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	NRM2010833956
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # *(assigned by OCD)*	NRM2010833956
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.11010 32.065554 Longitude -104.09649 -103.676255

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Myox 21 State Com West CTB/Red Hills Truck Station	Site Type	Tank Battery
Date Release Discovered	March 30, 2020	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
N O	21 4	25S 26S	28E 32E	Eddy Lea

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

Nature and Volume of Release

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

■ Crude Oil	Volume Released (bbls) 37	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by a third party connection failure.
A third party trucking company pickup oil from the COG - Myox Facility LACT Unit (32.11010, -104.09649) to transport to the Plains Pipeline- Red Hills Trucking Station located in Lea County. (32.0654, -103.6765 - Unit Letter O, Section 4, T26S, R32E, Surface Owner: BLM).

During unloading of the oil, the truck connection failed and released oil onto the Plains Red Hills Trucking Facility pad. All of the fluids remained on the facility pad. A vacuum truck was dispatched to remove all freestanding fluids.

Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

State of New Mexico
Oil Conservation Division

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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?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: Brittany N. Esparza Title: HSE Administrative Assistant

Signature: Brittany Esparza Date: 4/15/2020

email: besparza@concho.com Telephone: (432) 221-0398

OCD Only

Received by: Ramona Marcus Date: 4/17/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2010833956
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2010833956
District RP	
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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: Brittany N. Esparza Title: HSE Administrative Assistant

Signature: Date: 04/29/20

email: besparza@concho.com Telephone: (432) 221-0398

OCD Only

Received by: Date:

Incident ID	NRM2010833956
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Brittany N. Esparza Title: HSE Administrative Assistant

Signature: Brittany Esparza Date: 04/29/20

email: besparza@concho.com Telephone: (432) 221-0398

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

A proud member of WSP

LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

April 29, 2020

District 1
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

RE: Closure Request
Myox 21 State Com West CTB/ Red Hills Truck Station
Incident Number NRM2010833956
Lea County, New Mexico

To Whom It May Concern:

LT Environmental, Inc. (LTE), on behalf of COG Operating, LLC (COG), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities related to a release associated with the Myox 21 State Com West CTB located in Unit N, Section 21, Township 25 South, Range 28 East, in Eddy County, New Mexico (Figure 1, inset). The purpose of the site assessment and soil sampling activities was to confirm the presence or absence of impacts to soil following the release of crude oil at the Plains Pipeline Red Hills Truck Station (Site) located in Unit O, Section 4, Township 26 South, Range 32 East, in Lea County, New Mexico (Figure 1). Based on field observations, field screenings, and laboratory analytical results from the soil sampling activities, Concho is submitting this Closure Request and requesting no further action (NFA) for Incident Number NRM2010833956.

RELEASE BACKGROUND

On March 30, 2020, a transport vehicle was transporting crude oil from the Myox 21 State Com West CTB to the Red Hills Trucking Station. While unloading the crude oil at the Site, the hose from the truck disconnected off the load out causing a release of 37 barrels (bbls) of crude oil onto the pad, immediately adjacent to several unloading stations at the Plains Pipeline Facility. An attempt to recover free-standing fluid was made by dispatching a hydrovac truck; however, no fluids were recovered. Plains Pipeline shut down two of the unloading stations until remediation work could be completed. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on April 15, 2020 and was subsequently assigned Incident Number NRM2010833956.

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 greater than 100

feet below ground surface (bgs) based on the nearest groundwater well data. The nearest permitted groundwater well with depth to groundwater data is the United States Geological Survey (USGS) well number 320424103415401, located approximately 1.4 miles northwest from the Site. The groundwater well has a depth to groundwater of 290 feet bgs and a unknown total well depth. Within a 2.75 mile radius there are three New Mexico Office of the State Engineer (NM OSE) wells and three USGS wells all indicating regional depth to groundwater between 155 feet and 405 feet bgs. NM OSE well C-04209, located 2.5 miles west of the Site, was most recently measured in May 2018 and had a reported depth to water of 155 feet bgs. Utilizing the regional depth to water measurements, depth to water beneath the Site is estimated to be greater than 100 feet bgs. All referenced wells are depicted on Figure 1.

The closest continuously flowing water or significant watercourse to the Site is a unnamed dry wash located approximately 5,714 feet northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a medium potential karst area and not underlain by unstable geology. The Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT AND EXCAVATION ACTIVITIES

On April 3, 2020, LTE personnel inspected the Site to evaluate the release extent based on information provided by COG and visual observations. LTE personnel collected four preliminary soil samples (SS01 through SS04) from within the release extent at a depth of approximately 0.5 feet bgs to assess the lateral extent of impacts to soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

Based on field screenings results of preliminary soil samples SS01 through SS04 and visual staining observed, excavation of soil within the release extent appeared warranted.

From April 6 to April 8, 2020, LTE personnel returned to the Site to oversee excavation activities. To direct excavation activities, LTE screened soil for volatile aromatic hydrocarbons and chloride. The release extent was excavated to depths ranging from approximately 0.5 feet to 2 feet bgs. Multiple marked and unmarked lines were found in the release extent, which were exposed by a hydrovac truck in a minimum of three locations spaced no farther than 20 feet apart. Contaminated soil on top of lines was excavated to approximately 0.5 feet bgs to avoid striking or decompressing buried lines. Areas near equipment that could not be excavated by mechanical means were power washed and impacted fluids were recovered. The excavation extent was approximately 3,270 square feet and an estimated 120 cubic yards of impacted soil were removed from the Site.

Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by depositing five aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS16 were collected from the floor of the excavation at depths ranging between approximately 0.5 feet and 2 feet bgs. Composite soil sample SW01 was collected from the sidewalls of the excavation from ground surface to approximately 2 feet bgs.

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

The excavation extent and excavation soil sample locations are depicted on Figure 3. Photographic documentation was conducted during excavation activities. Photographic logs are included in Attachment 1.

On April 10, 2020 LTE personnel resampled soil in the vicinity of composite floor soil samples FS03 and FS10 and labeled the resampled soil samples FS17 and FS18, respectively. The soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Carlsbad, New Mexico..

On April 14, 2020 after reviewing laboratory analytical results from the confirmation soil samples and an understanding that Plains Pipeline needed to open up the two shutdown unloading

stations, the excavation was backfilled with clean backfill material. Photographic documentation was conducted during backfill activities and a photographic log is included in Attachment 1.

ANALYTICAL RESULTS

Following the excavation event, LTE collected confirmation soil samples within the excavation extent. Laboratory analytical results indicated benzene, BTEX, TPH-GRO and TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in excavation soil samples FS01, FS02, FS04-FS09, FS11-16, and SW01. Soil samples FS03, and FS10 exceeded Closure Criteria and additional confirmation samples were collected at those locations. Confirmation samples FS17 and FS18 were collected in the vicinity of confirmation floor soil samples FS03 and FS10 respectively, and laboratory analytical results indicated TPH-GRO and TPH-DRO, and TPH concentrations were compliant with Closure Criteria. Laboratory analytical results are summarized in Table 1. The complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

Initial and follow-up response efforts as a result of the crude oil release at the Site included excavation and removal of impacted soils and follow-up collection of soil samples. Preliminary soil samples were collected from within and around the release extent. Field screenings of soil samples SS01 through SS04 indicated TPH concentrations were likely greater than the Closure Criteria throughout the release extent. As a result, the release extent was excavated, removing impacted soils from the surface to depths ranging between 0.5 feet and 2 feet bgs. The excavation extent was approximately 3,270 square feet and an estimated 120 cubic yards of impacted soil were removed from the Site.

Laboratory analytical results for the final confirmation soil samples collected within the final excavation extent indicated benzene, BTEX, TPH-GRO and TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

The excavation occurred at a third-party location, immediately adjacent to unloading station equipment and numerous buried pipelines. Operations at the Site were limited while remediation of the release was ongoing. In order to reduce impacts to operations and ensure timely remediation of the release, impacted soils were removed from the Site within a week of the release date. In addition, regional depth to water was determined to be greater than 100 feet bgs, based on eight water wells near the Site, in order to identify the Site-specific Closure Criteria. Based on these factors, LTE and COG believe impacts to human health, the environment, and groundwater have been sufficiently mitigated, and respectfully requests closure and NFA for Incident Number NRM2010833956.

If you have any questions or comments, please do not hesitate to contact Mr. Dan Moir at (432) 236-3849.

Sincerely,

LT ENVIRONMENTAL, INC.

William Mather
Staff Environmental Scientist

Dan Moir, P.G.
Senior Geologist

cc: Ike Tavares, COG
Amber Groves, Plains Pipeline, L.P.
Paul Dorsett, BML, Inc.
Rich Harness, LMH Environmental, Inc.
Jim Amos, Bureau of Land Management (BLM)
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Appendices:

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

FIGURES

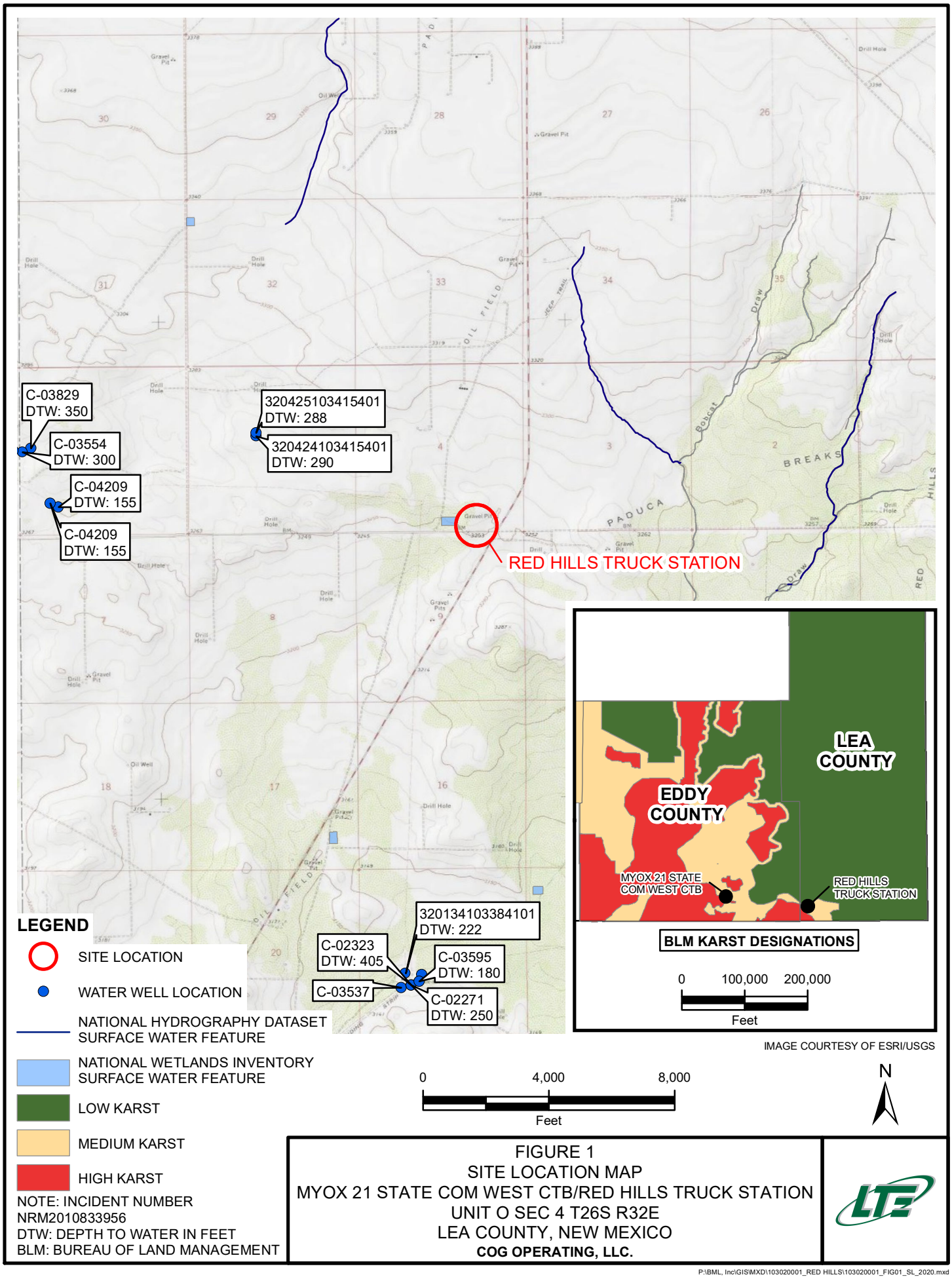

FIGURE 1
SITE LOCATION MAP
MYOX 21 STATE COM WEST CTB/RED HILLS TRUCK STATION
UNIT O SEC 4 T26S R32E
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC.

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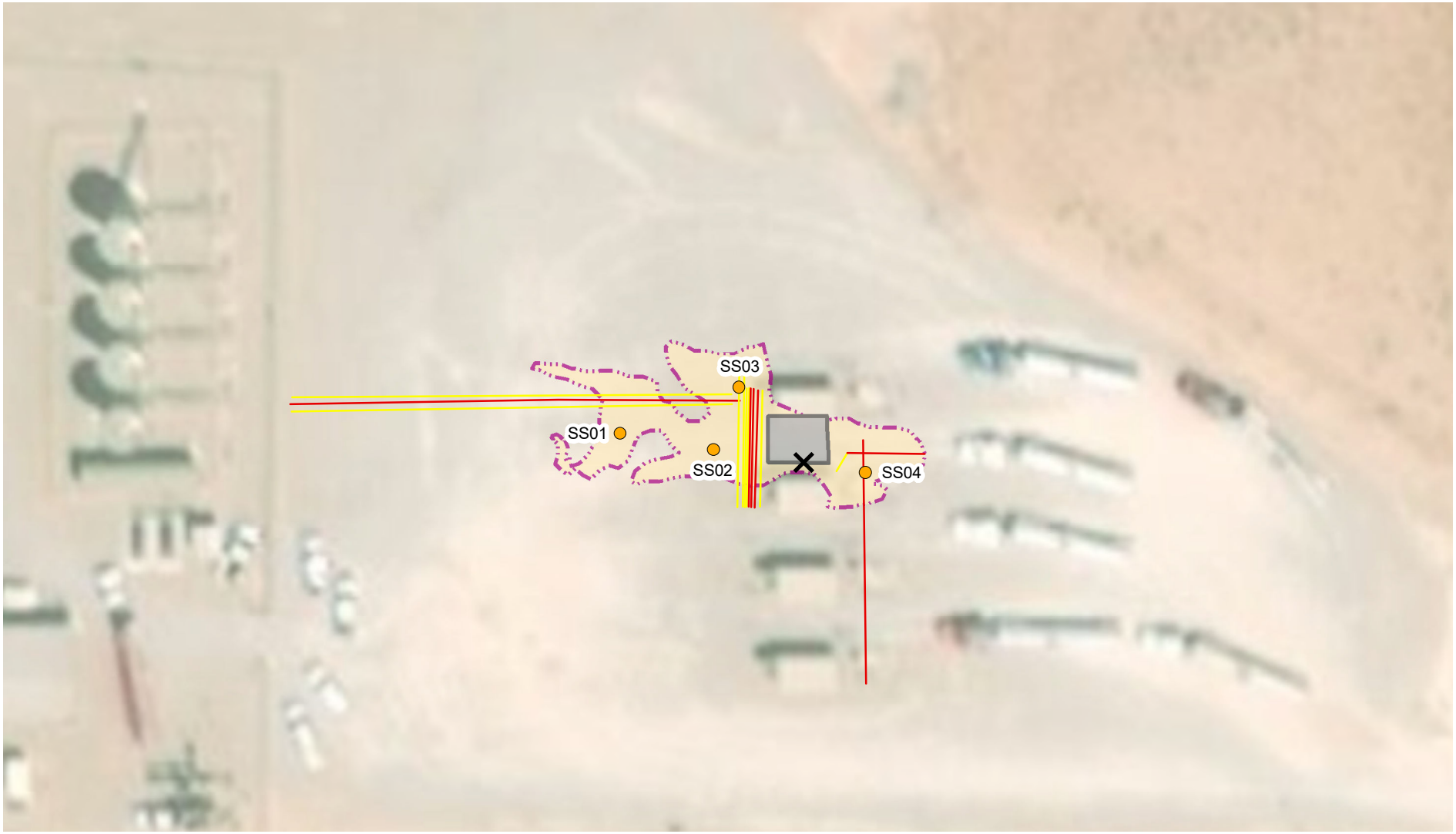

LEGEND

- RELEASE LOCATION
- PRELIMINARY SOIL SAMPLE
- ELECTRIC LINE
- GAS LINE
- RELEASE EXTENT
- LOAD OUT CONTAINMENT

NOTE: INCIDENT NUMBER NRM2010833956

IMAGE COURTESY OF ESRI

0 50 100

Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
MYOX 21 STATE COM WEST CTB/RED HILLS TRUCK STATION
UNIT O SEC 4 T26S R32E
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC.

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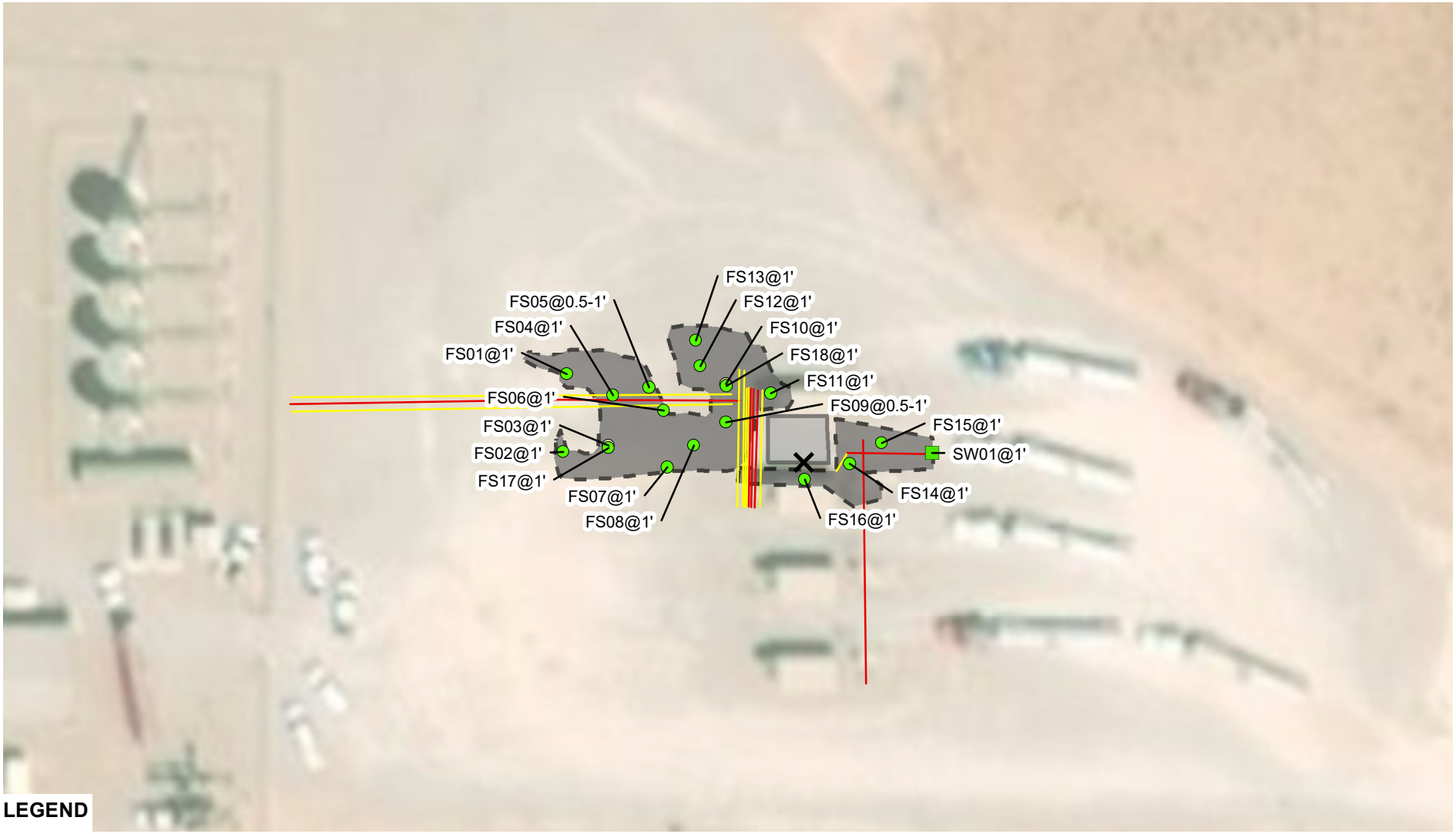

LEGEND

- RELEASE LOCATION
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- FLOOR SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED
- SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: INCIDENT NUMBER NRM2010833956

- ELECTRIC LINE
- GAS LINE
- EXCAVATION EXTENT
- LOAD OUT CONTAINMENT

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
MYOX 21 STATE COM WEST CTB/RED HILLS TRUCK STATION
UNIT O SEC 4 T26S R32E
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC.

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TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

MYOX 21 STATE COM WEST CTB/ RED HILLS TRUCK STATION
INCIDENT NUMBER NRM2010833956
LEA COUNTY, NEW MEXICO
COG, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS01	1	04/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	81.4	<50.0	81.4	81.4	71.2
FS02	1	04/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	76.2	<50.0	76.2	76.2	37.8
FS03	1	04/10/2020	<0.00198	0.00828	0.00738	0.0662	0.0819	<50.1	1,300	113	**1,300**	1,410	82.1
FS17	1	04/10/2020	N/A	N/A	N/A	N/A	N/A	<50.2	415	<50.2	415	415	N/A
FS04	1	04/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	310	<50.1	310	310	99.3
FS05	0.5 - 1	04/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	141	<50.1	141	141	121
FS06	1	04/08/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	254	<49.8	254	254	116
FS07	1	04/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	166	<50.1	166	166	82.5
FS08	1	04/08/2020	<0.00200	<0.00200	<0.00200	0.0353	0.0353	<50.0	507	<50.0	507	507	56.8
FS09	0.5 - 1	04/08/2020	<0.00199	<0.00199	<0.00199	0.0154	0.0154	<50.1	669	69.1	669	738	99.8
FS10	1	04/10/2020	<0.00198	<0.00198	<0.00198	0.0382	0.0382	<50.2	1,220	112	**1,220**	1,330	109
FS18	1	04/10/2020	N/A	N/A	N/A	N/A	N/A	<50.2	<50.2	<50.2	<50.2	<50.2	N/A
FS11	1	04/08/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	340	<50.0	340	340	113
FS12	1	04/08/2020	<0.00202	<0.00202	<0.00202	0.00657	0.00657	<49.9	71.7	<49.9	71.7	71.7	33.8
FS13	1	04/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	183	<50.3	183	183	40.2
FS14	1	04/08/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	13.3

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TABLE 1
SOIL ANALYTICAL RESULTS

MYOX 21 STATE COM WEST CTB/ RED HILLS TRUCK STATION
INCIDENT NUMBER NRM2010833956
LEA COUNTY, NEW MEXICO
COG, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS15	1	04/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	66.7	<50.2	66.7	66.7	45.8
FS16	1	04/08/2020	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<50.1	96.8	<50.1	96.8	96.8	61.2
SW01	1	04/08/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	18.1

Notes:

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

ATTACHMENT 1: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of release near equipment facing west.

Photograph 2: View of release extent on pad facing southeast.

PHOTOGRAPHIC LOG

Photograph 3: View of excavation in between equipment facing west.

Photograph 4: View of excavation facing east.

PHOTOGRAPHIC LOG

Photograph 5: View of excavation east of equipment facing northeast.

Photograph 6: View of excavation facing east.

PHOTOGRAPHIC LOG

Photograph 7: View of final backfill facing east.

Photograph 8: View of final backfill facing west.

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 658406

for

LT Environmental, Inc.

Project Manager: Dan Moir

Red Hills

103020001

04.10.2020

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: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04.10.2020

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

Reference: XENCO Report No(s): **658406**
Red Hills
Project Address: Lea

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) 658406. 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. 658406 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	04.08.2020 11:10	1 ft	658406-001
FS02	S	04.08.2020 12:30	1 ft	658406-002
FS03	S	04.08.2020 12:34	1 ft	658406-003
FS04	S	04.08.2020 12:37	1 ft	658406-004
FS05	S	04.08.2020 12:39	0.5 - 1 ft	658406-005
FS06	S	04.08.2020 12:55	1 ft	658406-006
FS07	S	04.08.2020 12:58	1 ft	658406-007
FS08	S	04.08.2020 13:56	1 ft	658406-008
FS09	S	04.08.2020 14:42	0.5 - 1 ft	658406-009
FS10	S	04.08.2020 14:54	1 ft	658406-010
FS11	S	04.08.2020 14:58	1 ft	658406-011
FS12	S	04.08.2020 15:02	1 ft	658406-012
FS13	S	04.08.2020 15:08	1 ft	658406-013
FS14	S	04.08.2020 17:42	1 ft	658406-014
FS15	S	04.08.2020 18:14	1 ft	658406-015
FS16	S	04.08.2020 19:32	1 ft	658406-016
SW01	S	04.08.2020 17:54	1 ft	658406-017

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Red Hills

Project ID: *103020001*
Work Order Number(s): *658406*

Report Date: *04.10.2020*
Date Received: *04.09.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3122568 BTEX by EPA 8021B

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

Certificate of Analysis Summary 658406

LT Environmental, Inc., Arvada, CO

Project Name: Red Hills

Project Id: 103020001
Contact: Dan Moir
Project Location: Lea

Date Received in Lab: Thu 04.09.2020 08:55
Report Date: 04.10.2020 11:18
Project Manager: Jessica Kramer

Analysis Requested		658406-001		658406-002		658406-003		658406-004		658406-005		658406-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	1- ft		1- ft		1- ft		1- ft		0.5-1 ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.08.2020 11:10		04.08.2020 12:30		04.08.2020 12:34		04.08.2020 12:37		04.08.2020 12:39		04.08.2020 12:55	
BTEX by EPA 8021B	***Extracted:***	04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00	
	Analyzed:	04.09.2020 14:07		04.09.2020 14:27		04.09.2020 14:47		04.09.2020 15:08		04.09.2020 15:28		04.09.2020 15:49	
	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	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00199	0.00199	0.00828	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199	0.00738	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398	0.0481	0.00397	<0.00401	0.00401	<0.00399	0.00399	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00199	0.00199	0.0181	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Xylenes, Total		<0.00199	0.00199	<0.00199	0.00199	0.0662	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00199	0.00199	0.0819	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00	
	Analyzed:	04.09.2020 11:54		04.09.2020 12:13		04.09.2020 12:20		04.09.2020 12:26		04.09.2020 12:32		04.09.2020 12:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		71.2	9.96	37.8	9.96	82.1	9.96	99.3	9.98	121	10.0	116	9.98
TPH by SW8015 Mod	***Extracted:***	04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44	
	Analyzed:	04.09.2020 14:06		04.09.2020 15:07		04.09.2020 15:28		04.09.2020 15:48		04.09.2020 16:08		04.09.2020 16:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<50.1	50.1	<50.1	50.1	<50.1	50.1	<49.8	49.8
Diesel Range Organics (DRO)		81.4	50.0	76.2	50.0	1300	50.1	310	50.1	141	50.1	254	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	113	50.1	<50.1	50.1	<50.1	50.1	<49.8	49.8
Total GRO-DRO		81.4	50.0	76.2	50.0	1300	50.1	310	50.1	141	50.1	254	49.8
Total TPH		81.4	50.0	76.2	50.0	1410	50.1	310	50.1	141	50.1	254	49.8

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Jessica Kramer
Project Manager

Certificate of Analysis Summary 658406

LT Environmental, Inc., Arvada, CO

Project Name: Red Hills

Project Id: 103020001
Contact: Dan Moir
Project Location: Lea

Date Received in Lab: Thu 04.09.2020 08:55
Report Date: 04.10.2020 11:18
Project Manager: Jessica Kramer

Analysis Requested		658406-007		658406-008		658406-009		658406-010		658406-011		658406-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	1- ft		1- ft		0.5-1 ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.08.2020 12:58		04.08.2020 13:56		04.08.2020 14:42		04.08.2020 14:54		04.08.2020 14:58		04.08.2020 15:02	
BTEX by EPA 8021B	***Extracted:***	04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00	
	Analyzed:	04.09.2020 16:09		04.09.2020 16:30		04.09.2020 16:50		04.09.2020 17:10		04.09.2020 18:32		04.09.2020 18:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202
m,p-Xylenes		<0.00398	0.00398	0.0241	0.00399	0.0102	0.00398	0.0255	0.00396	<0.00398	0.00398	0.00657	0.00404
o-Xylene		<0.00199	0.00199	0.0112	0.00200	0.00516	0.00199	0.0127	0.00198	<0.00199	0.00199	<0.00202	0.00202
Xylenes, Total		<0.00199	0.00199	0.0353	0.00200	0.0154	0.00199	0.0382	0.00198	<0.00199	0.00199	0.00657	0.00202
Total BTEX		<0.00199	0.00199	0.0353	0.00200	0.0154	0.00199	0.0382	0.00198	<0.00199	0.00199	0.00657	0.00202
Chloride by EPA 300	***Extracted:***	04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00	
	Analyzed:	04.09.2020 12:59		04.09.2020 13:05		04.09.2020 13:12		04.09.2020 13:18		04.09.2020 13:24		04.09.2020 13:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		82.5	9.96	56.8	10.0	99.8	9.96	109	10.1	113	9.96	33.8	10.0
TPH by SW8015 Mod	***Extracted:***	04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44	
	Analyzed:	04.09.2020 16:50		04.09.2020 17:10		04.09.2020 17:31		04.09.2020 17:51		04.09.2020 18:32		04.09.2020 18:52	
	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	<50.0	50.0	<50.1	50.1	<50.2	50.2	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		166	50.1	507	50.0	669	50.1	1220	50.2	340	50.0	71.7	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.0	50.0	69.1	50.1	112	50.2	<50.0	50.0	<49.9	49.9
Total GRO-DRO		166	50.1	507	50.0	669	50.1	1220	50.2	340	50.0	71.7	49.9
Total TPH		166	50.1	507	50.0	738	50.1	1330	50.2	340	50.0	71.7	49.9

Jessica Kramer
Project Manager

Certificate of Analysis Summary 658406

LT Environmental, Inc., Arvada, CO

Project Name: Red Hills

Project Id: 103020001
Contact: Dan Moir
Project Location: Lea

Date Received in Lab: Thu 04.09.2020 08:55
Report Date: 04.10.2020 11:18
Project Manager: Jessica Kramer

Analysis Requested		658406-013		658406-014		658406-015		658406-016		658406-017	
	Field Id:	FS13		FS14		FS15		FS16		SW01	
	Depth:	1- ft		1- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.08.2020 15:08		04.08.2020 17:42		04.08.2020 18:14		04.08.2020 19:32		04.08.2020 17:54	
BTEX by EPA 8021B	*Extracted:*	04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00	
	Analyzed:	04.09.2020 19:13		04.09.2020 19:34		04.09.2020 19:54		04.09.2020 20:14		04.09.2020 20:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.0189	0.0189	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.0189	0.0189	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.0189	0.0189	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00400	0.00400	<0.0377	0.0377	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.0189	0.0189	<0.00200	0.00200
Xylenes, Total		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.0189	0.0189	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.0189	0.0189	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00		04.09.2020 11:00	
	Analyzed:	04.09.2020 13:50		04.09.2020 14:09		04.09.2020 14:16		04.09.2020 14:22		04.09.2020 14:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		40.2	9.98	13.3	10.1	45.8	10.1	61.2	10.1	18.1	10.1
TPH by SW8015 Mod	*Extracted:*	04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44		04.09.2020 12:44	
	Analyzed:	04.09.2020 19:13		04.09.2020 19:33		04.09.2020 19:54		04.09.2020 20:14		04.09.2020 20:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.2	50.2
Diesel Range Organics (DRO)		183	50.3	<49.9	49.9	66.7	50.2	96.8	50.1	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.2	50.2
Total GRO-DRO		183	50.3	<49.9	49.9	66.7	50.2	96.8	50.1	<50.2	50.2
Total TPH		183	50.3	<49.9	49.9	66.7	50.2	96.8	50.1	<50.2	50.2

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

Jessica Kramer
Project Manager

Certificate of Analytical Results 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-001	Date Collected:	04.08.2020 11:10	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**71.2**	9.96	mg/kg	04.09.2020 11:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.09.2020 14:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	**81.4**	50.0	mg/kg	04.09.2020 14:06		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.09.2020 14:06	U	1
Total GRO-DRO	PHC628	**81.4**	50.0	mg/kg	04.09.2020 14:06		1
Total TPH	PHC635	**81.4**	50.0	mg/kg	04.09.2020 14:06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	04.09.2020 14:06	
o-Terphenyl	84-15-1	120	%	70-135	04.09.2020 14:06	

Certificate of Analytical Results 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-001	Date Collected:	04.08.2020 11:10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.09.2020 14:07	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.09.2020 14:07	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.09.2020 14:07	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.09.2020 14:07	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.09.2020 14:07	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.09.2020 14:07	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.09.2020 14:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.09.2020 14:07	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.09.2020 14:07	

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LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-002	Date Collected:	04.08.2020 12:30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.8**	9.96	mg/kg	04.09.2020 12:13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.09.2020 15:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	**76.2**	50.0	mg/kg	04.09.2020 15:07		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.09.2020 15:07	U	1
Total GRO-DRO	PHC628	**76.2**	50.0	mg/kg	04.09.2020 15:07		1
Total TPH	PHC635	**76.2**	50.0	mg/kg	04.09.2020 15:07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.09.2020 15:07	
o-Terphenyl	84-15-1	125	%	70-135	04.09.2020 15:07	

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Red Hills

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-002	Date Collected:	04.08.2020 12:30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.09.2020 14:27	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.09.2020 14:27	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.09.2020 14:27	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.09.2020 14:27	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.09.2020 14:27	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.09.2020 14:27	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.09.2020 14:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.09.2020 14:27	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.09.2020 14:27	

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Red Hills

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-003	Date Collected:	04.08.2020 12:34	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**82.1**	9.96	mg/kg	04.09.2020 12:20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.09.2020 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1300**	50.1	mg/kg	04.09.2020 15:28		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**113**	50.1	mg/kg	04.09.2020 15:28		1
Total GRO-DRO	PHC628	**1300**	50.1	mg/kg	04.09.2020 15:28		1
Total TPH	PHC635	**1410**	50.1	mg/kg	04.09.2020 15:28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.09.2020 15:28	
o-Terphenyl	84-15-1	124	%	70-135	04.09.2020 15:28	

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Red Hills

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-003	Date Collected:	04.08.2020 12:34	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.09.2020 14:47	U	1
Toluene	108-88-3	**0.00828**	0.00198	mg/kg	04.09.2020 14:47		1
Ethylbenzene	100-41-4	**0.00738**	0.00198	mg/kg	04.09.2020 14:47		1
m,p-Xylenes	179601-23-1	**0.0481**	0.00397	mg/kg	04.09.2020 14:47		1
o-Xylene	95-47-6	**0.0181**	0.00198	mg/kg	04.09.2020 14:47		1
Xylenes, Total	1330-20-7	**0.0662**	0.00198	mg/kg	04.09.2020 14:47		1
Total BTEX		**0.0819**	0.00198	mg/kg	04.09.2020 14:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	04.09.2020 14:47	
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.09.2020 14:47	

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Sample Id:	**FS04**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-004	Date Collected:	04.08.2020 12:37	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.3**	9.98	mg/kg	04.09.2020 12:26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.09.2020 15:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	**310**	50.1	mg/kg	04.09.2020 15:48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.09.2020 15:48	U	1
Total GRO-DRO	PHC628	**310**	50.1	mg/kg	04.09.2020 15:48		1
Total TPH	PHC635	**310**	50.1	mg/kg	04.09.2020 15:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	04.09.2020 15:48	
o-Terphenyl	84-15-1	122	%	70-135	04.09.2020 15:48	

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Sample Id:	**FS04**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-004	Date Collected:	04.08.2020 12:37	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.09.2020 15:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.09.2020 15:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.09.2020 15:08	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.09.2020 15:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.09.2020 15:08	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	04.09.2020 15:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.09.2020 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.09.2020 15:08	
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.09.2020 15:08	

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Sample Id:	**FS05**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-005	Date Collected:	04.08.2020 12:39	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**121**	10.0	mg/kg	04.09.2020 12:32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.09.2020 16:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	**141**	50.1	mg/kg	04.09.2020 16:08		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.09.2020 16:08	U	1
Total GRO-DRO	PHC628	**141**	50.1	mg/kg	04.09.2020 16:08		1
Total TPH	PHC635	**141**	50.1	mg/kg	04.09.2020 16:08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	04.09.2020 16:08	
o-Terphenyl	84-15-1	134	%	70-135	04.09.2020 16:08	

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Sample Id:	**FS05**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-005	Date Collected:	04.08.2020 12:39	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.09.2020 15:28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.09.2020 15:28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.09.2020 15:28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.09.2020 15:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.09.2020 15:28	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	04.09.2020 15:28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.09.2020 15:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	04.09.2020 15:28	
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.09.2020 15:28	

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Sample Id:	**FS06**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-006	Date Collected:	04.08.2020 12:55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**116**	9.98	mg/kg	04.09.2020 12:53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.09.2020 16:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	**254**	49.8	mg/kg	04.09.2020 16:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.09.2020 16:29	U	1
Total GRO-DRO	PHC628	**254**	49.8	mg/kg	04.09.2020 16:29		1
Total TPH	PHC635	**254**	49.8	mg/kg	04.09.2020 16:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	04.09.2020 16:29	
o-Terphenyl	84-15-1	126	%	70-135	04.09.2020 16:29	

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Sample Id:	**FS06**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-006	Date Collected:	04.08.2020 12:55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.09.2020 15:49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.09.2020 15:49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.09.2020 15:49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.09.2020 15:49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.09.2020 15:49	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	04.09.2020 15:49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.09.2020 15:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	04.09.2020 15:49	
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.09.2020 15:49	

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Sample Id:	**FS07**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-007	Date Collected:	04.08.2020 12:58	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**82.5**	9.96	mg/kg	04.09.2020 12:59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.09.2020 16:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	**166**	50.1	mg/kg	04.09.2020 16:50		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.09.2020 16:50	U	1
Total GRO-DRO	PHC628	**166**	50.1	mg/kg	04.09.2020 16:50		1
Total TPH	PHC635	**166**	50.1	mg/kg	04.09.2020 16:50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	04.09.2020 16:50	
o-Terphenyl	84-15-1	124	%	70-135	04.09.2020 16:50	

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Sample Id:	**FS07**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-007	Date Collected:	04.08.2020 12:58	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.09.2020 16:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.09.2020 16:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.09.2020 16:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.09.2020 16:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.09.2020 16:09	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.09.2020 16:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.09.2020 16:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.09.2020 16:09	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.09.2020 16:09	

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Sample Id:	**FS08**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-008	Date Collected:	04.08.2020 13:56	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.8**	10.0	mg/kg	04.09.2020 13:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.09.2020 17:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	**507**	50.0	mg/kg	04.09.2020 17:10		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.09.2020 17:10	U	1
Total GRO-DRO	PHC628	**507**	50.0	mg/kg	04.09.2020 17:10		1
Total TPH	PHC635	**507**	50.0	mg/kg	04.09.2020 17:10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	04.09.2020 17:10	
o-Terphenyl	84-15-1	126	%	70-135	04.09.2020 17:10	

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Red Hills

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-008	Date Collected:	04.08.2020 13:56	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.09.2020 16:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.09.2020 16:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.09.2020 16:30	U	1
m,p-Xylenes	179601-23-1	**0.0241**	0.00399	mg/kg	04.09.2020 16:30		1
o-Xylene	95-47-6	**0.0112**	0.00200	mg/kg	04.09.2020 16:30		1
Xylenes, Total	1330-20-7	**0.0353**	0.00200	mg/kg	04.09.2020 16:30		1
Total BTEX		**0.0353**	0.00200	mg/kg	04.09.2020 16:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.09.2020 16:30	
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.09.2020 16:30	

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Red Hills

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-009	Date Collected:	04.08.2020 14:42	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.8**	9.96	mg/kg	04.09.2020 13:12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.09.2020 17:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**669**	50.1	mg/kg	04.09.2020 17:31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**69.1**	50.1	mg/kg	04.09.2020 17:31		1
Total GRO-DRO	PHC628	**669**	50.1	mg/kg	04.09.2020 17:31		1
Total TPH	PHC635	**738**	50.1	mg/kg	04.09.2020 17:31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	04.09.2020 17:31	
o-Terphenyl	84-15-1	129	%	70-135	04.09.2020 17:31	

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Sample Id:	**FS09**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-009	Date Collected:	04.08.2020 14:42	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.09.2020 16:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.09.2020 16:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.09.2020 16:50	U	1
m,p-Xylenes	179601-23-1	**0.0102**	0.00398	mg/kg	04.09.2020 16:50		1
o-Xylene	95-47-6	**0.00516**	0.00199	mg/kg	04.09.2020 16:50		1
Xylenes, Total	1330-20-7	**0.0154**	0.00199	mg/kg	04.09.2020 16:50		1
Total BTEX		**0.0154**	0.00199	mg/kg	04.09.2020 16:50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.09.2020 16:50	
1,4-Difluorobenzene	540-36-3	102	%	70-130	04.09.2020 16:50	

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Sample Id:	**FS10**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-010	Date Collected:	04.08.2020 14:54	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**109**	10.1	mg/kg	04.09.2020 13:18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.09.2020 17:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1220**	50.2	mg/kg	04.09.2020 17:51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**112**	50.2	mg/kg	04.09.2020 17:51		1
Total GRO-DRO	PHC628	**1220**	50.2	mg/kg	04.09.2020 17:51		1
Total TPH	PHC635	**1330**	50.2	mg/kg	04.09.2020 17:51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	04.09.2020 17:51	
o-Terphenyl	84-15-1	130	%	70-135	04.09.2020 17:51	

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Sample Id:	**FS10**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-010	Date Collected:	04.08.2020 14:54	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.09.2020 17:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.09.2020 17:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.09.2020 17:10	U	1
m,p-Xylenes	179601-23-1	**0.0255**	0.00396	mg/kg	04.09.2020 17:10		1
o-Xylene	95-47-6	**0.0127**	0.00198	mg/kg	04.09.2020 17:10		1
Xylenes, Total	1330-20-7	**0.0382**	0.00198	mg/kg	04.09.2020 17:10		1
Total BTEX		**0.0382**	0.00198	mg/kg	04.09.2020 17:10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.09.2020 17:10	
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.09.2020 17:10	

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Sample Id:	**FS11**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-011	Date Collected:	04.08.2020 14:58	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**113**	9.96	mg/kg	04.09.2020 13:24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.09.2020 18:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	**340**	50.0	mg/kg	04.09.2020 18:32		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.09.2020 18:32	U	1
Total GRO-DRO	PHC628	**340**	50.0	mg/kg	04.09.2020 18:32		1
Total TPH	PHC635	**340**	50.0	mg/kg	04.09.2020 18:32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	04.09.2020 18:32	
o-Terphenyl	84-15-1	123	%	70-135	04.09.2020 18:32	

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Sample Id:	**FS11**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-011	Date Collected:	04.08.2020 14:58	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.09.2020 18:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.09.2020 18:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.09.2020 18:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.09.2020 18:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.09.2020 18:32	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.09.2020 18:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.09.2020 18:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.09.2020 18:32	
1,4-Difluorobenzene	540-36-3	104	%	70-130	04.09.2020 18:32	

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Sample Id:	**FS12**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-012	Date Collected:	04.08.2020 15:02	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.8**	10.0	mg/kg	04.09.2020 13:44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.09.2020 18:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	**71.7**	49.9	mg/kg	04.09.2020 18:52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.09.2020 18:52	U	1
Total GRO-DRO	PHC628	**71.7**	49.9	mg/kg	04.09.2020 18:52		1
Total TPH	PHC635	**71.7**	49.9	mg/kg	04.09.2020 18:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.09.2020 18:52	
o-Terphenyl	84-15-1	125	%	70-135	04.09.2020 18:52	

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Sample Id:	**FS12**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-012	Date Collected:	04.08.2020 15:02	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.09.2020 18:53	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.09.2020 18:53	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.09.2020 18:53	U	1
m,p-Xylenes	179601-23-1	**0.00657**	0.00404	mg/kg	04.09.2020 18:53		1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.09.2020 18:53	U	1
Xylenes, Total	1330-20-7	**0.00657**	0.00202	mg/kg	04.09.2020 18:53		1
Total BTEX		**0.00657**	0.00202	mg/kg	04.09.2020 18:53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.09.2020 18:53	
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.09.2020 18:53	

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Sample Id:	**FS13**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-013	Date Collected:	04.08.2020 15:08	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.2**	9.98	mg/kg	04.09.2020 13:50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.09.2020 19:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	**183**	50.3	mg/kg	04.09.2020 19:13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.09.2020 19:13	U	1
Total GRO-DRO	PHC628	**183**	50.3	mg/kg	04.09.2020 19:13		1
Total TPH	PHC635	**183**	50.3	mg/kg	04.09.2020 19:13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.09.2020 19:13	
o-Terphenyl	84-15-1	126	%	70-135	04.09.2020 19:13	

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Sample Id:	**FS13**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-013	Date Collected:	04.08.2020 15:08	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.09.2020 19:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.09.2020 19:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.09.2020 19:13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.09.2020 19:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.09.2020 19:13	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	04.09.2020 19:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.09.2020 19:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	04.09.2020 19:13	
4-Bromofluorobenzene	460-00-4	89	%	70-130	04.09.2020 19:13	

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Sample Id:	**FS14**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-014	Date Collected:	04.08.2020 17:42	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.3**	10.1	mg/kg	04.09.2020 14:09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.09.2020 19:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.09.2020 19:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.09.2020 19:33	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	04.09.2020 19:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.09.2020 19:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	04.09.2020 19:33	
o-Terphenyl	84-15-1	126	%	70-135	04.09.2020 19:33	

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Sample Id:	**FS14**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-014	Date Collected:	04.08.2020 17:42	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.09.2020 19:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.09.2020 19:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.09.2020 19:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.09.2020 19:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.09.2020 19:34	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	04.09.2020 19:34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.09.2020 19:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	04.09.2020 19:34	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.09.2020 19:34	

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Sample Id:	**FS15**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-015	Date Collected:	04.08.2020 18:14	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**45.8**	10.1	mg/kg	04.09.2020 14:16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.09.2020 19:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	**66.7**	50.2	mg/kg	04.09.2020 19:54		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.09.2020 19:54	U	1
Total GRO-DRO	PHC628	**66.7**	50.2	mg/kg	04.09.2020 19:54		1
Total TPH	PHC635	**66.7**	50.2	mg/kg	04.09.2020 19:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	04.09.2020 19:54	
o-Terphenyl	84-15-1	127	%	70-135	04.09.2020 19:54	

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Sample Id:	**FS15**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-015	Date Collected:	04.08.2020 18:14	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.09.2020 19:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.09.2020 19:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.09.2020 19:54	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.09.2020 19:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.09.2020 19:54	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	04.09.2020 19:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.09.2020 19:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	04.09.2020 19:54	
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.09.2020 19:54	

Certificate of Analytical Results 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-016	Date Collected:	04.08.2020 19:32	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.2**	10.1	mg/kg	04.09.2020 14:22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.09.2020 20:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**96.8**	50.1	mg/kg	04.09.2020 20:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.09.2020 20:14	U	1
Total GRO-DRO	PHC628	**96.8**	50.1	mg/kg	04.09.2020 20:14		1
Total TPH	PHC635	**96.8**	50.1	mg/kg	04.09.2020 20:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	04.09.2020 20:14	
o-Terphenyl	84-15-1	124	%	70-135	04.09.2020 20:14	

Certificate of Analytical Results 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-016	Date Collected:	04.08.2020 19:32	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	04.09.2020 20:14	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	04.09.2020 20:14	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	04.09.2020 20:14	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	04.09.2020 20:14	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	04.09.2020 20:14	U	1
Xylenes, Total	1330-20-7	<0.0189	0.0189	mg/kg	04.09.2020 20:14	U	1
Total BTEX		<0.0189	0.0189	mg/kg	04.09.2020 20:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.09.2020 20:14	
1,4-Difluorobenzene	540-36-3	104	%	70-130	04.09.2020 20:14	

Certificate of Analytical Results 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-017	Date Collected:	04.08.2020 17:54	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122580				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.1**	10.1	mg/kg	04.09.2020 14:28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.09.2020 12:44	Basis:	Wet Weight
Seq Number:	3122574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.09.2020 20:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.09.2020 20:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.09.2020 20:34	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.09.2020 20:34	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.09.2020 20:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.09.2020 20:34	
o-Terphenyl	84-15-1	123	%	70-135	04.09.2020 20:34	

Certificate of Analytical Results 658406

LT Environmental, Inc., Arvada, CO

Red Hills

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	04.09.2020 08:55
Lab Sample Id:	658406-017	Date Collected:	04.08.2020 17:54	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	04.09.2020 11:00	Basis:	Wet Weight
Seq Number:	3122568				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.09.2020 20:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.09.2020 20:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.09.2020 20:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.09.2020 20:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.09.2020 20:35	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	04.09.2020 20:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.09.2020 20:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.09.2020 20:35	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.09.2020 20:35	

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

QC Summary 658406

LT Environmental, Inc.

Red Hills

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3122580 — Matrix: Solid — Date Prep: 04.09.2020
MB Sample Id: 7700931-1-BLK — LCS Sample Id: 7700931-1-BKS — LCSD Sample Id: 7700931-1-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	04.09.2020 11:41	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3122580 — Matrix: Soil — Date Prep: 04.09.2020
Parent Sample Id: 658406-001 — MS Sample Id: 658406-001 S — MSD Sample Id: 658406-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	71.2	200	284	106	282	105	90-110	1	20	mg/kg	04.09.2020 12:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3122580 — Matrix: Soil — Date Prep: 04.09.2020
Parent Sample Id: 658406-011 — MS Sample Id: 658406-011 S — MSD Sample Id: 658406-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	113	199	322	105	324	106	90-110	1	20	mg/kg	04.09.2020 13:31	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3122574 — Matrix: Solid — Date Prep: 04.09.2020
MB Sample Id: 7700947-1-BLK — LCS Sample Id: 7700947-1-BKS — LCSD Sample Id: 7700947-1-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	1010	101	945	95	70-135	7	35	mg/kg	04.09.2020 13:25	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1080	108	70-135	4	35	mg/kg	04.09.2020 13:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		128		124		70-135	%	04.09.2020 13:25
o-Terphenyl	119		126		124		70-135	%	04.09.2020 13:25

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3122574 — Matrix: Solid — Date Prep: 04.09.2020
MB Sample Id: 7700947-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.09.2020 13:04	

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

QC Summary 658406

LT Environmental, Inc.

Red Hills

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3122574 Matrix: Soil Date Prep: 04.09.2020
Parent Sample Id: 658406-001 MS Sample Id: 658406-001 S MSD Sample Id: 658406-001 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)	<50.0	999	1020	102	987	98	70-135	3	35	mg/kg	04.09.2020 14:26	
Diesel Range Organics (DRO)	81.4	999	1130	105	1190	110	70-135	5	35	mg/kg	04.09.2020 14:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		126		70-135	%	04.09.2020 14:26
o-Terphenyl	134		128		70-135	%	04.09.2020 14:26

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122568 Matrix: Solid Date Prep: 04.09.2020
MB Sample Id: 7700933-1-BLK LCS Sample Id: 7700933-1-BKS LCSD Sample Id: 7700933-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.116	116	70-130	5	35	mg/kg	04.09.2020 12:24	
Toluene	<0.00200	0.100	0.105	105	0.112	112	70-130	6	35	mg/kg	04.09.2020 12:24	
Ethylbenzene	<0.00200	0.100	0.0988	99	0.106	106	71-129	7	35	mg/kg	04.09.2020 12:24	
m,p-Xylenes	<0.00400	0.200	0.205	103	0.220	110	70-135	7	35	mg/kg	04.09.2020 12:24	
o-Xylene	<0.00200	0.100	0.102	102	0.110	110	71-133	8	35	mg/kg	04.09.2020 12:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		105		104		70-130	%	04.09.2020 12:24
4-Bromofluorobenzene	95		93		91		70-130	%	04.09.2020 12:24

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122568 Matrix: Soil Date Prep: 04.09.2020
Parent Sample Id: 658406-001 MS Sample Id: 658406-001 S MSD Sample Id: 658406-001 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	0.104	104	0.106	106	70-130	2	35	mg/kg	04.09.2020 13:05	
Toluene	<0.00200	0.100	0.0981	98	0.102	102	70-130	4	35	mg/kg	04.09.2020 13:05	
Ethylbenzene	<0.00200	0.100	0.0918	92	0.0960	96	71-129	4	35	mg/kg	04.09.2020 13:05	
m,p-Xylenes	<0.00401	0.200	0.189	95	0.198	99	70-135	5	35	mg/kg	04.09.2020 13:05	
o-Xylene	<0.00200	0.100	0.0947	95	0.0983	98	71-133	4	35	mg/kg	04.09.2020 13:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	04.09.2020 13:05
4-Bromofluorobenzene	94		91		70-130	%	04.09.2020 13:05

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

Chain of Custody

Work Order No: 458400

XENCO LABORATORIES

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

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Project Manager:	Dan Moir	Bill to: (if different)	Dan Moir
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
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

Work Order Comments

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

Project Name:	Red Hills	Turn Around	
Project Number:	103020001	Routine ☐	
P.O. Number:	Lea	Rush: 24 hr	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.8	Thermometer ID	
Received Intact:	(Yes) No		HNM007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	17

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS01	s	4/8/2020	11:10	1'	1	x	x	x	Composite
FS02	s	4/8/2020	12:30	1'	1	x	x	x	Composite
FS03	s	4/8/2020	12:34	1'	1	x	x	x	Composite
FS04	s	4/8/2020	12:37	1'	1	x	x	x	Composite
FS05	s	4/8/2020	12:39	0.5'-1	1	x	x	x	Composite
FS06	s	4/8/2020	12:55	1'	1	x	x	x	Composite
FS07	s	4/8/2020	12:58	1'	1	x	x	x	Composite
FS08	s	4/8/2020	13:56	1'	1	x	x	x	Composite
FS09	s	4/8/2020	14:42	0.5'-1'	1	x	x	x	Composite
FS10	s	4/8/2020	14:54	1'	1	x	x	x	Composite

ANALYSIS REQUEST

Work Order Notes

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

Total 200.7 / 6010 200.8 / 6020: 43928

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4/9/20 08:55	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: 6584016

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

Project Manager:	Dan Moir	Bill to: (if different)	Dan Moir
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
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

Work Order Comments

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

Project Name:	Red Hills	Turn Around	
Project Number:	103020001	Routine ☐	
P.O. Number:	Lea	Rush: 24hr	
Sampler's Name:	William Mather	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Work Order Notes / Sample Comments
FS11	s	4/8/2020	14:58	.5'	1	x	x	x	Composite
FS12	s	4/8/2020	15:02	1'	1	x	x	x	Composite
FS13	s	4/8/2020	15:08	1'	1	x	x	x	Composite
FS14	s	4/8/2020	17:42	2'	1	x	x	x	Composite
FS15	s	4/8/2020	18:14	.5'	1	x	x	x	Composite
FS16	s	4/8/2020	19:32	.5'	1	x	x	x	Composite
SW01	s	4/8/2020	17:54	0'-2'	1	x	x	x	Composite

ANALYSIS REQUEST

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

43928

Total 200.7 / 6010 200.8 / 6020:

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4/9/20 08:55	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04.09.2020 08.55.00 AM

Work Order #: 658406

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)?	3.8
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

*** 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: 04.09.2020

Checklist reviewed by: Jessica Kramer Date: 04.09.2020

Jessica Kramer

Analytical Report 658603

for

LT Environmental, Inc.

Project Manager: Dan Moir

RED HILLS

103020001

04.17.2020

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: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04.17.2020

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

Reference: XENCO Report No(s): **658603**
RED HILLS
Project Address: Lea

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) 658603. 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. 658603 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 658603

LT Environmental, Inc., Arvada, CO

RED HILLS

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS17	S	04.10.2020 12:28	1 ft	658603-001
FS18	S	04.10.2020 12:30	1 ft	658603-002

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RED HILLS

Project ID: *103020001*
Work Order Number(s): *658603*

Report Date: *04.17.2020*
Date Received: *04.10.2020*

Sample receipt non conformances and comments:

V1.001 Revision (client email) Changed samples 001 & 002 names JK 04/17/20
FS03 --> FS17
FS10 --> FS18

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 658603

LT Environmental, Inc., Arvada, CO

Project Name: RED HILLS

Project Id: 103020001
Contact: Dan Moir
Project Location: Lea

Date Received in Lab: Fri 04.10.2020 14:05
Report Date: 04.17.2020 13:19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	658603-001		658603-002					
	Field Id:	FS17		FS18					
	Depth:	1- ft		1- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	04.10.2020 12:28		04.10.2020 12:30					
TPH by SW8015 Mod	***Extracted:***	04.10.2020 15:30		04.10.2020 15:30					
	Analyzed:	04.10.2020 17:02		04.10.2020 17:23					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.2	50.2				
Diesel Range Organics (DRO)		415	50.2	<50.2	50.2				
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.2	50.2				
Total GRO-DRO		415	50.2	<50.2	50.2				
Total TPH		415	50.2	<50.2	50.2				

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

Jessica Kramer
Project Manager

Certificate of Analytical Results 658603

LT Environmental, Inc., Arvada, CO

RED HILLS

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	04.10.2020 14:05
Lab Sample Id:	658603-001	Date Collected:	04.10.2020 12:28	Sample Depth:	1 ft
Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.10.2020 15:30	Basis:	Wet Weight
Seq Number:	3122701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.10.2020 17:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	**415**	50.2	mg/kg	04.10.2020 17:02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.10.2020 17:02	U	1
Total GRO-DRO	PHC628	**415**	50.2	mg/kg	04.10.2020 17:02		1
Total TPH	PHC635	**415**	50.2	mg/kg	04.10.2020 17:02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	04.10.2020 17:02	
o-Terphenyl	84-15-1	133	%	70-135	04.10.2020 17:02	

Certificate of Analytical Results 658603

LT Environmental, Inc., Arvada, CO

RED HILLS

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	04.10.2020 14:05
Lab Sample Id:	658603-002	Date Collected:	04.10.2020 12:30	Sample Depth:	1 ft
Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	04.10.2020 15:30	Basis:	Wet Weight
Seq Number:	3122701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.10.2020 17:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.10.2020 17:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.10.2020 17:23	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.10.2020 17:23	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.10.2020 17:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	04.10.2020 17:23	
o-Terphenyl	84-15-1	127	%	70-135	04.10.2020 17:23	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 658603

LT Environmental, Inc.

RED HILLS

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3122701 Matrix: Solid Date Prep: 04.10.2020
MB Sample Id: 7701064-1-BLK LCS Sample Id: 7701064-1-BKS LCSD Sample Id: 7701064-1-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	950	95	1010	101	70-135	6	35	mg/kg	04.10.2020 15:21	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	1110	111	70-135	7	35	mg/kg	04.10.2020 15:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		124		130		70-135	%	04.10.2020 15:21
o-Terphenyl	98		120		127		70-135	%	04.10.2020 15:21

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3122701 Matrix: Solid Date Prep: 04.10.2020
MB Sample Id: 7701064-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.10.2020 15:00	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3122701 Matrix: Soil Date Prep: 04.10.2020
Parent Sample Id: 658521-003 MS Sample Id: 658521-003 S MSD Sample Id: 658521-003 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)	<50.0	999	1040	104	1040	104	70-135	0	35	mg/kg	04.10.2020 16:22	
Diesel Range Organics (DRO)	60.2	999	1160	110	1140	108	70-135	2	35	mg/kg	04.10.2020 16:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		130		70-135	%	04.10.2020 16:22
o-Terphenyl	132		129		70-135	%	04.10.2020 16:22

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference 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

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 608603

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	
Company Name:	LT Environmental, Inc, Permian Office	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX, 79705	City, State ZIP:	
Phone:	432-230-3849	Email:	WMather@ltenv.com, DMoir@ltenv.com

Work Order Comments

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

Project Name:	Red Hills	Turn Around	
Project Number:	103020001	Routine ☐	
Project Location	Lea	Rush: 24hr	
Sampler's Name:	William Mather	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temperature (°C):	2.0	Temp Blank: (Yes) No	Wet Ice: (Yes) No
Received Intact:	(Yes) No	Thermometer ID	TNM007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	2

ANALYSIS REQUEST

Preservative Codes

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

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

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	Sample Comments
	FS03	S	4/10/20	12:28	1'	1	X	Composite
	FS10	S	↓	12:30	1'	1	X	↓

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

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/10/20 14:05	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04.10.2020 02.05.00 PM

Work Order #: 658603

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?	**No**
#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: Martha Castro Date: 04.10.2020

Checklist reviewed by: Jessica Kramer Date: 04.10.2020

Jessica Kramer