

## Hamlet, Robert, EMNRD

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**From:** Hamlet, Robert, EMNRD  
**Sent:** Thursday, February 27, 2020 9:15 AM  
**To:** Raley, Jim  
**Cc:** Bratcher, Mike, EMNRD; Venegas, Victoria, EMNRD; Eads, Cristina, EMNRD  
**Subject:** Closure Approval - WPX - Ross Draw Unit #41 - (2RP-5654) NAB1928159228  
**Attachments:** Closure Approval - WPX - Ross Draw Unit #41 - (2RP-5654).pdf

Jim,

We have received your closure report and final C-141 for **Incident #NAB1928159228** Ross Draw Unit #41, thank you. This closure is approved.

Please let me know if you have any further questions.

Regards,

Robert J Hamlet  
State of New Mexico  
Energy, Minerals, and Natural Resources  
Oil Conservation Division  
811 S. First St., Artesia NM 88210  
(575) 748-1283  
[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Form C-141

Page 5

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	2RP-5654
Facility ID	
Application ID	

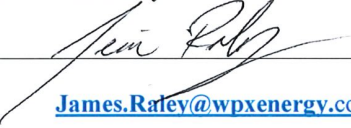
## Closure

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: Date: **12/13/2019**email: [James.Raley@wpenergy.com](mailto:James.Raley@wpenergy.com)Telephone: **575-689-7597****OCD Only**Received by: **Robert Hamlet**Date: **2/27/2020**

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

Closure Approved by:  Date: **2/27/2020**Printed Name: **Robert Hamlet**Title: **Environmental Eng. Tech. III**



LT Environmental, Inc.

3300 North "A" Street  
Building 1, Unit 103  
Midland, Texas 79705  
432.704.5178

December 13, 2019

Mr. Mike Bratcher  
New Mexico Oil Conservation Division  
811 South First Street  
Artesia, New Mexico 88210**RE: Closure Request  
Ross Draw Unit #041  
Remediation Permit Number 2RP-5654  
Eddy County, New Mexico**

Dear Mr. Bratcher,

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, Inc. (WPX), presents the following Closure Request detailing soil sampling and excavation activities at the Ross Draw Unit #041 (Site) in Unit L, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impacts to soil following a produced water and crude oil release at the Site. Based on the excavation activities and results of the soil sampling events, WPX is submitting this Closure Request, describing remediation that has occurred and requesting no further action for this release event.

### RELEASE BACKGROUND

On September 18, 2019, a flowline developed a leak near the wellhead allowing 7 barrels (bbls) of produced water and 6 bbls of oil to be released to the Site surface. Response efforts at the Site recovered 6 bbls of produced water and 4 bbls of oil. The spill volume was calculated by averaging the saturated soil depth and estimating the percentage of liquids based on soil type and liquid type. Any free liquids standing or recovered, were added to the total volume. The average saturation depth of the soil was observed to be equal to or less than 1 inch and no free liquids were present. The soil type was determined to be sand, which was estimated to have an available space (i.e. porosity) of 28 percent (%) total volume with a mixture of produced water and oil saturating the soils. Based on these assumptions, the following equation was used to calculate total volume:

$$[\text{saturated soil volume (cubic feet)} / 4.21 \text{ cubic feet per bbl of liquid}] \times \text{estimated soil porosity (\%)} = \text{total volume}$$

WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on September 16, 2019, and was assigned Remediation Permit (RP) Number 2RP-5654 (Attachment 1).

### SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on





Bratcher, M.  
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the nearest water well data. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) well 320125103514701, located approximately 4,126 feet southwest of the Site. The water well has a depth to groundwater of 117 feet bgs. Ground surface elevation at the water well location is 3,044 feet above mean sea level (AMSL), which is approximately 9 feet higher in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is a tributary to the Pecos River located approximately 1,540 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church. The Site is greater than 300 feet from a 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 SOIL SAMPLING ACTIVITIES

On September 25, 2019, LTE personnel inspected the Site to evaluate the release extent. WPX had conducted preliminary excavation activities prior to the visit. The release extent and excavation area were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Preliminary field screening and observations within the excavation area indicated impacts to soil and that further excavation was warranted. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 2.

On October 2, 2019, LTE was on site to oversee excavation activities within the release area. Excavation activities were directed by field screening soil samples for volatile aromatic hydrocarbons using a PID and chloride using Hach® chloride QuanTab® test strips. Following completion of excavation activities, 5-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 soil samples placed directly into a pre-cleaned glass jar, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of chloride following United States Environmental Protection Agency (USEPA) Method 300.0. Approximately 60 cubic yards of impacted soil were removed from the excavation area and transported to the R360 Red Bluff Facility in Orla, Texas for disposal. The excavation area measured approximately 1,200 square feet in area and 3.5 feet bgs in depth. The excavation area and soil sample locations are depicted on Figure 3.

### ANALYTICAL RESULTS

Laboratory analytical results of final excavation conformation soil samples indicated that BTEX, TPH, and chloride concentrations were either below the laboratory detection limit or compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 3.





Bratcher, M.  
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## CLOSURE REQUEST

A total of approximately 60 cubic yards of impacted soil were excavated from the Site. Laboratory analytical results of final excavation conformation soil samples indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria and no further excavation was warranted.

Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. WPX requests no further action for release number 2RP-5654. Upon approval of this closure request, WPX will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. An updated NMOCD Form C-141 is included as Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read 'Chris McKisson'.

Chris McKisson  
Project Environmental Scientist

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

Ashley L. Ager, P.G.  
Senior Geologist

cc: Jim Raley, WPX  
Robert Hamlet, NMOCD  
Victoria Venegas, NMOCD  
Bureau of Land Management

### Attachments:

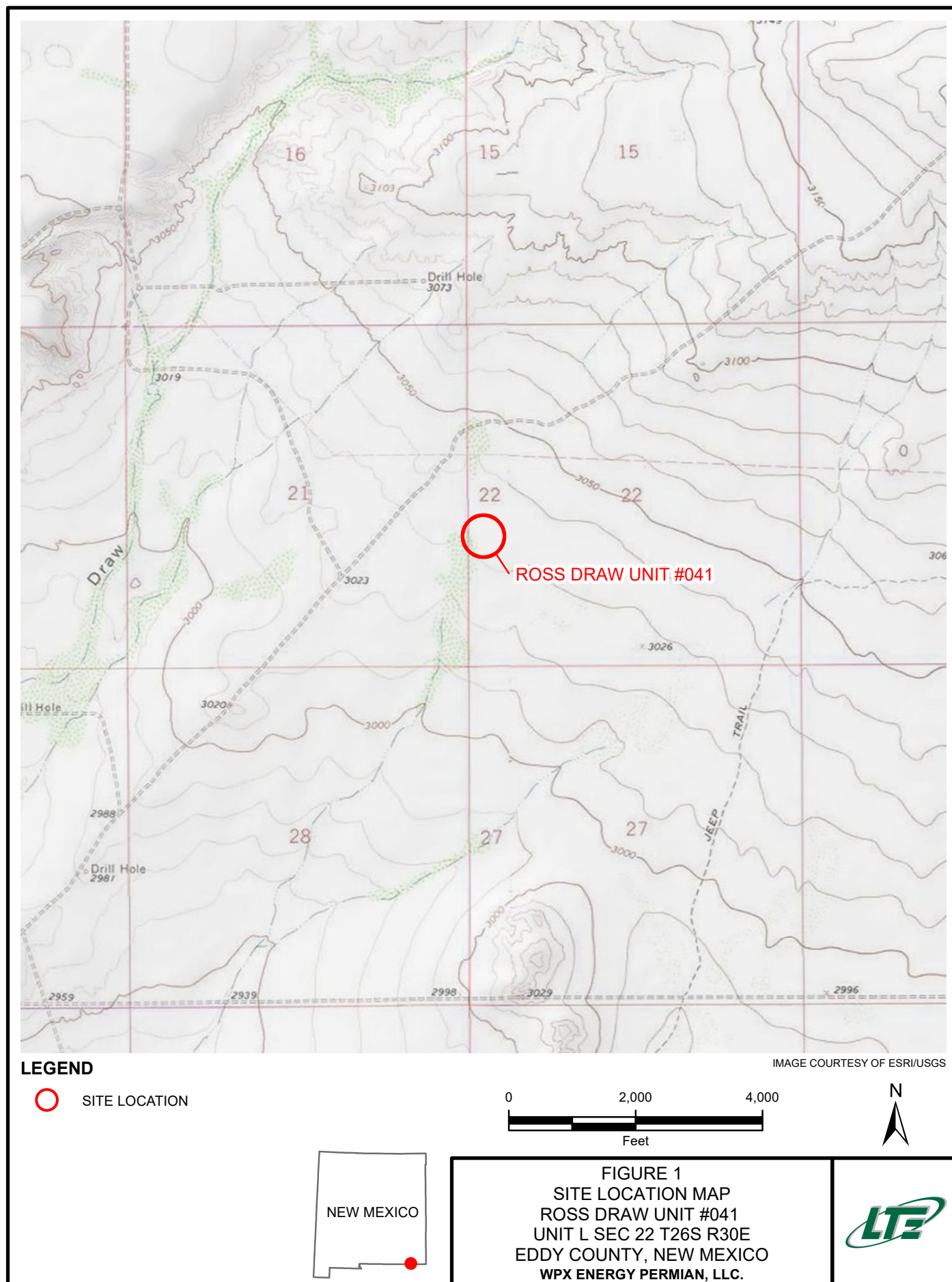
Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Analytical Reports
Attachment 1	Initial/Final NMOCD Form C-141
Attachment 2	Photographic Log
Attachment 3	Laboratory Analytical Reports



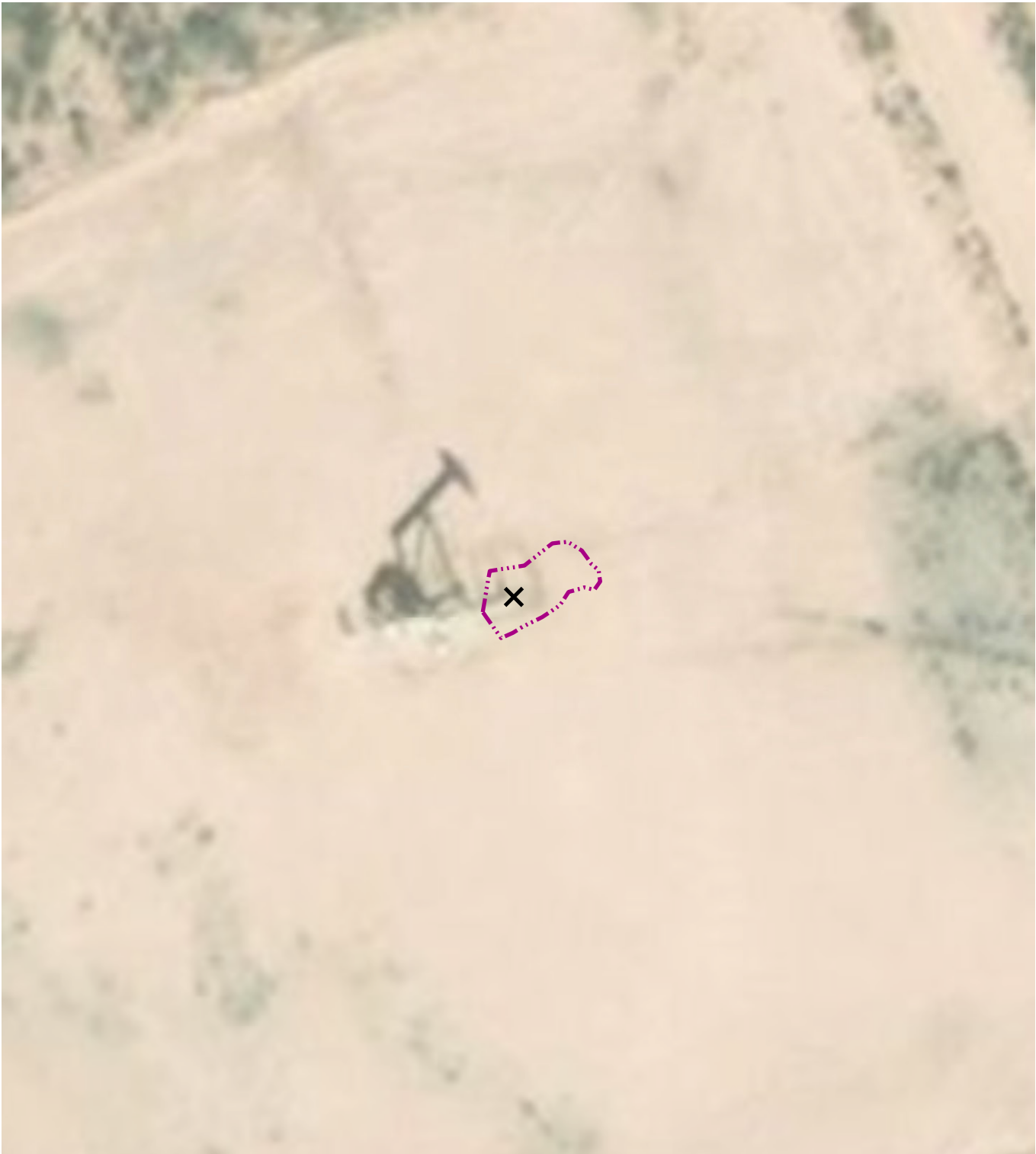
FIGURES







P:\WPX\GIS\MXD\034819058\_RDU 41\034819058\_FIG01\_SL\_2019.mxd



**LEGEND**



-  RELEASE LOCATION
-  RELEASE EXTENT (490 SQUARE FEET)

IMAGE COURTESY OF ESRI

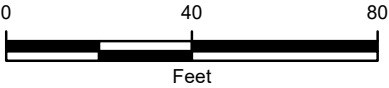
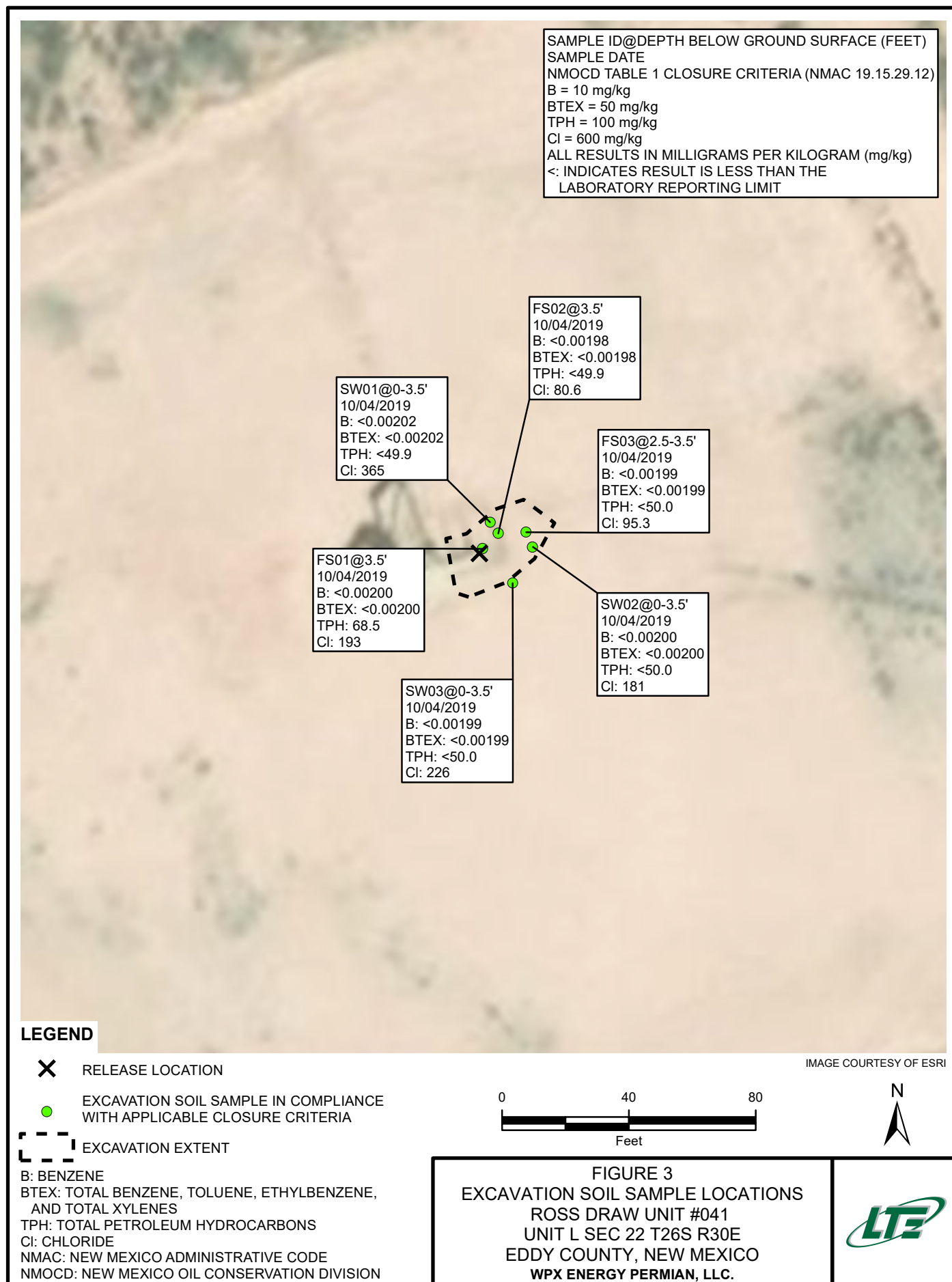


FIGURE 2  
SITE MAP  
ROSS DRAW UNIT #041  
UNIT L SEC 22 T26S R30E  
EDDY COUNTY, NEW MEXICO  
WPX ENERGY PERMIAN, LLC.







P:\WPX\GIS\WMD\034819058\_RDU 41\034819058\_FIG03\_EXCAVATION\_2019.mxd

TABLES



**TABLE 1**  
**SOIL ANALYTICAL RESULTS**

**ROSS DRAW UNIT #041**  
**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)
SW01	0-3.5	10/4/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	365
SW02	0-3.5	10/4/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	181
SW03	0-3.5	10/4/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	226
FS01	3.5	10/4/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	68.5	<49.8	68.5	68.5	193
FS02	3.5	10/4/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	80.6
FS03	2.5-3.5	10/4/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	95.3
<b>NMOCD Table 1 Closure Criteria</b>			<b>10</b>	NE	NE	NE	<b>50</b>	NE	NE	NE	<b>NE</b>	<b>100</b>	<b>600</b>

**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 limitsBold- indicates result exceeds the applicable regulatory  
standard

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141



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

Incident ID	NAB1928159228
District RP	2RP-5654
Facility ID	
Application ID	pAB1928158952

## Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: james.raley@wpxenergy.com	Incident # <i>(assigned by OCD)</i> NAB1928159228
Contact mailing address: 5315 Buena Vista Dr., Carlsbad, NM 88220	

## Location of Release Source

Latitude 32.02611 \_\_\_\_\_ Longitude -103.87665 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: ROSS DRAW UNIT #041	Site Type: Production Facility
Date Release Discovered: 9/18/2019	API# (if applicable): 30-015-42944

Unit Letter	Section	Township	Range	County
L	22	26S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private

## Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 6	Volume Recovered (bbls) 4
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 7	Volume Recovered (bbls) 6
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Flowline developed leak near wellhead, resulting in 13bbls of fluids impacting soils around wellhead, 10 bbls were recovered. Line to be repaired and investigated for cause and extent. Impacted soils to be removed



Form C-141

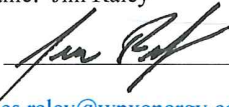
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State of New Mexico  
Oil Conservation Division

Incident ID	NAB1928159228
District RP	2RP-5654
Facility ID	
Application ID	pAB1928158952

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

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:          	
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: 	Date: 9/18/2019
email: <a href="mailto:james.raley@wpenergy.com">james.raley@wpenergy.com</a>	Telephone: 575-689-7597
<b><u>OCD Only</u></b>	
Received by: <u>Amalia Bustamante</u>	Date: <u>10/8/2019</u>

Incident ID	
District RP	2RP-5654
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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

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District RP	2RP-5654
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Printed Name: **Jim Raley**Title: **Environmental Specialist**

Signature: \_\_\_\_\_

Date: **12/13/2019**email: [James.Raley@wpenergy.com](mailto:James.Raley@wpenergy.com)Telephone: **575-689-7597****OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

Form C-141

Page 5

State of New Mexico  
Oil Conservation Division

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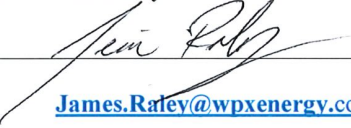
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**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☒ 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

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Printed Name: **Jim Raley**Title: **Environmental Specialist**Signature: Date: **12/13/2019**email: [James.Raley@wpenergy.com](mailto:James.Raley@wpenergy.com)Telephone: **575-689-7597****OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

ATTACHMENT 2: PHOTOGRAPHIC LOG





PHOTOGRAPHIC LOG



**Photograph 1:** View south of excavation.



**Photograph 2:** View west of excavation.



**Photograph 3:** View northwest of excavation.



**Photograph 4:** View north of excavation.

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS



# Analytical Report 639206

for  
**LT Environmental, Inc.**

**Project Manager: Chris McKisson**

**RDU 41**

**034819058**

**15-OCT-19**

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):

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

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

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

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

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

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

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



15-OCT-19

Project Manager: **Chris McKisson**

**LT Environmental, Inc.**

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **639206**

**RDU 41**

Project Address: Eddy County, NM

**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) 639206. 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. 639206 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

---

**Jessica Kramer**

Project Assistant

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

*Certified and approved by numerous States and Agencies.*

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

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



Sample Cross Reference 639206

LT Environmental, Inc., Arvada, CO

RDU 41

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	10-04-19 12:15	0 - 3.5 ft	639206-001
SW02	S	10-04-19 12:20	0 - 3.5 ft	639206-002
SW03	S	10-04-19 12:25	0 - 3.5 ft	639206-003
FS01	S	10-04-19 12:30	3.5 ft	639206-004
FS02	S	10-04-19 12:35	3.5 ft	639206-005
FS03	S	10-04-19 12:40	2.5 - 3.5 ft	639206-006



**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: RDU 41**

Project ID: 034819058

Work Order Number(s): 639206

Report Date: 15-OCT-19

Date Received: 10/07/2019

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**Sample receipt non conformances and comments:**None

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**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3104086 BTEX by EPA 8021B

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 639206-001, -002, -003, -004, -005, -006

Lab Sample ID 639206-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 639206-001, -002, -003, -004, -005, -006.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

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



# Certificate of Analysis Summary 639206

LT Environmental, Inc., Arvada, CO

Project Name: RDU 41

**Project Id:** 034819058  
**Contact:** Chris McKisson  
**Project Location:** Eddy County, NM

**Date Received in Lab:** Mon Oct-07-19 12:50 pm

**Report Date:** 15-OCT-19

**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	639206-001	639206-002	639206-003	639206-004	639206-005	639206-006
	<i>Field Id:</i>	SW01	SW02	SW03	FS01	FS02	FS03
	<i>Depth:</i>	0-3.5 ft	0-3.5 ft	0-3.5 ft	3.5- ft	3.5- ft	2.5-3.5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-04-19 12:15	Oct-04-19 12:20	Oct-04-19 12:25	Oct-04-19 12:30	Oct-04-19 12:35	Oct-04-19 12:40
<b>BTEX by EPA 8021B SUB: T104704400-19-19</b>	<i>Extracted:</i>	Oct-10-19 16:15	Oct-10-19 16:15	Oct-10-19 16:15	Oct-10-19 16:15	Oct-10-19 16:15	Oct-10-19 16:15
	<i>Analyzed:</i>	Oct-12-19 22:07	Oct-12-19 22:27	Oct-12-19 22:47	Oct-12-19 23:07	Oct-12-19 23:27	Oct-12-19 23:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
m,p-Xylenes		<0.00404 0.00404	<0.00399 0.00399	<0.00398 0.00398	<0.00400 0.00400	<0.00396 0.00396	<0.00398 0.00398
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
<b>Chloride by EPA 300 SUB: T104704400-19-19</b>	<i>Extracted:</i>	Oct-08-19 16:10	Oct-08-19 16:10	Oct-08-19 16:10	Oct-08-19 16:10	Oct-08-19 16:10	Oct-08-19 16:10
	<i>Analyzed:</i>	Oct-08-19 16:46	Oct-09-19 08:24	Oct-09-19 08:34	Oct-08-19 17:33	Oct-08-19 17:42	Oct-08-19 18:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		365 5.02	181 4.98	226 5.00	193 5.04	80.6 4.96	95.3 4.99
<b>TPH by SW8015 Mod SUB: T104704400-19-19</b>	<i>Extracted:</i>	Oct-10-19 17:00	Oct-10-19 17:00	Oct-10-19 17:00	Oct-10-19 17:00	Oct-10-19 17:00	Oct-10-19 17:00
	<i>Analyzed:</i>	Oct-11-19 03:48	Oct-11-19 04:09	Oct-11-19 04:31	Oct-11-19 04:52	Oct-11-19 05:13	Oct-11-19 05:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	68.5 49.8	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0
Total GRO-DRO		<49.9 49.9	<50.0 50.0	<50.0 50.0	68.5 49.8	<49.9 49.9	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<50.0 50.0	68.5 49.8	<49.9 49.9	<50.0 50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.  
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.  
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.  
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Version: 1.0%

*Jessica Kramer*

Jessica Kramer  
Project Assistant



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

**RDU 41**

Sample Id: **SW01**

Matrix: Soil

Date Received: 10.07.19 12.50

Lab Sample Id: 639206-001

Date Collected: 10.04.19 12.15

Sample Depth: 0 - 3.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.08.19 16.10

Basis: Wet Weight

Seq Number: 3103711

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	365	5.02	mg/kg	10.08.19 16.46		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: DVM

Date Prep: 10.10.19 17.00

Basis: Wet Weight

Seq Number: 3104059

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.11.19 03.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.11.19 03.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.11.19 03.48	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.11.19 03.48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.11.19 03.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.11.19 03.48	
o-Terphenyl	84-15-1	93	%	70-135	10.11.19 03.48	



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

RDU 41

Sample Id: **SW01**

Matrix: Soil

Date Received: 10.07.19 12.50

Lab Sample Id: 639206-001

Date Collected: 10.04.19 12.15

Sample Depth: 0 - 3.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.10.19 16.15

Basis: Wet Weight

Seq Number: 3104086

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.12.19 22.07	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.12.19 22.07	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.12.19 22.07	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	10.12.19 22.07	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.12.19 22.07	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.12.19 22.07	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.12.19 22.07	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.12.19 22.07		
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.12.19 22.07		



# Certificate of Analytical Results 639206

## LT Environmental, Inc., Arvada, CO

RDU 41

Sample Id: **SW02** Matrix: Soil Date Received: 10.07.19 12.50  
 Lab Sample Id: 639206-002 Date Collected: 10.04.19 12.20 Sample Depth: 0 - 3.5 ft  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 10.08.19 16.10 Basis: Wet Weight  
 Seq Number: 3103711 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	181	4.98	mg/kg	10.09.19 08.24		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: DVM Date Prep: 10.10.19 17.00 Basis: Wet Weight  
 Seq Number: 3104059 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.11.19 04.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.11.19 04.09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.11.19 04.09	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.11.19 04.09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.11.19 04.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.11.19 04.09	
o-Terphenyl	84-15-1	101	%	70-135	10.11.19 04.09	





# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

RDU 41

Sample Id: <b>SW02</b>	Matrix: Soil	Date Received: 10.07.19 12.50
Lab Sample Id: 639206-002	Date Collected: 10.04.19 12.20	Sample Depth: 0 - 3.5 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B
Tech: KTL		% Moisture:
Analyst: KTL	Date Prep: 10.10.19 16.15	Basis: Wet Weight
Seq Number: 3104086		SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.12.19 22.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.12.19 22.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.12.19 22.27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.12.19 22.27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.12.19 22.27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.12.19 22.27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.12.19 22.27	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.12.19 22.27		
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.12.19 22.27		



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

**RDU 41**

Sample Id: **SW03**

Matrix: Soil

Date Received: 10.07.19 12.50

Lab Sample Id: 639206-003

Date Collected: 10.04.19 12.25

Sample Depth: 0 - 3.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.08.19 16.10

Basis: Wet Weight

Seq Number: 3103711

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	226	5.00	mg/kg	10.09.19 08.34		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: DVM

Date Prep: 10.10.19 17.00

Basis: Wet Weight

Seq Number: 3104059

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.11.19 04.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.11.19 04.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.11.19 04.31	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.11.19 04.31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.11.19 04.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.11.19 04.31	
o-Terphenyl	84-15-1	92	%	70-135	10.11.19 04.31	



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

RDU 41

Sample Id: **SW03**

Matrix: Soil

Date Received: 10.07.19 12.50

Lab Sample Id: 639206-003

Date Collected: 10.04.19 12.25

Sample Depth: 0 - 3.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.10.19 16.15

Basis: Wet Weight

Seq Number: 3104086

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.12.19 22.47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.12.19 22.47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.12.19 22.47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.12.19 22.47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.12.19 22.47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.12.19 22.47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.12.19 22.47	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.12.19 22.47		
1,4-Difluorobenzene	540-36-3	85	%	70-130	10.12.19 22.47		



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

**RDU 41**

Sample Id: <b>FS01</b>	Matrix: Soil	Date Received: 10.07.19 12.50
Lab Sample Id: 639206-004	Date Collected: 10.04.19 12.30	Sample Depth: 3.5 ft
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 10.08.19 16.10	Basis: Wet Weight
Seq Number: 3103711		SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	193	5.04	mg/kg	10.08.19 17.33		1

Analytical Method: TPH by SW8015 Mod	Prep Method: SW8015P
Tech: DVM	% Moisture:
Analyst: DVM	Date Prep: 10.10.19 17.00
Seq Number: 3104059	Basis: Wet Weight
	SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.11.19 04.52	U	1
<b>Diesel Range Organics (DRO)</b>	C10C28DRO	<b>68.5</b>	49.8	mg/kg	10.11.19 04.52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.11.19 04.52	U	1
<b>Total GRO-DRO</b>	PHC628	<b>68.5</b>	49.8	mg/kg	10.11.19 04.52		1
<b>Total TPH</b>	PHC635	<b>68.5</b>	49.8	mg/kg	10.11.19 04.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.11.19 04.52	
o-Terphenyl	84-15-1	96	%	70-135	10.11.19 04.52	



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

RDU 41

Sample Id: **FS01**

Matrix: Soil

Date Received: 10.07.19 12.50

Lab Sample Id: 639206-004

Date Collected: 10.04.19 12.30

Sample Depth: 3.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.10.19 16.15

Basis: Wet Weight

Seq Number: 3104086

SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.12.19 23.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.12.19 23.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.12.19 23.07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.12.19 23.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.12.19 23.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.12.19 23.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.12.19 23.07	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.12.19 23.07		
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.12.19 23.07		



# Certificate of Analytical Results 639206

## LT Environmental, Inc., Arvada, CO

RDU 41

Sample Id: **FS02** Matrix: Soil Date Received: 10.07.19 12.50  
 Lab Sample Id: 639206-005 Date Collected: 10.04.19 12.35 Sample Depth: 3.5 ft  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 10.08.19 16.10 Basis: Wet Weight  
 Seq Number: 3103711 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	80.6	4.96	mg/kg	10.08.19 17.42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: DVM Date Prep: 10.10.19 17.00 Basis: Wet Weight  
 Seq Number: 3104059 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.11.19 05.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.11.19 05.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.11.19 05.13	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.11.19 05.13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.11.19 05.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.11.19 05.13	
o-Terphenyl	84-15-1	97	%	70-135	10.11.19 05.13	





# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

RDU 41

Sample Id: **FS02** Matrix: Soil Date Received: 10.07.19 12.50  
 Lab Sample Id: 639206-005 Date Collected: 10.04.19 12.35 Sample Depth: 3.5 ft  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 10.10.19 16.15 Basis: Wet Weight  
 Seq Number: 3104086 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.12.19 23.27	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.12.19 23.27	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.12.19 23.27	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.12.19 23.27	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.12.19 23.27	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.12.19 23.27	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.12.19 23.27	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	86	%	70-130	10.12.19 23.27		
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.12.19 23.27		



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

**RDU 41**

Sample Id: **FS03** Matrix: Soil Date Received: 10.07.19 12.50  
 Lab Sample Id: 639206-006 Date Collected: 10.04.19 12.40 Sample Depth: 2.5 - 3.5 ft  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 10.08.19 16.10 Basis: Wet Weight  
 Seq Number: 3103711 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	95.3	4.99	mg/kg	10.08.19 18.10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: DVM Date Prep: 10.10.19 17.00 Basis: Wet Weight  
 Seq Number: 3104059 SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.11.19 05.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.11.19 05.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.11.19 05.35	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.11.19 05.35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.11.19 05.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.11.19 05.35	
o-Terphenyl	84-15-1	102	%	70-135	10.11.19 05.35	



# Certificate of Analytical Results 639206

**LT Environmental, Inc., Arvada, CO**

RDU 41

Sample Id: <b>FS03</b>	Matrix: Soil	Date Received: 10.07.19 12.50
Lab Sample Id: 639206-006	Date Collected: 10.04.19 12.40	Sample Depth: 2.5 - 3.5 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B
Tech: KTL		% Moisture:
Analyst: KTL	Date Prep: 10.10.19 16.15	Basis: Wet Weight
Seq Number: 3104086		SUB: T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.12.19 23.47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.12.19 23.47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.12.19 23.47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.12.19 23.47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.12.19 23.47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.12.19 23.47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.12.19 23.47	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.12.19 23.47		
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.12.19 23.47		



## Flagging Criteria

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

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

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

**PQL** Practical Quantitation Limit      **SQL** Sample 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 639206

## LT Environmental, Inc.

RDU 41

## Analytical Method: Chloride by EPA 300

Seq Number: 3103711

MB Sample Id: 7687722-1-BLK

Matrix: Solid

LCS Sample Id: 7687722-1-BKS

Prep Method: E300P

Date Prep: 10.08.19

LCSD Sample Id: 7687722-1-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	244	98	90-110	0	20	mg/kg	10.08.19 16:27	

## Analytical Method: Chloride by EPA 300

Seq Number: 3103711

Parent Sample Id: 639206-001

Matrix: Soil

MS Sample Id: 639206-001 S

Prep Method: E300P

Date Prep: 10.08.19

MSD Sample Id: 639206-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	365	251	611	98	603	95	90-110	1	20	mg/kg	10.08.19 16:56	

## Analytical Method: Chloride by EPA 300

Seq Number: 3103711

Parent Sample Id: 639218-005

Matrix: Soil

MS Sample Id: 639218-005 S

Prep Method: E300P

Date Prep: 10.08.19

MSD Sample Id: 639218-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	100	250	352	101	346	98	90-110	2	20	mg/kg	10.08.19 19:06	

## Analytical Method: TPH by SW8015 Mod

Seq Number: 3104059

MB Sample Id: 7687890-1-BLK

Matrix: Solid

LCS Sample Id: 7687890-1-BKS

Prep Method: SW8015P

Date Prep: 10.10.19

LCSD Sample Id: 7687890-1-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	1080	108	1100	110	70-135	2	20	mg/kg	10.10.19 21:24	
Diesel Range Organics (DRO)	<15.0	1000	1040	104	1060	106	70-135	2	20	mg/kg	10.10.19 21:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		99		115		70-135	%	10.10.19 21:24
o-Terphenyl	96		97		101		70-135	%	10.10.19 21:24

## Analytical Method: TPH by SW8015 Mod

Seq Number: 3104059

Matrix: Solid  
MB Sample Id: 7687890-1-BLK

Prep Method: SW8015P

Date Prep: 10.10.19

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.10.19 21:03	

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

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

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

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



## QC Summary 639206

## LT Environmental, Inc.

RDU 41

## Analytical Method: TPH by SW8015 Mod

Seq Number: 3104059

Parent Sample Id: 639118-004

Matrix: Soil

MS Sample Id: 639118-004 S

Prep Method: SW8015P

Date Prep: 10.10.19

MSD Sample Id: 639118-004 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)	<15.0	999	991	99	1000	100	70-135	1	20	mg/kg	10.10.19 22:29	
Diesel Range Organics (DRO)	<15.0	999	947	95	965	97	70-135	2	20	mg/kg	10.10.19 22:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		92		70-135	%	10.10.19 22:29
o-Terphenyl	87		90		70-135	%	10.10.19 22:29

## Analytical Method: BTEX by EPA 8021B

Seq Number: 3104086

MB Sample Id: 7687878-1-BLK

Matrix: Solid

LCS Sample Id: 7687878-1-BKS

Prep Method: SW5030B

Date Prep: 10.10.19

LCSD Sample Id: 7687878-1-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	0.0815	82	0.0775	78	70-130	5	35	mg/kg	10.12.19 18:46	
Toluene	<0.00200	0.100	0.0878	88	0.0835	84	70-130	5	35	mg/kg	10.12.19 18:46	
Ethylbenzene	<0.00200	0.100	0.0955	96	0.0906	91	70-130	5	35	mg/kg	10.12.19 18:46	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.179	90	70-130	5	35	mg/kg	10.12.19 18:46	
o-Xylene	<0.00200	0.100	0.101	101	0.0968	97	70-130	4	35	mg/kg	10.12.19 18:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		90		91		70-130	%	10.12.19 18:46
4-Bromofluorobenzene	103		113		112		70-130	%	10.12.19 18:46

## Analytical Method: BTEX by EPA 8021B

Seq Number: 3104086

Parent Sample Id: 639206-001

Matrix: Soil

MS Sample Id: 639206-001 S

Prep Method: SW5030B

Date Prep: 10.10.19

MSD Sample Id: 639206-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.00757	8	0.0222	22	70-130	98	35	mg/kg	10.12.19 19:27	XF
Toluene	<0.00199	0.0996	0.00368	4	0.0176	18	70-130	131	35	mg/kg	10.12.19 19:27	XF
Ethylbenzene	<0.00199	0.0996	0.00426	4	0.0164	16	70-130	118	35	mg/kg	10.12.19 19:27	XF
m,p-Xylenes	<0.00398	0.199	0.00401	2	0.0132	7	70-130	107	35	mg/kg	10.12.19 19:27	XF
o-Xylene	<0.00199	0.0996	0.00985	10	0.0280	28	70-130	96	35	mg/kg	10.12.19 19:27	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		87		70-130	%	10.12.19 19:27
4-Bromofluorobenzene	120		122		70-130	%	10.12.19 19:27

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



# Chain of Custody

**Work Order No:**

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



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

75-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 1 of 1

75-392-7550) 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)	Chris McKisson
Company Name:	LT Environmental, Inc.	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:	<a href="mailto:ilaumbach@ltenv.com">ilaumbach@ltenv.com</a> , <a href="mailto:cmckisson@ltenv.com">cmckisson@ltenv.com</a> , <a href="mailto:asmith@ltenv.com">asmith@ltenv.com</a>

Work Order Comments				
Program: <input type="text"/> UST/PST <input type="text"/> PRP <input type="text"/> Brownfields <input type="text"/> RRC <input type="text"/> Superfund <input type="text"/>				
State of Project:				
Reporting: Level II <input type="text"/> Level III <input type="text"/> DST/UST <input type="text"/> TRP <input type="text"/> Level IV <input type="text"/>				
Deliverables: EDD <input type="text"/> ADaPT <input type="text"/> Other: <input type="text"/>				

Project Name:		RDU 41	Turn Around	
Project Number:		(348)19058	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Eddy County, NM/ Task #002	Rush:	
Sampler's Name:		Lynda Laumbach	Due Date:	
<b>SAMPLE RECEIPT</b>		Temp Blank:	Yes <input checked="" type="radio"/> No <input checked="" type="radio"/>	Wet loc: Yes <input checked="" type="radio"/> No <input type="radio"/>
Temperature (°C):		3.2	Thermometer ID T-NM-007	
Received Intact:		Yes <input checked="" type="radio"/> No <input type="radio"/>		
Cooler Custody Seals:		Yes <input checked="" type="radio"/> N/A	Correction Factor: -0.2	
Sample Custody Seals:		Yes <input checked="" type="radio"/> N/A	Total Containers: 0	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
SW01	S	10/6/2019	12:15	0-3.5'
SW02	S		12:20	0-3.5'
SW03	S		12:25	0-3.5'
FSD1	S		12:30	3.5'
FSD2	S		12:35	3.5'
FSD3	S	↓	12:40	2.5-3.5'

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

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

[illegible]

Revised Date 05/14/18 Rev 2018.1





## Inter-Office Shipment

Page 1 of 1

IOS Number **49493**

Date/Time: 10/07/19 15:09

Created by: Elizabeth McClellan

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
639206-001	S	SW01	10/04/19 12:15	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639206-001	S	SW01	10/04/19 12:15	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639206-001	S	SW01	10/04/19 12:15	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639206-002	S	SW02	10/04/19 12:20	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639206-002	S	SW02	10/04/19 12:20	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639206-002	S	SW02	10/04/19 12:20	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639206-003	S	SW03	10/04/19 12:25	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639206-003	S	SW03	10/04/19 12:25	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639206-003	S	SW03	10/04/19 12:25	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639206-004	S	FS01	10/04/19 12:30	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639206-004	S	FS01	10/04/19 12:30	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639206-004	S	FS01	10/04/19 12:30	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639206-005	S	FS02	10/04/19 12:35	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639206-005	S	FS02	10/04/19 12:35	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639206-005	S	FS02	10/04/19 12:35	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	
639206-006	S	FS03	10/04/19 12:40	SW8015MOD_NM	TPH by SW8015 Mod	10/11/19	10/18/19	JKR	GRO-DRO PHCC10C28 PI	
639206-006	S	FS03	10/04/19 12:40	E300_CL	Chloride by EPA 300	10/11/19	04/01/20	JKR	CL	
639206-006	S	FS03	10/04/19 12:40	SW8021B	BTEX by EPA 8021B	10/11/19	10/18/19	JKR	BR4FBZ BZ BZME EBZ X	

## Inter Office Shipment or Sample Comments:

Relinquished By:

Elizabeth McClellan

Date Relinquished: 10/07/2019

Received By:

Brianna Teel

Date Received: 10/08/2019 13:36

Cooler Temperature: 0.4

**XENCO Laboratories****Inter Office Report- Sample Receipt Checklist**

Sent To: Midland

IOS #: 49493

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sent By: Elizabeth McClellan

Date Sent: 10/07/2019 03:09 PM

Received By: Brianna Teel

Date Received: 10/08/2019 01:36 PM

**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: 10/08/2019

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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**District II**  
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**District III**  
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**District IV**  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 328775

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 328775
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	Documents will be added to the incident file and incident will be closed.	4/2/2024