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

Febuary 14th, 2022
NMOCD District 2
1220 S St Francis Dr # 3,
Santa Fe, NM 87505

RE:
Request for Closure

WPX Energy Permian, Inc. Remediation
Permit Number 2RP-4121 (NAB1704831420)
McKittrick 29-22
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, Inc. (WPX), is pleased to present the following Request for Closure letter report detailing excavation and soil sampling activities at the McKittrick 29-22 well pad (Site) located in Unit E, Section 29, Township 22 South, Range 26 East, Eddy County, New Mexico, as depicted on Figure 1.

Soil sampling activities were conducted in response to a release of approximately 32 barrels (bbls) of oil due to corrosion of the oil tank. The release was discovered on January 30, 2017. The release was mostly contained within the earthen unlined containment berm surrounding the tank with approximately 0.5 bbls breaching the containment onto the well pad surface. The release did not migrate off location and affected approximately 1,250 square feet of the well pad surface. The release footprint was mapped (Figure 2), and the impacted soil was excavated and transported off site for disposal. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on February 15, 2017 and was subsequently assigned Remediation Permit (RP) Number 2RP-4121 (Attachment 1). Based on the initial response efforts and the results of the excavation confirmation soil sampling, WPX is requesting no further action for this release event.

BACKGROUND

LTE determined closure criteria 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 greater than 100 feet below ground surface (bgs) based on known aquifer properties and the elevation difference between the Site and an identified water well. The nearest permitted water well with depth to water data is C 01788, located approximately 2,534 feet southwest of the Site. Water well C 01788 has a reported depth to water of 150 feet bgs and is approximately 43 feet higher

in elevation than the Site. The closest significant watercourse to the Site is an Office of the State Engineer (OSE) stream located approximately 178 feet northwest of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a high-potential karst area. Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

EXCAVATION AND DELINEATION SAMPLING

From April 23 to May 9, 2019, LTE was on site to oversee excavation activities within the release area following the removal of the failed production tank. Excavation activities were directed by field screening soil samples for volatile aromatic hydrocarbons using a photo-ionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Following completion of excavation activities, five-point composite confirmation soil samples were collected from the floor (samples labeled as "FS") and sidewalls (samples labeled as "SW") of the excavation area. Each soil sample represented at most 200 square feet. The excavation area and soil sample locations are depicted on Figure 2.

Soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name or initials, and method of analysis and immediately placed on ice. The samples were shipped at or below 4 degrees Celsius (°C) to Xenco Laboratories in Midland, Texas, under strict chain-of-custody (COC) procedures for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) following USEPA Method 8015M, and chloride following USEPA Method 300.0. Laboratory analytical results of all floor and sidewall initial excavation confirmation soil samples indicated additional excavation appeared warranted to remove residual TPH impacts in soil.

On June 5, 2019, LTE returned to the Site after additional excavation activities were conducted by WPX. The final excavation area measured approximately 1,900 square feet in lateral area and 8 feet bgs in depth. Excavation confirmation soil samples were collected, handled, and analyzed as previously described. Laboratory analytical results of confirmation soil sample FS04 at approximately 8 feet bgs indicated TPH in soil exceeded the NMOCD Table 1 Closure Criteria at a concentration of 112 mg/kg.

On July 12, 2019, LTE returned to the Site to resample the area represented by soil sample FS04. Soil sample FS05 was collected from the area, handled, and analyzed as previously described. A total of 600 cubic yards of impacted soil were excavated and transported to the R360 facility located in Halfway, New Mexico. Photographs taken during on site activities are included in Attachment 2.

ANALYTICAL RESULTS

Laboratory analytical results of all final excavation soil samples indicated BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 Closure Criteria. Laboratory analytical results are presented on Figures 2 and 3 and summarized in Table 1. The complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Laboratory analytical results for the excavation confirmation soil samples indicated BTEX, TPH, and chloride concentrations are compliant with NMOCD Table 1. Response efforts including excavation of impacted material within the release footprint have mitigated impacts at the Site. As a result, WPX requests no further action for 2RP-4121. An updated Form C-141 is included in Attachment 1.

If you have any questions or comments, please do not hesitate to contact Mr. Chris McKisson at (970) 285-9985 or cmckisson@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Chris McKisson
Project Environmental Scientist

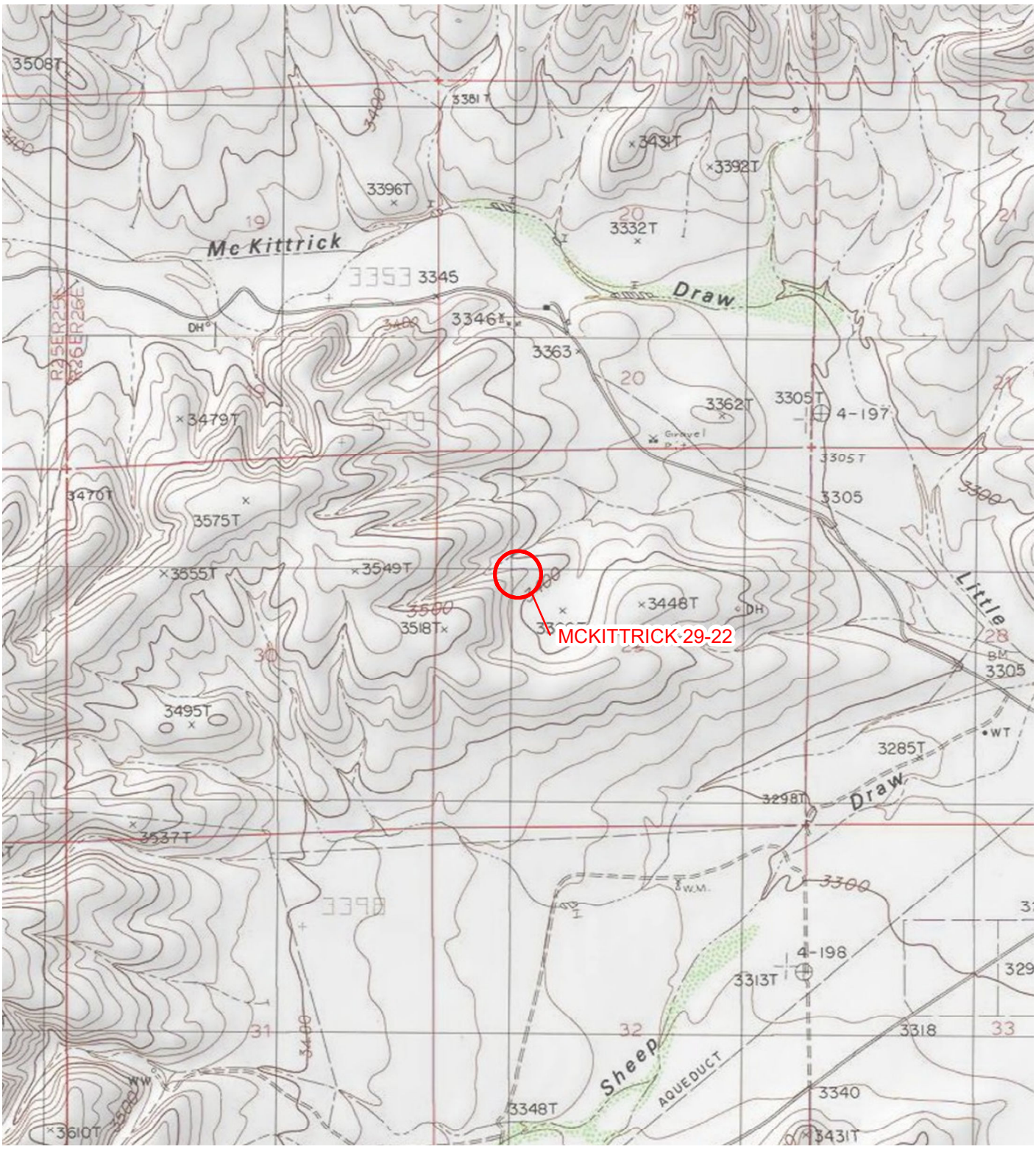
Ashley L. Ager, M.S., P.G.
Senior Geologist

cc: Jim Raley, WPX
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Excavation Soil Sample Locations (5/9/2019)
Figure 3	Excavation Soil Sample Locations (6/5/2019 & 7/12/2019)
Table 1	Soil Analytical Results
Attachment 1	Form C-141
Attachment 2	Photographic Log
Attachment 3	Laboratory Analytical Reports

FIGURES



LEGEND

SITE LOCATION

0 2,000 4,000

Feet

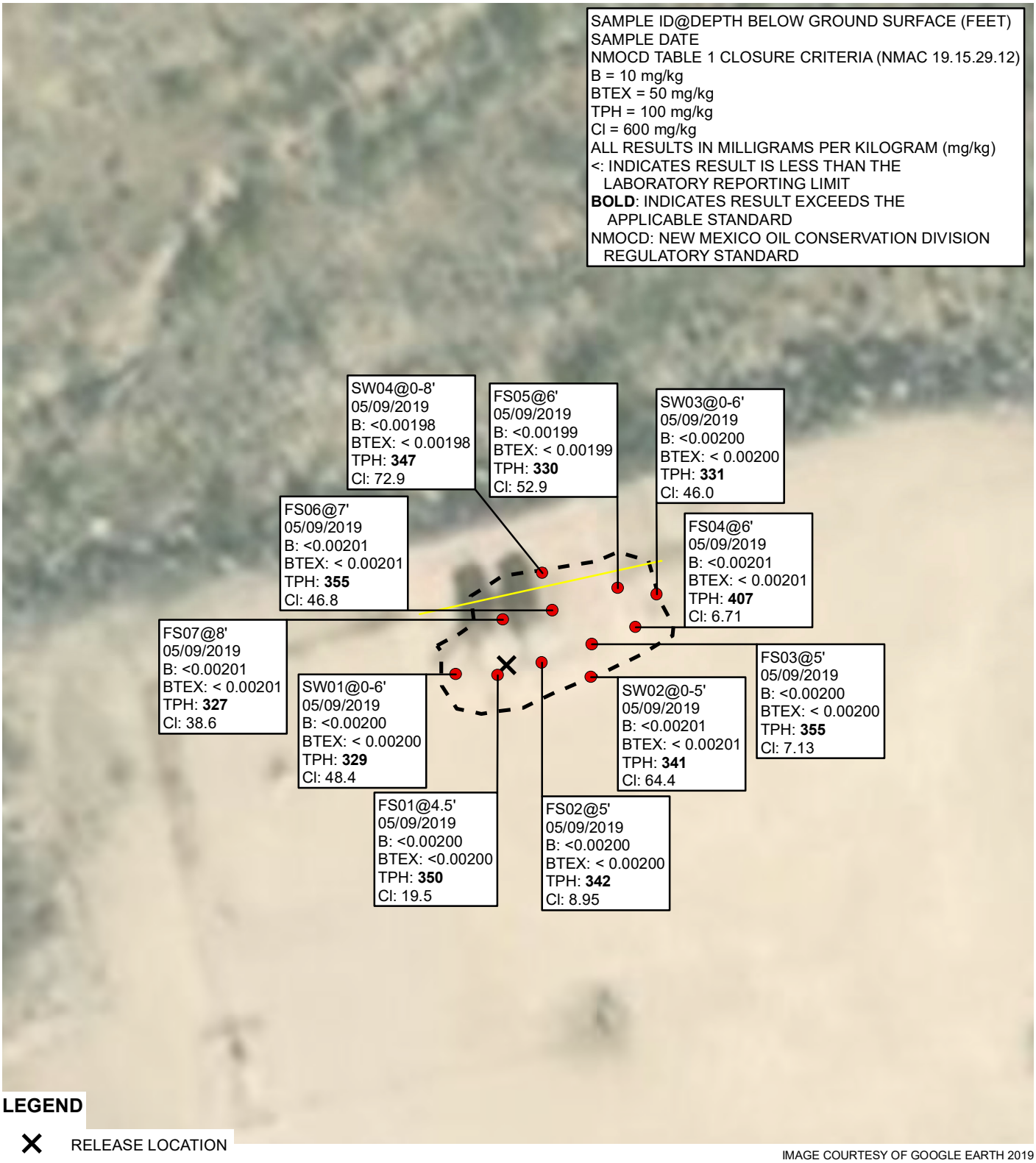
N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4121

FIGURE 1
SITE LOCATION MAP
MCKITTRICK 29-22
UNIT E SEC 29 T22S R26E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

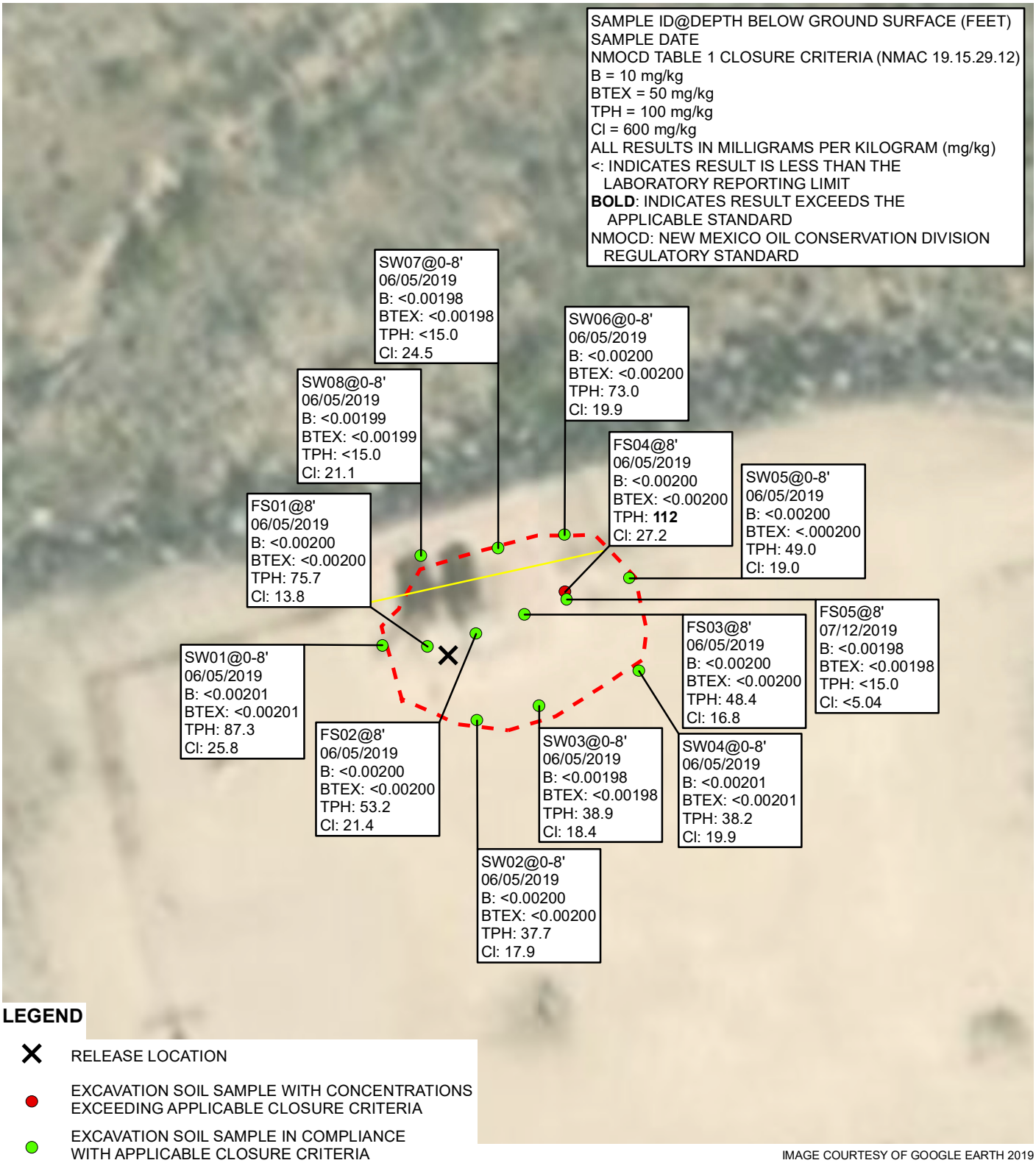
P:\WPX\GIS\MXD\034819010_MCKITTRICK 29-22\034819010_FIG01_SL_4121.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-4121

FIGURE 2
EXCAVATION SOIL SAMPLE LOCATIONS (5/9/2019)
MCKITTRICK 29-22
UNIT E SEC 29 T22S R26E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034819010_MCKITTRICK 29-22\034819010_FIG02_DELINEATION_4121.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-4121

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS (6/5/2019)
MCKITTRICK 29-22
UNIT E SEC 29 T22S R26E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034819010_MCKITTRICK 29-22\034819010_FIG03_EXCAVATION_4121.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS

MCKITTRICK 29-22
REMEDIATION PERMIT NUMBER 2RP-4121
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, 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)	MRO (mg/kg)	Sum of GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
FS01	4.5	05/09/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	263	86.9	263	**350**	19.5
FS02	5	05/09/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	261	80.7	261	**342**	8.95
FS03	5	05/09/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	270	84.9	270	**355**	7.13
FS04	6	05/09/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	311	95.8	311	**407**	6.71
FS05	6	05/09/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	257	72.5	257	**330**	52.9
FS06	7	05/09/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	275	80.1	275	**355**	46.8
FS07	8	05/09/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	256	71.2	256	**327**	38.6
SW01	0-6	05/09/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	256	73.0	256	**329**	48.4
SW02	0-5	05/09/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	271	70.1	271	**341**	64.4
SW03	0-6	05/09/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	260	71.1	260	**331**	46.0
SW04	0-8	05/09/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	274	73.0	274	**347**	72.9
FS01	8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	25.1	50.6	<15.0	75.7	75.7	13.8
FS02	8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	53.2	<14.9	53.2	53.2	21.4
FS03	8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	48.4	<15.0	48.4	48.4	16.8
FS04	8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	112	<15.0	112	**112**	27.2
SW01	0-8	06/05/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	87.3	<15.0	87.3	87.3	25.8
SW02	0-8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	37.7	<14.9	37.7	37.7	17.9
SW03	0-8	06/05/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	38.9	<15.0	38.9	38.9	18.4
SW04	0-8	06/05/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	38.2	<15.0	38.2	38.2	19.9
SW05	0-8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	49.0	<15.0	49.0	49.0	19.0
SW06	0-8	06/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	73.0	<15.0	73.0	73.0	19.9
SW07	0-8	06/05/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	24.5
SW08	0-8	06/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	21.1
FS05	8	07/12/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	<5.04
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**NE**	**100**	**600**

Notes:

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

ATTACHMENT 1: FORM C-141

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1704831420

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company WPX Energy Inc/RKI 241628?	Contact Karolina Blaney
Address 5315 Buena Vista Dr.	Telephone No. 970 589 0743
Facility Name: McKitrick 29-22	Facility Type: Well Pad

Surface Owner: Private	Mineral Owner: Federal	API No. 30- 015-29351

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	29	22S	26E	1715	FNL	1160	FWL	Eddy

32.36573?9 Latitude: ~~32.81139288~~N Longitude: ~~-103.86641694~~W -104.3199844

NATURE OF RELEASE

Type of Release. Oil	Volume of Release: 32 Bbls	Volume Recovered: 0 Bbls
Source of Release Tank	Date and Hour of Occurrence 1/30/2017	Date and Hour of Discovery 1/30/2017 – 11:30 hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD Crystal Weaver & Michael Bratcher, BLM Shelly Tucker	
By Whom? Karolina Blaney	Date and Hour: 2/1/17 – 6:50 hrs MT	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

The spill was caused by equipment failure; corroded hole in the oil tank. Approximately 32 bbls of oil leaked out of the tank into a dirt SPCC containment. Less than 0.5 bbl saturated the berm and stained a small area outside the berm. The spill did not migrate off location.

Describe Area Affected and Cleanup Action Taken.*

The impacted area was mapped with a Trimble. The impacted soil was field screened for hydrocarbons and exceeded the cleanup thresholds of 5,000 ppm at 10" below surface. The delineation plan for the hydrocarbon and chloride impacts will be sent to BLM and OCD within 30 days of this submittal.

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

Signature: Karolina Blaney	OIL CONSERVATION DIVISION Approved by Environmental Specialist: Signed By [illegible]
Printed Name: Karolina Blaney	
Title: Environmental Specialist	Approval Date: 2/17/17 Expiration Date: N/A
E-mail Address: Karolina.blaney@wpxenergy.com	Conditions of Approval: See attached Attached ☐
Date: 2/15/2016 Phone: 970-589-0743	

Attach Additional Sheets If Necessary

2RP-4121

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	**NAB1704831420**
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	**WPX Energy, Inc.**	OGRID	**246289**
Contact Name	**Jim Raley**	Contact Telephone	**575-689-7597**
Contact email	jim.raley@dvn.com	Incident # *(assigned by OCD)*	NAB1704831420
Contact mailing address	**5315 Buena Vista Dr., Carlsbad, NM 88220**		

Location of Release Source

Latitude **32.3657379** Longitude **-104.3199844**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	**McKittrick 29-22**	Site Type	**Oil Well Pad**
Date Release Discovered	**1/30/2017**	API# *(if applicable)*	**30-015-29351**

Unit Letter	Section	Township	Range	County
E	**29**	**22S**	**26E**	**Eddy**

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 32	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 spill was caused by equipment failure; corroded hole in the oil tank. Approximately 32 bbls of oil leaked out of the tank into the dirt SPCC containment. Less than 0.5 bbls saturated the berm and stained a small area outside the berm. The spill did not migrate off location.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	**NAB1704831420**
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? **An unauthorized release of volume greater than 25 bbls.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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: **Jim Raley** Title: **Environmental Specialist**

Signature: Jim Raley **2/14/2022**

Date: email: jim.raley@dvn.com Telephone: **575-689-7597**

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	**NAB1704831420**
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	
District RP	**NAB1704831420**
Facility ID	
Application ID	

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

Printed Name: **Jim Raley** Title: **Environmental Specialist**

Signature: _____ **2/14/2022**

Date: email: **jim.raley@dvn.com** Telephone: **575-689-7597**

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	**NAB1704831420**
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: **Jim Raley** Title: **Environmental Specialist**

Signature: Jim Raley Date: **2/14/2022**

jim.raley@dvn.com email: Telephone: **575-689-7597**

OCD Only

Received by: OCD Date: 7/12/2022

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: Ashley Maxwell Date: 9/14/2022

Printed Name: Ashley Maxwell Title: Environmental Specialist

ATTACHMENT 2: PHOTOGRAPHIC LOG

Release footprint – view north

Project: 034819010	WPX Energy Permian, Inc. McKittrick 29-22	Advancing Opportunity
March 20, 2019	Photographic Log	

Release footprint – view west

Project: 034819010	WPX Energy Permian, Inc. McKittrick 29-22	LTE Advancing Opportunity
March 20, 2019	Photographic Log	

Excavation area – view northeast

Project: 034819010	WPX Energy Permian, Inc. McKittrick 29-22	LTE Advancing Opportunity
June 5, 2019	Photographic Log	

Excavation area – view north

Project: 034819010	WPX Energy Permian, Inc. McKittrick 29-22	LTE Advancing Opportunity
July 12, 2019	Photographic Log	

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 624024

for

LT Environmental, Inc.

Project Manager: Chris McKisson

McKittrick 29-22

034819010

17-MAY-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

17-MAY-19

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

Reference: XENCO Report No(s): **624024**
McKittrick 29-22
Project Address:

Chris McKisson:

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) 624024. 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. 624024 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	05-09-19 08:00	4.5 ft	624024-001
FS02	S	05-09-19 08:30	5 ft	624024-002
FS03	S	05-09-19 09:00	5 ft	624024-003
FS04	S	05-09-19 09:30	6 ft	624024-004
FS05	S	05-09-19 10:30	6 ft	624024-005
FS06	S	05-09-19 11:00	7 ft	624024-006
FS07	S	05-09-19 11:30	8 ft	624024-007
SW01	S	05-09-19 11:50	0 - 6 ft	624024-008
SW02	S	05-09-19 12:10	0 - 5 ft	624024-009
SW03	S	05-09-19 12:30	0 - 6 ft	624024-010
SW04	S	05-09-19 12:50	0 - 8 ft	624024-011

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: McKittrick 29-22

Project ID: *034819010*
Work Order Number(s): *624024*

Report Date: *17-MAY-19*
Date Received: *05/13/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3089058 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3089157 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 624024-007 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
Benzene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 624024-007, -008, -009, -010, -011.
The Laboratory Control Sample for Benzene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 624024

LT Environmental, Inc., Arvada, CO

Project Name: McKittrick 29-22

Project Id: 034819010
Contact: Chris McKisson
Project Location:

Date Received in Lab: Mon May-13-19 10:50 am
Report Date: 17-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624024-001		624024-002		624024-003		624024-004		624024-005		624024-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	4.5- ft		5- ft		5- ft		6- ft		6- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-09-19 08:00		May-09-19 08:30		May-09-19 09:00		May-09-19 09:30		May-09-19 10:30		May-09-19 11:00	
BTEX by EPA 8021B	***Extracted:***	May-14-19 15:00		May-14-19 15:00		May-14-19 15:00		May-14-19 15:00		May-14-19 15:00		May-14-19 15:00	
	Analyzed:	May-15-19 05:03		May-15-19 05:22		May-15-19 05:41		May-15-19 06:00		May-15-19 06:19		May-15-19 06:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00401	0.00401	<0.00399	0.00399	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Inorganic Anions by EPA 300	***Extracted:***	May-14-19 10:00		May-14-19 10:00		May-14-19 10:00		May-14-19 10:00		May-14-19 11:40		May-14-19 11:40	
	Analyzed:	May-14-19 14:53		May-14-19 15:14		May-14-19 15:21		May-14-19 15:28		May-14-19 12:18		May-14-19 12:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		19.5	4.98	8.95	5.00	7.13	5.04	6.71	4.99	52.9	5.02	46.8	5.01
TPH by SW8015 Mod	***Extracted:***	May-14-19 17:00		May-14-19 17:00		May-14-19 17:00		May-14-19 17:00		May-14-19 17:00		May-14-19 17:00	
	Analyzed:	May-14-19 22:51		May-14-19 23:51		May-15-19 00:11		May-15-19 00:31		May-15-19 00:51		May-15-19 01:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		263	15.0	261	15.0	270	15.0	311	15.0	257	15.0	275	15.0
Motor Oil Range Hydrocarbons (MRO)		86.9	15.0	80.7	15.0	84.9	15.0	95.8	15.0	72.5	15.0	80.1	15.0
Total TPH		350	15.0	342	15.0	355	15.0	407	15.0	330	15.0	355	15.0
Total GRO-DRO		263	15.0	261	15.0	270	15.0	311	15.0	257	15.0	275	15.0

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

Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 624024

LT Environmental, Inc., Arvada, CO

Project Name: McKittrick 29-22

Project Id: 034819010
Contact: Chris McKisson
Project Location:

Date Received in Lab: Mon May-13-19 10:50 am
Report Date: 17-MAY-19
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	624024-007		624024-008		624024-009		624024-010		624024-011	
	Field Id:	FS07		SW01		SW02		SW03		SW04	
	Depth:	8- ft		0-6 ft		0-5 ft		0-6 ft		0-8 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-09-19 11:30		May-09-19 11:50		May-09-19 12:10		May-09-19 12:30		May-09-19 12:50	
BTEX by EPA 8021B	***Extracted:***	May-15-19 15:15		May-15-19 15:15		May-15-19 15:15		May-15-19 15:15		May-15-19 15:15	
	Analyzed:	May-15-19 17:47		May-15-19 18:07		May-15-19 18:26		May-15-19 18:45		May-15-19 19:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00402	0.00402	<0.00400	0.00400	<0.00402	0.00402	<0.00401	0.00401	<0.00397	0.00397
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198
Inorganic Anions by EPA 300	***Extracted:***	May-14-19 11:40		May-14-19 11:40		May-14-19 11:40		May-14-19 11:40		May-14-19 11:40	
	Analyzed:	May-14-19 12:47		May-14-19 12:54		May-14-19 13:01		May-14-19 13:23		May-14-19 13:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		38.6	5.02	48.4	5.02	64.4	5.03	46.0	4.95	72.9	5.00
TPH by SW8015 Mod	***Extracted:***	May-14-19 17:00		May-14-19 17:00		May-14-19 17:00		May-14-19 17:00		May-14-19 17:00	
	Analyzed:	May-15-19 01:30		May-15-19 01:51		May-15-19 02:11		May-15-19 02:31		May-15-19 03:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		256	15.0	256	15.0	271	15.0	260	15.0	274	15.0
Motor Oil Range Hydrocarbons (MRO)		71.2	15.0	73.0	15.0	70.1	15.0	71.1	15.0	73.0	15.0
Total TPH		327	15.0	329	15.0	341	15.0	331	15.0	347	15.0
Total GRO-DRO		256	15.0	256	15.0	271	15.0	260	15.0	274	15.0

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-001	Date Collected:	05.09.19 08.00	Sample Depth:	4.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 10.00	Basis:	Wet Weight
Seq Number:	3088959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.5**	4.98	mg/kg	05.14.19 14.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.14.19 22.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**263**	15.0	mg/kg	05.14.19 22.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**86.9**	15.0	mg/kg	05.14.19 22.51		1
Total TPH	PHC635	**350**	15.0	mg/kg	05.14.19 22.51		1
Total GRO-DRO	PHC628	**263**	15.0	mg/kg	05.14.19 22.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.14.19 22.51	
o-Terphenyl	84-15-1	89	%	70-135	05.14.19 22.51	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-001	Date Collected:	05.09.19 08.00	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.14.19 15.00	Basis:	Wet Weight
Seq Number:	3089058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.15.19 05.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.15.19 05.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.15.19 05.03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.15.19 05.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.15.19 05.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.15.19 05.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.15.19 05.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.15.19 05.03	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.15.19 05.03	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-002	Date Collected:	05.09.19 08.30	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 10.00	Basis:	Wet Weight
Seq Number:	3088959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.95**	5.00	mg/kg	05.14.19 15.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.14.19 23.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**261**	15.0	mg/kg	05.14.19 23.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**80.7**	15.0	mg/kg	05.14.19 23.51		1
Total TPH	PHC635	**342**	15.0	mg/kg	05.14.19 23.51		1
Total GRO-DRO	PHC628	**261**	15.0	mg/kg	05.14.19 23.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.14.19 23.51	
o-Terphenyl	84-15-1	89	%	70-135	05.14.19 23.51	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-002	Date Collected:	05.09.19 08.30	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.14.19 15.00	Basis:	Wet Weight
Seq Number:	3089058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.15.19 05.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.15.19 05.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.15.19 05.22	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.15.19 05.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.15.19 05.22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.15.19 05.22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.15.19 05.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.15.19 05.22	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.15.19 05.22	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-003	Date Collected:	05.09.19 09.00	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 10.00	Basis:	Wet Weight
Seq Number:	3088959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.13**	5.04	mg/kg	05.14.19 15.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 00.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	**270**	15.0	mg/kg	05.15.19 00.11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**84.9**	15.0	mg/kg	05.15.19 00.11		1
Total TPH	PHC635	**355**	15.0	mg/kg	05.15.19 00.11		1
Total GRO-DRO	PHC628	**270**	15.0	mg/kg	05.15.19 00.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.15.19 00.11	
o-Terphenyl	84-15-1	87	%	70-135	05.15.19 00.11	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-003	Date Collected:	05.09.19 09.00	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.14.19 15.00	Basis:	Wet Weight
Seq Number:	3089058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.15.19 05.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.15.19 05.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.15.19 05.41	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.15.19 05.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.15.19 05.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.15.19 05.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.15.19 05.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.15.19 05.41	
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.15.19 05.41	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-004	Date Collected:	05.09.19 09.30	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 10.00	Basis:	Wet Weight
Seq Number:	3088959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.71**	4.99	mg/kg	05.14.19 15.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 00.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**311**	15.0	mg/kg	05.15.19 00.31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**95.8**	15.0	mg/kg	05.15.19 00.31		1
Total TPH	PHC635	**407**	15.0	mg/kg	05.15.19 00.31		1
Total GRO-DRO	PHC628	**311**	15.0	mg/kg	05.15.19 00.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.15.19 00.31	
o-Terphenyl	84-15-1	88	%	70-135	05.15.19 00.31	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS04**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-004	Date Collected:	05.09.19 09.30	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.14.19 15.00	Basis:	Wet Weight
Seq Number:	3089058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.15.19 06.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.15.19 06.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.15.19 06.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.15.19 06.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.15.19 06.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.15.19 06.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.15.19 06.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	05.15.19 06.00	
4-Bromofluorobenzene	460-00-4	93	%	70-130	05.15.19 06.00	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-005	Date Collected:	05.09.19 10.30	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 11.40	Basis:	Wet Weight
Seq Number:	3089035				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**52.9**	5.02	mg/kg	05.14.19 12.18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 00.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**257**	15.0	mg/kg	05.15.19 00.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**72.5**	15.0	mg/kg	05.15.19 00.51		1
Total TPH	PHC635	**330**	15.0	mg/kg	05.15.19 00.51		1
Total GRO-DRO	PHC628	**257**	15.0	mg/kg	05.15.19 00.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.15.19 00.51	
o-Terphenyl	84-15-1	92	%	70-135	05.15.19 00.51	

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Sample Id:	**FS05**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-005	Date Collected:	05.09.19 10.30	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.14.19 15.00	Basis:	Wet Weight
Seq Number:	3089058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.15.19 06.19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.15.19 06.19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.15.19 06.19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.15.19 06.19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.15.19 06.19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.15.19 06.19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.15.19 06.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	05.15.19 06.19	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.15.19 06.19	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-006	Date Collected:	05.09.19 11.00	Sample Depth:	7 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 11.40	Basis:	Wet Weight
Seq Number:	3089035				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.8**	5.01	mg/kg	05.14.19 12.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 01.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	**275**	15.0	mg/kg	05.15.19 01.10		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**80.1**	15.0	mg/kg	05.15.19 01.10		1
Total TPH	PHC635	**355**	15.0	mg/kg	05.15.19 01.10		1
Total GRO-DRO	PHC628	**275**	15.0	mg/kg	05.15.19 01.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.15.19 01.10	
o-Terphenyl	84-15-1	92	%	70-135	05.15.19 01.10	

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Sample Id:	**FS06**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-006	Date Collected:	05.09.19 11.00	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.14.19 15.00	Basis:	Wet Weight
Seq Number:	3089058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.15.19 06.38	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.15.19 06.38	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.15.19 06.38	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.15.19 06.38	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.15.19 06.38	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.15.19 06.38	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.15.19 06.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	05.15.19 06.38	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.15.19 06.38	

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Sample Id: **FS07** Matrix: Soil Date Received:05.13.19 10.50

Lab Sample Id: 624024-007 Date Collected: 05.09.19 11.30 Sample Depth: 8 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 05.14.19 11.40 Basis: Wet Weight

Seq Number: 3089035

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**38.6**	5.02	mg/kg	05.14.19 12.47		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 05.14.19 17.00 Basis: Wet Weight

Seq Number: 3089071

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 01.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**256**	15.0	mg/kg	05.15.19 01.30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**71.2**	15.0	mg/kg	05.15.19 01.30		1
Total TPH	PHC635	**327**	15.0	mg/kg	05.15.19 01.30		1
Total GRO-DRO	PHC628	**256**	15.0	mg/kg	05.15.19 01.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.15.19 01.30	
o-Terphenyl	84-15-1	92	%	70-135	05.15.19 01.30	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-007	Date Collected:	05.09.19 11.30	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.15.19 15.15	Basis:	Wet Weight
Seq Number:	3089157				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.15.19 17.47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.15.19 17.47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.15.19 17.47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.15.19 17.47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.15.19 17.47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.15.19 17.47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.15.19 17.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.15.19 17.47	
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.15.19 17.47	

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McKittrick 29-22

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-008	Date Collected:	05.09.19 11.50	Sample Depth:	0 - 6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 11.40	Basis:	Wet Weight
Seq Number:	3089035				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**48.4**	5.02	mg/kg	05.14.19 12.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 01.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**256**	15.0	mg/kg	05.15.19 01.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**73.0**	15.0	mg/kg	05.15.19 01.51		1
Total TPH	PHC635	**329**	15.0	mg/kg	05.15.19 01.51		1
Total GRO-DRO	PHC628	**256**	15.0	mg/kg	05.15.19 01.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.15.19 01.51	
o-Terphenyl	84-15-1	88	%	70-135	05.15.19 01.51	

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Sample Id:	**SW01**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-008	Date Collected:	05.09.19 11.50	Sample Depth:	0 - 6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.15.19 15.15	Basis:	Wet Weight
Seq Number:	3089157				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.15.19 18.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.15.19 18.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.15.19 18.07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.15.19 18.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.15.19 18.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.15.19 18.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.15.19 18.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.15.19 18.07	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.15.19 18.07	

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Sample Id:	**SW02**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-009	Date Collected:	05.09.19 12.10	Sample Depth:	0 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 11.40	Basis:	Wet Weight
Seq Number:	3089035				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.4**	5.03	mg/kg	05.14.19 13.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 02.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	**271**	15.0	mg/kg	05.15.19 02.11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**70.1**	15.0	mg/kg	05.15.19 02.11		1
Total TPH	PHC635	**341**	15.0	mg/kg	05.15.19 02.11		1
Total GRO-DRO	PHC628	**271**	15.0	mg/kg	05.15.19 02.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.15.19 02.11	
o-Terphenyl	84-15-1	93	%	70-135	05.15.19 02.11	

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Sample Id:	**SW02**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-009	Date Collected:	05.09.19 12.10	Sample Depth:	0 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.15.19 15.15	Basis:	Wet Weight
Seq Number:	3089157				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.15.19 18.26	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.15.19 18.26	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.15.19 18.26	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.15.19 18.26	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.15.19 18.26	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.15.19 18.26	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.15.19 18.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	05.15.19 18.26	
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.15.19 18.26	

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Sample Id:	**SW03**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-010	Date Collected:	05.09.19 12.30	Sample Depth:	0 - 6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 11.40	Basis:	Wet Weight
Seq Number:	3089035				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.0**	4.95	mg/kg	05.14.19 13.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 02.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**260**	15.0	mg/kg	05.15.19 02.31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**71.1**	15.0	mg/kg	05.15.19 02.31		1
Total TPH	PHC635	**331**	15.0	mg/kg	05.15.19 02.31		1
Total GRO-DRO	PHC628	**260**	15.0	mg/kg	05.15.19 02.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.15.19 02.31	
o-Terphenyl	84-15-1	93	%	70-135	05.15.19 02.31	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-010	Date Collected:	05.09.19 12.30	Sample Depth:	0 - 6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.15.19 15.15	Basis:	Wet Weight
Seq Number:	3089157				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.15.19 18.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.15.19 18.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.15.19 18.45	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.15.19 18.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.15.19 18.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.15.19 18.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.15.19 18.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	05.15.19 18.45	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.15.19 18.45	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-011	Date Collected:	05.09.19 12.50	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.19 11.40	Basis:	Wet Weight
Seq Number:	3089035				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**72.9**	5.00	mg/kg	05.14.19 13.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.19 17.00	Basis:	Wet Weight
Seq Number:	3089071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.15.19 03.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**274**	15.0	mg/kg	05.15.19 03.30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**73.0**	15.0	mg/kg	05.15.19 03.30		1
Total TPH	PHC635	**347**	15.0	mg/kg	05.15.19 03.30		1
Total GRO-DRO	PHC628	**274**	15.0	mg/kg	05.15.19 03.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.15.19 03.30	
o-Terphenyl	84-15-1	91	%	70-135	05.15.19 03.30	

Certificate of Analytical Results 624024

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	05.13.19 10.50
Lab Sample Id:	624024-011	Date Collected:	05.09.19 12.50	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.15.19 15.15	Basis:	Wet Weight
Seq Number:	3089157				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.15.19 19.04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.15.19 19.04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.15.19 19.04	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.15.19 19.04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.15.19 19.04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.15.19 19.04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.15.19 19.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	05.15.19 19.04	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.15.19 19.04	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 624024

LT Environmental, Inc.

McKittrick 29-22

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3088959 — Matrix: Solid — Date Prep: 05.14.19
MB Sample Id: 7677804-1-BLK — LCS Sample Id: 7677804-1-BKS — LCSD Sample Id: 7677804-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	247	99	249	100	90-110	1	20	mg/kg	05.14.19 10:54	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089035 — Matrix: Solid — Date Prep: 05.14.19
MB Sample Id: 7677803-1-BLK — LCS Sample Id: 7677803-1-BKS — LCSD Sample Id: 7677803-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	254	102	254	102	90-110	0	20	mg/kg	05.14.19 12:03	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3088959 — Matrix: Soil — Date Prep: 05.14.19
Parent Sample Id: 623921-002 — MS Sample Id: 623921-002 S — MSD Sample Id: 623921-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	642	250	822	72	806	66	90-110	2	20	mg/kg	05.14.19 11:16	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3088959 — Matrix: Soil — Date Prep: 05.14.19
Parent Sample Id: 624051-002 — MS Sample Id: 624051-002 S — MSD Sample Id: 624051-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1010	251	1200	76	1210	80	90-110	1	20	mg/kg	05.14.19 13:58	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089035 — Matrix: Soil — Date Prep: 05.14.19
Parent Sample Id: 624024-005 — MS Sample Id: 624024-005 S — MSD Sample Id: 624024-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	52.9	251	304	100	302	99	90-110	1	20	mg/kg	05.14.19 12:25	

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 624024

LT Environmental, Inc.

McKittrick 29-22

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3089035 Matrix: Soil Date Prep: 05.14.19
Parent Sample Id: 624025-004 MS Sample Id: 624025-004 S MSD Sample Id: 624025-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	232	251	479	98	481	99	90-110	0	20	mg/kg	05.14.19 14:07	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3089071 Matrix: Solid Date Prep: 05.14.19
MB Sample Id: 7677881-1-BLK LCS Sample Id: 7677881-1-BKS LCSD Sample Id: 7677881-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1080	108	1110	111	70-135	3	20	mg/kg	05.14.19 22:11	
Diesel Range Organics (DRO)	<8.13	1000	1040	104	1080	108	70-135	4	20	mg/kg	05.14.19 22:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		126		127		70-135	%	05.14.19 22:11
o-Terphenyl	103		106		115		70-135	%	05.14.19 22:11

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3089071 Matrix: Soil Date Prep: 05.14.19
Parent Sample Id: 624024-001 MS Sample Id: 624024-001 S MSD Sample Id: 624024-001 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)	13.6	999	1000	99	996	98	70-135	0	20	mg/kg	05.14.19 23:11	
Diesel Range Organics (DRO)	263	999	1150	89	1140	88	70-135	1	20	mg/kg	05.14.19 23:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		120		70-135	%	05.14.19 23:11
o-Terphenyl	105		97		70-135	%	05.14.19 23:11

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 624024

LT Environmental, Inc.

McKittrick 29-22

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089058 | Matrix: Solid | Date Prep: 05.14.19
MB Sample Id: 7677870-1-BLK | LCS Sample Id: 7677870-1-BKS | LCSD Sample Id: 7677870-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.110	110	0.111	111	70-130	1	35	mg/kg	05.14.19 21:49	
Toluene	<0.000455	0.0998	0.102	102	0.103	103	70-130	1	35	mg/kg	05.14.19 21:49	
Ethylbenzene	<0.000564	0.0998	0.107	107	0.107	107	70-130	0	35	mg/kg	05.14.19 21:49	
m,p-Xylenes	<0.00101	0.200	0.221	111	0.222	111	70-130	0	35	mg/kg	05.14.19 21:49	
o-Xylene	<0.000344	0.0998	0.107	107	0.109	109	70-130	2	35	mg/kg	05.14.19 21:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		102		103		70-130	%	05.14.19 21:49
4-Bromofluorobenzene	82		97		99		70-130	%	05.14.19 21:49

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089157 | Matrix: Solid | Date Prep: 05.15.19
MB Sample Id: 7677944-1-BLK | LCS Sample Id: 7677944-1-BKS | LCSD Sample Id: 7677944-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0996	0.114	114	0.119	119	70-130	4	35	mg/kg	05.15.19 15:44	
Toluene	<0.000454	0.0996	0.106	106	0.111	111	70-130	5	35	mg/kg	05.15.19 15:44	
Ethylbenzene	<0.000563	0.0996	0.113	113	0.117	117	70-130	3	35	mg/kg	05.15.19 15:44	
m,p-Xylenes	<0.00101	0.199	0.234	118	0.243	122	70-130	4	35	mg/kg	05.15.19 15:44	
o-Xylene	<0.000343	0.0996	0.112	112	0.117	117	70-130	4	35	mg/kg	05.15.19 15:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		101		103		70-130	%	05.15.19 15:44
4-Bromofluorobenzene	83		94		99		70-130	%	05.15.19 15:44

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089058 | Matrix: Soil | Date Prep: 05.14.19
Parent Sample Id: 623942-002 | MS Sample Id: 623942-002 S | MSD Sample Id: 623942-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000504	0.100	0.0963	96	0.0994	99	70-130	3	35	mg/kg	05.14.19 22:27	
Toluene	<0.000457	0.100	0.0873	87	0.0912	92	70-130	4	35	mg/kg	05.14.19 22:27	
Ethylbenzene	<0.000566	0.100	0.0884	88	0.0932	94	70-130	5	35	mg/kg	05.14.19 22:27	
m,p-Xylenes	<0.00102	0.200	0.181	91	0.193	97	70-130	6	35	mg/kg	05.14.19 22:27	
o-Xylene	0.000474	0.100	0.0879	87	0.0934	93	70-130	6	35	mg/kg	05.14.19 22:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	05.14.19 22:27
4-Bromofluorobenzene	101		102		70-130	%	05.14.19 22:27

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

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

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

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

QC Summary 624024

LT Environmental, Inc.

McKittrick 29-22

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

Seq Number: 3089157 Matrix: Soil Date Prep: 05.15.19

Parent Sample Id: 624024-007 MS Sample Id: 624024-007 S MSD Sample Id: 624024-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0938	94	0.0671	68	70-130	33	35	mg/kg	05.15.19 16:29	X
Toluene	0.000473	0.100	0.0805	80	0.0704	70	70-130	13	35	mg/kg	05.15.19 16:29	
Ethylbenzene	<0.000567	0.100	0.0747	75	0.0729	73	70-130	2	35	mg/kg	05.15.19 16:29	
m,p-Xylenes	<0.00102	0.201	0.151	75	0.146	73	70-130	3	35	mg/kg	05.15.19 16:29	
o-Xylene	0.000594	0.100	0.0730	72	0.0733	73	70-130	0	35	mg/kg	05.15.19 16:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		97		70-130	%	05.15.19 16:29
4-Bromofluorobenzene	92		101		70-130	%	05.15.19 16:29

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: 624024

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

Page 1 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)285-9985	Email:	llaumbach@ltenv.com cmckisson@ltenv.com

Work Order Comments

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

Project Name:	McKittrick 29-22	Turn Around	
Project Number:	~~###~~ 03481901O	Routine	☒
P.O. Number:	2RP-4121	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.5 / 0.4	Thermometer ID	TE	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1	
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS01	S	05/09/2019	8:00	4.5'	1	X	X	X
FS02	S		8:30	5'	1	X	X	X
FS03	S		9:00	5'	1	X	X	X
FS04	S		9:30	6'	1	X	X	X
FS05	S		10:30	6'	1	X	X	X
FS06	S		11:00	7'	1	X	X	X
FS07	S		11:30	8'	1	X	X	X
SW01	S		11:50	0-6'	1	X	X	X
SW02	S		12:10	0-5'	1	X	X	X
SW03	S		12:30	0-6'	2	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Mark	05/10/2019 13:30	2	Brad	5/13/19 1050
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: 1e710524

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 1 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)285-9985 Email:	llaumbach@ltenv.com cmckisson@ltenv.com	

Work Order Comments

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

Project Name:	McKittrick 29-22	Turn Around	
Project Number:	~~###~~ 034819010	Routine	☒
P.O. Number:	2RP-4121	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.5 | 0.4	Thermometer ID	VE	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1	
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SW04	S	05/09/19	12:50	0-8'	2	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		05/10/2019 13:30	2		5/13/19 1050
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: 05/13/2019 10:50:00 AM

Work Order #: 624024

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 05/13/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 05/13/2019

Jessica Kramer

Analytical Report 626928

for

LT Environmental, Inc.

Project Manager: Chris McKisson

McKittrick 29-22

34819010

30-JUL-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

30-JUL-19

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

Reference: XENCO Report No(s): **626928**
McKittrick 29-22
Project Address:

Chris McKisson:

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) 626928. 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. 626928 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	06-05-19 08:15	8 ft	626928-001
FS02	S	06-05-19 08:30	8 ft	626928-002
FS03	S	06-05-19 08:45	8 ft	626928-003
FS04	S	06-05-19 09:00	8 ft	626928-004
SW01	S	06-05-19 09:20	0 - 8 ft	626928-005
SW02	S	06-05-19 09:30	0 - 8 ft	626928-006
SW03	S	06-05-19 09:45	0 - 8 ft	626928-007
SW04	S	06-05-19 10:00	0 - 8 ft	626928-008
SW05	S	06-05-19 10:15	0 - 8 ft	626928-009
SW06	S	06-05-19 10:25	0 - 8 ft	626928-010
SW07	S	06-05-19 10:40	0 - 8 ft	626928-011
SW08	S	06-05-19 10:50	0 - 8 ft	626928-012

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: McKittrick 29-22

Project ID: *34819010*
Work Order Number(s): *626928*

Report Date: *30-JUL-19*
Date Received: *06/07/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3091706 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered above QC limits. Samples affected are: 7679506-1-BSD.

Batch: LBA-3092372 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 626928-001 S,626928-001 SD,626928-004,626928-005,626928-007,626928-012,626928-002,626928-003.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 626928

LT Environmental, Inc., Arvada, CO

Project Name: McKittrick 29-22

Project Id: 34819010
Contact: Chris McKisson
Project Location:

Date Received in Lab: Fri Jun-07-19 10:46 am
Report Date: 30-JUL-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	626928-001		626928-002		626928-003		626928-004		626928-005		626928-006	
	Field Id:	FS01		FS02		FS03		FS04		SW01		SW02	
	Depth:	8- ft		8- ft		8- ft		8- ft		0-8 ft		0-8 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-05-19 08:15		Jun-05-19 08:30		Jun-05-19 08:45		Jun-05-19 09:00		Jun-05-19 09:20		Jun-05-19 09:30	
BTEX by EPA 8021B	***Extracted:***	Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00	
	Analyzed:	Jun-13-19 11:48		Jun-13-19 12:07		Jun-13-19 12:26		Jun-13-19 12:42		Jun-13-19 13:04		Jun-13-19 13:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00399	0.00399	<0.00400	0.00400	<0.00401	0.00401	<0.00402	0.00402	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30	
	Analyzed:	Jun-08-19 20:26		Jun-08-19 20:48		Jun-08-19 20:55		Jun-08-19 21:02		Jun-08-19 21:09		Jun-08-19 21:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		13.8	4.96	21.4	5.02	16.8	4.96	27.2	4.99	25.8	5.01	17.9	5.01
TPH by SW8015 Mod	***Extracted:***	Jun-08-19 12:00		Jun-08-19 12:00		Jun-08-19 12:00		Jun-08-19 12:00		Jun-08-19 12:00		Jun-08-19 12:00	
	Analyzed:	Jun-09-19 06:56		Jun-09-19 07:26		Jun-09-19 07:50		Jun-09-19 08:14		Jun-09-19 08:39		Jun-09-19 09:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		25.1	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics (DRO)		50.6	15.0	53.2	14.9	48.4	15.0	112	15.0	87.3	15.0	37.7	14.9
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		75.7	15.0	53.2	14.9	48.4	15.0	112	15.0	87.3	15.0	37.7	14.9
Total GRO-DRO		75.7	15.0	53.2	14.9	48.4	15.0	112	15.0	87.3	15.0	37.7	14.9

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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 626928

LT Environmental, Inc., Arvada, CO

Project Name: McKittrick 29-22

Project Id: 34819010
Contact: Chris McKisson
Project Location:

Date Received in Lab: Fri Jun-07-19 10:46 am
Report Date: 30-JUL-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	626928-007		626928-008		626928-009		626928-010		626928-011		626928-012	
	Field Id:	SW03		SW04		SW05		SW06		SW07		SW08	
	Depth:	0-8 ft		0-8 ft		0-8 ft		0-8 ft		0-8 ft		0-8 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-05-19 09:45		Jun-05-19 10:00		Jun-05-19 10:15		Jun-05-19 10:25		Jun-05-19 10:40		Jun-05-19 10:50	
BTEX by EPA 8021B	***Extracted:***	Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00		Jun-13-19 10:00	
	Analyzed:	Jun-13-19 13:43		Jun-13-19 14:03		Jun-13-19 14:24		Jun-13-19 14:44		Jun-13-19 15:29		Jun-13-19 15:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Toluene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Ethylbenzene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
m,p-Xylenes		<0.00397	0.00397	<0.00402	0.00402	<0.00400	0.00400	<0.00401	0.00401	<0.00397	0.00397	<0.00398	0.00398
o-Xylene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Total Xylenes		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Total BTEX		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30		Jun-08-19 16:30	
	Analyzed:	Jun-08-19 21:24		Jun-08-19 21:46		Jun-08-19 21:53		Jun-08-19 22:15		Jun-08-19 22:22		Jun-08-19 22:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		18.4	5.02	19.9	4.98	19.0	5.02	19.9	5.01	24.5	4.98	21.1	4.96
TPH by SW8015 Mod	***Extracted:***	Jun-08-19 12:00		Jun-08-19 12:00		Jun-08-19 12:00		Jun-08-19 12:00		Jun-07-19 16:00		Jun-07-19 16:00	
	Analyzed:	Jun-09-19 09:27		Jun-09-19 09:51		Jun-09-19 10:15		Jun-09-19 10:40		Jun-08-19 10:12		Jun-08-19 10:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		38.9	15.0	38.2	15.0	49.0	15.0	73.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		38.9	15.0	38.2	15.0	49.0	15.0	73.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		38.9	15.0	38.2	15.0	49.0	15.0	73.0	15.0	<15.0	15.0	<15.0	15.0

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

Jessica Kramer
Project Assistant

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-001	Date Collected:	06.05.19 08.15	Sample Depth:	8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.8**	4.96	mg/kg	06.08.19 20.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**25.1**	15.0	mg/kg	06.09.19 06.56		1
Diesel Range Organics (DRO)	C10C28DRO	**50.6**	15.0	mg/kg	06.09.19 06.56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 06.56	U	1
Total TPH	PHC635	**75.7**	15.0	mg/kg	06.09.19 06.56		1
Total GRO-DRO	PHC628	**75.7**	15.0	mg/kg	06.09.19 06.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.09.19 06.56	
o-Terphenyl	84-15-1	104	%	70-135	06.09.19 06.56	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-001	Date Collected:	06.05.19 08.15	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.13.19 11.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.13.19 11.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.13.19 11.48	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.13.19 11.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.13.19 11.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.13.19 11.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.13.19 11.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	80	%	70-130	06.13.19 11.48	
1,4-Difluorobenzene	540-36-3	99	%	70-130	06.13.19 11.48	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-002	Date Collected:	06.05.19 08.30	Sample Depth:	8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.4**	5.02	mg/kg	06.08.19 20.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.09.19 07.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	**53.2**	14.9	mg/kg	06.09.19 07.26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	06.09.19 07.26	U	1
Total TPH	PHC635	**53.2**	14.9	mg/kg	06.09.19 07.26		1
Total GRO-DRO	PHC628	**53.2**	14.9	mg/kg	06.09.19 07.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.09.19 07.26	
o-Terphenyl	84-15-1	107	%	70-135	06.09.19 07.26	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-002	Date Collected:	06.05.19 08.30	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.14.19 21.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.14.19 21.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.14.19 21.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.14.19 21.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.14.19 21.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.14.19 21.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.14.19 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	68	%	70-130	06.13.19 12.07	**
1,4-Difluorobenzene	540-36-3	95	%	70-130	06.13.19 12.07	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-003	Date Collected:	06.05.19 08.45	Sample Depth:	8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.8**	4.96	mg/kg	06.08.19 20.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 07.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	**48.4**	15.0	mg/kg	06.09.19 07.50		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 07.50	U	1
Total TPH	PHC635	**48.4**	15.0	mg/kg	06.09.19 07.50		1
Total GRO-DRO	PHC628	**48.4**	15.0	mg/kg	06.09.19 07.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.09.19 07.50	
o-Terphenyl	84-15-1	103	%	70-135	06.09.19 07.50	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-003	Date Collected:	06.05.19 08.45	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.14.19 21.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.14.19 21.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.14.19 21.26	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.14.19 21.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.14.19 21.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.14.19 21.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.14.19 21.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	06.13.19 12.26	
4-Bromofluorobenzene	460-00-4	58	%	70-130	06.13.19 12.26	**

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-004	Date Collected:	06.05.19 09.00	Sample Depth:	8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**27.2**	4.99	mg/kg	06.08.19 21.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 08.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**112**	15.0	mg/kg	06.09.19 08.14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 08.14	U	1
Total TPH	PHC635	**112**	15.0	mg/kg	06.09.19 08.14		1
Total GRO-DRO	PHC628	**112**	15.0	mg/kg	06.09.19 08.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.09.19 08.14	
o-Terphenyl	84-15-1	102	%	70-135	06.09.19 08.14	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-004	Date Collected:	06.05.19 09.00	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.14.19 21.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.14.19 21.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.14.19 21.43	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.14.19 21.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.14.19 21.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.14.19 21.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.14.19 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	06.13.19 12.42	
4-Bromofluorobenzene	460-00-4	60	%	70-130	06.13.19 12.42	**

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-005	Date Collected:	06.05.19 09.20	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.8**	5.01	mg/kg	06.08.19 21.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 08.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	**87.3**	15.0	mg/kg	06.09.19 08.39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 08.39	U	1
Total TPH	PHC635	**87.3**	15.0	mg/kg	06.09.19 08.39		1
Total GRO-DRO	PHC628	**87.3**	15.0	mg/kg	06.09.19 08.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.09.19 08.39	
o-Terphenyl	84-15-1	106	%	70-135	06.09.19 08.39	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-005	Date Collected:	06.05.19 09.20	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.14.19 22.01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.14.19 22.01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.14.19 22.01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.14.19 22.01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.14.19 22.01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.14.19 22.01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.14.19 22.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	64	%	70-130	06.13.19 13.04	**
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.13.19 13.04	

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McKittrick 29-22

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-006	Date Collected:	06.05.19 09.30	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.9**	5.01	mg/kg	06.08.19 21.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.09.19 09.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	**37.7**	14.9	mg/kg	06.09.19 09.03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	06.09.19 09.03	U	1
Total TPH	PHC635	**37.7**	14.9	mg/kg	06.09.19 09.03		1
Total GRO-DRO	PHC628	**37.7**	14.9	mg/kg	06.09.19 09.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	06.09.19 09.03	
o-Terphenyl	84-15-1	103	%	70-135	06.09.19 09.03	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-006	Date Collected:	06.05.19 09.30	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.13.19 13.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.13.19 13.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.13.19 13.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.13.19 13.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.13.19 13.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.13.19 13.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.13.19 13.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	82	%	70-130	06.13.19 13.23	
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.13.19 13.23	

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McKittrick 29-22

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-007	Date Collected:	06.05.19 09.45	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.4**	5.02	mg/kg	06.08.19 21.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 09.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	**38.9**	15.0	mg/kg	06.09.19 09.27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 09.27	U	1
Total TPH	PHC635	**38.9**	15.0	mg/kg	06.09.19 09.27		1
Total GRO-DRO	PHC628	**38.9**	15.0	mg/kg	06.09.19 09.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.09.19 09.27	
o-Terphenyl	84-15-1	94	%	70-135	06.09.19 09.27	

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LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-007	Date Collected:	06.05.19 09.45	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.14.19 22.18	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.14.19 22.18	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.14.19 22.18	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.14.19 22.18	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.14.19 22.18	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.14.19 22.18	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.14.19 22.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	06.13.19 13.43	
4-Bromofluorobenzene	460-00-4	68	%	70-130	06.13.19 13.43	**

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Sample Id:	**SW04**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-008	Date Collected:	06.05.19 10.00	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.9**	4.98	mg/kg	06.08.19 21.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 09.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**38.2**	15.0	mg/kg	06.09.19 09.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 09.51	U	1
Total TPH	PHC635	**38.2**	15.0	mg/kg	06.09.19 09.51		1
Total GRO-DRO	PHC628	**38.2**	15.0	mg/kg	06.09.19 09.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.09.19 09.51	
o-Terphenyl	84-15-1	93	%	70-135	06.09.19 09.51	

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Sample Id:	**SW04**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-008	Date Collected:	06.05.19 10.00	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.13.19 14.03	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.13.19 14.03	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.13.19 14.03	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.13.19 14.03	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.13.19 14.03	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.13.19 14.03	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.13.19 14.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	06.13.19 14.03	
4-Bromofluorobenzene	460-00-4	81	%	70-130	06.13.19 14.03	

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Sample Id:	**SW05**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-009	Date Collected:	06.05.19 10.15	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.0**	5.02	mg/kg	06.08.19 21.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 10.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	**49.0**	15.0	mg/kg	06.09.19 10.15		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 10.15	U	1
Total TPH	PHC635	**49.0**	15.0	mg/kg	06.09.19 10.15		1
Total GRO-DRO	PHC628	**49.0**	15.0	mg/kg	06.09.19 10.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.09.19 10.15	
o-Terphenyl	84-15-1	97	%	70-135	06.09.19 10.15	

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McKittrick 29-22

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-009	Date Collected:	06.05.19 10.15	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.13.19 14.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.13.19 14.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.13.19 14.24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.13.19 14.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.13.19 14.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.13.19 14.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.13.19 14.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	06.13.19 14.24	
4-Bromofluorobenzene	460-00-4	80	%	70-130	06.13.19 14.24	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-010	Date Collected:	06.05.19 10.25	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.9**	5.01	mg/kg	06.08.19 22.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.08.19 12.00	Basis:	Wet Weight
Seq Number:	3091706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.09.19 10.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	**73.0**	15.0	mg/kg	06.09.19 10.40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.09.19 10.40	U	1
Total TPH	PHC635	**73.0**	15.0	mg/kg	06.09.19 10.40		1
Total GRO-DRO	PHC628	**73.0**	15.0	mg/kg	06.09.19 10.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.09.19 10.40	
o-Terphenyl	84-15-1	109	%	70-135	06.09.19 10.40	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-010	Date Collected:	06.05.19 10.25	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.13.19 14.44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.13.19 14.44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.13.19 14.44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.13.19 14.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.13.19 14.44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.13.19 14.44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.13.19 14.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	06.13.19 14.44	
4-Bromofluorobenzene	460-00-4	71	%	70-130	06.13.19 14.44	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-011	Date Collected:	06.05.19 10.40	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.5**	4.98	mg/kg	06.08.19 22.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.07.19 16.00	Basis:	Wet Weight
Seq Number:	3091704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.08.19 10.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.08.19 10.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.08.19 10.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.08.19 10.12	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.08.19 10.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.08.19 10.12	
o-Terphenyl	84-15-1	87	%	70-135	06.08.19 10.12	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-011	Date Collected:	06.05.19 10.40	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.13.19 15.29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.13.19 15.29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.13.19 15.29	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.13.19 15.29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.13.19 15.29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.13.19 15.29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.13.19 15.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	06.13.19 15.29	
4-Bromofluorobenzene	460-00-4	84	%	70-130	06.13.19 15.29	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-012	Date Collected:	06.05.19 10.50	Sample Depth:	0 - 8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.08.19 16.30	Basis:	Wet Weight
Seq Number:	3091696				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.1**	4.96	mg/kg	06.08.19 22.29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.07.19 16.00	Basis:	Wet Weight
Seq Number:	3091704				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.08.19 10.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.08.19 10.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.08.19 10.37	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.08.19 10.37	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.08.19 10.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.08.19 10.37	
o-Terphenyl	84-15-1	79	%	70-135	06.08.19 10.37	

Certificate of Analytical Results 626928

LT Environmental, Inc., Arvada, CO

McKittrick 29-22

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	06.07.19 10.46
Lab Sample Id:	626928-012	Date Collected:	06.05.19 10.50	Sample Depth:	0 - 8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.13.19 10.00	Basis:	Wet Weight
Seq Number:	3092372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.14.19 22.35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.14.19 22.35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.14.19 22.35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.14.19 22.35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.14.19 22.35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.14.19 22.35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.14.19 22.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	69	%	70-130	06.13.19 15.49	**
1,4-Difluorobenzene	540-36-3	92	%	70-130	06.13.19 15.49	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 626928

LT Environmental, Inc.

McKittrick 29-22

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3091696 — Matrix: Solid — Date Prep: 06.08.19
MB Sample Id: 7679541-1-BLK — LCS Sample Id: 7679541-1-BKS — LCSD Sample Id: 7679541-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	243	97	90-110	0	20	mg/kg	06.08.19 19:28	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3091696 — Matrix: Soil — Date Prep: 06.08.19
Parent Sample Id: 626902-002 — MS Sample Id: 626902-002 S — MSD Sample Id: 626902-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	101	252	350	99	350	99	90-110	0	20	mg/kg	06.08.19 19:49	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3091696 — Matrix: Soil — Date Prep: 06.08.19
Parent Sample Id: 626928-007 — MS Sample Id: 626928-007 S — MSD Sample Id: 626928-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	18.4	251	281	105	281	105	90-110	0	20	mg/kg	06.08.19 21:31	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3091704 — Matrix: Solid — Date Prep: 06.07.19
MB Sample Id: 7679504-1-BLK — LCS Sample Id: 7679504-1-BKS — LCSD Sample Id: 7679504-1-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)	10.7	1000	1190	119	1190	119	70-135	0	20	mg/kg	06.08.19 00:41	
Diesel Range Organics (DRO)	<8.13	1000	1160	116	1190	119	70-135	3	20	mg/kg	06.08.19 00:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		120		120		70-135	%	06.08.19 00:41
o-Terphenyl	94		121		111		70-135	%	06.08.19 00:41

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 626928

LT Environmental, Inc.

McKittrick 29-22

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3091706 — Matrix: Solid — Date Prep: 06.08.19
MB Sample Id: 7679506-1-BLK — LCS Sample Id: 7679506-1-BKS — LCSD Sample Id: 7679506-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1110	111	1110	111	70-135	0	20	mg/kg	06.09.19 00:51	
Diesel Range Organics (DRO)	<8.13	1000	1090	109	1230	123	70-135	12	20	mg/kg	06.09.19 00:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		104		115		70-135	%	06.09.19 00:51
o-Terphenyl	113		97		136	**	70-135	%	06.09.19 00:51

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3091704 — Matrix: Soil — Date Prep: 06.07.19
Parent Sample Id: 626933-005 — MS Sample Id: 626933-005 S — MSD Sample Id: 626933-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	13.6	997	1160	115	1200	119	70-135	3	20	mg/kg	06.08.19 01:56	
Diesel Range Organics (DRO)	8.96	997	1110	110	1150	114	70-135	4	20	mg/kg	06.08.19 01:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		119		70-135	%	06.08.19 01:56
o-Terphenyl	111		113		70-135	%	06.08.19 01:56

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3091706 — Matrix: Soil — Date Prep: 06.08.19
Parent Sample Id: 626929-021 — MS Sample Id: 626929-021 S — MSD Sample Id: 626929-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	11.0	998	1110	110	1080	107	70-135	3	20	mg/kg	06.09.19 02:04	
Diesel Range Organics (DRO)	<8.11	998	1140	114	1050	105	70-135	8	20	mg/kg	06.09.19 02:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		108		70-135	%	06.09.19 02:04
o-Terphenyl	113		101		70-135	%	06.09.19 02:04

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 626928

LT Environmental, Inc.

McKittrick 29-22

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3092372 | Matrix: Solid | Date Prep: 06.13.19
MB Sample Id: 7679938-1-BLK | LCS Sample Id: 7679938-1-BKS | LCSD Sample Id: 7679938-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00139	0.100	0.0893	89	0.0809	81	70-130	10	35	mg/kg	06.13.19 09:52	
Toluene	<0.00200	0.100	0.0861	86	0.0933	93	70-130	8	35	mg/kg	06.13.19 09:52	
Ethylbenzene	0.00114	0.100	0.0948	95	0.107	107	70-130	12	35	mg/kg	06.13.19 09:52	
m,p-Xylenes	0.00186	0.200	0.197	99	0.225	113	70-130	13	35	mg/kg	06.13.19 09:52	
o-Xylene	<0.00200	0.100	0.0959	96	0.117	117	70-130	20	35	mg/kg	06.13.19 09:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		101		95		70-130	%	06.13.19 09:52
4-Bromofluorobenzene	77		95		80		70-130	%	06.13.19 09:52

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3092372 | Matrix: Soil | Date Prep: 06.13.19
Parent Sample Id: 626928-001 | MS Sample Id: 626928-001 S | MSD Sample Id: 626928-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0881	88	0.0769	76	70-130	14	35	mg/kg	06.13.19 10:30	
Toluene	<0.00201	0.100	0.0940	94	0.0791	78	70-130	17	35	mg/kg	06.13.19 10:30	
Ethylbenzene	<0.00201	0.100	0.100	100	0.0831	82	70-130	18	35	mg/kg	06.13.19 10:30	
m,p-Xylenes	<0.00402	0.201	0.197	98	0.164	82	70-130	18	35	mg/kg	06.13.19 10:30	
o-Xylene	<0.00201	0.100	0.0970	97	0.0840	83	70-130	14	35	mg/kg	06.13.19 10:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		109		70-130	%	06.13.19 10:30
4-Bromofluorobenzene	63	**	66	**	70-130	%	06.13.19 10:30

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: 624978

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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Phone:	(970)620-5743 Email:		llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@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:	McKittrick 29-22	Turn Around	
Project Number:	34819010	Routine	X
P.O. Number:	2RP-4121	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	05/0.3	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
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)
FS01	S	06/05/2019	8:15	8'	1	X	X	X
FS02	S		8:30	8'	1			
FS03	S		8:45	8'	1			
FS04	S		9:00	8'	1			
SW01	S		9:20	0-8'	1			
SW02	S		9:30		1			
SW03	S		9:45		1			
SW04	S		10:00		1			
SW05	S		10:15		1			
SW06	S		10:25		1			

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		06/05/2019 15:10	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: 426920

XENCO LABORATORIES

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

www.xenco.com Page 2 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental, Inc.
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(970)620-5743	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@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:	McKittrick 29-22	Turn Around	
Project Number:	34819010	Routine	X
P.O. Number:	2RP-4121	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	0.5 0.3	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SW07	S	06/05/2019	10:40	0-8'	1	X	X	X
SW08	S	06/05/2019	10:50	0-8'	1	X	X	X

Work Order Notes

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

Sample Comments

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			06/05/2019 15:10	2		6/7/19
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: 06/07/2019 10:46:00 AM

Work Order #: 626928

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 06/07/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/07/2019

Jessica Kramer

Analytical Report 630699

for

LT Environmental, Inc.

Project Manager: Chris McKisson

Mckittrick 29-22

34819010

22-JUL-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

22-JUL-19

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

Reference: XENCO Report No(s): **630699**
Mckittrick 29-22
Project Address: Delaware Basin

Chris McKisson:

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) 630699. 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. 630699 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 630699

LT Environmental, Inc., Arvada, CO

Mckittrick 29-22

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS05	S	07-12-19 05:45	8 ft	630699-001

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Mckittrick 29-22

Project ID: *34819010*
Work Order Number(s): *630699*

Report Date: *22-JUL-19*
Date Received: *07/12/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3095558 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 630494-005 S.

Batch: LBA-3096052 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 630699-001.

Certificate of Analysis Summary 630699

LT Environmental, Inc., Arvada, CO

Project Name: Mckittrick 29-22

Project Id: 34819010
Contact: Chris McKisson
Project Location: Delaware Basin

Date Received in Lab: Fri Jul-12-19 09:05 am
Report Date: 22-JUL-19
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	630699-001					
	Field Id:	FS05					
	Depth:	8- ft					
	Matrix:	SOIL					
	Sampled:	Jul-12-19 05:45					
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Jul-15-19 13:42					
	Analyzed:	Jul-17-19 01:22					
	Units/RL:	mg/kg	RL				
Benzene		<0.00198	0.00198				
Toluene		<0.00198	0.00198				
Ethylbenzene		<0.00198	0.00198				
m,p-Xylenes		<0.00396	0.00396				
o-Xylene		<0.00198	0.00198				
Total Xylenes		<0.00198	0.00198				
Total BTEX		<0.00198	0.00198				
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Jul-15-19 15:50					
	Analyzed:	Jul-15-19 17:12					
	Units/RL:	mg/kg	RL				
Chloride		<5.04	5.04				
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Jul-21-19 09:00					
	Analyzed:	Jul-21-19 22:36					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0				
Total TPH		<15.0	15.0				
Total GRO-DRO		<15.0	15.0				

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 630699

LT Environmental, Inc., Arvada, CO

Mckittrick 29-22

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	07.12.19 09.05
Lab Sample Id:	630699-001	Date Collected:	07.12.19 05.45	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	07.15.19 15.50	Basis:	Wet Weight
Seq Number:	3095383			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	07.15.19 17.12	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	07.21.19 09.00	Basis:	Wet Weight
Seq Number:	3096052			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.19 22.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.19 22.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	07.21.19 22.36	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.19 22.36	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	07.21.19 22.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	07.21.19 22.36	
o-Terphenyl	84-15-1	62	%	70-135	07.21.19 22.36	**

Certificate of Analytical Results 630699

LT Environmental, Inc., Arvada, CO

Mckittrick 29-22

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	07.12.19 09.05
Lab Sample Id:	630699-001	Date Collected:	07.12.19 05.45	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALG			% Moisture:	
Analyst:	FOV	Date Prep:	07.15.19 13.42	Basis:	Wet Weight
Seq Number:	3095558			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.17.19 01.22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.17.19 01.22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.17.19 01.22	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.17.19 01.22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.17.19 01.22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.17.19 01.22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.17.19 01.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	07.17.19 01.22	
4-Bromofluorobenzene	460-00-4	110	%	70-130	07.17.19 01.22	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 630699

LT Environmental, Inc.

Mckittrick 29-22

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3095383 Matrix: Solid Date Prep: 07.15.19
MB Sample Id: 7682059-1-BLK LCS Sample Id: 7682059-1-BKS LCSD Sample Id: 7682059-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	237	95	235	94	90-110	1	20	mg/kg	07.15.19 15:55	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3095383 Matrix: Soil Date Prep: 07.15.19
Parent Sample Id: 630699-001 MS Sample Id: 630699-001 S MSD Sample Id: 630699-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.04	252	249	99	248	98	90-110	0	20	mg/kg	07.15.19 17:17	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3095383 Matrix: Soil Date Prep: 07.15.19
Parent Sample Id: 630821-001 MS Sample Id: 630821-001 S MSD Sample Id: 630821-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.5	250	259	99	259	99	90-110	0	20	mg/kg	07.15.19 16:09	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3096052 Matrix: Solid Date Prep: 07.21.19
MB Sample Id: 7682451-1-BLK LCS Sample Id: 7682451-1-BKS LCSD Sample Id: 7682451-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1140	114	1140	114	70-135	0	20	mg/kg	07.21.19 21:49	
Diesel Range Organics (DRO)	<15.0	1000	1100	110	1160	116	70-135	5	20	mg/kg	07.21.19 21:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		101		113		70-135	%	07.21.19 21:49
o-Terphenyl	83		79		93		70-135	%	07.21.19 21:49

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 630699

LT Environmental, Inc.

Mckittrick 29-22

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3096052 | Matrix: Soil | Date Prep: 07.21.19
Parent Sample Id: 630699-001 | MS Sample Id: 630699-001 S | MSD Sample Id: 630699-001 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)	11.0	997	1030	102	1010	100	70-135	2	20	mg/kg	07.21.19 23:00	
Diesel Range Organics (DRO)	10.1	997	990	98	967	96	70-135	2	20	mg/kg	07.21.19 23:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		90		70-135	%	07.21.19 23:00
o-Terphenyl	71		71		70-135	%	07.21.19 23:00

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3095558 | Matrix: Solid | Date Prep: 07.15.19
MB Sample Id: 7682046-1-BLK | LCS Sample Id: 7682046-1-BKS | LCSD Sample Id: 7682046-1-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	0.0871	87	0.0967	97	70-130	10	35	mg/kg	07.16.19 08:21	
Toluene	<0.00200	0.100	0.0863	86	0.0914	91	70-130	6	35	mg/kg	07.16.19 08:21	
Ethylbenzene	<0.00200	0.100	0.0962	96	0.0999	100	70-130	4	35	mg/kg	07.16.19 08:21	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.202	101	70-130	5	35	mg/kg	07.16.19 08:21	
o-Xylene	<0.00200	0.100	0.0925	93	0.0983	98	70-130	6	35	mg/kg	07.16.19 08:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		94		97		70-130	%	07.16.19 08:21
4-Bromofluorobenzene	99		105		116		70-130	%	07.16.19 08:21

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3095558 | Matrix: Sludge | Date Prep: 07.15.19
Parent Sample Id: 630494-005 | MS Sample Id: 630494-005 S | MSD Sample Id: 630494-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000620	0.100	0.0612	61	0.0612	61	70-130	0	35	mg/kg	07.16.19 12:49	X
Toluene	0.0113	0.100	0.0671	56	0.0606	49	70-130	10	35	mg/kg	07.16.19 12:49	X
Ethylbenzene	0.0107	0.100	0.0655	55	0.0545	44	70-130	18	35	mg/kg	07.16.19 12:49	X
m,p-Xylenes	0.0261	0.201	0.183	78	0.138	56	70-130	28	35	mg/kg	07.16.19 12:49	X
o-Xylene	0.0119	0.100	0.0583	46	0.0421	30	70-130	32	35	mg/kg	07.16.19 12:49	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		92		70-130	%	07.16.19 12:49
4-Bromofluorobenzene	142	**	126		70-130	%	07.16.19 12:49

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

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

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

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

Final 1.000

Chain of Custody

Work Order No: 6301095

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:	Chris McKisson	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com

Work Order Comments

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

Project Name:	Mckittrick 29-22	Turn Around	
Project Number:	34819010	Routine	X
P.O. Number:	2RP-4121	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	2.0	Thermometer ID		
Received Intact:	(Yes) No	TNM-007		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS05	S	07/12/19	5:45	8'	1	X	X	X

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		07/12/19 8:55	2		07/12/19
		9:05	4		7/12/19 09:05
			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **43342**

Date/Time: 07/12/19 10:54
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.:

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
630699-001	S	FS05	07/12/19 05:45	SW8015MOD_NM	TPH by SW8015 Mod	07/18/19	07/26/19	JKR	GRO-DRO PHCC10C28 PI	
630699-001	S	FS05	07/12/19 05:45	SW8021B	BTEX by EPA 8021B	07/18/19	07/26/19	JKR	BR4FBZ BZ BZME EBZ X	
630699-001	S	FS05	07/12/19 05:45	E300_CL	Chloride by EPA 300	07/18/19	01/08/20	JKR	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 07/12/2019

Received By: Brianna Teel

Date Received: 07/15/2019 07:42

Cooler Temperature: 4.0

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 43342

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Elizabeth McClellan **Date Sent:** 07/12/2019 10:54 AM

Received By: Brianna Teel **Date Received:** 07/15/2019 07:42 AM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: Brianna Teel Date: 07/15/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07/12/2019 05:45:00 AM

Work Order #: 630699

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 07/12/2019

Checklist reviewed by: Jessica Kramer Date: 07/16/2019

Jessica Kramer

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 124420

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 124420
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/14/2022