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## **Remediation and Closure Report**

West Red Lake Unit Federal Satellite Battery #81

\*2RP-5671

Talon Project # 701307.126.01

### **Prepared For:**

Lime Rock Resources  
1111 Bagby St. Suite 4600  
Houston, TX 77002

### **Prepared By:**

TALON/LPE  
408 W. Texas Avenue  
Artesia, New Mexico 88210

**February 17, 2020**

Mr. Jim Amos  
**BLM Carlsbad Field Office**  
620 East Greene Street  
Carlsbad, NM 88220

Mr. Mike Bratcher  
**NMOCD District 2**  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210

Subject: **Remediation and Closure Report**  
WRLU Federal Satellite Battery #81\*2RP-5671  
Eddy County, NM

Dear Mr. Amos & Mr. Bratcher,

Lime Rock Resources contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The results of our remediation and closure request are contained herein. The incident descriptions, soil sampling results, remedial actions, and closure requests are presented herein.

### Site Information

WRLU Federal Satellite Battery #81 is located approximately eight (8) miles southeast of Artesia, New Mexico. The legal location for this release is Unit Letter A, Section 8, Township 18 South and Range 27 East in Eddy County, New Mexico. More specifically, the latitude and longitude for the release are 32.7677155 North and -104.294693 West. A Site Map is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Gypsum lands. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Guadalupian in age and is comprised of weathered gypsum. Drainage courses in this area are well-drained.

### Ground Water and Site Ranking

The New Mexico Office of the State Engineer Database indicates the average reported depth to groundwater is 96-feet below ground surface (BGS). See [Appendix II](#) for the referenced groundwater depth. This site is located within a high potential Karst area.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 NMAC.

<b>Approximate Depth to Groundwater</b>	<b>96 Feet/BGS</b>
---	--------------------

- |   |   |
|---|---|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet of any continuously flowing watercourse or any other significant watercourse  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 200 feet of any lakebed, sinkhole or playa lake  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet from an occupied permanent residence, school, hospital, institution or church   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 500 feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock watering purposes                                  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 1000 feet of any freshwater well or spring   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within incorporated municipal boundaries or within a defined Municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978 |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet of a wetland  |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within the area overlying a subsurface mine   |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Within an unstable area, yes, a high Karst area   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within a 100-year floodplain  |

Table I Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
50 feet	Total Chlorides***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg



## Incident Description

On September 30, 2019, a leak was found from a hole in the bottom of a 500 barrel (bbl) steel tank due to corrosion. An estimated 218 bbls of oil was released in which 208 bbls were recovered. The fluids were contained within the bermed battery containment. Lime Rock immediately placed an emergency one-call and dispatched vac trucks and roustabout crews to begin initial cleanup measures. A site map is presented in [Appendix I](#).

Talon mobilized personnel to the site to supervise the contract companies dispatched by Lime Rock. The impacted area was excavated utilizing hand tools by roustabout crews and hydro-excavators. Because of the tanks and infrastructure, no mechanical excavation equipment was able to be utilized. Hard rock refusal was encountered and hydro-excavators were subsequently used to clean the top of the rock.

An air rotary rig was mobilized to delineate the vertical extent of the impacted area and is representative of all the affected areas. The results of our subsurface investigation are summarized in the following data table and the complete lab report is attached in [Appendix V](#).

## Soil Sampling

### 10-4-19 Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
S-1	10/4/2019	0-1 R	ND	ND	ND	48.3	25	73.3	240
S-2	10/4/2019	0	0.61	ND	ND	253	72.2	325.2	2280
		1 R	ND	ND	ND	ND	ND	ND	768
S-3	10/4/2019	0-1 R	ND	ND	ND	ND	ND	ND	400
S-4	10/4/2019	0-1 R	ND	ND	ND	ND	ND	ND	10100
S-5	10/4/2019	0-1 R	0.411	ND	ND	29.7	16.9	46.6	384
S-6	10/4/2019	0-1 R	ND	ND	ND	ND	ND	ND	432
S-7	10/4/2019	0-1 R	0.545	ND	ND	18.4	ND	18.4	2450
S-8	10/4/2019	0-1 R	ND	ND	ND	82.8	15.2	98	288
S-9	10/4/2019	0-1 R	2.5	0.305	ND	276	99.3	375.3	432
S-10	10/4/2019	0-1 R	1.64	0.052	ND	570	259	829	256
S-11	10/4/2019	0-1 R	1.91	0.076	ND	555	299	854	144
S-12	10/4/2019	0-1 R	12.5	0.671	39.6	1120	505	1664.6	256
S-13	10/4/2019	0-1 R	2.12	0.07	ND	2750	683	3433	14800
S-14	10/4/2019	0-1 R	ND	2.65	ND	22.4	ND	22.4	928
S-15	10/4/2019	0-1 R	132	3.14	3570	5480	1640	10690	448
S-16	10/4/2019	0-1 R	1.15	ND	ND	715	440	1155	64
S-17	10/4/2019	0-1 R	53.8	3.61	225	1660	772	2657	80
S-18	10/4/2019	0-1 R	3.43	0.075	18.6	1010	443	1471.6	48

ND- Analyte Not Detected



## 11-21-19 Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
East SW Comp	11/21/2019	1	ND	ND	ND	ND	ND	ND	576
North SW Comp	11/21/2019	1	ND	ND	ND	334	73.4	407.4	2560
West SW Comp	11/21/2019	1	ND	ND	ND	ND	ND	ND	96
South SW Comp	11/21/2019	1	ND	ND	ND	66.1	34.8	100.9	960

ND- Analyte Not Detected

## 1-29-20 Boring Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
B-1	1/29/2020	0-2'	ND	ND	ND	ND	ND	ND	32
B-2	1/29/2020	0-2'	ND	ND	ND	188	50.8	238.8	640
		4	ND	ND	ND	ND	ND	ND	80
B-3	1/29/2020	0-2'	ND	ND	ND	ND	ND	ND	80
B-4	1/29/2020	0-2'	ND	ND	ND	72	ND	72	1020
		4'	ND	ND	ND	ND	ND	ND	80

ND- Analyte Not Detected

## 2-5-20 Laboratory Results

Sample ID	Sample Date	Depth (BGS)	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC						100 mg/kg	600 mg/kg
N. Sidewall Comp	2/5/2020	1.5'	ND	ND	ND	ND	64
S. Sidewall Comp	2/5/2020	1.5'	--	--	--	--	80

ND- Analyte Not Detected

See [Appendix V](#) for the complete report of laboratory results.

### Remedial Actions:

- The impacted areas inside the tank battery area was excavated by hand and hydro-excavated to a depth of 2.0-feet BGS, where hard rock refusal was encountered.
- The impacted area was vertically and horizontally delineated.
- All contaminated soil was transported to Lea Land, LLC, an NMOCD approved soil waste disposal facility.
- An Initial & Final C-141 is attached in **Appendix III**.

### Closure

On behalf of Lime Rock Resources, we respectfully request that no further actions be required at this time and that a deferral until facility closure with regard to this incident be granted. Backfilling efforts will begin as soon as permission is granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

TALON/LPE



Chris Jones  
Project Manager

### Attachments:

- Appendix I Site Map, Karst Map, TOPO Map & Locator Map
- Appendix II Soil Survey, Groundwater Data & FEMA Flood Zone
- Appendix III Initial & Final C-141
- Appendix IV Photographic Documentation
- Appendix V Laboratory Results



# **APPENDIX I**

**SITE MAP**

**KARST MAP**

**TOPO MAP**

**LOCATOR MAP**



# West Red Lake Unit #81

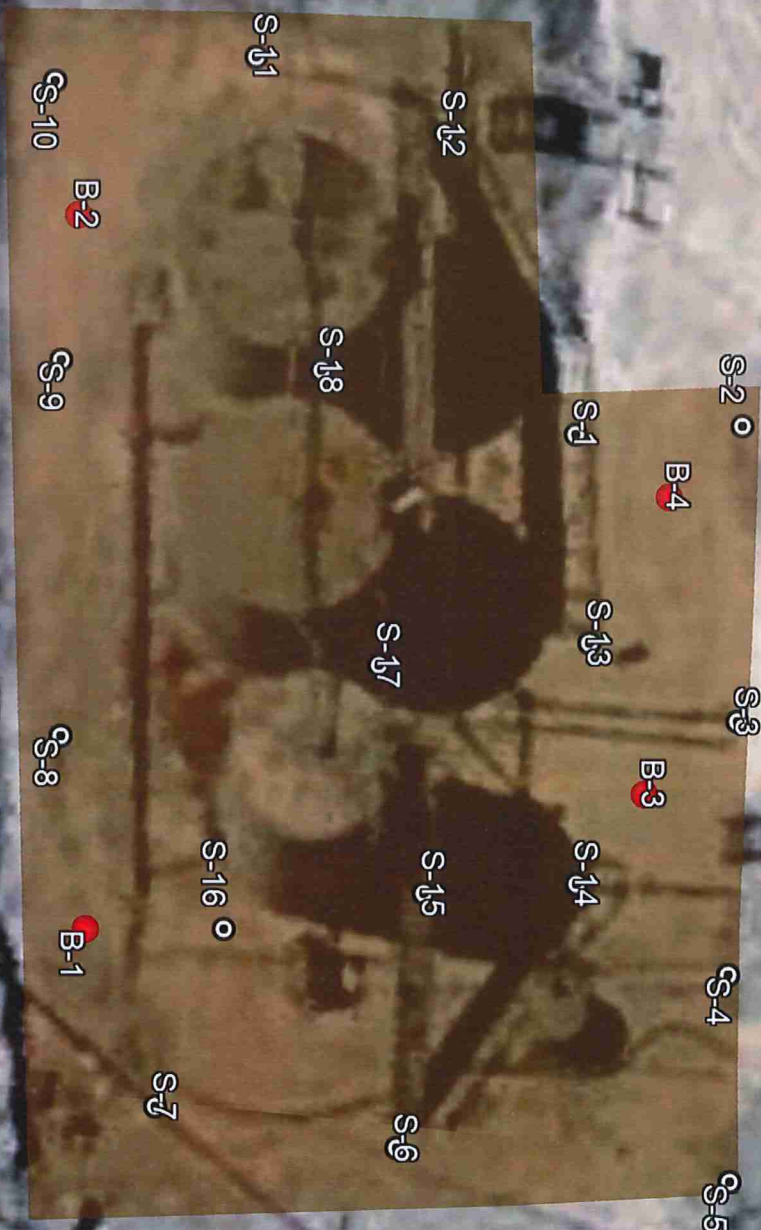
Lime Rock Resources

Eddy, NM

API 30-015-30666

Site Map

WRLU Satellite Batt #81



- Legend**
- Boring Holes
  - Impact Area
  - Samples

Google Earth

18 10 18 58 41

Received by OGD: 4/15/12 4:02 PM



# WRLU Satellite Batt #81

Lime Rock Resources  
Eddy County, NM  
API #30-015-30666  
Karst Map

- Legend**
- High
  - Low
  - Medium

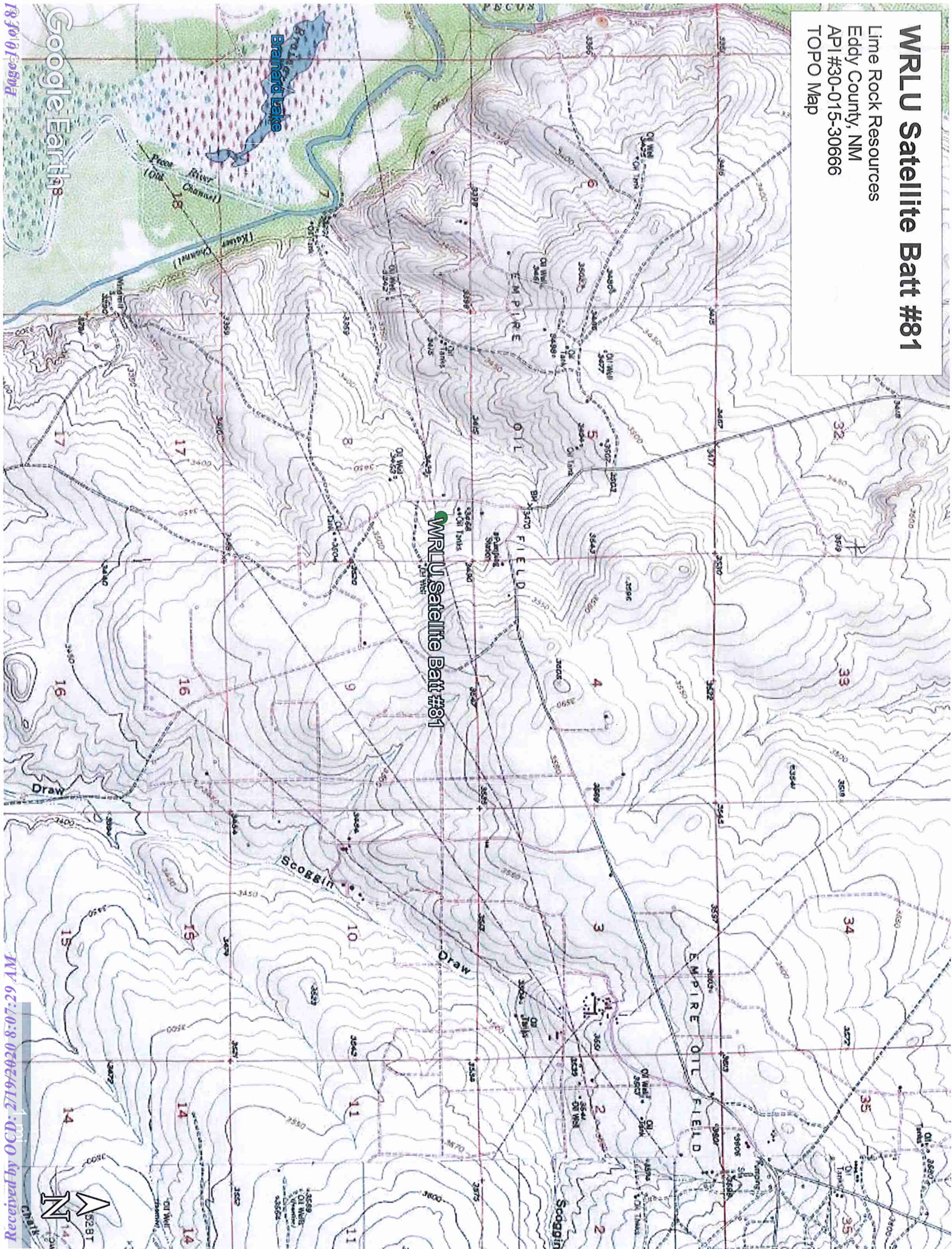
WRLU Satellite Batt #81

Google Earth





Lime Rock Resources  
Eddy County, NM  
API #30-015-30666  
TOPO Map





# WRLU Satellite Batt #81

Lime Rock Resources  
Eddy County, NM  
API #30-015-30666  
Locator Map



WRLU Satellite Batt #81

Google Earth

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1830217-0804 Copernicus

11-62-20-8-02026612-030-44 p.100222





## **APPENDIX II**

# **GROUNDWATER DATA**

## **SOIL SURVEY**

## **FEMA FLOOD ZONE**



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">RA 03714</a>		RA	CH	4	4	2	08	18S	27E	566212	3625253*	525	381		
<a href="#">RA 03661</a>		RA	ED	3	2	3	32	17S	27E	565186	3628038*	2444	330	140	190
<a href="#">RA 03664</a>		RA	CH	3	2	3	32	17S	27E	565186	3628038*	2444	400	100	300
<a href="#">RA 03917</a>		RA	LE	4	1	2	10	18S	27E	569019	3625660*	2960	130	50	80

Average Depth to Water: 96 feet

Minimum Depth: 50 feet

Maximum Depth: 140 feet

Record Count: 4

### UTMNAD83 Radius Search (in meters):

Easting (X): 566060.541

Northing (Y): 3625755.825

Radius: 3000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/14/19 2:10 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



## Eddy Area, New Mexico

### GA—Gypsum land

#### Map Unit Setting

*National map unit symbol:* 1w4f

*Elevation:* 1,250 to 5,000 feet

*Mean annual precipitation:* 10 to 25 inches

*Mean annual air temperature:* 57 to 66 degrees F

*Frost-free period:* 190 to 225 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Gypsum land:* 98 percent

*Minor components:* 2 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Gypsum Land

##### Setting

*Landform:* Plains, ridges, hills

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Residuum weathered from gypsum

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8s

*Hydric soil rating:* No

#### Minor Components

##### Reeves

*Percent of map unit:* 1 percent

*Ecological site:* Salty Bottomland (R042XC033NM)

*Hydric soil rating:* No

##### Cottonwood

*Percent of map unit:* 1 percent

*Ecological site:* Salty Bottomland (R042XC033NM)

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 15, Sep 15, 2019



# National Flood Hazard Layer FIRMette

32°46'18.90"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, AE9 With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
----------------------------	--

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X) Future Conditions 1% Annual Chance Flood Hazard (Zone X) Area with Reduced Flood Risk due to Levee. See Notes, Zone X Area with Flood Risk due to Levee (Zone D)
-----------------------------	--

OTHER AREAS GENERAL STRUCTURES	NO SCREEN Effective LOMRs Area of Undetermined Flood Hazard (Zone X) Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
--------------------------------	---

OTHER FEATURES	20.2 17.5 Base Flood Elevation (BFE) Coastal Transect Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature
----------------	--

MAP PANELS	Digital Data Available No Digital Data Available Unmapped
------------	---

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/14/2019 at 4:22:34 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRW panel number, and FIRW effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





## **APPENDIX III**

# **INITIAL C-141 & FINAL 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 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	NAB1928853045
District RP	2RP-5671
Facility ID	
Application ID	pAB1928852581

## Release Notification

BQFVH-191003-C-1410

### Responsible Party

Responsible Party Lime Rock Resources	OGRID 277558
Contact Name Michael Barrett	Contact Telephone 575-365-9724
Contact email mbarrett@limerockresources.com	Incident # (assigned by OCD) NAB1928853045
Contact mailing address 1111 Bagby St Ste 4600 Houston, TX 77002	

### Location of Release Source

Latitude 32.7677155 Longitude -104.294693  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name West Red Lake Unit Satellite Battery WRLU #81	Site Type Production Facility
Date Release Discovered 9-30-19	API# 30-015-30666

Unit Letter	Section	Township	Range	County
A	8	18S	27E	Eddy

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

\*\*WELL DETAILS IS FEDERAL  
AB

### 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 218 bbls	Volume Recovered 208 bbls
<input type="checkbox"/> Produced Water	Volume Released	Volume Recovered
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" 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: On 9-30-19 at the WRLU Satellite Battery WRLU#81 a leak was found from a hole in the bottom of a 500 bbl steel tank due to corrosion. The fluids were contained within the bermed battery containment. The tank has been taken out of service until repairs are made.

Form C-141

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State of New Mexico  
Oil Conservation Division

Incident ID	NAB1928853045
District RP	2RP-5671
Facility ID	
Application ID	pAB1928852581

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  Volume exceeded 25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, Chris Jones-Talon LPE to Mike Bratcher, Victoria Venegas, Robert Hamlet-NMOCD, Jim Amos-BLM on 10-2-19 via email.	

### 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: Mike Barrett  Signature:   email: <a href="mailto:mbarrett@limerockresources.com">mbarrett@limerockresources.com</a>	Title: Production Superintendent  Date: <u>10-2-19</u>  Telephone: 575-365-9724
<b><u>OCD Only</u></b>  Received by: <u>Amalia Bustamante</u> Date: <u>10/15/2019</u>	

Form C-141

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State of New Mexico  
Oil Conservation Division

Incident ID	nAB1928853045
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>96</u> (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 checked="" 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

Incident ID	nAB1928853045
District RP	
Facility ID	
Application ID	

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

Printed Name: Mike Barrett

Title: Production Superintendent

Signature: Date: 2-14-20email: [mbarrett@limerockresources.com](mailto:mbarrett@limerockresources.com)

Telephone: 575-365-9724

**OCD Only**Received by: Cristina EadsDate: 03/25/2020

Form C-141

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State of New Mexico  
Oil Conservation Division

Incident ID	nAB1928853045
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: Mike Barrett

Title: Production Superintendent

Signature: Date: email: [mbarrett@limerockresources.com](mailto:mbarrett@limerockresources.com)

Telephone: 575-365-9724

### OCD Only

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

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

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

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

Form C-141

Page 6

State of New Mexico  
Oil Conservation Division

Incident ID	nAB1928853045
District RP	
Facility ID	
Application ID	

## Closure

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


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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Mike Barrett

Title: Production Superintendent

Signature: Date: 2/14/20email: [mbarrett@limerockresources.com](mailto:mbarrett@limerockresources.com)

Telephone: 575-365-9724

**OCD Only**Received by: Cristina EadsDate: 03/25/2020

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: 03/25/2020Printed Name: Cristina EadsTitle: Environmental Specialist

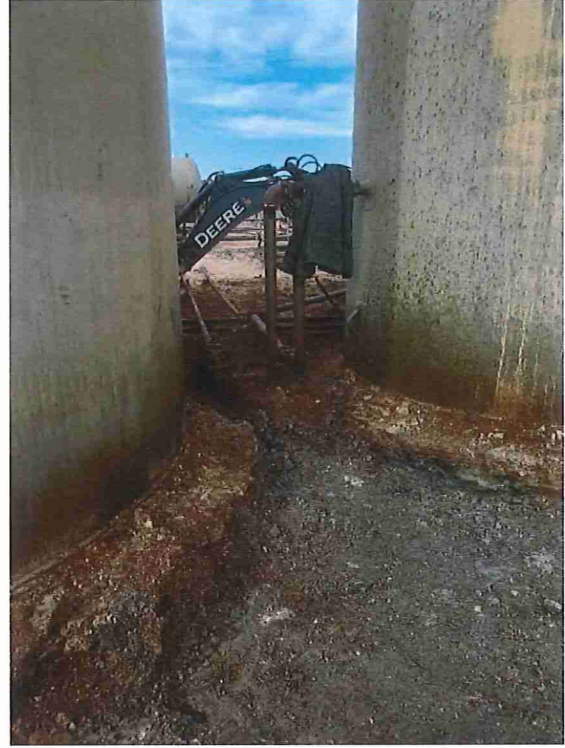
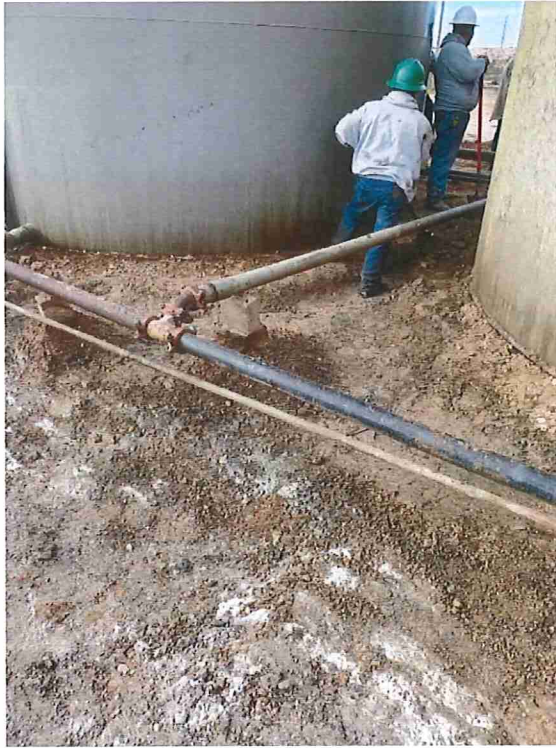




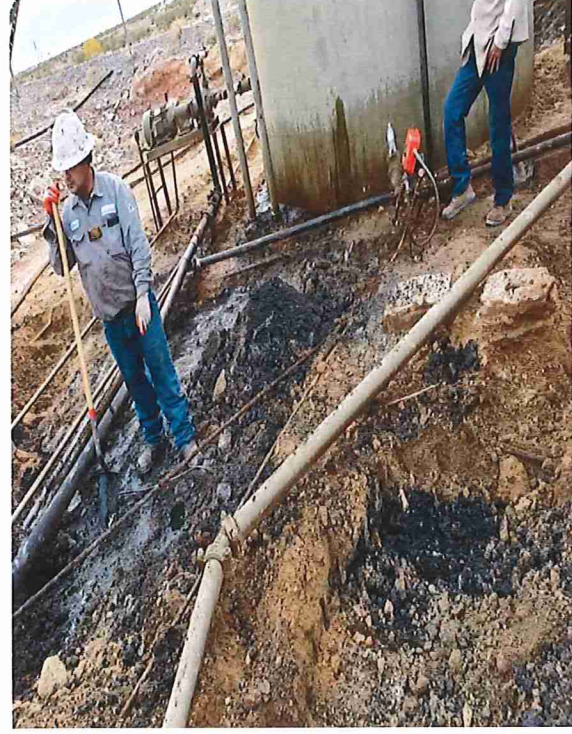
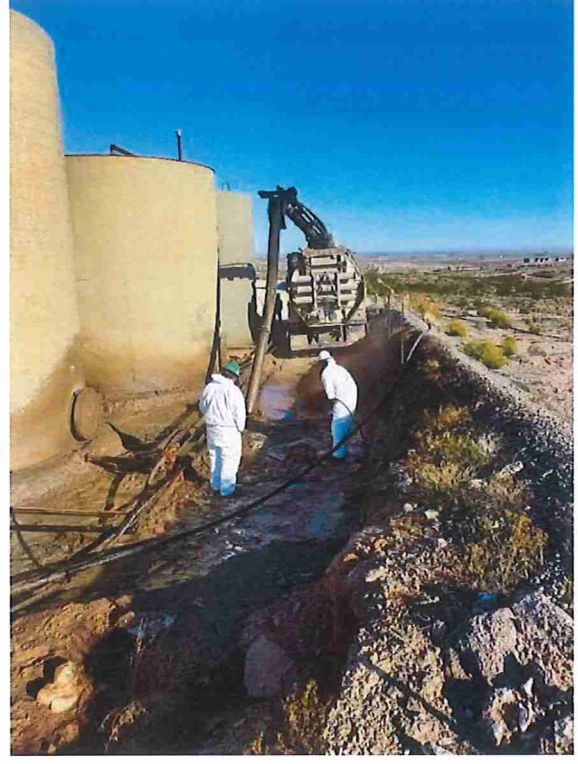
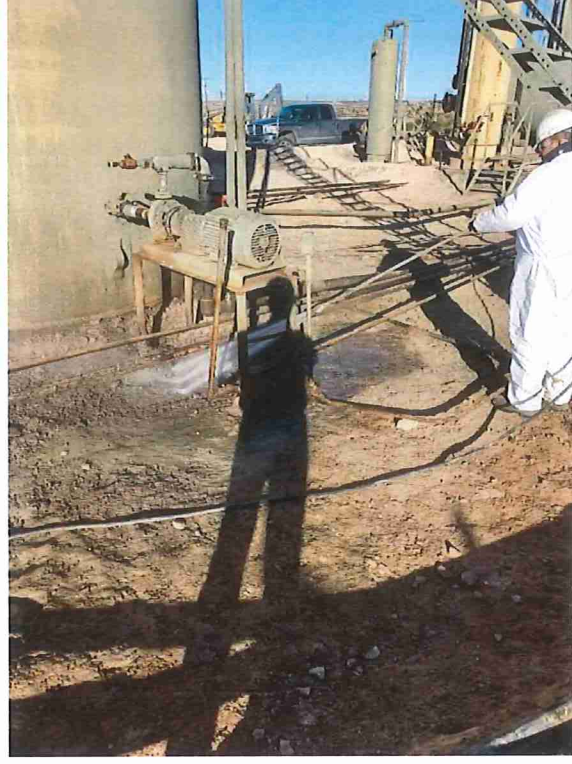
## **APPENDIX IV**

# **PHOTOGRAPHIC DOCUMENTATION**

WRLU #81 Excavation Pics







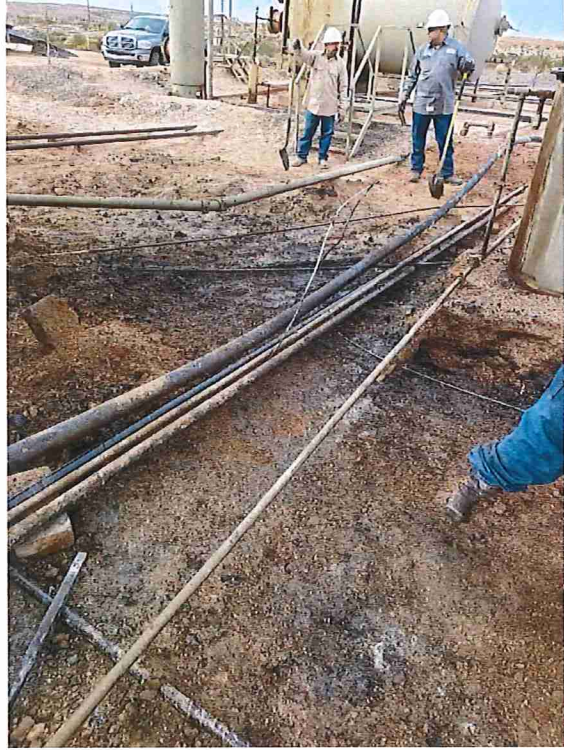






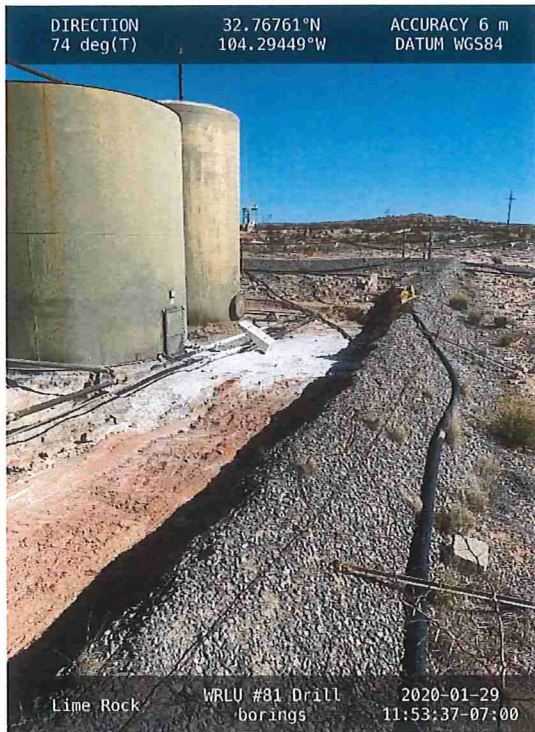








## Boring Samples











## APPENDIX V

# LABORATORY DATA



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

February 18, 2020

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WEST RED LAKE UNIT #081 A

Enclosed are the results of analyses for samples received by the laboratory on 10/07/19 14:38.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S - 1 0-1' R	H903403-04	Soil	04-Oct-19 10:20	07-Oct-19 14:38
S - 2 0-1'	H903403-05	Soil	04-Oct-19 10:30	07-Oct-19 14:38
S - 2 1' R	H903403-06	Soil	04-Oct-19 10:40	07-Oct-19 14:38
S - 3 0-1' R	H903403-07	Soil	04-Oct-19 10:45	07-Oct-19 14:38
S - 4 0-1' R	H903403-08	Soil	04-Oct-19 10:55	07-Oct-19 14:38
S - 5 0-1' R	H903403-09	Soil	04-Oct-19 11:05	07-Oct-19 14:38
S - 6 0-1' R	H903403-10	Soil	04-Oct-19 11:15	07-Oct-19 14:38
S - 7 0-1' R	H903403-11	Soil	04-Oct-19 11:20	07-Oct-19 14:38
S - 8 0-1' R	H903403-12	Soil	04-Oct-19 11:30	07-Oct-19 14:38
S - 9 0-1' R	H903403-13	Soil	04-Oct-19 11:40	07-Oct-19 14:38
S - 10 0-1' R	H903403-14	Soil	04-Oct-19 11:45	07-Oct-19 14:38
S - 11 0-1' R	H903403-15	Soil	04-Oct-19 11:55	07-Oct-19 14:38
S - 12 0-1' R	H903403-16	Soil	04-Oct-19 12:00	07-Oct-19 14:38
S - 13 0-1' R	H903403-17	Soil	04-Oct-19 12:10	07-Oct-19 14:38
S - 14 0-1' R	H903403-18	Soil	04-Oct-19 12:20	07-Oct-19 14:38
S - 15 0-1' R	H903403-19	Soil	04-Oct-19 12:30	07-Oct-19 14:38
S - 16 0-1' R	H903403-20	Soil	04-Oct-19 12:40	07-Oct-19 14:38
S - 17 0-1' R	H903403-21	Soil	04-Oct-19 12:50	07-Oct-19 14:38
S - 18 0-1' R	H903403-22	Soil	04-Oct-19 13:00	07-Oct-19 14:38

02/17/20 - Client removed the BG samples from the report.

02/18/20 - This is the revised report and will replace the one sent on 10/08/19.

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
---	---	------------------------------

**S - 1 0-1' R  
H903403-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	240		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			84.5 %	73.3-129		9100801	BF	08-Oct-19	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
DRO >C10-C28*	48.3		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
EXT DRO >C28-C36	25.0		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
Surrogate: 1-Chlorooctane			86.9 %	41-142		9100713	MS	07-Oct-19	8015B	
Surrogate: 1-Chlorooctadecane			96.4 %	37.6-147		9100713	MS	07-Oct-19	8015B	

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\*=Accredited Analyte

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*Celestine Keene*

Celestine D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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S - 2 0-1'  
H903403-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	2280		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-CI-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	0.103		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	0.180		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	0.328		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	0.610		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			85.9 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
DRO >C10-C28*	253		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
EXT DRO >C28-C36	72.2		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	

Surrogate: 1-Chlorooctane			83.7 %	41-142		9100713	MS	07-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			103 %	37.6-147		9100713	MS	07-Oct-19	8015B	
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\*=Accredited Analyte

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*Coley D. Keene*

Coley D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 2 1' R**  
**H903403-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	768		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			82.5 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9100713	MS	07-Oct-19	8015B	

Surrogate: 1-Chlorooctane			88.6 %	41-142		9100713	MS	07-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			92.7 %	37.6-147		9100713	MS	07-Oct-19	8015B	
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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 3 0-1' R**  
**H903403-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	400		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	0.094		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			82.1 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			81.6 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			86.3 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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\* = Accredited Analyte

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Celest D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
---	---	------------------------------

**S - 4 0-1' R  
H903403-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	10100		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			83.8 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			85.1 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			89.6 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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Cardinal Laboratories

\*=Accredited Analyte

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*Coley D. Keene*

Coley D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**S - 5 0-1' R  
H903403-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	384		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	0.074		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	0.127		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	0.210		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	0.411		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			82.7 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	29.7		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	16.9		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			84.3 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			93.7 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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*Celest D. Keene*

Celest D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 6 0-1' R**  
**H903403-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	432		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			79.6 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			86.3 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			89.1 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**S - 7 0-1' R**  
**H903403-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	2450		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Toluene*	0.098		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Ethylbenzene*	0.098		0.050	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total Xylenes*	0.349		0.150	mg/kg	50	9100801	BF	08-Oct-19	8021B	
Total BTEX	0.545		0.300	mg/kg	50	9100801	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			85.6 %	73.3-129		9100801	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	18.4		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			84.7 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			88.4 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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*Celestine Keene*

Celestine D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 8 0-1' R**  
**H903403-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	288		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	73.3-129		9100802	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	82.8		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	15.2		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			86.9 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			94.5 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**S - 9 0-1' R  
H903403-13 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	432		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

**S-04**

Benzene*	0.305		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Toluene*	0.206		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	0.471		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	1.52		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total BTEX	2.50		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			147 %	73.3-129		9100802	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	276		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	99.3		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			87.5 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			102 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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*Celest D. Keene*

Celest D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 10 0-1' R**  
**H903403-14 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	256	16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	0.052	0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Toluene*	0.207	0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Ethylbenzene*	0.477	0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Total Xylenes*	0.908	0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B
Total BTEX	1.64	0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B

Surrogate: 4-Bromofluorobenzene (PID)	108 %	73.3-129	9100802	BF	08-Oct-19	8021B
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B
DRO >C10-C28*	570	10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B
EXT DRO >C28-C36	259	10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B

Surrogate: 1-Chlorooctane	89.0 %	41-142	9100713	MS	08-Oct-19	8015B
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Surrogate: 1-Chlorooctadecane	128 %	37.6-147	9100713	MS	08-Oct-19	8015B
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**S - 11 0-1' R  
H903403-15 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	0.076		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Toluene*	0.381		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	0.494		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	0.959		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total BTEX	1.91		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B	

Surrogate: <i>t</i> -Bromofluorobenzene (PID)			107 %	73.3-129		9100802	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	555		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	299		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: <i>1</i> -Chlorooctane			87.7 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: <i>1</i> -Chlorooctadecane			123 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 12 0-1' R**  
**H903403-16 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	256		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	0.671		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Toluene*	3.31		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	3.12		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	5.38		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total BTEX	12.5		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B	

Surrogate: *4-Bromofluorobenzene (PID)* 112 % 73.3-129 9100802 BF 08-Oct-19 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	39.6		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	1120		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	505		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: *1-Chlorooctane* 92.6 % 41-142 9100713 MS 08-Oct-19 8015B

Surrogate: *1-Chlorooctadecane* 131 % 37.6-147 9100713 MS 08-Oct-19 8015B

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\*=Accredited Analyte

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Caley D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 13 0-1' R**  
**H903403-17 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	14800		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021****S-04**

Benzene*	0.070		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Toluene*	0.685		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Ethylbenzene*	<0.050		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Total Xylenes*	1.36		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B
Total BTEX	2.12		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B

Surrogate: 4-Bromofluorobenzene (PID)			315 %	73.3-129		9100802	BF	08-Oct-19	8021B
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**Petroleum Hydrocarbons by GC FID****S-06**

GRO C6-C10*	<50.0		50.0	mg/kg	5	9100713	MS	08-Oct-19	8015B
DRO >C10-C28*	2750		50.0	mg/kg	5	9100713	MS	08-Oct-19	8015B
EXT DRO >C28-C36	683		50.0	mg/kg	5	9100713	MS	08-Oct-19	8015B

Surrogate: 1-Chlorooctane			99.7 %	41-142		9100713	MS	08-Oct-19	8015B
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Surrogate: 1-Chlorooctadecane			178 %	37.6-147		9100713	MS	08-Oct-19	8015B
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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 14 0-1' R**  
**H903403-18 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	928		16.0	mg/kg	4	9100812	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021****S-04**

Benzene*	<0.050		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Toluene*	0.061		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Ethylbenzene*	0.078		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B
Total Xylenes*	2.51		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B
Total BTEX	2.65		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B

Surrogate: 4-Bromofluorobenzene (PID)			138 %	73.3-129		9100802	BF	08-Oct-19	8021B
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B
DRO >C10-C28*	22.4		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B

Surrogate: 1-Chlorooctane			88.8 %	41-142		9100713	MS	08-Oct-19	8015B
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Surrogate: 1-Chlorooctadecane			92.8 %	37.6-147		9100713	MS	08-Oct-19	8015B
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**S - 15 0-1' R  
H903403-19 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	448		16.0	mg/kg	4	9100813	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

**S-04**

Benzene*	3.14		1.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Toluene*	14.2		1.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	39.2		1.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	75.7		3.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Total BTEX	132		6.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			147 %	73.3-129		9100802	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

**S-06**

GRO C6-C10*	3570		50.0	mg/kg	5	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	5480		50.0	mg/kg	5	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	1640		50.0	mg/kg	5	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			242 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			204 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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*Celestine Keene*

Celestine D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 16 0-1' R**  
**H903403-20 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	9100813	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Toluene*	0.056		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	0.254		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	0.838		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total BTEX	1.15		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			104 %	73.3-129		9100802	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
DRO >C10-C28*	715		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	440		10.0	mg/kg	1	9100713	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			88.0 %	41-142		9100713	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			134 %	37.6-147		9100713	MS	08-Oct-19	8015B	
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*Celest D. Keene*

Celest D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**S - 17 0-1' R**  
**H903403-21 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	9100813	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	3.61		1.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Toluene*	15.4		1.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	12.3		1.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	22.5		3.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	
Total BTEX	53.8		6.00	mg/kg	1000	9100802	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129 9100802 BF 08-Oct-19 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	225		10.0	mg/kg	1	9100709	MS	08-Oct-19	8015B	
DRO >C10-C28*	1660		10.0	mg/kg	1	9100709	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	772		10.0	mg/kg	1	9100709	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane 90.4 % 41-142 9100709 MS 08-Oct-19 8015B

Surrogate: 1-Chlorooctadecane 118 % 37.6-147 9100709 MS 08-Oct-19 8015B

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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**S - 18 0-1' R  
H903403-22 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	48.0		16.0	mg/kg	4	9100813	AC	08-Oct-19	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	0.075		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Toluene*	0.242		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Ethylbenzene*	0.870		0.050	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total Xylenes*	2.25		0.150	mg/kg	50	9100802	BF	08-Oct-19	8021B	
Total BTEX	3.43		0.300	mg/kg	50	9100802	BF	08-Oct-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			123 %	73.3-129		9100802	BF	08-Oct-19	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	18.6		10.0	mg/kg	1	9100709	MS	08-Oct-19	8015B	
DRO >C10-C28*	1010		10.0	mg/kg	1	9100709	MS	08-Oct-19	8015B	
EXT DRO >C28-C36	443		10.0	mg/kg	1	9100709	MS	08-Oct-19	8015B	

Surrogate: 1-Chlorooctane			88.7 %	41-142		9100709	MS	08-Oct-19	8015B	
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Surrogate: 1-Chlorooctadecane			111 %	37.6-147		9100709	MS	08-Oct-19	8015B	
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*Celestine D. Keene*

Celestine D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 9100812 - 1:4 DI Water****Blank (9100812-BLK1)**

Prepared &amp; Analyzed: 08-Oct-19

Chloride	ND	16.0	mg/kg							
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**LCS (9100812-BS1)**

Prepared &amp; Analyzed: 08-Oct-19

Chloride	416	16.0	mg/kg	400		104	80-120			
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**LCS Dup (9100812-BSD1)**

Prepared &amp; Analyzed: 08-Oct-19

Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	
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**Batch 9100813 - 1:4 DI Water****Blank (9100813-BLK1)**

Prepared &amp; Analyzed: 08-Oct-19

Chloride	ND	16.0	mg/kg							
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**LCS (9100813-BS1)**

Prepared &amp; Analyzed: 08-Oct-19

Chloride	416	16.0	mg/kg	400		104	80-120			
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**LCS Dup (9100813-BSD1)**

Prepared &amp; Analyzed: 08-Oct-19

Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**Volatile Organic Compounds by EPA Method 8021 - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 9100801 - Volatiles**

<b>Blank (9100801-BLK1)</b>		Prepared & Analyzed: 08-Oct-19								
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							

Surrogate: 4-Bromofluorobenzene (PID) 0.0808 mg/kg 0.100 80.8 73.3-129

<b>LCS (9100801-BS1)</b>		Prepared & Analyzed: 08-Oct-19								
Benzene	1.90	0.050	mg/kg	2.00		94.9	72.2-131			
Toluene	1.82	0.050	mg/kg	2.00		90.8	71.7-126			
Ethylbenzene	1.78	0.050	mg/kg	2.00		89.2	68.9-126			
Total Xylenes	5.38	0.150	mg/kg	6.00		89.6	71.4-125			

Surrogate: 4-Bromofluorobenzene (PID) 0.0731 mg/kg 0.100 73.1 73.3-129

<b>LCS Dup (9100801-BSD1)</b>		Prepared & Analyzed: 08-Oct-19								
Benzene	1.83	0.050	mg/kg	2.00		91.4	72.2-131	3.79	6.91	
Toluene	1.80	0.050	mg/kg	2.00		89.8	71.7-126	1.11	7.12	
Ethylbenzene	1.81	0.050	mg/kg	2.00		90.5	68.9-126	1.48	7.88	
Total Xylenes	5.46	0.150	mg/kg	6.00		90.9	71.4-125	1.47	7.46	

Surrogate: 4-Bromofluorobenzene (PID) 0.0774 mg/kg 0.100 77.4 73.3-129

**Batch 9100802 - Volatiles**

<b>Blank (9100802-BLK1)</b>		Prepared & Analyzed: 08-Oct-19								
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							

Surrogate: 4-Bromofluorobenzene (PID) 0.0519 mg/kg 0.0500 104 73.3-129

Cardinal Laboratories

\*=Accredited Analyte

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*Celest D. Keene*

Celest D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**Volatile Organic Compounds by EPA Method 8021 - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 9100802 - Volatiles**

**LCS (9100802-BS1)**

Prepared & Analyzed: 08-Oct-19

Benzene	1.93	0.050	mg/kg	2.00		96.4	72.2-131			
Toluene	1.91	0.050	mg/kg	2.00		95.4	71.7-126			
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	68.9-126			
Total Xylenes	6.04	0.150	mg/kg	6.00		101	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500		99.9	73.3-129			

**LCS Dup (9100802-BSD1)**

Prepared & Analyzed: 08-Oct-19

Benzene	1.94	0.050	mg/kg	2.00		97.1	72.2-131	0.742	6.91	
Toluene	1.94	0.050	mg/kg	2.00		97.1	71.7-126	1.71	7.12	
Ethylbenzene	2.09	0.050	mg/kg	2.00		105	68.9-126	2.51	7.88	
Total Xylenes	6.17	0.150	mg/kg	6.00		103	71.4-125	2.22	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0520		mg/kg	0.0500		104	73.3-129			

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210

Project: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Manager: CHRIS JONES  
Fax To: (575) 745-8905

Reported:  
18-Feb-20 08:47

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 9100709 - General Prep - Organics****Blank (9100709-BLK1)**

Prepared &amp; Analyzed: 07-Oct-19

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	51.2		mg/kg	50.0		102	41-142			
Surrogate: 1-Chlorooctadecane	52.5		mg/kg	50.0		105	37.6-147			

**LCS (9100709-BS1)**

Prepared &amp; Analyzed: 07-Oct-19

GRO C6-C10	201	10.0	mg/kg	200		101	76.5-133			
DRO >C10-C28	220	10.0	mg/kg	200		110	72.9-138			
Total TPH C6-C28	421	10.0	mg/kg	400		105	78-132			
Surrogate: 1-Chlorooctane	50.3		mg/kg	50.0		101	41-142			
Surrogate: 1-Chlorooctadecane	50.7		mg/kg	50.0		101	37.6-147			

**LCS Dup (9100709-BSD1)**

Prepared &amp; Analyzed: 07-Oct-19

GRO C6-C10	212	10.0	mg/kg	200		106	76.5-133	5.30	20.6	
DRO >C10-C28	237	10.0	mg/kg	200		118	72.9-138	7.33	20.6	
Total TPH C6-C28	449	10.0	mg/kg	400		112	78-132	6.37	18	
Surrogate: 1-Chlorooctane	54.7		mg/kg	50.0		109	41-142			
Surrogate: 1-Chlorooctadecane	54.8		mg/kg	50.0		110	37.6-147			

**Batch 9100713 - General Prep - Organics****Blank (9100713-BLK1)**

Prepared &amp; Analyzed: 07-Oct-19

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	49.1		mg/kg	50.0		98.2	41-142			
Surrogate: 1-Chlorooctadecane	52.3		mg/kg	50.0		105	37.6-147			

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WEST RED LAKE UNIT #081 A Project Number: 701307.126.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 18-Feb-20 08:47
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**Petroleum Hydrocarbons by GC FID - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 9100713 - General Prep - Organics**

<b>LCS (9100713-BS1)</b>		Prepared & Analyzed: 07-Oct-19								
GRO C6-C10	185	10.0	mg/kg	200		92.3	76.5-133			
DRO >C10-C28	188	10.0	mg/kg	200		94.2	72.9-138			
Total TPH C6-C28	373	10.0	mg/kg	400		93.2	78-132			
Surrogate: 1-Chlorooctane	53.5		mg/kg	50.0		107	41-142			
Surrogate: 1-Chlorooctadecane	54.3		mg/kg	50.0		109	37.6-147			
<b>LCS Dup (9100713-BSD1)</b>		Prepared & Analyzed: 07-Oct-19								
GRO C6-C10	214	10.0	mg/kg	200		107	76.5-133	15.0	20.6	
DRO >C10-C28	207	10.0	mg/kg	200		104	72.9-138	9.47	20.6	
Total TPH C6-C28	421	10.0	mg/kg	400		105	78-132	12.2	18	
Surrogate: 1-Chlorooctane	55.6		mg/kg	50.0		111	41-142			
Surrogate: 1-Chlorooctadecane	57.0		mg/kg	50.0		114	37.6-147			

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### Notes and Definitions

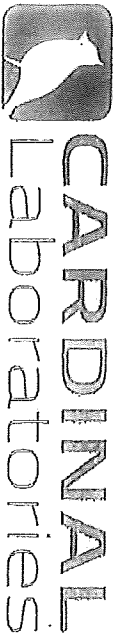
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or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

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Maryland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon LPE		P.O. #: 701307.126.01	
Project Manager: Chris Jones		Company: Talon LPE	
Address: 408 W Texas Ave		Attn: David Adkins	
City: Artesia		Address:	
Phone #: 575-746-8768		Fax #:	
State: NM Zip: 88210		City:	
Project #: 701307.126.01		Project Owner: Line Rock Res	
Project Name: West Red Lake Unit #081A		State: Zip:	
Project Location: Eddy County		Phone #:	
Sample Name: Brandon Sinclair		Fax #:	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
4903403												
1	B6-1 0-1' R	G								10/4/19	10:00	TPH EXT
2	B6-2 0-1' R									10:05	10:05	BTEX
3	B6-3 0-1' R									10:10	10:10	Chlorides
4	S-1 0-1' R									10:20	10:20	
5	S-2 0-1' R									10:30	10:30	
6	S-2 1' R									10:40	10:40	
7	S-3 0-1' R									10:45	10:45	
8	S-4 0-1' R									10:55	10:55	
9	S-5 0-1' R									11:05	11:05	
10	S-6 0-1' R									11:15	11:15	

Relinquished By: <i>Q. Duke</i>	Date: 10-7-19	Received By: <i>Brandon Sinclair</i>	Date: 10-7-19
Relinquished By: <i>Brandon Sinclair</i>	Date: 10-7-19	Received By: <i>Brandon Sinclair</i>	Date: 10-7-19
Delivered By: (Circle One) <i>Q. Duke</i>	Date: 10-7-19	Sample Condition: <i>Good</i>	Checked By: <i>Brandon Sinclair</i>
Sampler - UPS - Bus - Other: <i>Delivered 1.3</i>		Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	COI Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	ADD'l Phone #:
Test Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	ADD'l Fax #:
REMARKS: <i>Rush</i>	

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326





# CARDINAL Laboratories

101 East Martland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Talon LPE		P.O. #: 701307.126.01	
Project Manager: Chris Jones		Company: Talon LPE	
Address: 408 W Texas Ave.		Attn: David Adkins	
City: Artesia		State: NM Zip: 88210	
Phone #: 575-746-8768		Fax #: 575-746-8768	
Project #: 701307.126.01		Project Owner: Lime Rock Res	
Project Name: West Red Lake Unit #081A		City:	
Project Location: Eddy County		State: Zip:	
Sampler Name: Brandon Sinclair		Phone #:	
FOR LAB USE ONLY		Fax #:	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS REQUEST				
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			ICE / COOL	OTHER :	TPH EXT	BTEX	Chlorides
4903403																	
11	S-7 0-1'R		9								10/4/19	11:20					
12	S-8 0-1'R											11:30					
13	S-9 0-1'R											11:40					
14	S-10 0-1'R											11:45					
15	S-11 0-1'R											11:55					
16	S-12 0-1'R											12:00					
17	S-13 0-1'R											12:10					
18	S-14 0-1'R											12:20					
19	S-15 0-1'R											12:30					
20	S-16 0-1'R											12:40					

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Relinquished By: *David Adkins* Received By: *Brandon Sinclair*

Relinquished Date: *10/4/19* Received Date: *10/4/19*

Delivered By: *David Adkins* Sample Condition: *Good* Intact: ☒ Yes ☐ No

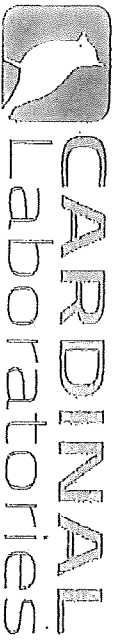
Sampler - UPS - Bus - Other: *Other* ☐ Yes ☒ No

CHECKED BY: *David Adkins* (Initials) *DA*

REMARKS: *Rush*

Phone Result: ☐ Yes ☐ No Add'l Phone #: \_\_\_\_\_

Fax Result: ☐ Yes ☐ No Add'l Fax #: \_\_\_\_\_



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

104 East Maryland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon LPE		P.O. #: 701307-126.01		ANALYSIS REQUEST	
Project Manager: Chris Jones		Company: Talon LPE			
Address: 408 W Texas Ave		Attn: David Adkins			
City: Artesia		Address:			
Phone #: 575-746-8768		State: NM Zip: 88210			
Project #: 701307-126.01		Project Owner: Lime Rock Res			
Project Name: West Red Lake Unit #081A		City:			
Project Location: Eddy County		State:			
Sampler Name: Brandon Sinclair		Phone #:			
FOR LAB USE ONLY		Fax #:			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH EXT	BTX	Chlorides	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:						ICE / COOL
4903403	21	5-17 0-1'R	G									10/4/19	12:50			
	22	5-18 0-1'R	G									10/4/19	13:00			

Relinquished By: <i>Paul S. Risher</i>	Date: 10-7-19	Received By: <i>Brandon Sinclair</i>	Date: 10-7-19
Relinquished By: <i>Brandon Sinclair</i>	Date: 10-7-19	Received By: <i>Brandon Sinclair</i>	Date: 10-7-19

Delivered By: (Circle One) <i>0.92</i>	Sample Condition: <i>Good</i>	CHECKED BY: <i>[Signature]</i>
Sampler - UPS - Bins - Other: <i>Consolidated 1.31</i>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Phone Result: ☐ Yes ☐ No ☐ Add'l Phone #:

Fax Result: ☐ Yes ☐ No ☐ Add'l Fax #:

REMARKS: *Rush*

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

November 26, 2019

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WRLU 81 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/22/19 7:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 11/22/2019  
Reported: 11/26/2019  
Project Name: WRLU 81 BATTERY  
Project Number: 701307.126.01  
Project Location: LIMEROCK-EDDY CTY., NM

Sampling Date: 11/21/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: E. S.W. COMP 1' (H903967-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2019	ND	1.70	84.9	2.00	2.04	
Toluene*	<0.050	0.050	11/25/2019	ND	1.64	82.1	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/25/2019	ND	1.68	84.1	2.00	2.06	
Total Xylenes*	<0.150	0.150	11/25/2019	ND	5.10	85.0	6.00	2.61	
Total BTEX	<0.300	0.300	11/25/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIB) 99.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	11/26/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2019	ND	202	101	200	3.01	
DRO >C10-C28*	<10.0	10.0	11/25/2019	ND	192	95.9	200	2.75	
EXT DRO >C28-C36	<10.0	10.0	11/25/2019	ND					

Surrogate: 1-Chlorooctane 87.2 % 41-142

Surrogate: 1-Chlorooctadecane 86.2 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 11/22/2019  
Reported: 11/26/2019  
Project Name: WRLU 81 BATTERY  
Project Number: 701307.126.01  
Project Location: LIMEROCK-EDDY CTY., NM

Sampling Date: 11/21/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: N. S.W. COMP 1' (H903967-02)**

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2019	ND	1.70	84.9	2.00	2.04	
Toluene*	<0.050	0.050	11/25/2019	ND	1.64	82.1	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/25/2019	ND	1.68	84.1	2.00	2.06	
Total Xylenes*	<0.150	0.150	11/25/2019	ND	5.10	85.0	6.00	2.61	
Total BTEX	<0.300	0.300	11/25/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 97.3 % 73.3-129

Chloride, SM4500CI-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	11/26/2019	ND	416	104	400	3.77	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2019	ND	202	101	200	3.01	
DRO >C10-C28*	334	10.0	11/25/2019	ND	192	95.9	200	2.75	
EXT DRO >C28-C36	73.4	10.0	11/25/2019	ND					

Surrogate: 1-Chlorooctane 84.6 % 41-142

Surrogate: 1-Chlorooctadecane 92.3 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 11/22/2019  
Reported: 11/26/2019  
Project Name: WRLU 81 BATTERY  
Project Number: 701307.126.01  
Project Location: LIMEROCK-EDDY CTY., NM

Sampling Date: 11/21/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: W. S.W. COMP 1' (H903967-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2019	ND	1.70	84.9	2.00	2.04	
Toluene*	<0.050	0.050	11/25/2019	ND	1.64	82.1	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/25/2019	ND	1.68	84.1	2.00	2.06	
Total Xylenes*	<0.150	0.150	11/25/2019	ND	5.10	85.0	6.00	2.61	
Total BTEX	<0.300	0.300	11/25/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/26/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2019	ND	202	101	200	3.01	
DRO >C10-C28*	<10.0	10.0	11/25/2019	ND	192	95.9	200	2.75	
EXT DRO >C28-C36	<10.0	10.0	11/25/2019	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 87.2 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 11/22/2019  
Reported: 11/26/2019  
Project Name: WRLU 81 BATTERY  
Project Number: 701307.126.01  
Project Location: LIMEROCK-EDDY CTY., NM

Sampling Date: 11/21/2019  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S. S.W. COMP 1' (H903967-04)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2019	ND	1.70	84.9	2.00	2.04	
Toluene*	<0.050	0.050	11/25/2019	ND	1.64	82.1	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/25/2019	ND	1.68	84.1	2.00	2.06	
Total Xylenes*	<0.150	0.150	11/25/2019	ND	5.10	85.0	6.00	2.61	
Total BTX	<0.300	0.300	11/25/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	11/26/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2019	ND	202	101	200	3.01	
DRO >C10-C28*	66.1	10.0	11/25/2019	ND	192	95.9	200	2.75	
EXT DRO >C28-C36	34.8	10.0	11/25/2019	ND					

Surrogate: 1-Chlorooctane 90.4 % 41-142

Surrogate: 1-Chlorooctadecane 86.6 % 37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





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### Notes and Definitions

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

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

104 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <b>TRION LPE</b>		P.O. #: <b>701307.126.01</b>	
Project Manager: <b>CHARIS JONES</b>		Company: <b>TRION</b>	
Address: <b>408 W. TEXAS AVE</b>		Attn: <b>C. JONES</b>	
City: <b>ARTESIA</b>	State: <b>NM</b> Zip: <b>88410</b>	Address:	
Phone #: <b>575-631-6977</b>	Fax #:	City:	
Project #: <b>701307.126.01</b>	Project Owner: <b>LMERCK</b>	State:	
Project Name: <b>WRLM 81 BATTERY</b>		Zip:	
Project Location: <b>EDDY COUNTY</b>		Phone #:	
Sampler Name: <b>MICHAEL COLLIER</b>		Fax #:	

Lab I.D.	Sample I.D.	(O)RAB OR (C)OMP.	# CONTAINERS	MATRIX								DATE	TIME	TPH	BTX	TOTAL CHLORIDES
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL					
H903967																
1	E. S.W. COMP 1'	C 1										1-2-19	12:00			
2	N. S.W. COMP 1'											12:05				
3	N. S.W. COMP 1'											11:10				
4	S. S.W. COMP 1'											12:15				

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other: <b>2.92/3.12 #97</b>	Cool / Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>AK</b>

Reinquisitioned By:	Date: <b>11/25/19</b>	Received By:
<b>AK</b>		<b>AK</b>
Reinquisitioned By:	Date: <b>11/22/19</b>	Received By:
<b>AK</b>		<b>AK</b>

REMARKS:

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



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

February 04, 2020

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WEST RED LAKE UNIT #081 A

Enclosed are the results of analyses for samples received by the laboratory on 01/31/20 13:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	01/31/2020	Sampling Date:	01/29/2020
Reported:	02/04/2020	Sampling Type:	Soil
Project Name:	WEST RED LAKE UNIT #081 A	Sampling Condition:	Cool & Intact
Project Number:	701307.126.01	Sample Received By:	Tamara Oldaker
Project Location:	LIME ROCK-EDDY CO NM		

**Sample ID: B - 1 0-2' (H000306-01)**

BTX 8021B			mg/kg							Analyzed By: MS
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2020	ND	1.93	96.7	2.00	0.489		
Toluene*	<0.050	0.050	02/03/2020	ND	1.92	96.1	2.00	0.242		
Ethylbenzene*	<0.050	0.050	02/03/2020	ND	1.90	95.1	2.00	0.0365		
Total Xylenes*	<0.150	0.150	02/03/2020	ND	5.60	93.3	6.00	0.182		
Total BTX	<0.300	0.300	02/03/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 99.6 % 73.3-129

Chloride, SM4500Cl-B			mg/kg							Analyzed By: GM
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/03/2020	ND	432	108	400	0.00		

TPH 8015M			mg/kg							Analyzed By: MS
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/03/2020	ND	226	113	200	2.81		
DRO >C10-C28*	<10.0	10.0	02/03/2020	ND	214	107	200	4.88		
EXT DRO >C28-C36	<10.0	10.0	02/03/2020	ND						

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 85.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 01/31/2020  
Reported: 02/04/2020  
Project Name: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Location: LIME ROCK-EDDY CO NM

Sampling Date: 01/29/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B - 2 0-2' (H000306-06)**

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2020	ND	1.93	96.7	2.00	0.489		
Toluene*	<0.050	0.050	02/03/2020	ND	1.92	96.1	2.00	0.242		
Ethylbenzene*	<0.050	0.050	02/03/2020	ND	1.90	95.1	2.00	0.0365		
Total Xylenes*	<0.150	0.150	02/03/2020	ND	5.60	93.3	6.00	0.182		
Total BTEX	<0.300	0.300	02/03/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: GM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	02/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2020	ND	226	113	200	2.81	
DRO >C10-C28*	188	10.0	02/03/2020	ND	214	107	200	4.88	
EXT DRO >C28-C36	50.8	10.0	02/03/2020	ND					

Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 98.4 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 01/31/2020  
Reported: 02/04/2020  
Project Name: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Location: LIME ROCK-EDDY CO NM

Sampling Date: 01/29/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B - 2 4' (H000306-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2020	ND	1.93	96.7	2.00	0.489	
Toluene*	<0.050	0.050	02/03/2020	ND	1.92	96.1	2.00	0.242	
Ethylbenzene*	<0.050	0.050	02/03/2020	ND	1.90	95.1	2.00	0.0365	
Total Xylenes*	<0.150	0.150	02/03/2020	ND	5.60	93.3	6.00	0.182	
Total BTEX	<0.300	0.300	02/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2020	ND	226	113	200	2.81	
DRO >C10-C28*	<10.0	10.0	02/03/2020	ND	214	107	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	02/03/2020	ND					

Surrogate: 1-Chlorooctane 87.5 % 41-142

Surrogate: 1-Chlorooctadecane 86.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	01/31/2020	Sampling Date:	01/29/2020
Reported:	02/04/2020	Sampling Type:	Soil
Project Name:	WEST RED LAKE UNIT #081 A	Sampling Condition:	Cool & Intact
Project Number:	701307.126.01	Sample Received By:	Tamara Oldaker
Project Location:	LIME ROCK-EDDY CO NM		

**Sample ID: B - 3 0-2' (H000306-11)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2020	ND	1.93	96.7	2.00	0.489	
Toluene*	<0.050	0.050	02/03/2020	ND	1.92	96.1	2.00	0.242	
Ethylbenzene*	<0.050	0.050	02/03/2020	ND	1.90	95.1	2.00	0.0365	
Total Xylenes*	<0.150	0.150	02/03/2020	ND	5.60	93.3	6.00	0.182	
Total BTEX	<0.300	0.300	02/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2020	ND	226	113	200	2.81	
DRO >C10-C28*	<10.0	10.0	02/03/2020	ND	214	107	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	02/03/2020	ND					

Surrogate: 1-Chlorooctane 88.1 % 41-142

Surrogate: 1-Chlorooctadecane 84.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 01/31/2020  
Reported: 02/04/2020  
Project Name: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Location: LIME ROCK-EDDY CO NM

Sampling Date: 01/29/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B - 4 0-2' (H000306-16)**

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2020	ND	1.93	96.7	2.00	0.489		
Toluene*	<0.050	0.050	02/03/2020	ND	1.92	96.1	2.00	0.242		
Ethylbenzene*	<0.050	0.050	02/03/2020	ND	1.90	95.1	2.00	0.0365		
Total Xylenes*	<0.150	0.150	02/03/2020	ND	5.60	93.3	6.00	0.182		
Total BTEX	<0.300	0.300	02/03/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1020	16.0	02/03/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2020	ND	226	113	200	2.81	
DRO >C10-C28*	72.0	10.0	02/03/2020	ND	214	107	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	02/03/2020	ND					

Surrogate: 1-Chlorooctane 83.0 % 41-142

Surrogate: 1-Chlorooctadecane 85.4 % 37.6-147

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 01/31/2020  
Reported: 02/04/2020  
Project Name: WEST RED LAKE UNIT #081 A  
Project Number: 701307.126.01  
Project Location: LIME ROCK-EDDY CO NM

Sampling Date: 01/29/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B - 4 4' (H000306-17)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2020	ND	1.93	96.7	2.00	0.489	
Toluene*	<0.050	0.050	02/03/2020	ND	1.92	96.1	2.00	0.242	
Ethylbenzene*	<0.050	0.050	02/03/2020	ND	1.90	95.1	2.00	0.0365	
Total Xylenes*	<0.150	0.150	02/03/2020	ND	5.60	93.3	6.00	0.182	
Total BTX	<0.300	0.300	02/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.3 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/03/2020	ND	226	113	200	2.81	
DRO >C10-C28*	<10.0	10.0	02/03/2020	ND	214	107	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	02/03/2020	ND					

Surrogate: 1-Chlorooctane 78.8 % 41-142

Surrogate: 1-Chlorooctadecane 74.6 % 37.6-147

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### Notes and Definitions

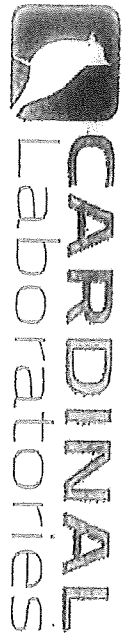
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported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

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Celey D. Keene, Lab Director/Quality Manager



101 East Maryland, Hobbs, NM 88240  
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST

Company Name: Talon LPE  
Project Manager: Chris Jones  
Address: 408 W Texas Ave  
City: Artesia State: NM Zip: 88210  
Phone #: 575-746-8768 Fax #:   
Project #: 701307.126.01 Project Owner: Lime Rock  
Project Name: West Red Lake Unit #81  
Project Location: Eddy County  
Sampler Name: Brandon Sinclair  
P.O. #: 701307.126.01 Company: Talon LPE  
Attn: Chris Jones Address:   
City:  State:  Zip:   
Phone #:  Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(S)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING	DATE	TIME	TPH EXT	BTEX	Total Chlorides
4060306	B-1 0-2'	G		GROUNDWATER			1-29-20	1440			
	B-1 4'			WASTEWATER				1445			
	B-1 6'			SOIL				1450			
	B-1 8'			OIL				1455			
	B-1 10'			SLUDGE				1500			
	B-2 0-2'			OTHER:				1510			
	B-2 4'			ACID/BASE:				1515			
	B-2 6'			ICE / COOL				1520			
	B-2 8'			OTHER:				1525			
	B-2 10'							1530			

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Relinquished By: Brandon Sinclair Received By: Chris Jones  
Time: 12:31-20 Date: 1-29-20  
Time: 14:30 Date: 1-29-20

Delivered By: (Circle One) Sample Condition  
Sampler - UPS - Bus - Other: #113 Nbc Cool: Yes Intact: Yes  
☐ Yes ☐ No ☐ Yes ☐ No

For each sample group (B1, B2, etc.): please test in descending order until cleanup criteria is met (600 mg/kg Cl, 100 mg/kg TPH, and 50 mg/kg BTX).



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February 12, 2020

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WRLU 81 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/11/20 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager





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**Analytical Results For:**

TALON LPE  
CHRIS JONES  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	02/11/2020	Sampling Date:	02/05/2020
Reported:	02/12/2020	Sampling Type:	Soil
Project Name:	WRLU 81 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701307.126.01	Sample Received By:	Tamara Oldaker
Project Location:	LIMEROCK-EDDY CTY., NM		

**Sample ID: N. SIDEWALL COMP 1.5 (H000414-01)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	02/12/2020	ND	432	108	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/12/2020	ND	201	101	200	5.43	
DRO >C10-C28*	<10.0	10.0	02/12/2020	ND	199	99.5	200	6.77	
EXT DRO >C28-C36	<10.0	10.0	02/12/2020	ND					

Surrogate: 1-Chlorooctane 88.1 % 41-142

Surrogate: 1-Chlorooctadecane 89.7 % 37.6-147

**Sample ID: S. SIDEWALL COMP 1.5 (H000414-02)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	02/12/2020	ND	432	108	400	0.00	

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### Notes and Definitions

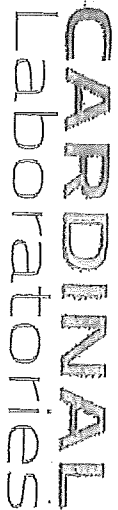
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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