kg	03.30.20 14:04	

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121417

Parent Sample Id: 657203-027

Matrix: Soil

MS Sample Id: 657203-027 S

Prep Method: E300P

Date Prep: 03.30.20

MSD Sample Id: 657203-027 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	192	200	403	106	403	106	90-110	0	20	mg/kg	03.30.20 15:25	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121425

MB Sample Id: 7700130-1-BLK

Matrix: Solid

LCS Sample Id: 7700130-1-BKS

Prep Method: SW8015P

Date Prep: 03.30.20

LCSD Sample Id: 7700130-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	982	98	1050	105	70-135	7	35	mg/kg	03.30.20 16:50	
Diesel Range Organics (DRO)	<50.0	1000	920	92	993	99	70-135	8	35	mg/kg	03.30.20 16:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		112		121		70-135	%	03.30.20 16:50
o-Terphenyl	121		112		122		70-135	%	03.30.20 16:50

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121443

MB Sample Id: 7700134-1-BLK

Matrix: Solid

LCS Sample Id: 7700134-1-BKS

Prep Method: SW8015P

Date Prep: 03.30.20

LCSD Sample Id: 7700134-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	982	98	1050	105	70-135	7	35	mg/kg	03.30.20 16:50	
Diesel Range Organics (DRO)	<50.0	1000	920	92	993	99	70-135	8	35	mg/kg	03.30.20 16:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		112		121		70-135	%	03.30.20 16:50
o-Terphenyl	121		112		122		70-135	%	03.30.20 16:50

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121465

MB Sample Id: 7700158-1-BLK

Matrix: Solid

LCS Sample Id: 7700158-1-BKS

Prep Method: SW8015P

Date Prep: 03.30.20

LCSD Sample Id: 7700158-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	926	93	868	87	70-135	6	35	mg/kg	03.31.20 02:40	
Diesel Range Organics (DRO)	<50.0	1000	873	87	826	83	70-135	6	35	mg/kg	03.31.20 02:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		107		102		70-135	%	03.31.20 02:40
o-Terphenyl	96		105		101		70-135	%	03.31.20 02:40

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121425

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.30.20

MB Sample Id: 7700130-1-BLK

Parameter

MB
Result

Units

Analysis
Date

Flag

Motor Oil Range Hydrocarbons (MRO)

<50.0

mg/kg

03.30.20 16:29

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121443

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.30.20

MB Sample Id: 7700134-1-BLK

Parameter

MB
Result

Units

Analysis
Date

Flag

Motor Oil Range Hydrocarbons (MRO)

<50.0

mg/kg

03.30.20 16:29

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121465

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.30.20

MB Sample Id: 7700158-1-BLK

Parameter

MB
Result

Units

Analysis
Date

Flag

Motor Oil Range Hydrocarbons (MRO)

<50.0

mg/kg

03.31.20 02:19

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121425

Matrix: Soil

Prep Method: SW8015P

Date Prep: 03.30.20

Parent Sample Id: 657203-007

MS Sample Id: 657203-007 S

MSD Sample Id: 657203-007 SD

Parameter

Parent
Result Spike
AmountMS
ResultMS
%RecMSD
ResultMSD
%Rec

Limits

%RPD RPD

Limit Units

Analysis
Date

Flag

Gasoline Range Hydrocarbons (GRO)

<50.3

1010

1030

102

1050

104

70-135

2

35

mg/kg

03.30.20 17:51

Diesel Range Organics (DRO)

<50.3

1010

1190

118

1080

107

70-135

10

35

mg/kg

03.30.20 17:51

Surrogate

MS
%RecMS
FlagMSD
%RecMSD
Flag

Limits

Units

Analysis
Date

1-Chlorooctane

115

118

70-135

%

03.30.20 17:51

o-Terphenyl

112

115

70-135

%

03.30.20 17:51

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121443

Parent Sample Id: 657294-001

Matrix: Soil

MS Sample Id: 657294-001 S

Prep Method: SW8015P

Date Prep: 03.30.20

MSD Sample Id: 657294-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	937	93	901	90	70-135	4	35	mg/kg	03.30.20 17:51	
Diesel Range Organics (DRO)	<50.3	1010	1080	107	1020	102	70-135	6	35	mg/kg	03.30.20 17:51	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		100		70-135	%	03.30.20 17:51
o-Terphenyl	98		95		70-135	%	03.30.20 17:51

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121465

Parent Sample Id: 657334-007

Matrix: Soil

MS Sample Id: 657334-007 S

Prep Method: SW8015P

Date Prep: 03.30.20

MSD Sample Id: 657334-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1140	114	1040	104	70-135	9	35	mg/kg	03.31.20 03:40	
Diesel Range Organics (DRO)	<50.2	1000	1150	115	1050	105	70-135	9	35	mg/kg	03.31.20 03:40	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		119		70-135	%	03.31.20 03:40
o-Terphenyl	125		114		70-135	%	03.31.20 03:40

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121408

MB Sample Id: 7700093-1-BLK

Matrix: Solid

LCS Sample Id: 7700093-1-BKS

Prep Method: SW5030B

Date Prep: 03.30.20

LCSD Sample Id: 7700093-1-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	0.121	121	0.117	117	70-130	3	35	mg/kg	03.30.20 10:42	
Toluene	<0.00200	0.100	0.120	120	0.126	126	70-130	5	35	mg/kg	03.30.20 10:42	
Ethylbenzene	<0.00200	0.100	0.113	113	0.118	118	71-129	4	35	mg/kg	03.30.20 10:42	
m,p-Xylenes	<0.00400	0.200	0.218	109	0.230	115	70-135	5	35	mg/kg	03.30.20 10:42	
o-Xylene	<0.00200	0.100	0.110	110	0.115	115	71-133	4	35	mg/kg	03.30.20 10:42	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		109		109		70-130	%	03.30.20 10:42
4-Bromofluorobenzene	89		85		85		70-130	%	03.30.20 10:42

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121410

MB Sample Id: 7700094-1-BLK

Matrix: Solid

LCS Sample Id: 7700094-1-BKS

Prep Method: SW5030B

Date Prep: 03.30.20

LCSD Sample Id: 7700094-1-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	0.112	112	0.110	110	70-130	2	35	mg/kg	03.30.20 11:26	
Toluene	<0.00200	0.100	0.107	107	0.104	104	70-130	3	35	mg/kg	03.30.20 11:26	
Ethylbenzene	<0.00200	0.100	0.102	102	0.0995	100	71-129	2	35	mg/kg	03.30.20 11:26	
m,p-Xylenes	<0.00400	0.200	0.210	105	0.206	103	70-135	2	35	mg/kg	03.30.20 11:26	
o-Xylene	<0.00200	0.100	0.105	105	0.104	104	71-133	1	35	mg/kg	03.30.20 11:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		107		70-130	%	03.30.20 11:26
4-Bromofluorobenzene	97		91		92		70-130	%	03.30.20 11:26

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121408

Parent Sample Id: 657202-001

Matrix: Soil

MS Sample Id: 657202-001 S

Prep Method: SW5030B

Date Prep: 03.30.20

MSD Sample Id: 657202-001 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	0.100	0.0892	89	0.125	125	70-130	33	35	mg/kg	03.30.20 11:23	
Toluene	<0.00200	0.100	0.0952	95	0.102	102	70-130	7	35	mg/kg	03.30.20 11:23	
Ethylbenzene	<0.00200	0.100	0.0792	79	0.0746	75	71-129	6	35	mg/kg	03.30.20 11:23	
m,p-Xylenes	<0.00401	0.200	0.158	79	0.143	72	70-135	10	35	mg/kg	03.30.20 11:23	
o-Xylene	<0.00200	0.100	0.0892	89	0.0722	72	71-133	21	35	mg/kg	03.30.20 11:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		110		70-130	%	03.30.20 11:23
4-Bromofluorobenzene	84		82		70-130	%	03.30.20 11:23

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121410

Parent Sample Id: 657203-015

Matrix: Soil

MS Sample Id: 657203-015 S

Prep Method: SW5030B

Date Prep: 03.30.20

MSD Sample Id: 657203-015 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	0.100	0.118	118	0.103	103	70-130	14	35	mg/kg	03.30.20 12:07	
Toluene	<0.00200	0.100	0.113	113	0.0997	100	70-130	13	35	mg/kg	03.30.20 12:07	
Ethylbenzene	<0.00200	0.100	0.107	107	0.0950	95	71-129	12	35	mg/kg	03.30.20 12:07	
m,p-Xylenes	<0.00401	0.200	0.221	111	0.197	99	70-135	11	35	mg/kg	03.30.20 12:07	
o-Xylene	<0.00200	0.100	0.110	110	0.0983	98	71-133	11	35	mg/kg	03.30.20 12:07	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	03.30.20 12:07
4-Bromofluorobenzene	94		94		70-130	%	03.30.20 12:07

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

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

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

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



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 1057203

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

Project Name: ADV 816	Turn Around Routine: ☒
Project Number: 012919221	Rush: ☐
PO #: ZRP-2674	Due Date:
Sampler's Name: Fatima Smith	
Temp Blank: ☒ Yes ☐ No	Wet Ice: ☒ Yes ☐ No
Temperature (°C): 4.2	Thermometer ID: T-NH-001
Received Intact: ☒ Yes ☐ No	Correction Factor: 0.2
Cooler Custody Seals: ☒ Yes ☐ No	Total Containers: 27
Sample Custody Seals: ☒ Yes ☐ No	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST											Work Order Notes		
					Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)										
MW03	S	3/26/20	0908	0.5	1	X	X	X										
MW03A			0910	5														
MW03B			0915	10														
MW03C			0917	15														
MW03D			0919	20														
MW03E			0925	25														
MW03F			0927	30														
MW03G			0928	35														
MW03H			0930	37														
BH11			1428	0.5														

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/27/20 3:23PM

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/27/20 15:40



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 508-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No:

1057203

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Page 2 of 3

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

Work Order Comments	
Program: ☐ UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	ADU 816	Turn Around	☒
Project Number:	012919221	Routine:	☒
PO #:	2RP-2674	Rush:	
Sampler's Name:	Fatma Smith	Due Date:	
SAMPLE RECEIPT	Temp Blank:	Yes	No
Temperature (°C):		Wet Ice:	Yes
Received In tact:	Yes	No	
Cooler Custody Seals:	Yes	No	
Sample Custody Seals:	Yes	No	
Thermometer ID			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
BH11A	S	3/26/20	1430	5	1	X	X	X		
BH11B			1435	10						
BH11C			1437	15						
BH11D			1447	20						
BH11E			1449	25						
BH11F			1508	30						
BH11G			1511	35						
BH11H			1520	38						
BH08			1648	0.5						
BH08A			1650	5						

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
fatma	hsmith	3/27/20 3:23AM	hsmith	Q. Littrell	3/27/20 1540



Chain of Custody

Work Order No: 657203

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1286
Hobbs, NM (575) 392-7550, Carlsbad, NM (505) 988-3159, Phoenix, AZ (480) 355-0800
Tampa, FL (813) 820-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6700
Atlanta, GA (770) 448-8800

Page 3 of 3

Project Manager:		Dan Moir		Bill to: (if different)		Kyle Littrell	
Company Name:		LT Environmental, Inc., Permian Office		Company Name:		XTO Energy, Inc.	
Address:		3300 North A Street		Address:		3104 E Greene St	
City, State ZIP:		Midland, TX 79705		City, State ZIP:		Carlsbad, NM 88220	
Phone:		(432) 236-3849		Email:		fsmith@ltenv.com, dmoir@ltenv.com	
Project Name:		ADU 816		Turn Around			
Project Number:		012919221		Routine:		☒	
PO #:		2RP-2614		Rush:			
Sampler's Name:		Fatima Smith		Due Date:			
SAMPLE RECEIPT		Temp Blank:		Yes		No	
Temperature (°C):		Yes		No		Thermometer ID	
Received Intact:		Yes		No		Correction Factor:	
Cooler Custody Seals:		Yes		No		Total Containers:	
Sample Custody Seals:		Yes		No		N/A	
Sample Identification		Matrix		Date Sampled		Time Sampled	
BHO8B		S		3/26/20		1652	
BHO8C		I				1655	
BHO8D		I				1659	
BHO8E		I				1705	
BHO8F		I				1710	
BHO8G		I				1715	
BHO8H		I				1719	
Number of Containers		TPH (EPA 8015)		BTX (EPA 0=8021)		Chloride (EPA 300.0)	
Sample Comments		TAT starts the day received by the lab, if received by 4:30pm					
Relinquished by: (Signature)		Received by: (Signature)		Date/Time		Relinquished by: (Signature)	
1		2		3		4	
5		6		7		8	

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 03.27.2020 03.40.00 PM

Work Order #: 657203

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 03.27.2020

Checklist reviewed by:



Jessica Kramer

Date: 03.31.2020



Analytical Report 657244

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

04.06.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



04.06.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **657244**

ADU 816

Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 657244. 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. 657244 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH13	S	03.27.2020 12:38	0.5 ft	657244-001
BH13A	S	03.27.2020 12:40	5 ft	657244-002
BH13B	S	03.27.2020 12:41	10 ft	657244-003
BH13C	S	03.27.2020 13:08	15 ft	657244-004
BH13D	S	03.27.2020 13:10	20 ft	657244-005
BH13E	S	03.27.2020 13:12	25 ft	657244-006
BH13F	S	03.27.2020 13:14	30 ft	657244-007
BH13G	S	03.27.2020 13:27	35 ft	657244-008
BH13H	S	03.27.2020 13:30	37 ft	657244-009
BH09	S	03.27.2020 14:42	0.5 ft	657244-010
BH09A	S	03.27.2020 14:48	5 ft	657244-011
BH09B	S	03.27.2020 14:55	10 ft	657244-012
BH09C	S	03.27.2020 14:57	15 ft	657244-013
BH09D	S	03.27.2020 15:16	20 ft	657244-014
BH09E	S	03.27.2020 15:20	25 ft	657244-015
BH09F	S	03.27.2020 15:25	30 ft	657244-016
BH09G	S	03.27.2020 15:48	35 ft	657244-017
BH09H	S	03.27.2020 15:16	37 ft	657244-018
BH14	S	03.28.2020 08:33	0.5 ft	657244-019
BH14A	S	03.28.2020 08:35	5 ft	657244-020
BH14B	S	03.28.2020 08:42	10 ft	657244-021
BH14C	S	03.28.2020 08:50	15 ft	657244-022
BH14D	S	03.28.2020 08:53	20 ft	657244-023
BH14E	S	03.28.2020 09:03	25 ft	657244-024
BH14F	S	03.28.2020 09:14	30 ft	657244-025
BH14G	S	03.28.2020 09:28	35 ft	657244-026
BH14H	S	03.28.2020 09:30	37 ft	657244-027
MW05	S	03.28.2020 10:18	0.5 ft	657244-028
MW05A	S	03.28.2020 10:20	5 ft	657244-029
MW05B	S	03.28.2020 10:36	10 ft	657244-030
MW05C	S	03.28.2020 10:39	15 ft	657244-031
MW05D	S	03.28.2020 10:50	20 ft	657244-032
MW05E	S	03.28.2020 11:01	25 ft	657244-033
MW05F	S	03.28.2020 11:03	30 ft	657244-034
MW05G	S	03.28.2020 11:17	35 ft	657244-035
MW05H	S	03.28.2020 11:18	37 ft	657244-036
BH12	S	03.28.2020 15:11	0.5 ft	657244-037
BH12A	S	03.28.2020 15:12	5 ft	657244-038
BH12B	S	03.28.2020 15:14	10 ft	657244-039
BH12C	S	03.28.2020 15:17	15 ft	657244-040
BH12D	S	03.28.2020 15:20	20 ft	657244-041
BH12E	S	03.28.2020 15:22	25 ft	657244-042
BH12F	S	03.28.2020 15:25	30 ft	657244-043

**Sample Cross Reference 657244****LT Environmental, Inc., Arvada, CO**

ADU 816

BH12G	S	03.28.2020 15:35	35 ft	657244-044
BH12H	S	03.28.2020 15:37	37 ft	657244-045
BH19	S	03.29.2020 11:08	0.5 ft	657244-046
BH19A	S	03.29.2020 11:10	5 ft	657244-047
BH19B	S	03.29.2020 11:16	10 ft	657244-048
BH19C	S	03.29.2020 11:18	15 ft	657244-049
BH19D	S	03.29.2020 11:22	20 ft	657244-050
BH19E	S	03.29.2020 11:24	25 ft	657244-051
BH19F	S	03.29.2020 11:32	30 ft	657244-052
BH19G	S	03.29.2020 11:34	35 ft	657244-053
BH19H	S	03.29.2020 11:41	37 ft	657244-054

**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: ADU 816**Project ID: 012919221
Work Order Number(s): 657244Report Date: 04.06.2020
Date Received: 03.30.2020

Sample receipt non conformances and comments:V1.001 Revision (client email) Corrected sample depths for BH13, BH09, and BH14. JK 04/06/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121560 BTEX by EPA 8021B

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

Batch: LBA-3121562 BTEX by EPA 8021B

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

Batch: LBA-3121568 BTEX by EPA 8021B

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

Batch: LBA-3121835 BTEX by EPA 8021B

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



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-001	657244-002	657244-003	657244-004	657244-005	657244-006
	<i>Field Id:</i>	BH13	BH13A	BH13B	BH13C	BH13D	BH13E
	<i>Depth:</i>	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.27.2020 12:38	03.27.2020 12:40	03.27.2020 12:41	03.27.2020 13:08	03.27.2020 13:10	03.27.2020 13:12
BTEX by EPA 8021B	<i>Extracted:</i>	03.30.2020 19:44	03.30.2020 19:44	03.30.2020 19:44	03.30.2020 19:44	03.30.2020 19:44	03.30.2020 19:44
	<i>Analyzed:</i>	03.31.2020 15:56	03.31.2020 16:17	03.31.2020 16:37	03.31.2020 16:58	03.31.2020 17:18	03.31.2020 17:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00402 0.00402	<0.00396 0.00396	<0.00400 0.00400	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 07:56	03.31.2020 07:56	03.31.2020 07:56	03.31.2020 07:56	03.31.2020 07:56	03.31.2020 07:56
	<i>Analyzed:</i>	03.31.2020 10:09	03.31.2020 10:26	03.31.2020 10:32	03.31.2020 10:49	03.31.2020 10:54	03.31.2020 11:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.96 9.96	189 10.1	624 49.9	658 49.6	760 49.9	513 49.9
TPH by SW8015 Mod	<i>Extracted:</i>	03.31.2020 13:40	03.31.2020 13:40	03.31.2020 13:40	03.31.2020 13:40	03.31.2020 13:40	03.31.2020 13:40
	<i>Analyzed:</i>	03.31.2020 20:23	03.31.2020 20:43	03.31.2020 21:03	04.01.2020 09:17	04.01.2020 09:38	04.01.2020 09:58
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		67.4 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total GRO-DRO		67.4 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		67.4 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-007	657244-008	657244-009	657244-010	657244-011	657244-012
	<i>Field Id:</i>	BH13F	BH13G	BH13H	BH09	BH09A	BH09B
	<i>Depth:</i>	30- ft	35- ft	37- ft	0.5- ft	5- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.27.2020 13:14	03.27.2020 13:27	03.27.2020 13:30	03.27.2020 14:42	03.27.2020 14:48	03.27.2020 14:55
BTEX by EPA 8021B	<i>Extracted:</i>	03.30.2020 19:44	03.30.2020 19:44	03.30.2020 19:47	03.30.2020 19:44	03.30.2020 19:44	03.30.2020 19:47
	<i>Analyzed:</i>	03.31.2020 11:11	03.31.2020 17:59	03.31.2020 09:32	03.31.2020 18:19	03.31.2020 18:40	03.31.2020 12:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00403 0.00403	<0.00403 0.00403	<0.00402 0.00402	<0.00402 0.00402	<0.00401 0.00401	<0.00397 0.00397
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 07:56	03.31.2020 07:56	03.31.2020 07:56	03.31.2020 07:56	03.30.2020 18:02	03.30.2020 18:02
	<i>Analyzed:</i>	03.31.2020 11:06	03.31.2020 11:11	03.31.2020 11:17	03.31.2020 11:23	03.31.2020 01:25	03.31.2020 07:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		397 49.9	281 9.96	306 9.92	34.0 9.92	21.0 9.98	<10.0 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	03.31.2020 13:40	03.31.2020 17:30	03.31.2020 17:30	03.31.2020 17:30	03.31.2020 17:30	03.31.2020 17:30
	<i>Analyzed:</i>	04.01.2020 10:18	04.01.2020 18:49	04.01.2020 19:09	04.01.2020 19:33	04.01.2020 19:54	04.01.2020 20:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9
Total GRO-DRO		<50.0 50.0	<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9
Total TPH		<50.0 50.0	<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-013	657244-014	657244-015	657244-016	657244-017	657244-018
	<i>Field Id:</i>	BH09C	BH09D	BH09E	BH09F	BH09G	BH09H
	<i>Depth:</i>	15- ft	20- ft	25- ft	30- ft	35- ft	37- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.27.2020 14:57	03.27.2020 15:16	03.27.2020 15:20	03.27.2020 15:25	03.27.2020 15:48	03.27.2020 15:16
BTEX by EPA 8021B	<i>Extracted:</i>	03.30.2020 19:47	03.30.2020 19:47	03.30.2020 19:47	03.30.2020 19:47	03.30.2020 19:47	03.30.2020 19:47
	<i>Analyzed:</i>	03.31.2020 13:37	03.31.2020 13:58	03.31.2020 14:24	03.31.2020 14:44	03.31.2020 15:05	03.31.2020 15:25
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
m,p-Xylenes		<0.00403 0.00403	<0.00401 0.00401	<0.00400 0.00400	<0.00402 0.00402	<0.00402 0.00402	<0.00403 0.00403
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04
	<i>Analyzed:</i>	03.31.2020 12:44	03.31.2020 13:01	03.31.2020 13:07	03.31.2020 13:12	03.31.2020 13:18	03.31.2020 13:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		698 9.94	4130 49.8	7010 50.0	3970 50.4	203 49.7	135 9.98
TPH by SW8015 Mod	<i>Extracted:</i>	04.01.2020 11:57	03.31.2020 18:00	03.31.2020 18:00	03.31.2020 18:00	03.31.2020 18:00	03.31.2020 18:00
	<i>Analyzed:</i>	04.02.2020 04:23	04.02.2020 03:22	04.02.2020 03:42	04.02.2020 04:23	04.02.2020 04:43	04.02.2020 05:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1	<50.1 50.1
Diesel Range Organics (DRO)		<50.3 50.3	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1	<50.1 50.1
Total GRO-DRO		<50.3 50.3	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1	<50.1 50.1
Total TPH		<50.3 50.3	<50.3 50.3	<49.9 49.9	<50.3 50.3	<50.1 50.1	<50.1 50.1

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-019	657244-020	657244-021	657244-022	657244-023	657244-024
	<i>Field Id:</i>	BH14	BH14A	BH14B	BH14C	BH14D	BH14E
	<i>Depth:</i>	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.28.2020 08:33	03.28.2020 08:35	03.28.2020 08:42	03.28.2020 08:50	03.28.2020 08:53	03.28.2020 09:03
BTEX by EPA 8021B	<i>Extracted:</i>	03.30.2020 19:47	03.30.2020 19:47	03.30.2020 19:47	03.30.2020 19:47	03.31.2020 19:26	03.31.2020 19:26
	<i>Analyzed:</i>	03.31.2020 15:46	03.31.2020 16:06	03.31.2020 16:26	03.31.2020 16:47	03.31.2020 20:31	03.31.2020 20:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00400 0.00400	<0.00404 0.00404	<0.00401 0.00401	<0.00402 0.00402
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04
	<i>Analyzed:</i>	03.31.2020 13:43	03.31.2020 13:49	03.31.2020 13:55	03.31.2020 14:02	03.31.2020 14:08	03.31.2020 14:26
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		15.9 10.1	2700 50.1	4470 49.7	3520 9.96	3240 49.6	2170 50.1
TPH by SW8015 Mod	<i>Extracted:</i>	03.31.2020 18:00	03.31.2020 18:00	03.31.2020 18:00	03.31.2020 18:00	03.31.2020 18:00	04.01.2020 15:00
	<i>Analyzed:</i>	04.02.2020 05:24	04.02.2020 05:44	04.02.2020 06:04	04.02.2020 06:25	04.02.2020 06:45	04.02.2020 23:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.2 50.2
Total TPH		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.2 50.2

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-025	657244-026	657244-027	657244-028	657244-029	657244-030
	<i>Field Id:</i>	BH14F	BH14G	BH14H	MW05	MW05A	MW05B
	<i>Depth:</i>	30- ft	35- ft	37- ft	0.5- ft	5- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.28.2020 09:14	03.28.2020 09:28	03.28.2020 09:30	03.28.2020 10:18	03.28.2020 10:20	03.28.2020 10:36
BTEX by EPA 8021B	<i>Extracted:</i>	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26
	<i>Analyzed:</i>	03.31.2020 21:12	03.31.2020 21:32	03.31.2020 21:53	03.31.2020 22:13	03.31.2020 22:33	03.31.2020 22:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00402 0.00402	<0.00400 0.00400	<0.00396 0.00396	<0.00399 0.00399	<0.00399 0.00399
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 08:04
	<i>Analyzed:</i>	03.31.2020 14:33	03.31.2020 14:51	03.31.2020 14:57	03.31.2020 15:03	03.31.2020 15:09	03.31.2020 15:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		445 49.7	747 9.96	370 9.98	38.6 10.0	1140 50.1	2240 50.2
TPH by SW8015 Mod	<i>Extracted:</i>	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00
	<i>Analyzed:</i>	04.02.2020 23:48	04.03.2020 00:08	04.03.2020 00:29	04.03.2020 00:49	04.03.2020 01:09	04.03.2020 01:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.3 50.3	<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.3 50.3	<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.3 50.3	<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.0 50.0
Total GRO-DRO		<49.8 49.8	<50.3 50.3	<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.0 50.0
Total TPH		<49.8 49.8	<50.3 50.3	<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.0 50.0

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-031	657244-032	657244-033	657244-034	657244-035	657244-036
	<i>Field Id:</i>	MW05C	MW05D	MW05E	MW05F	MW05G	MW05H
	<i>Depth:</i>	15- ft	20- ft	25- ft	30- ft	35- ft	37- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.28.2020 10:39	03.28.2020 10:50	03.28.2020 11:01	03.28.2020 11:03	03.28.2020 11:17	03.28.2020 11:18
BTEX by EPA 8021B	<i>Extracted:</i>	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26
	<i>Analyzed:</i>	03.31.2020 23:55	04.01.2020 00:15	04.01.2020 00:36	04.01.2020 00:56	04.01.2020 01:16	04.01.2020 01:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402	<0.00403 0.00403	<0.00400 0.00400	<0.00398 0.00398
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 08:04	03.31.2020 08:04	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09
	<i>Analyzed:</i>	03.31.2020 15:22	03.31.2020 15:28	04.01.2020 12:15	04.01.2020 12:32	04.01.2020 12:37	04.01.2020 12:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2010 50.2	681 50.0	267 9.96	1110 49.8	404 9.92	351 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00	04.01.2020 15:00
	<i>Analyzed:</i>	04.03.2020 02:10	04.03.2020 02:30	04.03.2020 02:51	04.03.2020 03:11	04.03.2020 03:31	04.03.2020 03:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9	<50.1 50.1
Diesel Range Organics (DRO)		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9	<50.1 50.1
Total GRO-DRO		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9	<50.1 50.1
Total TPH		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2	<49.9 49.9	<50.1 50.1

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-037	657244-038	657244-039	657244-040	657244-041	657244-042
	<i>Field Id:</i>	BH12	BH12A	BH12B	BH12C	BH12D	BH12E
	<i>Depth:</i>	0.5- ft	5- ft	10- ft	15- ft	20- ft	25- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.28.2020 15:11	03.28.2020 15:12	03.28.2020 15:14	03.28.2020 15:17	03.28.2020 15:20	03.28.2020 15:22
BTEX by EPA 8021B	<i>Extracted:</i>	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	03.31.2020 19:26	04.01.2020 19:24	04.01.2020 19:24
	<i>Analyzed:</i>	04.01.2020 01:57	04.01.2020 02:18	04.01.2020 02:38	04.01.2020 02:58	04.02.2020 08:31	04.02.2020 08:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
m,p-Xylenes		<0.00400 0.00400	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00404 0.00404	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09
	<i>Analyzed:</i>	04.01.2020 13:42	04.01.2020 13:13	04.01.2020 13:19	04.01.2020 13:25	04.01.2020 13:31	04.01.2020 13:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1390 50.2	4900 50.3	4900 49.7	3500 49.9	632 49.8	1320 49.6
TPH by SW8015 Mod	<i>Extracted:</i>	04.01.2020 15:00	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50
	<i>Analyzed:</i>	04.03.2020 04:12	04.02.2020 21:25	04.02.2020 23:27	04.02.2020 23:48	04.03.2020 00:08	04.03.2020 00:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2
Total GRO-DRO		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2
Total TPH		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-043	657244-044	657244-045	657244-046	657244-047	657244-048
	<i>Field Id:</i>	BH12F	BH12G	BH12H	BH19	BH19A	BH19B
	<i>Depth:</i>	30- ft	35- ft	37- ft	0.5- ft	5- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.28.2020 15:25	03.28.2020 15:35	03.28.2020 15:37	03.29.2020 11:08	03.29.2020 11:10	03.29.2020 11:16
BTEX by EPA 8021B	<i>Extracted:</i>	04.01.2020 19:24	04.01.2020 19:24	04.01.2020 19:24	04.01.2020 16:24	04.01.2020 16:24	04.01.2020 16:24
	<i>Analyzed:</i>	04.02.2020 09:12	04.02.2020 09:32	04.02.2020 08:11	04.02.2020 13:03	04.02.2020 13:23	04.02.2020 13:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00404 0.00404	<0.00403 0.00403	<0.00399 0.00399	<0.00400 0.00400	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09
	<i>Analyzed:</i>	04.01.2020 13:48	04.01.2020 14:06	04.01.2020 14:12	04.01.2020 14:31	04.01.2020 14:37	04.01.2020 14:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		557 9.98	1090 49.8	771 50.1	1090 50.4	24.0 9.80	22.4 10.1
TPH by SW8015 Mod	<i>Extracted:</i>	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50
	<i>Analyzed:</i>	04.03.2020 00:49	04.03.2020 01:09	04.03.2020 01:50	04.03.2020 02:10	04.03.2020 02:30	04.03.2020 02:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.2 50.2
Diesel Range Organics (DRO)		<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.2 50.2
Total GRO-DRO		<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.2 50.2
Total TPH		<49.8 49.8	<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.2 50.2

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657244

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 03.30.2020 08:32

Report Date: 04.06.2020 10:11

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657244-049	657244-050	657244-051	657244-052	657244-053	657244-054
	<i>Field Id:</i>	BH19C	BH19D	BH19E	BH19F	BH19G	BH19H
	<i>Depth:</i>	15- ft	20- ft	25- ft	30- ft	35- ft	37- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.29.2020 11:18	03.29.2020 11:22	03.29.2020 11:24	03.29.2020 11:32	03.29.2020 11:34	03.29.2020 11:41
BTEX by EPA 8021B	<i>Extracted:</i>	04.01.2020 16:24	04.01.2020 16:24	04.01.2020 16:24	04.01.2020 16:24	04.01.2020 16:24	04.01.2020 16:24
	<i>Analyzed:</i>	04.02.2020 14:04	04.02.2020 14:24	04.02.2020 15:46	04.02.2020 16:06	04.02.2020 16:27	04.02.2020 16:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	<0.00402 0.00402	<0.00398 0.00398	<0.00401 0.00401	0.0188 0.00396
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	0.0188 0.00198
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	0.0188 0.00198
Chloride by EPA 300	<i>Extracted:</i>	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:09	03.31.2020 10:08	03.31.2020 10:08
	<i>Analyzed:</i>	04.01.2020 14:49	04.01.2020 14:55	04.01.2020 15:01	04.01.2020 15:07	03.31.2020 16:12	03.31.2020 16:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		15.7 10.1	84.3 10.0	150 9.92	255 50.1	130 49.7	399 50.1
TPH by SW8015 Mod	<i>Extracted:</i>	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50	04.02.2020 15:50
	<i>Analyzed:</i>	04.03.2020 03:11	04.03.2020 03:31	04.03.2020 03:51	04.03.2020 04:12	04.03.2020 04:32	04.03.2020 04:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Total GRO-DRO		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Total TPH		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9

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Jessica Kramer
Project Manager



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13**
Lab Sample Id: 657244-001

Matrix: Soil
Date Collected: 03.27.2020 12:38

Date Received: 03.30.2020 08:32
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Date Prep: 03.31.2020 07:56

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.96	9.96	mg/kg	03.31.2020 10:09	U	1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121587

Date Prep: 03.31.2020 13:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 20:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	67.4	50.0	mg/kg	03.31.2020 20:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 20:23	U	1
Total GRO-DRO	PHC628	67.4	50.0	mg/kg	03.31.2020 20:23		1
Total TPH	PHC635	67.4	50.0	mg/kg	03.31.2020 20:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	03.31.2020 20:23	
o-Terphenyl	84-15-1	109	%	70-135	03.31.2020 20:23	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13**
 Lab Sample Id: 657244-001

Matrix: Soil
 Date Collected: 03.27.2020 12:38

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 15:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 15:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 15:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.2020 15:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 15:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 15:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 15:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.2020 15:56		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.2020 15:56		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13A**
 Lab Sample Id: 657244-002

Matrix: Soil
 Date Collected: 03.27.2020 12:40

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 07:56

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	189	10.1	mg/kg	03.31.2020 10:26		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121587

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 13:40

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.2020 20:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.2020 20:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.2020 20:43	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.31.2020 20:43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.2020 20:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	03.31.2020 20:43	
o-Terphenyl	84-15-1	108	%	70-135	03.31.2020 20:43	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13A**
 Lab Sample Id: 657244-002

Matrix: Soil
 Date Collected: 03.27.2020 12:40

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 16:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 16:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 16:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.2020 16:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 16:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 16:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 16:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.2020 16:17	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.2020 16:17	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13B**
 Lab Sample Id: 657244-003

Matrix: Soil
 Date Collected: 03.27.2020 12:41

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Prep Method: E300P

% Moisture:

Date Prep: 03.31.2020 07:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	624	49.9	mg/kg	03.31.2020 10:32		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121587

Prep Method: SW8015P

% Moisture:

Date Prep: 03.31.2020 13:40

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.2020 21:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.2020 21:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.2020 21:03	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	03.31.2020 21:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.2020 21:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	03.31.2020 21:03	
o-Terphenyl	84-15-1	109	%	70-135	03.31.2020 21:03	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13B**
 Lab Sample Id: 657244-003

Matrix: Soil
 Date Collected: 03.27.2020 12:41

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 16:37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 16:37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 16:37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 16:37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 16:37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 16:37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 16:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.2020 16:37		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.2020 16:37		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13C**
 Lab Sample Id: 657244-004

Matrix: Soil
 Date Collected: 03.27.2020 13:08

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 07:56

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	658	49.6	mg/kg	03.31.2020 10:49		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121587

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 13:40

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.01.2020 09:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.01.2020 09:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.01.2020 09:17	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.01.2020 09:17	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.01.2020 09:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.01.2020 09:17	
o-Terphenyl	84-15-1	110	%	70-135	04.01.2020 09:17	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13C**
 Lab Sample Id: 657244-004

Matrix: Soil
 Date Collected: 03.27.2020 13:08

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.31.2020 16:58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.31.2020 16:58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.31.2020 16:58	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.31.2020 16:58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.31.2020 16:58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.31.2020 16:58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.31.2020 16:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	03.31.2020 16:58	
1,4-Difluorobenzene	540-36-3	114	%	70-130	03.31.2020 16:58	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13D**
 Lab Sample Id: 657244-005

Matrix: Soil
 Date Collected: 03.27.2020 13:10

Date Received: 03.30.2020 08:32
 Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 07:56

Basis: Wet Weight

Seq Number: 3121572

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	760	49.9	mg/kg	03.31.2020 10:54		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.2020 13:40

Basis: Wet Weight

Seq Number: 3121587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.01.2020 09:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.01.2020 09:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.01.2020 09:38	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.01.2020 09:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.01.2020 09:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.01.2020 09:38	
o-Terphenyl	84-15-1	112	%	70-135	04.01.2020 09:38	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13D**
Lab Sample Id: 657244-005

Matrix: Soil
Date Collected: 03.27.2020 13:10

Date Received: 03.30.2020 08:32
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 17:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 17:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 17:18	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.31.2020 17:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 17:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 17:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 17:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	03.31.2020 17:18		
1,4-Difluorobenzene	540-36-3	114	%	70-130	03.31.2020 17:18		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13E** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-006 Date Collected: 03.27.2020 13:12 Sample Depth: 25 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 07:56 Basis: Wet Weight
 Seq Number: 3121572

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	513	49.9	mg/kg	03.31.2020 11:00		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.31.2020 13:40 Basis: Wet Weight
 Seq Number: 3121587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.01.2020 09:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.01.2020 09:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.01.2020 09:58	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.01.2020 09:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.01.2020 09:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.01.2020 09:58	
o-Terphenyl	84-15-1	111	%	70-135	04.01.2020 09:58	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13E**
 Lab Sample Id: 657244-006

Matrix: Soil
 Date Collected: 03.27.2020 13:12

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 17:38	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 17:38	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 17:38	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 17:38	U	1
o-Xylene	95-47-6	0.00201	0.00201	mg/kg	03.31.2020 17:38		1
Total Xylenes	1330-20-7	0.00201	0.00201	mg/kg	03.31.2020 17:38		1
Total BTEX		0.00201	0.00201	mg/kg	03.31.2020 17:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.2020 17:38	
4-Bromofluorobenzene	460-00-4	91	%	70-130	03.31.2020 17:38	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13F**
Lab Sample Id: 657244-007

Matrix: Soil
Date Collected: 03.27.2020 13:14

Date Received: 03.30.2020 08:32
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Date Prep: 03.31.2020 07:56

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	397	49.9	mg/kg	03.31.2020 11:06		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121587

Date Prep: 03.31.2020 13:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.01.2020 10:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.01.2020 10:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.01.2020 10:18	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.01.2020 10:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.01.2020 10:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.01.2020 10:18	
o-Terphenyl	84-15-1	106	%	70-135	04.01.2020 10:18	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13F**
 Lab Sample Id: 657244-007

Matrix: Soil
 Date Collected: 03.27.2020 13:14

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.2020 11:11	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.2020 11:11	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.2020 11:11	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.2020 11:11	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.2020 11:11	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.31.2020 11:11	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.2020 11:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.2020 11:11		
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.2020 11:11		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13G**
 Lab Sample Id: 657244-008

Matrix: Soil
 Date Collected: 03.27.2020 13:27

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 07:56

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	281	9.96	mg/kg	03.31.2020 11:11		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121656

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 17:30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.01.2020 18:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.01.2020 18:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.01.2020 18:49	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.01.2020 18:49	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.01.2020 18:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	04.01.2020 18:49	
o-Terphenyl	84-15-1	94	%	70-135	04.01.2020 18:49	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13G**
 Lab Sample Id: 657244-008

Matrix: Soil
 Date Collected: 03.27.2020 13:27

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.2020 17:59	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.2020 17:59	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.2020 17:59	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.2020 17:59	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.2020 17:59	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.31.2020 17:59	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.2020 17:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.2020 17:59		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.2020 17:59		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13H**
 Lab Sample Id: 657244-009

Matrix: Soil
 Date Collected: 03.27.2020 13:30

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 07:56

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	306	9.92	mg/kg	03.31.2020 11:17		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121656

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 17:30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.01.2020 19:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.01.2020 19:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.01.2020 19:09	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.01.2020 19:09	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.01.2020 19:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	04.01.2020 19:09	
o-Terphenyl	84-15-1	100	%	70-135	04.01.2020 19:09	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH13H**
 Lab Sample Id: 657244-009

Matrix: Soil
 Date Collected: 03.27.2020 13:30

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 09:32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 09:32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 09:32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 09:32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 09:32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 09:32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 09:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 09:32		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 09:32		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09**
 Lab Sample Id: 657244-010

Matrix: Soil
 Date Collected: 03.27.2020 14:42

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121572

Date Prep: 03.31.2020 07:56

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.0	9.92	mg/kg	03.31.2020 11:23		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121656

Date Prep: 03.31.2020 17:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.01.2020 19:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.01.2020 19:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.01.2020 19:33	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.01.2020 19:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.01.2020 19:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	04.01.2020 19:33	
o-Terphenyl	84-15-1	97	%	70-135	04.01.2020 19:33	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09**
 Lab Sample Id: 657244-010

Matrix: Soil
 Date Collected: 03.27.2020 14:42

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 18:19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 18:19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 18:19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 18:19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 18:19	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 18:19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 18:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.2020 18:19		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.2020 18:19		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09A**
 Lab Sample Id: 657244-011

Matrix: Soil
 Date Collected: 03.27.2020 14:48

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121421

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.30.2020 18:02

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.0	9.98	mg/kg	03.31.2020 01:25		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121656

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 17:30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.01.2020 19:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.01.2020 19:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.01.2020 19:54	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.01.2020 19:54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.01.2020 19:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	04.01.2020 19:54	
o-Terphenyl	84-15-1	101	%	70-135	04.01.2020 19:54	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09A**
 Lab Sample Id: 657244-011

Matrix: Soil
 Date Collected: 03.27.2020 14:48

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:44

Basis: Wet Weight

Seq Number: 3121560

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 18:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 18:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 18:40	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.31.2020 18:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 18:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 18:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 18:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.2020 18:40		
4-Bromofluorobenzene	460-00-4	90	%	70-130	03.31.2020 18:40		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09B**
Lab Sample Id: 657244-012

Matrix: Soil
Date Collected: 03.27.2020 14:55

Date Received: 03.30.2020 08:32
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121421

Date Prep: 03.30.2020 18:02

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	03.31.2020 07:59	U	1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121656

Date Prep: 03.31.2020 17:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.01.2020 20:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.01.2020 20:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.01.2020 20:14	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.01.2020 20:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.01.2020 20:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	04.01.2020 20:14	
o-Terphenyl	84-15-1	98	%	70-135	04.01.2020 20:14	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09B**
 Lab Sample Id: 657244-012

Matrix: Soil
 Date Collected: 03.27.2020 14:55

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.31.2020 12:36	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.31.2020 12:36	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.31.2020 12:36	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.31.2020 12:36	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.31.2020 12:36	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.31.2020 12:36	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.31.2020 12:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 12:36		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.31.2020 12:36		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09C**
 Lab Sample Id: 657244-013

Matrix: Soil
 Date Collected: 03.27.2020 14:57

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Prep Method: E300P

% Moisture:

Date Prep: 03.31.2020 08:04

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	698	9.94	mg/kg	03.31.2020 12:44		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121687

Prep Method: SW8015P

% Moisture:

Date Prep: 04.01.2020 11:57

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	04.02.2020 04:23	
o-Terphenyl	84-15-1	107	%	70-135	04.02.2020 04:23	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09C**
Lab Sample Id: 657244-013

Matrix: Soil
Date Collected: 03.27.2020 14:57

Date Received: 03.30.2020 08:32
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.2020 13:37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.2020 13:37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.2020 13:37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.2020 13:37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.2020 13:37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.31.2020 13:37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.2020 13:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 13:37	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 13:37	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09D**
 Lab Sample Id: 657244-014

Matrix: Soil
 Date Collected: 03.27.2020 15:16

Date Received: 03.30.2020 08:32
 Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4130	49.8	mg/kg	03.31.2020 13:01		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Date Prep: 03.31.2020 18:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.02.2020 03:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.02.2020 03:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.02.2020 03:22	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	04.02.2020 03:22	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.02.2020 03:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	04.02.2020 03:22	
o-Terphenyl	84-15-1	90	%	70-135	04.02.2020 03:22	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09D**
 Lab Sample Id: 657244-014

Matrix: Soil
 Date Collected: 03.27.2020 15:16

Date Received: 03.30.2020 08:32
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 13:58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 13:58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 13:58	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.31.2020 13:58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 13:58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 13:58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 13:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.31.2020 13:58		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 13:58		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09E**
Lab Sample Id: 657244-015

Matrix: Soil
Date Collected: 03.27.2020 15:20

Date Received: 03.30.2020 08:32
Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7010	50.0	mg/kg	03.31.2020 13:07		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Date Prep: 03.31.2020 18:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.02.2020 03:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.02.2020 03:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.02.2020 03:42	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.02.2020 03:42	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.02.2020 03:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.02.2020 03:42	
o-Terphenyl	84-15-1	102	%	70-135	04.02.2020 03:42	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09E**
 Lab Sample Id: 657244-015

Matrix: Soil
 Date Collected: 03.27.2020 15:20

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 14:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 14:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 14:24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.31.2020 14:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 14:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 14:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 14:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.31.2020 14:24	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 14:24	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09F**
 Lab Sample Id: 657244-016

Matrix: Soil
 Date Collected: 03.27.2020 15:25

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3970	50.4	mg/kg	03.31.2020 13:12		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Date Prep: 03.31.2020 18:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.02.2020 04:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	04.02.2020 04:23	
o-Terphenyl	84-15-1	103	%	70-135	04.02.2020 04:23	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09F**
 Lab Sample Id: 657244-016

Matrix: Soil
 Date Collected: 03.27.2020 15:25

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 14:44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 14:44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 14:44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 14:44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 14:44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 14:44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 14:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 14:44		
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.31.2020 14:44		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09G**
Lab Sample Id: 657244-017

Matrix: Soil
Date Collected: 03.27.2020 15:48

Date Received: 03.30.2020 08:32
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	203	49.7	mg/kg	03.31.2020 13:18		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Date Prep: 03.31.2020 18:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.2020 04:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.2020 04:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.2020 04:43	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.02.2020 04:43	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.2020 04:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.02.2020 04:43	
o-Terphenyl	84-15-1	105	%	70-135	04.02.2020 04:43	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09G**
 Lab Sample Id: 657244-017

Matrix: Soil
 Date Collected: 03.27.2020 15:48

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 15:05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 15:05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 15:05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 15:05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 15:05	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 15:05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 15:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.2020 15:05		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 15:05		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09H**
 Lab Sample Id: 657244-018

Matrix: Soil
 Date Collected: 03.27.2020 15:16

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Prep Method: E300P

% Moisture:

Date Prep: 03.31.2020 08:04

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	135	9.98	mg/kg	03.31.2020 13:37		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Prep Method: SW8015P

% Moisture:

Date Prep: 03.31.2020 18:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.2020 05:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.2020 05:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.2020 05:03	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.02.2020 05:03	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.2020 05:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.02.2020 05:03	
o-Terphenyl	84-15-1	107	%	70-135	04.02.2020 05:03	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH09H**
Lab Sample Id: 657244-018

Matrix: Soil
Date Collected: 03.27.2020 15:16

Date Received: 03.30.2020 08:32
Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3121562

Prep Method: SW5030B

% Moisture:

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.2020 15:25	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.2020 15:25	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.2020 15:25	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.2020 15:25	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.2020 15:25	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.31.2020 15:25	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.2020 15:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.2020 15:25	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 15:25	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-019 Date Collected: 03.28.2020 08:33 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 08:04 Basis: Wet Weight
 Seq Number: 3121573

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.9	10.1	mg/kg	03.31.2020 13:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 03.31.2020 18:00 Basis: Wet Weight
 Seq Number: 3121695

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.02.2020 05:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.02.2020 05:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.02.2020 05:24	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.02.2020 05:24	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.02.2020 05:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.02.2020 05:24	
o-Terphenyl	84-15-1	106	%	70-135	04.02.2020 05:24	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14**
Lab Sample Id: 657244-019

Matrix: Soil
Date Collected: 03.28.2020 08:33

Date Received: 03.30.2020 08:32
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 15:46	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 15:46	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 15:46	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 15:46	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 15:46	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 15:46	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 15:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.2020 15:46	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 15:46	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14A**
Lab Sample Id: 657244-020

Matrix: Soil
Date Collected: 03.28.2020 08:35

Date Received: 03.30.2020 08:32
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2700	50.1	mg/kg	03.31.2020 13:49		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Date Prep: 03.31.2020 18:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.02.2020 05:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.02.2020 05:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.02.2020 05:44	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.02.2020 05:44	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.02.2020 05:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	04.02.2020 05:44	
o-Terphenyl	84-15-1	96	%	70-135	04.02.2020 05:44	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14A**
 Lab Sample Id: 657244-020

Matrix: Soil
 Date Collected: 03.28.2020 08:35

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 16:06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 16:06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 16:06	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.2020 16:06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 16:06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 16:06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 16:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.31.2020 16:06		
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.31.2020 16:06		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14B**
Lab Sample Id: 657244-021

Matrix: Soil
Date Collected: 03.28.2020 08:42

Date Received: 03.30.2020 08:32
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4470	49.7	mg/kg	03.31.2020 13:55		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Date Prep: 03.31.2020 18:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.2020 06:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.2020 06:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.2020 06:04	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.02.2020 06:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.02.2020 06:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	04.02.2020 06:04	
o-Terphenyl	84-15-1	99	%	70-135	04.02.2020 06:04	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14B**
 Lab Sample Id: 657244-021

Matrix: Soil
 Date Collected: 03.28.2020 08:42

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 16:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 16:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 16:26	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.31.2020 16:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 16:26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 16:26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 16:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.31.2020 16:26		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 16:26		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14C**
 Lab Sample Id: 657244-022

Matrix: Soil
 Date Collected: 03.28.2020 08:50

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 08:04

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3520	9.96	mg/kg	03.31.2020 14:02		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 18:00

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.02.2020 06:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.02.2020 06:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.02.2020 06:25	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.02.2020 06:25	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.02.2020 06:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.02.2020 06:25	
o-Terphenyl	84-15-1	101	%	70-135	04.02.2020 06:25	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14C**
 Lab Sample Id: 657244-022

Matrix: Soil
 Date Collected: 03.28.2020 08:50

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.2020 19:47

Basis: Wet Weight

Seq Number: 3121562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.2020 16:47	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.2020 16:47	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.2020 16:47	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.31.2020 16:47	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.2020 16:47	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.31.2020 16:47	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.2020 16:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 16:47		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.31.2020 16:47		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14D**
 Lab Sample Id: 657244-023

Matrix: Soil
 Date Collected: 03.28.2020 08:53

Date Received: 03.30.2020 08:32
 Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 08:04

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3240	49.6	mg/kg	03.31.2020 14:08		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121695

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 18:00

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.2020 06:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.2020 06:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.2020 06:45	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.02.2020 06:45	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.2020 06:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	04.02.2020 06:45	
o-Terphenyl	84-15-1	112	%	70-135	04.02.2020 06:45	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14D**
Lab Sample Id: 657244-023

Matrix: Soil
Date Collected: 03.28.2020 08:53

Date Received: 03.30.2020 08:32
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 20:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 20:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 20:31	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.31.2020 20:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 20:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 20:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 20:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 20:31	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.31.2020 20:31	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14E**
 Lab Sample Id: 657244-024

Matrix: Soil
 Date Collected: 03.28.2020 09:03

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2170	50.1	mg/kg	03.31.2020 14:26		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.02.2020 23:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.02.2020 23:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.02.2020 23:27	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.02.2020 23:27	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.02.2020 23:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	04.02.2020 23:27	
o-Terphenyl	84-15-1	107	%	70-135	04.02.2020 23:27	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14E**
 Lab Sample Id: 657244-024

Matrix: Soil
 Date Collected: 03.28.2020 09:03

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 20:51	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 20:51	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 20:51	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 20:51	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 20:51	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 20:51	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 20:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 20:51		
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.31.2020 20:51		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14F**
Lab Sample Id: 657244-025

Matrix: Soil
Date Collected: 03.28.2020 09:14

Date Received: 03.30.2020 08:32
Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	445	49.7	mg/kg	03.31.2020 14:33		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.02.2020 23:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.02.2020 23:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.02.2020 23:48	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.02.2020 23:48	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.02.2020 23:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	04.02.2020 23:48	
o-Terphenyl	84-15-1	105	%	70-135	04.02.2020 23:48	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14F**
 Lab Sample Id: 657244-025

Matrix: Soil
 Date Collected: 03.28.2020 09:14

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.2020 21:12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.2020 21:12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.2020 21:12	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.2020 21:12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.2020 21:12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.31.2020 21:12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.2020 21:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 21:12		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 21:12		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14G**
Lab Sample Id: 657244-026

Matrix: Soil
Date Collected: 03.28.2020 09:28

Date Received: 03.30.2020 08:32
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	747	9.96	mg/kg	03.31.2020 14:51		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.03.2020 00:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.03.2020 00:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.03.2020 00:08	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	04.03.2020 00:08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.03.2020 00:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.03.2020 00:08	
o-Terphenyl	84-15-1	108	%	70-135	04.03.2020 00:08	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14G**
 Lab Sample Id: 657244-026

Matrix: Soil
 Date Collected: 03.28.2020 09:28

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 21:32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 21:32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 21:32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 21:32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 21:32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 21:32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 21:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.2020 21:32		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 21:32		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14H**
Lab Sample Id: 657244-027

Matrix: Soil
Date Collected: 03.28.2020 09:30

Date Received: 03.30.2020 08:32
Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	370	9.98	mg/kg	03.31.2020 14:57		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 00:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 00:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 00:29	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 00:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 00:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	04.03.2020 00:29	
o-Terphenyl	84-15-1	105	%	70-135	04.03.2020 00:29	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH14H**
 Lab Sample Id: 657244-027

Matrix: Soil
 Date Collected: 03.28.2020 09:30

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 21:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 21:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 21:53	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.31.2020 21:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 21:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 21:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 21:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 21:53		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 21:53		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-028 Date Collected: 03.28.2020 10:18 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 08:04 Basis: Wet Weight
 Seq Number: 3121573

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.6	10.0	mg/kg	03.31.2020 15:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 04.01.2020 15:00 Basis: Wet Weight
 Seq Number: 3121825

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.03.2020 00:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.03.2020 00:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.03.2020 00:49	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.03.2020 00:49	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.03.2020 00:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	04.03.2020 00:49	
o-Terphenyl	84-15-1	109	%	70-135	04.03.2020 00:49	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05**
 Lab Sample Id: 657244-028

Matrix: Soil
 Date Collected: 03.28.2020 10:18

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.31.2020 22:13	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.31.2020 22:13	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.31.2020 22:13	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.31.2020 22:13	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.31.2020 22:13	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.31.2020 22:13	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.31.2020 22:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.31.2020 22:13	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 22:13	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05A**

Matrix: Soil

Date Received: 03.30.2020 08:32

Lab Sample Id: 657244-029

Date Collected: 03.28.2020 10:20

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 08:04

Basis: Wet Weight

Seq Number: 3121573

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1140	50.1	mg/kg	03.31.2020 15:09		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.2020 15:00

Basis: Wet Weight

Seq Number: 3121825

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.03.2020 01:09	
o-Terphenyl	84-15-1	108	%	70-135	04.03.2020 01:09	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05A**

Matrix: Soil

Date Received: 03.30.2020 08:32

Lab Sample Id: 657244-029

Date Collected: 03.28.2020 10:20

Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 22:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 22:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 22:33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.2020 22:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 22:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 22:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 22:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 22:33		
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.31.2020 22:33		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05B**
 Lab Sample Id: 657244-030

Matrix: Soil
 Date Collected: 03.28.2020 10:36

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 08:04

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2240	50.2	mg/kg	03.31.2020 15:16		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 04.01.2020 15:00

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.03.2020 01:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.03.2020 01:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.03.2020 01:50	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.03.2020 01:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.03.2020 01:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.03.2020 01:50	
o-Terphenyl	84-15-1	109	%	70-135	04.03.2020 01:50	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05B**

Matrix: Soil

Date Received: 03.30.2020 08:32

Lab Sample Id: 657244-030

Date Collected: 03.28.2020 10:36

Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.2020 22:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.2020 22:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.2020 22:54	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.2020 22:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.2020 22:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.31.2020 22:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.31.2020 22:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.31.2020 22:54		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.31.2020 22:54		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05C**
Lab Sample Id: 657244-031

Matrix: Soil
Date Collected: 03.28.2020 10:39

Date Received: 03.30.2020 08:32
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121573

Date Prep: 03.31.2020 08:04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2010	50.2	mg/kg	03.31.2020 15:22		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.03.2020 02:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.03.2020 02:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.03.2020 02:10	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.03.2020 02:10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.03.2020 02:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	04.03.2020 02:10	
o-Terphenyl	84-15-1	112	%	70-135	04.03.2020 02:10	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05C**
Lab Sample Id: 657244-031

Matrix: Soil
Date Collected: 03.28.2020 10:39

Date Received: 03.30.2020 08:32
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.2020 23:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.2020 23:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.2020 23:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.2020 23:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.2020 23:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.31.2020 23:55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.2020 23:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.31.2020 23:55	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.2020 23:55	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05D**

Matrix: Soil

Date Received: 03.30.2020 08:32

Lab Sample Id: 657244-032

Date Collected: 03.28.2020 10:50

Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 08:04

Basis: Wet Weight

Seq Number: 3121573

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	681	50.0	mg/kg	03.31.2020 15:28		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.2020 15:00

Basis: Wet Weight

Seq Number: 3121825

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 02:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 02:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 02:30	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 02:30	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 02:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.03.2020 02:30	
o-Terphenyl	84-15-1	108	%	70-135	04.03.2020 02:30	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05D**
 Lab Sample Id: 657244-032

Matrix: Soil
 Date Collected: 03.28.2020 10:50

Date Received: 03.30.2020 08:32
 Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.2020 00:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.2020 00:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.2020 00:15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.01.2020 00:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.2020 00:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.01.2020 00:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.01.2020 00:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.01.2020 00:15	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.2020 00:15	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05E**

Matrix: Soil

Date Received: 03.30.2020 08:32

Lab Sample Id: 657244-033

Date Collected: 03.28.2020 11:01

Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	267	9.96	mg/kg	04.01.2020 12:15		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.2020 15:00

Basis: Wet Weight

Seq Number: 3121825

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.03.2020 02:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.03.2020 02:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.03.2020 02:51	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.03.2020 02:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.03.2020 02:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	04.03.2020 02:51	
o-Terphenyl	84-15-1	108	%	70-135	04.03.2020 02:51	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05E**
 Lab Sample Id: 657244-033

Matrix: Soil
 Date Collected: 03.28.2020 11:01

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.01.2020 00:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.01.2020 00:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.01.2020 00:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.01.2020 00:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.01.2020 00:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.01.2020 00:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.01.2020 00:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.01.2020 00:36		
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.01.2020 00:36		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05F**
 Lab Sample Id: 657244-034

Matrix: Soil
 Date Collected: 03.28.2020 11:03

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1110	49.8	mg/kg	04.01.2020 12:32		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 03:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 03:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 03:11	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 03:11	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 03:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.03.2020 03:11	
o-Terphenyl	84-15-1	112	%	70-135	04.03.2020 03:11	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05F**
Lab Sample Id: 657244-034

Matrix: Soil
Date Collected: 03.28.2020 11:03

Date Received: 03.30.2020 08:32
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.01.2020 00:56	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.01.2020 00:56	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.01.2020 00:56	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.01.2020 00:56	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.01.2020 00:56	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.01.2020 00:56	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.01.2020 00:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.01.2020 00:56	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.01.2020 00:56	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05G**
Lab Sample Id: 657244-035

Matrix: Soil
Date Collected: 03.28.2020 11:17

Date Received: 03.30.2020 08:32
Sample Depth: 35 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	404	9.92	mg/kg	04.01.2020 12:37		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Date Prep: 04.01.2020 15:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	04.03.2020 03:31	
o-Terphenyl	84-15-1	109	%	70-135	04.03.2020 03:31	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05G**
 Lab Sample Id: 657244-035

Matrix: Soil
 Date Collected: 03.28.2020 11:17

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.2020 01:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.2020 01:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.2020 01:16	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.01.2020 01:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.2020 01:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.01.2020 01:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.01.2020 01:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.01.2020 01:16		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.01.2020 01:16		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05H**

Matrix: Soil

Date Received: 03.30.2020 08:32

Lab Sample Id: 657244-036

Date Collected: 03.28.2020 11:18

Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	351	10.0	mg/kg	04.01.2020 12:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.2020 15:00

Basis: Wet Weight

Seq Number: 3121825

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.03.2020 03:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.03.2020 03:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.03.2020 03:51	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.03.2020 03:51	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.03.2020 03:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	04.03.2020 03:51	
o-Terphenyl	84-15-1	106	%	70-135	04.03.2020 03:51	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **MW05H**
 Lab Sample Id: 657244-036

Matrix: Soil
 Date Collected: 03.28.2020 11:18

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.2020 01:37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.2020 01:37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.2020 01:37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.2020 01:37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.2020 01:37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.2020 01:37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.2020 01:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.01.2020 01:37	
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.01.2020 01:37	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12**
 Lab Sample Id: 657244-037

Matrix: Soil
 Date Collected: 03.28.2020 15:11

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.2020 10:09

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1390	50.2	mg/kg	04.01.2020 13:42		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121825

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 04.01.2020 15:00

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 04:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 04:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 04:12	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 04:12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 04:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.03.2020 04:12	
o-Terphenyl	84-15-1	112	%	70-135	04.03.2020 04:12	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12**
 Lab Sample Id: 657244-037

Matrix: Soil
 Date Collected: 03.28.2020 15:11

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.2020 01:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.2020 01:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.2020 01:57	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.01.2020 01:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.2020 01:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.01.2020 01:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.01.2020 01:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.01.2020 01:57	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.2020 01:57	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12A**
Lab Sample Id: 657244-038

Matrix: Soil
Date Collected: 03.28.2020 15:12

Date Received: 03.30.2020 08:32
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4900	50.3	mg/kg	04.01.2020 13:13		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.2020 21:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.2020 21:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.2020 21:25	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.02.2020 21:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.02.2020 21:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.02.2020 21:25	
o-Terphenyl	84-15-1	104	%	70-135	04.02.2020 21:25	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12A**
 Lab Sample Id: 657244-038

Matrix: Soil
 Date Collected: 03.28.2020 15:12

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.2020 02:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.2020 02:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.2020 02:18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.01.2020 02:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.2020 02:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.01.2020 02:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.01.2020 02:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.2020 02:18		
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.01.2020 02:18		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12B**
 Lab Sample Id: 657244-039

Matrix: Soil
 Date Collected: 03.28.2020 15:14

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4900	49.7	mg/kg	04.01.2020 13:19		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.2020 23:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.2020 23:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.2020 23:27	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.02.2020 23:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.02.2020 23:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	04.02.2020 23:27	
o-Terphenyl	84-15-1	107	%	70-135	04.02.2020 23:27	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12B**
 Lab Sample Id: 657244-039

Matrix: Soil
 Date Collected: 03.28.2020 15:14

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.2020 02:38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.2020 02:38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.2020 02:38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.2020 02:38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.2020 02:38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.2020 02:38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.2020 02:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.2020 02:38	
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.01.2020 02:38	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12C**
Lab Sample Id: 657244-040

Matrix: Soil
Date Collected: 03.28.2020 15:17

Date Received: 03.30.2020 08:32
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3500	49.9	mg/kg	04.01.2020 13:25		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.2020 23:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.2020 23:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.2020 23:48	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.02.2020 23:48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.02.2020 23:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	04.02.2020 23:48	
o-Terphenyl	84-15-1	102	%	70-135	04.02.2020 23:48	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12C**
 Lab Sample Id: 657244-040

Matrix: Soil
 Date Collected: 03.28.2020 15:17

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 19:26

Basis: Wet Weight

Seq Number: 3121568

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.2020 02:58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.2020 02:58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.2020 02:58	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.01.2020 02:58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.2020 02:58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.01.2020 02:58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.01.2020 02:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.01.2020 02:58	
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.01.2020 02:58	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12D**
Lab Sample Id: 657244-041

Matrix: Soil
Date Collected: 03.28.2020 15:20

Date Received: 03.30.2020 08:32
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	632	49.8	mg/kg	04.01.2020 13:31		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.03.2020 00:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.03.2020 00:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.03.2020 00:08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.03.2020 00:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.03.2020 00:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	04.03.2020 00:08	
o-Terphenyl	84-15-1	108	%	70-135	04.03.2020 00:08	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12D**
Lab Sample Id: 657244-041

Matrix: Soil
Date Collected: 03.28.2020 15:20

Date Received: 03.30.2020 08:32
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 19:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.2020 08:31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.2020 08:31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.2020 08:31	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.02.2020 08:31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.2020 08:31	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.2020 08:31	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.2020 08:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.2020 08:31	
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.2020 08:31	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12E**
 Lab Sample Id: 657244-042

Matrix: Soil
 Date Collected: 03.28.2020 15:22

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	49.6	mg/kg	04.01.2020 13:36		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.2020 15:50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 00:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 00:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 00:29	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 00:29	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 00:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	04.03.2020 00:29	
o-Terphenyl	84-15-1	111	%	70-135	04.03.2020 00:29	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12E**
 Lab Sample Id: 657244-042

Matrix: Soil
 Date Collected: 03.28.2020 15:22

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 19:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.02.2020 08:52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.02.2020 08:52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.02.2020 08:52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.02.2020 08:52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.02.2020 08:52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.02.2020 08:52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.02.2020 08:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	04.02.2020 08:52		
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.02.2020 08:52		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12F**
 Lab Sample Id: 657244-043

Matrix: Soil
 Date Collected: 03.28.2020 15:25

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Prep Method: E300P

% Moisture:

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	557	9.98	mg/kg	04.01.2020 13:48		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Prep Method: SW8015P

% Moisture:

Date Prep: 04.02.2020 15:50

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.03.2020 00:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.03.2020 00:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.03.2020 00:49	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	04.03.2020 00:49	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.03.2020 00:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	04.03.2020 00:49	
o-Terphenyl	84-15-1	104	%	70-135	04.03.2020 00:49	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12F**
 Lab Sample Id: 657244-043

Matrix: Soil
 Date Collected: 03.28.2020 15:25

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 19:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.2020 09:12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.2020 09:12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.2020 09:12	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.02.2020 09:12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.2020 09:12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.2020 09:12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.2020 09:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	04.02.2020 09:12	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.02.2020 09:12	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12G** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-044 Date Collected: 03.28.2020 15:35 Sample Depth: 35 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 10:09 Basis: Wet Weight
 Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	49.8	mg/kg	04.01.2020 14:06		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 04.02.2020 15:50 Basis: Wet Weight
 Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 01:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.03.2020 01:09	
o-Terphenyl	84-15-1	107	%	70-135	04.03.2020 01:09	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12G**
 Lab Sample Id: 657244-044

Matrix: Soil
 Date Collected: 03.28.2020 15:35

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 19:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.2020 09:32	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.2020 09:32	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.2020 09:32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.02.2020 09:32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.2020 09:32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.2020 09:32	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.2020 09:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.2020 09:32		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.2020 09:32		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12H**
 Lab Sample Id: 657244-045

Matrix: Soil
 Date Collected: 03.28.2020 15:37

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	771	50.1	mg/kg	04.01.2020 14:12		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.2020 15:50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 01:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 01:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 01:50	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 01:50	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 01:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.03.2020 01:50	
o-Terphenyl	84-15-1	107	%	70-135	04.03.2020 01:50	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH12H**
 Lab Sample Id: 657244-045

Matrix: Soil
 Date Collected: 03.28.2020 15:37

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 19:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 08:11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 08:11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 08:11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.2020 08:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 08:11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 08:11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 08:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.2020 08:11	
1,4-Difluorobenzene	540-36-3	115	%	70-130	04.02.2020 08:11	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-046 Date Collected: 03.29.2020 11:08 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 10:09 Basis: Wet Weight
 Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	50.4	mg/kg	04.01.2020 14:31		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 04.02.2020 15:50 Basis: Wet Weight
 Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.03.2020 02:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.03.2020 02:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.03.2020 02:10	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.03.2020 02:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.03.2020 02:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	04.03.2020 02:10	
o-Terphenyl	84-15-1	109	%	70-135	04.03.2020 02:10	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19**
 Lab Sample Id: 657244-046

Matrix: Soil
 Date Collected: 03.29.2020 11:08

Date Received: 03.30.2020 08:32
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 13:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 13:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 13:03	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.02.2020 13:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 13:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 13:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 13:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.02.2020 13:03	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.2020 13:03	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19A**
 Lab Sample Id: 657244-047

Matrix: Soil
 Date Collected: 03.29.2020 11:10

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.0	9.80	mg/kg	04.01.2020 14:37		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 02:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 02:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 02:30	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 02:30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 02:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	04.03.2020 02:30	
o-Terphenyl	84-15-1	97	%	70-135	04.03.2020 02:30	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19A**
 Lab Sample Id: 657244-047

Matrix: Soil
 Date Collected: 03.29.2020 11:10

Date Received: 03.30.2020 08:32
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 13:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 13:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 13:23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.2020 13:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 13:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 13:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 13:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.2020 13:23	
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.02.2020 13:23	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19B**
 Lab Sample Id: 657244-048

Matrix: Soil
 Date Collected: 03.29.2020 11:16

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.4	10.1	mg/kg	04.01.2020 14:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.2020 15:50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.03.2020 02:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.03.2020 02:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.03.2020 02:51	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.03.2020 02:51	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.03.2020 02:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	04.03.2020 02:51	
o-Terphenyl	84-15-1	107	%	70-135	04.03.2020 02:51	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19B**
 Lab Sample Id: 657244-048

Matrix: Soil
 Date Collected: 03.29.2020 11:16

Date Received: 03.30.2020 08:32
 Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.2020 13:43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.2020 13:43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.2020 13:43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.2020 13:43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.2020 13:43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.2020 13:43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.2020 13:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.2020 13:43	
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.02.2020 13:43	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19C**
 Lab Sample Id: 657244-049

Matrix: Soil
 Date Collected: 03.29.2020 11:18

Date Received: 03.30.2020 08:32
 Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.7	10.1	mg/kg	04.01.2020 14:49		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 03:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 03:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 03:11	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 03:11	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 03:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.03.2020 03:11	
o-Terphenyl	84-15-1	104	%	70-135	04.03.2020 03:11	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19C**
Lab Sample Id: 657244-049

Matrix: Soil
Date Collected: 03.29.2020 11:18

Date Received: 03.30.2020 08:32
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 14:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 14:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 14:04	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.02.2020 14:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 14:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 14:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 14:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.02.2020 14:04		
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.02.2020 14:04		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19D**
Lab Sample Id: 657244-050

Matrix: Soil
Date Collected: 03.29.2020 11:22

Date Received: 03.30.2020 08:32
Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Date Prep: 03.31.2020 10:09

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	84.3	10.0	mg/kg	04.01.2020 14:55		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Date Prep: 04.02.2020 15:50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 03:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	04.03.2020 03:31	
o-Terphenyl	84-15-1	112	%	70-135	04.03.2020 03:31	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19D**
Lab Sample Id: 657244-050

Matrix: Soil
Date Collected: 03.29.2020 11:22

Date Received: 03.30.2020 08:32
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 14:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 14:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 14:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.02.2020 14:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 14:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 14:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 14:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	04.02.2020 14:24	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.02.2020 14:24	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19E**
 Lab Sample Id: 657244-051

Matrix: Soil
 Date Collected: 03.29.2020 11:24

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121700

Prep Method: E300P

% Moisture:

Date Prep: 03.31.2020 10:09

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	9.92	mg/kg	04.01.2020 15:01		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121830

Prep Method: SW8015P

% Moisture:

Date Prep: 04.02.2020 15:50

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.03.2020 03:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.03.2020 03:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.03.2020 03:51	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.03.2020 03:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.03.2020 03:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	04.03.2020 03:51	
o-Terphenyl	84-15-1	104	%	70-135	04.03.2020 03:51	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19E**
 Lab Sample Id: 657244-051

Matrix: Soil
 Date Collected: 03.29.2020 11:24

Date Received: 03.30.2020 08:32
 Sample Depth: 25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.02.2020 15:46	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.02.2020 15:46	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.02.2020 15:46	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.02.2020 15:46	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.02.2020 15:46	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.02.2020 15:46	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.02.2020 15:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.2020 15:46		
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.02.2020 15:46		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19F** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-052 Date Collected: 03.29.2020 11:32 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 10:09 Basis: Wet Weight
 Seq Number: 3121700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	255	50.1	mg/kg	04.01.2020 15:07		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 04.02.2020 15:50 Basis: Wet Weight
 Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.03.2020 04:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.03.2020 04:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.03.2020 04:12	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.03.2020 04:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.03.2020 04:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.03.2020 04:12	
o-Terphenyl	84-15-1	107	%	70-135	04.03.2020 04:12	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19F**
 Lab Sample Id: 657244-052

Matrix: Soil
 Date Collected: 03.29.2020 11:32

Date Received: 03.30.2020 08:32
 Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.2020 16:06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.2020 16:06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.2020 16:06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.2020 16:06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.2020 16:06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.2020 16:06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.2020 16:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.2020 16:06		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.2020 16:06		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19G** Matrix: Soil Date Received: 03.30.2020 08:32
 Lab Sample Id: 657244-053 Date Collected: 03.29.2020 11:34 Sample Depth: 35 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 03.31.2020 10:08 Basis: Wet Weight
 Seq Number: 3121575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	130	49.7	mg/kg	03.31.2020 16:12		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 04.02.2020 15:50 Basis: Wet Weight
 Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 04:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 04:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 04:32	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 04:32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 04:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.03.2020 04:32	
o-Terphenyl	84-15-1	108	%	70-135	04.03.2020 04:32	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19G**
 Lab Sample Id: 657244-053

Matrix: Soil
 Date Collected: 03.29.2020 11:34

Date Received: 03.30.2020 08:32
 Sample Depth: 35 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Seq Number: 3121835

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 16:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 16:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 16:27	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.02.2020 16:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 16:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 16:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 16:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.2020 16:27		
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.02.2020 16:27		



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19H**
 Lab Sample Id: 657244-054

Matrix: Soil
 Date Collected: 03.29.2020 11:41

Date Received: 03.30.2020 08:32
 Sample Depth: 37 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.2020 10:08

Basis: Wet Weight

Seq Number: 3121575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	399	50.1	mg/kg	03.31.2020 16:30		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.2020 15:50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.03.2020 04:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.03.2020 04:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.03.2020 04:52	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.03.2020 04:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.03.2020 04:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	04.03.2020 04:52	
o-Terphenyl	84-15-1	112	%	70-135	04.03.2020 04:52	



Certificate of Analytical Results 657244

LT Environmental, Inc., Arvada, CO

ADU 816

Sample Id: **BH19H**
Lab Sample Id: 657244-054

Matrix: Soil
Date Collected: 03.29.2020 11:41

Date Received: 03.30.2020 08:32
Sample Depth: 37 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3121835

Prep Method: SW5030B

% Moisture:

Date Prep: 04.01.2020 16:24

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.02.2020 16:47	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.02.2020 16:47	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.02.2020 16:47	U	1
m,p-Xylenes	179601-23-1	0.0188	0.00396	mg/kg	04.02.2020 16:47		1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.02.2020 16:47	U	1
Total Xylenes	1330-20-7	0.0188	0.00198	mg/kg	04.02.2020 16:47		1
Total BTEX		0.0188	0.00198	mg/kg	04.02.2020 16:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.2020 16:47	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.02.2020 16:47	



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.
ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121421

MB Sample Id: 7700118-1-BLK

Matrix: Solid

LCS Sample Id: 7700118-1-BKS

Prep Method: E300P

Date Prep: 03.30.2020

LCSD Sample Id: 7700118-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	238	95	241	96	90-110	1	20	mg/kg	03.30.2020 23:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3121572

MB Sample Id: 7700116-1-BLK

Matrix: Solid

LCS Sample Id: 7700116-1-BKS

Prep Method: E300P

Date Prep: 03.31.2020

LCSD Sample Id: 7700116-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	261	104	266	106	90-110	2	20	mg/kg	03.31.2020 08:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3121573

MB Sample Id: 7700119-1-BLK

Matrix: Solid

LCS Sample Id: 7700119-1-BKS

Prep Method: E300P

Date Prep: 03.31.2020

LCSD Sample Id: 7700119-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	264	106	265	106	90-110	0	20	mg/kg	03.31.2020 11:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3121575

MB Sample Id: 7700188-1-BLK

Matrix: Solid

LCS Sample Id: 7700188-1-BKS

Prep Method: E300P

Date Prep: 03.31.2020

LCSD Sample Id: 7700188-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	266	106	90-110	0	20	mg/kg	03.31.2020 16:00	

Analytical Method: Chloride by EPA 300

Seq Number: 3121700

MB Sample Id: 7700120-1-BLK

Matrix: Solid

LCS Sample Id: 7700120-1-BKS

Prep Method: E300P

Date Prep: 03.31.2020

LCSD Sample Id: 7700120-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	269	108	267	107	90-110	1	20	mg/kg	04.01.2020 12:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3121421

Parent Sample Id: 657334-005

Matrix: Soil

MS Sample Id: 657334-005 S

Prep Method: E300P

Date Prep: 03.30.2020

MSD Sample Id: 657334-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.3	199	226	102	228	103	90-110	1	20	mg/kg	03.31.2020 00:13	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121572

Parent Sample Id: 657234-024

Matrix: Soil

MS Sample Id: 657234-024 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657234-024 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1850	199	2050	101	2060	105	90-110	0	20	mg/kg	03.31.2020 08:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3121572

Parent Sample Id: 657244-001

Matrix: Soil

MS Sample Id: 657244-001 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657244-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	217	109	218	109	90-110	0	20	mg/kg	03.31.2020 10:15	

Analytical Method: Chloride by EPA 300

Seq Number: 3121573

Parent Sample Id: 657244-013

Matrix: Soil

MS Sample Id: 657244-013 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657244-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	698	199	903	103	899	101	90-110	0	20	mg/kg	03.31.2020 12:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3121573

Parent Sample Id: 657244-023

Matrix: Soil

MS Sample Id: 657244-023 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657244-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3240	200	3450	105	3430	95	90-110	1	20	mg/kg	03.31.2020 14:14	

Analytical Method: Chloride by EPA 300

Seq Number: 3121575

Parent Sample Id: 657244-053

Matrix: Soil

MS Sample Id: 657244-053 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657244-053 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	130	199	329	100	331	101	90-110	1	20	mg/kg	03.31.2020 16:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3121700

Parent Sample Id: 657244-033

Matrix: Soil

MS Sample Id: 657244-033 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657244-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	267	200	481	107	478	106	90-110	1	20	mg/kg	04.01.2020 12:21	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121700

Parent Sample Id: 657244-043

Matrix: Soil

MS Sample Id: 657244-043 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657244-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	557	200	766	105	765	104	90-110	0	20	mg/kg	04.01.2020 13:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3121575

Parent Sample Id: 657366-009

Matrix: Soil

MS Sample Id: 657366-009 S

Prep Method: E300P

Date Prep: 03.31.2020

MSD Sample Id: 657366-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.92	198	209	106	217	110	90-110	4	20	mg/kg	03.31.2020 17:42	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121587

MB Sample Id: 7700182-1-BLK

Matrix: Solid

LCS Sample Id: 7700182-1-BKS

Prep Method: SW8015P

Date Prep: 03.31.2020

LCSD Sample Id: 7700182-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	954	95	935	94	70-135	2	35	mg/kg	03.31.2020 14:13	
Diesel Range Organics (DRO)	<50.0	1000	918	92	893	89	70-135	3	35	mg/kg	03.31.2020 14:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		89		86		70-135	%	03.31.2020 14:13
o-Terphenyl	97		86		83		70-135	%	03.31.2020 14:13

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121656

MB Sample Id: 7700185-1-BLK

Matrix: Solid

LCS Sample Id: 7700185-1-BKS

Prep Method: SW8015P

Date Prep: 03.31.2020

LCSD Sample Id: 7700185-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1180	118	1140	114	70-135	3	35	mg/kg	04.01.2020 12:41	
Diesel Range Organics (DRO)	<50.0	1000	1230	123	1200	120	70-135	2	35	mg/kg	04.01.2020 12:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		126		121		70-135	%	04.01.2020 12:41
o-Terphenyl	101		127		123		70-135	%	04.01.2020 12:41

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121695

MB Sample Id: 7700269-1-BLK

Matrix: Solid

LCS Sample Id: 7700269-1-BKS

Prep Method: SW8015P

Date Prep: 03.31.2020

LCSD Sample Id: 7700269-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	986	99	944	94	70-135	4	35	mg/kg	04.01.2020 23:18	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	988	99	70-135	4	35	mg/kg	04.01.2020 23:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		122		100		70-135	%	04.01.2020 23:18
o-Terphenyl	86		96		92		70-135	%	04.01.2020 23:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121687

MB Sample Id: 770257-1-BLK

Matrix: Solid

LCS Sample Id: 770257-1-BKS

Prep Method: SW8015P

Date Prep: 04.01.2020

LCSD Sample Id: 770257-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1150	115	1130	113	70-135	2	35	mg/kg	04.01.2020 23:18	
Diesel Range Organics (DRO)	<50.0	1000	1220	122	1260	126	70-135	3	35	mg/kg	04.01.2020 23:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		134		129		70-135	%	04.01.2020 23:18
o-Terphenyl	100		131		126		70-135	%	04.01.2020 23:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121825

MB Sample Id: 7700284-1-BLK

Matrix: Solid

LCS Sample Id: 7700284-1-BKS

Prep Method: SW8015P

Date Prep: 04.01.2020

LCSD Sample Id: 7700284-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	1000	100	70-135	2	35	mg/kg	04.02.2020 20:45	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1200	120	70-135	11	35	mg/kg	04.02.2020 20:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		135		134		70-135	%	04.02.2020 20:45
o-Terphenyl	130		124		124		70-135	%	04.02.2020 20:45

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121830

MB Sample Id: 7700393-1-BLK

Matrix: Solid

LCS Sample Id: 7700393-1-BKS

Prep Method: SW8015P

Date Prep: 04.02.2020

LCSD Sample Id: 7700393-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	999	100	964	96	70-135	4	35	mg/kg	04.02.2020 20:45	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1040	104	70-135	5	35	mg/kg	04.02.2020 20:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		114		113		70-135	%	04.02.2020 20:45
o-Terphenyl	108		114		106		70-135	%	04.02.2020 20:45

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121587

Matrix: Solid

MB Sample Id: 7700182-1-BLK

Prep Method: SW8015P

Date Prep: 03.31.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.31.2020 13:53	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121656

Matrix: Solid

MB Sample Id: 7700185-1-BLK

Prep Method: SW8015P

Date Prep: 03.31.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.01.2020 12:20	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121695

Matrix: Solid

MB Sample Id: 7700269-1-BLK

Prep Method: SW8015P

Date Prep: 03.31.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.01.2020 22:57	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121687

Matrix: Solid

MB Sample Id: 770257-1-BLK

Prep Method: SW8015P

Date Prep: 04.01.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.01.2020 22:57	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121825

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.01.2020

MB Sample Id: 7700284-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

04.02.2020 20:24

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121830

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.02.2020

MB Sample Id: 7700393-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

04.02.2020 20:24

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121587

Matrix: Soil

Prep Method: SW8015P

Date Prep: 03.31.2020

Parent Sample Id: 657367-006

MS Sample Id: 657367-006 S

MSD Sample Id: 657367-006 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<50.1

Spike
Amount

1000

MS
Result

959

MS
%Rec

96

MSD
Result

1010

MSD
%Rec

101

Limits

70-135

%RPD

5

RPD
Limit

35

Units

mg/kg

Analysis
Date

03.31.2020 15:15

Flag

Diesel Range Organics (DRO)

<50.1

1000

922

92

969

97

70-135

5

35

mg/kg

03.31.2020 15:15

Surrogate

1-Chlorooctane

MS
%Rec

90

MS
FlagMSD
%Rec

94

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

03.31.2020 15:15

o-Terphenyl

86

90

70-135

%

03.31.2020 15:15

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121656

Matrix: Soil

Prep Method: SW8015P

Date Prep: 03.31.2020

Parent Sample Id: 657427-001

MS Sample Id: 657427-001 S

MSD Sample Id: 657427-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<49.9

Spike
Amount

998

MS
Result

990

MS
%Rec

99

MSD
Result

955

MSD
%Rec

96

Limits

70-135

%RPD

4

RPD
Limit

35

Units

mg/kg

Analysis
Date

04.01.2020 13:42

Flag

Diesel Range Organics (DRO)

<49.9

998

1150

115

1100

110

70-135

4

35

mg/kg

04.01.2020 13:42

Surrogate

1-Chlorooctane

MS
%Rec

123

MS
FlagMSD
%Rec

122

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

04.01.2020 13:42

o-Terphenyl

121

118

70-135

%

04.01.2020 13:42

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

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

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

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



LT Environmental, Inc.
ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121695

Parent Sample Id: 657234-012

Matrix: Soil

MS Sample Id: 657234-012 S

Prep Method: SW8015P

Date Prep: 03.31.2020

MSD Sample Id: 657234-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1060	106	1100	111	70-135	4	35	mg/kg	04.02.2020 00:19	
Diesel Range Organics (DRO)	57.9	1000	1030	97	1060	101	70-135	3	35	mg/kg	04.02.2020 00:19	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		112		70-135	%	04.02.2020 00:19
o-Terphenyl	107		109		70-135	%	04.02.2020 00:19

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121687

Parent Sample Id: 657454-009

Matrix: Soil

MS Sample Id: 657454-009 S

Prep Method: SW8015P

Date Prep: 04.01.2020

MSD Sample Id: 657454-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1020	102	902	91	70-135	12	35	mg/kg	04.02.2020 00:19	
Diesel Range Organics (DRO)	<50.1	1000	1170	117	1040	104	70-135	12	35	mg/kg	04.02.2020 00:19	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		116		70-135	%	04.02.2020 00:19
o-Terphenyl	126		116		70-135	%	04.02.2020 00:19

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121825

Parent Sample Id: 657518-001

Matrix: Soil

MS Sample Id: 657518-001 S

Prep Method: SW8015P

Date Prep: 04.01.2020

MSD Sample Id: 657518-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	995	928	93	913	91	70-135	2	35	mg/kg	04.02.2020 21:46	
Diesel Range Organics (DRO)	<49.8	995	1080	109	1090	109	70-135	1	35	mg/kg	04.02.2020 21:46	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		120		70-135	%	04.02.2020 21:46
o-Terphenyl	120		122		70-135	%	04.02.2020 21:46

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121830

Parent Sample Id: 657244-038

Matrix: Soil

MS Sample Id: 657244-038 S

Prep Method: SW8015P

Date Prep: 04.02.2020

MSD Sample Id: 657244-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	966	97	881	88	70-135	9	35	mg/kg	04.02.2020 21:46	
Diesel Range Organics (DRO)	<49.9	998	1050	105	940	94	70-135	11	35	mg/kg	04.02.2020 21:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		124		70-135	%	04.02.2020 21:46
o-Terphenyl	117		105		70-135	%	04.02.2020 21:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121560

MB Sample Id: 7700097-1-BLK

Matrix: Solid

LCS Sample Id: 7700097-1-BKS

Prep Method: SW5030B

Date Prep: 03.30.2020

LCSD Sample Id: 7700097-1-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	0.117	117	0.125	125	70-130	7	35	mg/kg	03.31.2020 09:08	
Toluene	<0.00200	0.100	0.106	106	0.113	113	70-130	6	35	mg/kg	03.31.2020 09:08	
Ethylbenzene	<0.00200	0.100	0.0978	98	0.104	104	71-129	6	35	mg/kg	03.31.2020 09:08	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.201	101	70-135	6	35	mg/kg	03.31.2020 09:08	
o-Xylene	<0.00200	0.100	0.0978	98	0.104	104	71-133	6	35	mg/kg	03.31.2020 09:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	116		110		110		70-130	%	03.31.2020 09:08
4-Bromofluorobenzene	93		86		85		70-130	%	03.31.2020 09:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121562

MB Sample Id: 7700098-1-BLK

Matrix: Solid

LCS Sample Id: 7700098-1-BKS

Prep Method: SW5030B

Date Prep: 03.30.2020

LCSD Sample Id: 7700098-1-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	0.113	113	0.109	109	70-130	4	35	mg/kg	03.31.2020 07:50	
Toluene	<0.00200	0.100	0.107	107	0.102	102	70-130	5	35	mg/kg	03.31.2020 07:50	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0943	94	71-129	7	35	mg/kg	03.31.2020 07:50	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.193	97	70-135	7	35	mg/kg	03.31.2020 07:50	
o-Xylene	<0.00200	0.100	0.105	105	0.0991	99	71-133	6	35	mg/kg	03.31.2020 07:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		107		108		70-130	%	03.31.2020 07:50
4-Bromofluorobenzene	96		90		93		70-130	%	03.31.2020 07:50

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121568

Matrix: Solid

Prep Method: SW5030B

Date Prep: 03.31.2020

MB Sample Id: 7700194-1-BLK

LCS Sample Id: 7700194-1-BKS

LCSD Sample Id: 7700194-1-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	0.108	108	0.112	112	70-130	4	35	mg/kg	03.31.2020 18:08	
Toluene	<0.00200	0.100	0.103	103	0.107	107	70-130	4	35	mg/kg	03.31.2020 18:08	
Ethylbenzene	<0.00200	0.100	0.0961	96	0.101	101	71-129	5	35	mg/kg	03.31.2020 18:08	
m,p-Xylenes	<0.00400	0.200	0.198	99	0.209	105	70-135	5	35	mg/kg	03.31.2020 18:08	
o-Xylene	<0.00200	0.100	0.100	100	0.106	106	71-133	6	35	mg/kg	03.31.2020 18:08	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	111		110		108		70-130			%	03.31.2020 18:08	
4-Bromofluorobenzene	97		96		93		70-130			%	03.31.2020 18:08	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121835

Matrix: Solid

Prep Method: SW5030B

Date Prep: 04.01.2020

MB Sample Id: 7700193-1-BLK

LCS Sample Id: 7700193-1-BKS

LCSD Sample Id: 7700193-1-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	0.122	122	0.123	123	70-130	1	35	mg/kg	04.02.2020 06:29	
Toluene	<0.00200	0.100	0.129	129	0.122	122	70-130	6	35	mg/kg	04.02.2020 06:29	
Ethylbenzene	<0.00200	0.100	0.120	120	0.113	113	71-129	6	35	mg/kg	04.02.2020 06:29	
m,p-Xylenes	<0.00400	0.200	0.233	117	0.219	110	70-135	6	35	mg/kg	04.02.2020 06:29	
o-Xylene	<0.00200	0.100	0.119	119	0.112	112	71-133	6	35	mg/kg	04.02.2020 06:29	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	114		107		108		70-130			%	04.02.2020 06:29	
4-Bromofluorobenzene	92		83		86		70-130			%	04.02.2020 06:29	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121560

Matrix: Soil

Prep Method: SW5030B

Date Prep: 03.30.2020

Parent Sample Id: 657244-007

MS Sample Id: 657244-007 S

MSD Sample Id: 657244-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0937	94	0.111	111	70-130	17	35	mg/kg	03.31.2020 09:49	
Toluene	<0.00201	0.100	0.0818	82	0.0981	98	70-130	18	35	mg/kg	03.31.2020 09:49	
Ethylbenzene	<0.00201	0.100	0.0746	75	0.0904	90	71-129	19	35	mg/kg	03.31.2020 09:49	
m,p-Xylenes	<0.00402	0.201	0.143	71	0.171	86	70-135	18	35	mg/kg	03.31.2020 09:49	
o-Xylene	<0.00201	0.100	0.0727	73	0.0879	88	71-133	19	35	mg/kg	03.31.2020 09:49	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			109		110		70-130			%	03.31.2020 09:49	
4-Bromofluorobenzene			84		89		70-130			%	03.31.2020 09:49	

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

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

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

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



LT Environmental, Inc.

ADU 816

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121562

Parent Sample Id: 657244-009

Matrix: Soil

MS Sample Id: 657244-009 S

Prep Method: SW5030B

Date Prep: 03.30.2020

MSD Sample Id: 657244-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.104	103	0.103	102	70-130	1	35	mg/kg	03.31.2020 08:31	
Toluene	<0.00202	0.101	0.0991	98	0.0978	97	70-130	1	35	mg/kg	03.31.2020 08:31	
Ethylbenzene	<0.00202	0.101	0.0926	92	0.0925	92	71-129	0	35	mg/kg	03.31.2020 08:31	
m,p-Xylenes	<0.00404	0.202	0.191	95	0.189	94	70-135	1	35	mg/kg	03.31.2020 08:31	
o-Xylene	<0.00202	0.101	0.0962	95	0.0966	96	71-133	0	35	mg/kg	03.31.2020 08:31	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	03.31.2020 08:31
4-Bromofluorobenzene	94		95		70-130	%	03.31.2020 08:31

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121568

Parent Sample Id: 657379-001

Matrix: Soil

MS Sample Id: 657379-001 S

Prep Method: SW5030B

Date Prep: 03.31.2020

MSD Sample Id: 657379-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0993	100	0.0785	79	70-130	23	35	mg/kg	03.31.2020 18:49	
Toluene	<0.00198	0.0990	0.0918	93	0.0882	88	70-130	4	35	mg/kg	03.31.2020 18:49	
Ethylbenzene	<0.00198	0.0990	0.0858	87	0.0882	88	71-129	3	35	mg/kg	03.31.2020 18:49	
m,p-Xylenes	<0.00396	0.198	0.175	88	0.158	79	70-135	10	35	mg/kg	03.31.2020 18:49	
o-Xylene	<0.00198	0.0990	0.0898	91	0.0812	81	71-133	10	35	mg/kg	03.31.2020 18:49	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		70-130	%	03.31.2020 18:49
4-Bromofluorobenzene	96		94		70-130	%	03.31.2020 18:49

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121835

Parent Sample Id: 657244-041

Matrix: Soil

MS Sample Id: 657244-041 S

Prep Method: SW5030B

Date Prep: 04.01.2020

MSD Sample Id: 657244-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.121	121	0.116	116	70-130	4	35	mg/kg	04.02.2020 07:10	
Toluene	<0.00199	0.0996	0.109	109	0.104	104	70-130	5	35	mg/kg	04.02.2020 07:10	
Ethylbenzene	<0.00199	0.0996	0.101	101	0.0954	96	71-129	6	35	mg/kg	04.02.2020 07:10	
m,p-Xylenes	<0.00398	0.199	0.195	98	0.183	92	70-135	6	35	mg/kg	04.02.2020 07:10	
o-Xylene	<0.00199	0.0996	0.0998	100	0.0938	94	71-133	6	35	mg/kg	04.02.2020 07:10	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	04.02.2020 07:10
4-Bromofluorobenzene	86		87		70-130	%	04.02.2020 07:10

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

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

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

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



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 057244

www.xenco.com Page 1 of 4

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

Work Order Comments Program: ☐ UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project: _____ Reporting Level: ☐ Level ☐ PST/USE ☐ TRH ☐ Level ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____	

Project Name:	ADU 816	Turn Around	
Project Number:	012919221	Routine:	☒
PO #:	2RP-2674	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
SAMPLE RECEIPT	Temp Blank: ☒ Yes ☒ No	Wetted: ☒ Yes ☒ No	
Temperature (°C):	20.0	Thermometer ID	TN007
Received intact:	☒ Yes ☒ No	Correction Factor:	-0.2
Cooler Custody Seals:	☒ Yes ☒ No	Total Containers:	54
Sample Custody Seals:	☒ Yes ☒ No		
Sample Identification	Matrix	Date Sampled	Time Sampled
BH13	S	3/27/20	1238
BH13A			1240
BH13B			1241
BH13C			1308
BH13D			1310
BH13E			1312
BH13F			1314
BH13G			1327
BH13H			1330
BH09			1442
			0.5
Number of Containers		TPH (EPA 8015)	CC 33020
		BTEX (EPA 0=8021)	
		Chloride (EPA 300.0)	
ANALYSIS REQUEST			
Work Order Notes			
TAT starts the day received by the lab, if received by 4:30pm			
Sample Comments			
MW07			
MW07A			
MW07B			
MW07C			
MW07D			
MW07E			
MW07F			
MW07G			
MW07H			

Total 200.7 / 6010 200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
fatima	Winit	3/30/20 8:00am	Winit		3/30/20 08:32



Work Order No: 657244

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Final 1.001



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (905) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 1657241

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

Work Order Comments Program: ☐ UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project: _____ Reporting Level: ☐ Level ☐ PST/UST ☐ TRF ☐ Level ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____	

Project Name:	ADU 816	Turn Around	
Project Number:	012919221	Routine:	☒
PO #:	2RP-2674	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):	Temp Blank:	Yes	No
Received intact:	Yes	No	
Cooler Custody Seals:	Yes	No	
Sample Custody Seals:	Yes	No	
Thermometer ID	Correction Factor:	Yes	No
Total Containers:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			ANALYSIS REQUEST												Work Order Notes	
BH14B	S	3/28/20	0842	10	1	X	X	X													
BH14C			0850	15		X	X	X													
BH14D			0853	20		X	X	X													
BH14E			0903	25		X	X	X													
BH14F			0914	30		X	X	X													
BH14G			0928	35		X	X	X													
BH14H			0930	37		X	X	X													
MW05			1018	0.5		X	X	X													
MW05A			1020	5		X	X	X													
MW05B			1030	10		X	X	X													

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:		8RCRA Sb As Ba Be Cd Cr Co Cu Fe Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg	
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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		
fatima	fatima	3/30/20 08:32	fatima	fatima	3/30/20 08:32		



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-5443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701

Atlanta, GA (770) 449-8800

Page 4 of 6

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

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRd ☐ Superfund ☐	
State of Project:	
Reporting Level ☐ Level ☐ PST/US ☐ TRR ☐ Level ☒	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	ADU 816	Turn Around	
Project Number:	012919221	Routine:	☒
PO #:	2RP-2674	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):		Temp Blank:	Yes No Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	
Number of Containers			
(EPA 8015)			
(EPA 0=8021)			
(EPA 300.0)			
TAT starts the day received by the lab, if received by 4:30pm			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (%)	BTEX	Chloride
MW05C	S	3/26/20	1039	15	1	X	X	X
MW05D			1050	20				
MW05E			1101	25				
MW05F			1103	30				
MW05G			1117	35				
MW05H			1118	37				
BH12			1511	0.5				
BH12A			1512	5				
BH12B			1514	10				
BH12C	Y	Y	1517	15	Y	Y	Y	Y

Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010	200.8 / 6020:
8RCRA	13PPM	Texas 11
TCLP / SPL 6010:	8RCRA	Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
		1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	3/30/20 1:45 PM	2 <i>[Signature]</i>	<i>[Signature]</i>	3/30/20 08:32
3			4		
5			6		

Revised Date 10/14/19 Rev. 2019.



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No:

1657244

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Page 5 of 6

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

Program: ☐ UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund State of Project:	
Reporting Level: ☐ Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:	ADU 816	Turn Around	
Project Number:	012919221	Route:	☒
PO #:	2RP-2674	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
SAMPLE RECEIPT	Temp Blank: Yes ☐ No ☒	Wet Ice: Yes ☐ No ☒	
Temperature (°C):	Yes ☒ No ☐	Thermometer ID	
Received Inact:	Yes ☐ No ☒	Correction Factor:	
Cooler Custody Seals:	Yes ☐ No ☒	Total Containers:	
Sample Custody Seals:	Yes ☐ No ☒		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (%)	BTEX	Chloride											Sample Comments
BH12D	S	3/28/20	1520	20	1	X	X	X											
BH12E			1522	25															
BH12F			1525	30															
BH12G			1535	35															
BH12H		✓	1537	37															
BH19		3/29/20	1108	0.5															
BH19A			1110	5															
BH19B			1116	10															
BH19C			1118	15															
BH19D	✓	✓	1122	20	✓	✓	✓	✓											

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 fat	2	3/30/20 15:00	3	4	3/30/20 08:32
5			6		



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No:

1657244

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

Program: ☐ PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	Deliverables: EDD ☐ ADAPT ☐ Other: ☐

Project Name:	ADU 816	Turn Around	☒
Project Number:	012919221	Rush:	☐
PO #:	ZRP-2674	Due Date:	
Sampler's Name:	Fatima Smith		
SAMPLE RECEIPT	Temp Blank: Yes ☐ No ☐	Wet Ice: Yes ☐ No ☐	
Temperature (°C):	Thermometer ID		
Received Intact:	Yes ☒ No ☐	Correction Factor:	
Cooler Custody Seals:	Yes ☐ No ☐ N/A	Total Containers:	
Sample Custody Seals:	Yes ☐ No ☐ N/A		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Num	TPH	BTEX	Chlor												Sample Comments
BH19E	S	3/24/24	1124	25	1	X	X	X												
BH19F			1132	30																
BH19G			1134	35																
BH19H			1141	37																
~~XX~~																				

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/30/20 5:00pm	<i>[Signature]</i>	<i>[Signature]</i>	3/30/20 08:32

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 03.30.2020 08.32.00 AM

Work Order #: 657244

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 03.30.2020

Checklist reviewed by:



Jessica Kramer

Date: 03.31.2020



Analytical Report 657801

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU 816

012919221

04.06.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



04.06.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **657801**

ADU 816

Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 657801. 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. 657801 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW01	W	04.02.2020 13:50		657801-001
MW02	W	04.02.2020 13:55		657801-002
MW03	W	04.02.2020 14:00		657801-003
MW04	W	04.02.2020 14:05		657801-004
MW05	W	04.02.2020 14:10		657801-005
MW06	W	04.02.2020 14:15		657801-006
MW07	W	04.02.2020 14:20		657801-007



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU 816*

Project ID: 012919221
Work Order Number(s): 657801

Report Date: 04.06.2020
Date Received: 04.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 657801

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 04.02.2020 15:30

Report Date: 04.06.2020 13:45

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657801-001	657801-002	657801-003	657801-004	657801-005	657801-006
	Field Id:	MW01	MW02	MW03	MW04	MW05	MW06
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	04.02.2020 13:50	04.02.2020 13:55	04.02.2020 14:00	04.02.2020 14:05	04.02.2020 14:10	04.02.2020 14:15
Chloride by EPA 300	Extracted:	04.05.2020 12:56	04.05.2020 12:56	04.05.2020 12:56	04.05.2020 12:56	04.05.2020 12:56	04.05.2020 12:56
	Analyzed:	04.05.2020 19:51	04.05.2020 19:56	04.05.2020 20:02	04.05.2020 20:07	04.05.2020 20:23	04.05.2020 20:28
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		3210 25.0	6340 25.0	1010 25.0	1880 25.0	2710 25.0	1340 25.0
TDS by SM2540C SUB: T104704215-19-30	Extracted:						
	Analyzed:	04.06.2020 08:15	04.06.2020 08:15	04.06.2020 08:15	04.06.2020 08:15	04.06.2020 08:15	04.06.2020 08:15
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		9190 5.00	15200 5.00	5700 5.00	7290 5.00	8670 5.00	6290 5.00

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

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657801

LT Environmental, Inc., Arvada, CO

Project Name: ADU 816

Project Id: 012919221

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 04.02.2020 15:30

Report Date: 04.06.2020 13:45

Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 657801-007 Field Id: MW07 Depth: Matrix: WATER Sampled: 04.02.2020 14:20					
Chloride by EPA 300	Extracted: 04.05.2020 12:56 Analyzed: 04.05.2020 20:33 Units/RL: mg/L RL					
Chloride	2150 25.0					
TDS by SM2540C SUB: T104704215-19-30	Extracted: Analyzed: 04.06.2020 08:15 Units/RL: mg/L RL					
Total Dissolved Solids	20300 5.00					

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Jessica Kramer
Project Manager

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW01**
Lab Sample Id: 657801-001Matrix: Water
Date Collected: 04.02.2020 13:50

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3210	25.0	mg/L	04.05.2020 19:51		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	9190	5.00	mg/L	04.06.2020 08:15		1

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW02**
Lab Sample Id: 657801-002Matrix: Water
Date Collected: 04.02.2020 13:55

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6340	25.0	mg/L	04.05.2020 19:56		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	15200	5.00	mg/L	04.06.2020 08:15		1

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW03**
Lab Sample Id: 657801-003

Matrix: Water
Date Collected: 04.02.2020 14:00

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1010	25.0	mg/L	04.05.2020 20:02		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5700	5.00	mg/L	04.06.2020 08:15		1

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW04**
Lab Sample Id: 657801-004

Matrix: Water
Date Collected: 04.02.2020 14:05

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1880	25.0	mg/L	04.05.2020 20:07		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	7290	5.00	mg/L	04.06.2020 08:15		1

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW05**
Lab Sample Id: 657801-005

Matrix: Water
Date Collected: 04.02.2020 14:10

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2710	25.0	mg/L	04.05.2020 20:23		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8670	5.00	mg/L	04.06.2020 08:15		1

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW06**
Lab Sample Id: 657801-006

Matrix: Water
Date Collected: 04.02.2020 14:15

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1340	25.0	mg/L	04.05.2020 20:28		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6290	5.00	mg/L	04.06.2020 08:15		1

**Certificate of Analytical Results 657801****LT Environmental, Inc., Arvada, CO**

ADU 816

Sample Id: **MW07**
Lab Sample Id: 657801-007

Matrix: Water
Date Collected: 04.02.2020 14:20

Date Received: 04.02.2020 15:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.05.2020 12:56

Seq Number: 3121975

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2150	25.0	mg/L	04.05.2020 20:33		50

Analytical Method: TDS by SM2540C

Tech: JCL

% Moisture:

Analyst: JCL

Seq Number: 3122028

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	20300	5.00	mg/L	04.06.2020 08:15		1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



LT Environmental, Inc.

ADU 816

Analytical Method: Chloride by EPA 300

Seq Number: 3121975

MB Sample Id: 7700525-1-BLK

Matrix: Water

LCS Sample Id: 7700525-1-BKS

Prep Method: E300P

Date Prep: 04.05.2020

LCSD Sample Id: 7700525-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.500	25.0	25.9	104	26.1	104	90-110	1	20	mg/L	04.05.2020 19:25	

Analytical Method: Chloride by EPA 300

Seq Number: 3121975

Parent Sample Id: 657808-004

Matrix: Water

MS Sample Id: 657808-004 S

Prep Method: E300P

Date Prep: 04.05.2020

MSD Sample Id: 657808-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2050	50.0	2110	120	2100	100	90-110	0	20	mg/L	04.05.2020 19:40	X

Analytical Method: TDS by SM2540C

Seq Number: 3122028

MB Sample Id: 3122028-1-BLK

Matrix: Water

LCS Sample Id: 3122028-1-BKS

LCSD Sample Id: 3122028-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	973	97	972	97	80-120	0	10	mg/L	04.06.2020 08:15	

Analytical Method: TDS by SM2540C

Seq Number: 3122028

Parent Sample Id: 657801-001

Matrix: Water

MD Sample Id: 657801-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	9190	9190	0	10	mg/L	04.06.2020 08:15	

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

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

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

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



Chain of Custody

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

Work Order No: 057801

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	bbeill@xtenv.com

Program: ☒ UST/ST ☐ BPR ☐ Brownfields ☐ RC ☐ Superfund	
State of Project:	
Reporting Level: ☐ I ☐ II ☐ III ☐ ST/UST ☐ RRP ☐ Level IV ☐	Deliverables: ☐ EDD ☐ ADAPT ☐ Other:

Project Name:	FDV 816	Turn Around	☐ 48hrs
Project Number:	012919221	Rush:	☒ 24hrs
P.O. Number:	28P-2674	Due Date:	
Sampler's Name:	Benjamin Beill		
SAMPLE RECEIPT			
Temperature (°C):	3.0	Temp Blank:	☒ Yes ☐ No
Received intact:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Cooler Custody Seals:	Yes ☒ No ☐ N/A	Thermometer ID:	TMM007
Sample Custody Seals:	Yes ☒ No ☐ N/A	Correction Factor:	-0.2
		Total Containers:	14
Sample Identification			
Matrix	Date Sampled	Time Sampled	Depth
MWD 1	W	4/2/20	1350
MWD 2			1355
MWD 3			1400
MWD 4			1405
MWD 5			1410
MWD 6			1415
MWD 7			1420
ANALYSIS REQUEST			
Number of Containers			
Chloride (EPA 300.0)			
TAT starts the day received by the lab, if received by 4:30pm			
Sample Comments			

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/2/20 15:30			

Inter-Office Shipment

IOS Number : **61523**

Date/Time: 04.03.2020

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Houston**

Air Bill No.: 770171097563

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
657801-001	W	MW01	04.02.2020 13:50	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 13:50	JKR	TDS	
657801-002	W	MW02	04.02.2020 13:55	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 13:55	JKR	TDS	
657801-003	W	MW03	04.02.2020 14:00	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 14:00	JKR	TDS	
657801-004	W	MW04	04.02.2020 14:05	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 14:05	JKR	TDS	
657801-005	W	MW05	04.02.2020 14:10	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 14:10	JKR	TDS	
657801-006	W	MW06	04.02.2020 14:15	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 14:15	JKR	TDS	
657801-007	W	MW07	04.02.2020 14:20	SM2540C	TDS by SM2540C	04.06.2020	04.09.2020 14:20	JKR	TDS	

Inter Office Shipment or Sample Comments:

Relinquished By:



Elizabeth McClellan

Date Relinquished: 04.03.2020

Received By:



Jhyrom Edralin

Date Received: 04.04.2020

Cooler Temperature: 3.3



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 61523

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou-068

Sent By: Elizabeth McClellan

Date Sent: 04.03.2020 11.54 AM

Received By: Lesia Minor

Date Received: 04.04.2020 09.30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received with appropriate temperature?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 *Custody Seals Signed and dated for Containers/coolers	N/A	
#6 *IOS present?	Yes	
#7 Any missing/extra samples?	No	
#8 IOS agrees with sample label(s)/matrix?	Yes	
#9 Sample matrix/ properties agree with IOS?	Yes	
#10 Samples in proper container/ bottle?	No	1 gallon plastic container
#11 Samples properly preserved?	No	not preserved
#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:

Jhyrom Edralin

Date: 04.04.2020

XENCO Laboratories**Prelogin/Nonconformance Report- Sample Log-In****Client:** LT Environmental, Inc.**Date/ Time Received:** 04.02.2020 03.30.00 PM**Work Order #:** 657801**Acceptable Temperature Range:** 0 - 6 degC**Air and Metal samples Acceptable Range:** Ambient**Temperature Measuring device used :** T-NM-007

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:


Elizabeth McClellan

Date: 04.02.2020

Checklist reviewed by:


Jessica Kramer

Date: 04.03.2020