

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	NAB1433855615
District RP	2RP-2642
Facility ID	30-015-25901
Application ID	

## Release Notification

### Responsible Party

Responsible Party: Devon Energy	OGRID: 328947
Contact Name: Lupe Carrasco	Contact Telephone: 580-748-0765
Contact email: Lupe.Carrasco@dvn.com	Incident # (assigned by OCD): NAB1914957336
Contact mailing address: PO Box 250 Artesia, NM 88211	

### Location of Release Source

Latitude 32.75989 Longitude -103.90954 (NAD 83 in decimal degrees to 5 decimal places)

Site Name: Sand 7 Federal 1	Site Type: Oil Production
Date Release Discovered: 12/03/2014	API# (if applicable) 30-015-25901

Unit Letter	Section	Township	Range	County
K	07	18S	31E	Eddy

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 7 bbl	Volume Recovered (bbls) 2
	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:

The lease operator was in the process of transferring oil with the recirculation pump at the Sand 7 Fed1. He discovered that the hammer union was leaking and had released approximately 7 bbls of oil into the pasture area. The lease operator shut down the recirculation pump and notified the assistant production foreman with Devon Energy. Franco's trucking was dispatched and recovered approximately 2 bbls of fluid.

Incident ID	NAB1433855615
District RP	2RP-2642
Facility ID	30-015-25901
Application ID	

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? The volume of release was in excess of 5bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given to the NMOCD by Rudy Zuniga, the production foreman. Notice was provided to Mike Bratcher with the NMOCD and Jeff Robertson with the BLM on December 03, 2014	

## 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: <u>Rebecca Pons</u> Title: <u>Project Manager</u>	
Signature: <u>Rebecca Pons</u> <small>Digitally signed by Rebecca Pons DN: cn=Rebecca Pons, o=Talon LPE, ou=Artesia, email=Rpons@talonlpe.com, c=US Date: 2021.01.08 10:30:06 -0700</small>	Date: <u>12/31/2020</u>
email: <u>Rpons@talonlpe.com</u>	Telephone: <u>575-441-0980</u>
<b><u>OCD Only</u></b>	
Received by: _____ Date: _____	

Incident ID	NAB1433855615
District RP	2RP-2642
Facility ID	30-015-25901
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>80</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 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.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NAB1433855615
District RP	2RP-2642
Facility ID	30-015-25901
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: Rebecca Pons Title: Senior Project ManagerSignature: Rebecca Pons Digitally signed by Rebecca Pons  
DN: cn=Rebecca Pons, o=Talon LPE,  
ou=Alaska, email=Rpons@talonlpe.com,  
c=US  
Date: 2021.01.08 10:29:39 -0700 Date: 1/8/2021email: Rpons@talonlpe.com Telephone: 575-441-0980**OCD Only**

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



Incident ID	NAB1433855615
District RP	2RP-2642
Facility ID	30-015-25901
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: Lupe Carrasco Title: Environmental Professional  
Signature: Lupe Carrasco Date: 12/31/2020  
email: Lupe.Carrasco@dvn.com Telephone: 575--748-0765

**OCD Only**

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

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

Closure Approved by: Brittany Hall Date: 1/24/2023  
Printed Name: Brittany Hall Title: Environmental Specialist



talonlpe.com • 866.742.0742



## Remediation and Closure Report

Sand 7 Fed 1  
Eddy County, New Mexico  
30-015-25901  
Incident #Nab1433855615

### Prepared For:

Devon Energy Production  
6488 Seven Rivers Hwy  
Artesia, NM 88220

### Prepared By:

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

**December 29, 2020**

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

Jim Amos  
**BLM**  
620 E. Greene St.  
Carlsbad, NM 88220

Subject: **Remediation and Closure Report**  
Sand 7 Fed1  
Eddy County, NM  
API 30-015-25901  
**Incident #Nab1433855615**

Dear Mr. Bratcher,

Devon Energy has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The incident description, soil sampling results, remedial actions, and closure request is presented herein.

### Site Information

The Sand 7 Fed 1 is located approximately thirty eight (38) miles southeast of Artesia, New Mexico. The legal location for this release is Unit Letter K, Section 7, Township 18 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.75989 North and - 103.90954 West. A Site Map is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Kermit-Berino fine sands with 0 to 3 percent slopes. The reference soil data is presented in [Appendix II](#). Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to middle Pleistocene in age and is comprised of mixed alluvium and/or eolian sands. Drainage courses in this area are very well drained.

### Ground Water and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 80-feet below ground surface (BGS). The referenced groundwater data has drill data that is dated 03/19/2013. See [Appendix II](#) for the referenced groundwater depth. This site is not situated in a 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.

Approximate Depth to Groundwater	80 Feet/BGS
----------------------------------	-------------

- |   |   |
|---|---|
| <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 a 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 fresh water 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within an unstable area   |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within a 100-year floodplain  |

### Incident Description

On December 03, 2014 the hammer union on the recirculation pump malfunctioned, causing a release of approximately 7 bbls of mixed fluids. The well was immediately shut-in and the pump replaced. A vac truck was dispatched to the location and recovered 2 bbls of fluid. The affected area was on location surrounding the transfer pump with a flow path that traversed north along the lease road and west into the pasture area. The site map is presented in [Appendix I](#).

## Site Assessment

On December 05, 2014, Talon mobilized personnel to the site and conducted the initial site assessment. Soil samples were grabbed from the footprint of the spill area in order to construct a work plan. Grab soil samples were collected utilizing a hand auger to depths of 2' bgs. (below ground surface). The C-141 can be referenced in [Appendix III](#).

On January 09, 2015, Talon LPE submitted a work plan to the NMOCD for review. The work plan was approved on January 13, 2015, and can be referenced in [Appendix IV](#).

On September 29, 2020, Talon personnel mobilized to the Sand 7 Fed 1 location in order to conduct a follow-up assessment and site remediation. The impacted area was scraped to depths of .05' to 1' bgs. Sample positions were situated in the same areas as had been previously sampled. All soil samples were properly packaged, preserved, and transported to Cardinal Laboratories via chain of custody for analysis of Total Chlorides (Method SM4500CL-B), TPH (EPA Method 8015M), and BTEX (EPA Method 8021B). Sample locations are shown on the attached site plan and the results of our sampling event are presented in the following data table. See [Appendix VI](#) for the complete report of laboratory results.

### 11-4-2020 Soil Sample Laboratory Results

Sample ID	Sample Date	Depth ft.(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	DRO + GRO combined = 100 mg/kg			5,000 mg/kg	1,000 mg/kg
S-1	9/29/2020	0-1' R	ND	ND	ND	240	115	355	80
S-2	9/29/2020	0-1'	ND	ND	ND	ND	ND	0	32
		2' R	ND	ND	ND	ND	ND	0	16
S-3	9/29/2020	0-1'	ND	ND	ND	95.9	83.8	179.7	80
		1.5' R	ND	ND	ND	23.7	14.5	38.2	32
S-4	9/29/2020	0-1' R	ND	ND	ND	ND	ND	0	112
S-5	9/29/2020	0-1' R	ND	ND	ND	ND	ND	0	16
S-6	9/29/2020	0' R	ND	ND	ND	38.3	23.2	61.5	ND
S-7	9/29/2020	0-1' R	ND	ND	ND	ND	ND	0	ND
BG-1	9/29/2020	0'	ND	ND	ND	ND	ND	0	11600
BG-2	9/29/2020	0'	ND	ND	ND	ND	ND	0	ND
BG-3	9/29/2020	0'	ND	ND	ND	ND	ND	0	ND
BG-4	9/29/2020	0'	ND	ND	ND	45.8	33.3	79.1	48

ND-Analyte Not Detected \*Closure criteria per approved work plan.

On November 13, 2020, Talon personnel mobilized to the location in order to hand excavate the areas around S1 and S-3. Composite soil samples were retrieved, properly contained, preserved, and transported to Hall Laboratories for analyses. The results are tabled below, and complete laboratory reports are appended in [Appendix VI](#).

#### 11-20-2020 Soil Sample Laboratory Results

Sample ID	Sample Date	Depth ft.(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	DRO + GRO combined = 100 mg/kg			5,000 mg/kg	1,000 mg/kg
S-1	11/13/2020	.5'	ND	ND	ND	340	860	1200	99
S-3	11/13/2020	.5'	ND	ND	ND	160	660	820	250
BG-1	11/13/2020	.5'	ND	ND	ND	210	300	410	1000

ND-Analyte Not Detected

On December 08, 2020, Talon equipment and personnel returned to the location in order to advance the southern sidewall of the spill footprint at sample position BG-1. This area was excavated to 1' bgs. and the sidewall advanced to the extent that field titrations for chlorides were below the Recommended Remediation Action Levels (RRAL). A composite soil sample was taken, properly contained, preserved, and transported to Hall Laboratories for analysis. The results are tabled below. A full laboratory report can be viewed in [Appendix VI](#).

Sample ID	Sample Date	Depth ft.(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	DRO + GRO combined = 100 mg/kg			5,000 mg/kg	1,000 mg/kg
SSW-BG-1	12/08/2020	1'	ND	ND	ND	ND	ND	-	240

ND-Analyte Not Detected

## Remedial Actions

- Site was remediated in accordance with approved work plan.
- Confirmation soil samples were collected and verified analyte levels were below NMOCD and BLM remediation guidelines.
- Fresh caliche, similar in grade was used to backfill the location. The pad area was packed and restored to surrounding grade as can be seen in photo documentation [Appendix V](#).

## Closure

Based on this site characterization, remedial actions completed, and analytical results, we respectfully request that no further actions be required, and that closure with regard to the attached incident be 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

Rebecca  
Pons

Digitally signed by Rebecca Pons  
DN: cn=Rebecca Pons, o=Talon/  
LPE, ou=Artesia,  
email=rpoms@talonlpe.com, c=US  
Date: 2021.01.08 09:29:11 -0700

Rebecca Pons  
Project Manager

David J.  
Adkins

Digitally signed by David J. Adkins  
DN: cn=David J. Adkins, o=Talon/  
LPE, ou=Regional Manager,  
email=dadkins@talonlpe.com,  
c=US  
Date: 2021.01.08 09:23:59 -0700

David J. Adkins  
Regional Manager

Attachments:

- Appendix I Site Maps, Karst Map, TOPO Map
- Appendix II Groundwater Data, Soil Survey
- Appendix III Initial and Final C-141's
- Appendix IV Approved Work Plan
- Appendix V Photo Documentation
- Appendix VI Laboratory Analytical Data





# APPENDIX I

# SITE MAPS



Legend

Sand 7 Fed 1



Sand 7 Fed 1

Devon Energy Production Company

Elk County, NM

Acres 30-015-25801

Location Map

Google Earth

© 2020 Google





**Devon Energy Sand 7 Fed #1**

Bay County NM  
APN 30-015-25901  
Site Plan





Sand 7 Fed 1

Lawson Energy Production Company  
El Paso County, NM  
A/E: 30-015-25901  
S Map

Survey  
Google Earth

©2020 Google

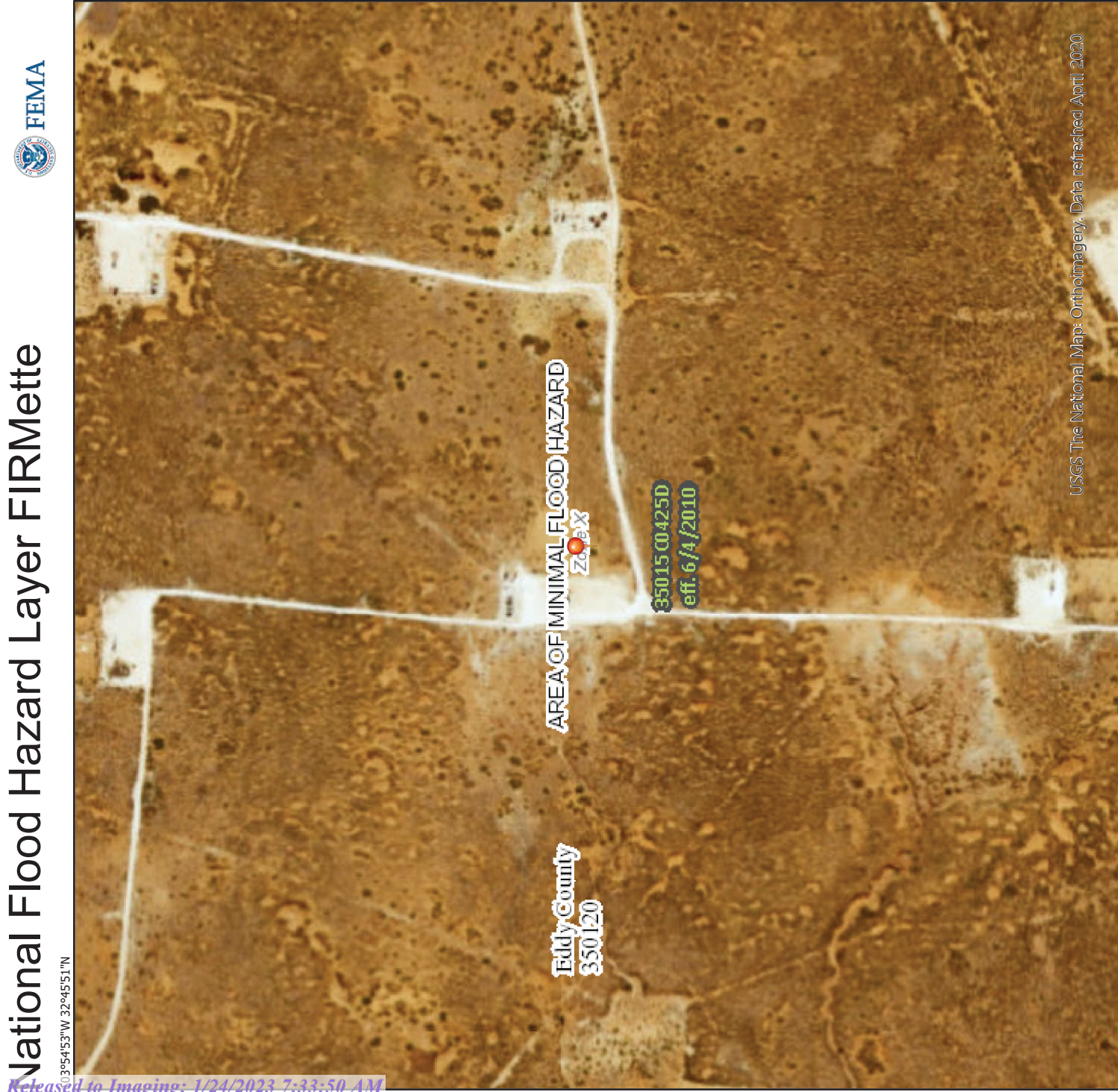


# National Flood Hazard Layer FIRMette



Received by OCD: 1/8/2022 10:36:07 AM

103°54'53"W 32°45'51"N



## Legend

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

Without Base Flood Elevation (BFE)  
*Zone A, V, AE9*

With BFE or Depth  
*Zone AE, AO, AH, VE, AP*

Regulatory Floodway

SPECIAL FLOOD HAZARD AREAS

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with an 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 OF FLOOD HAZARD

NO SCREEN

Area of Minimal Flood Hazard  
*Zone X*

Effective LOMRs

Area of Undetermined Flood Hazard  
*Zone D*

OTHER AREAS

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

GENERAL STRUCTURES

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

MAP PANELS

N

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 **9/17/2020 at 3:39 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, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Page 17 of 104



**Legend**

- Low
- Medium
- Sand 7 Fed 1



**Sand 7 Fed 1**  
Lyon Energy Production Company  
Elbert County, NM  
Acreage: 30-015-25901  
K-12 Map

Survey  
Google Earth



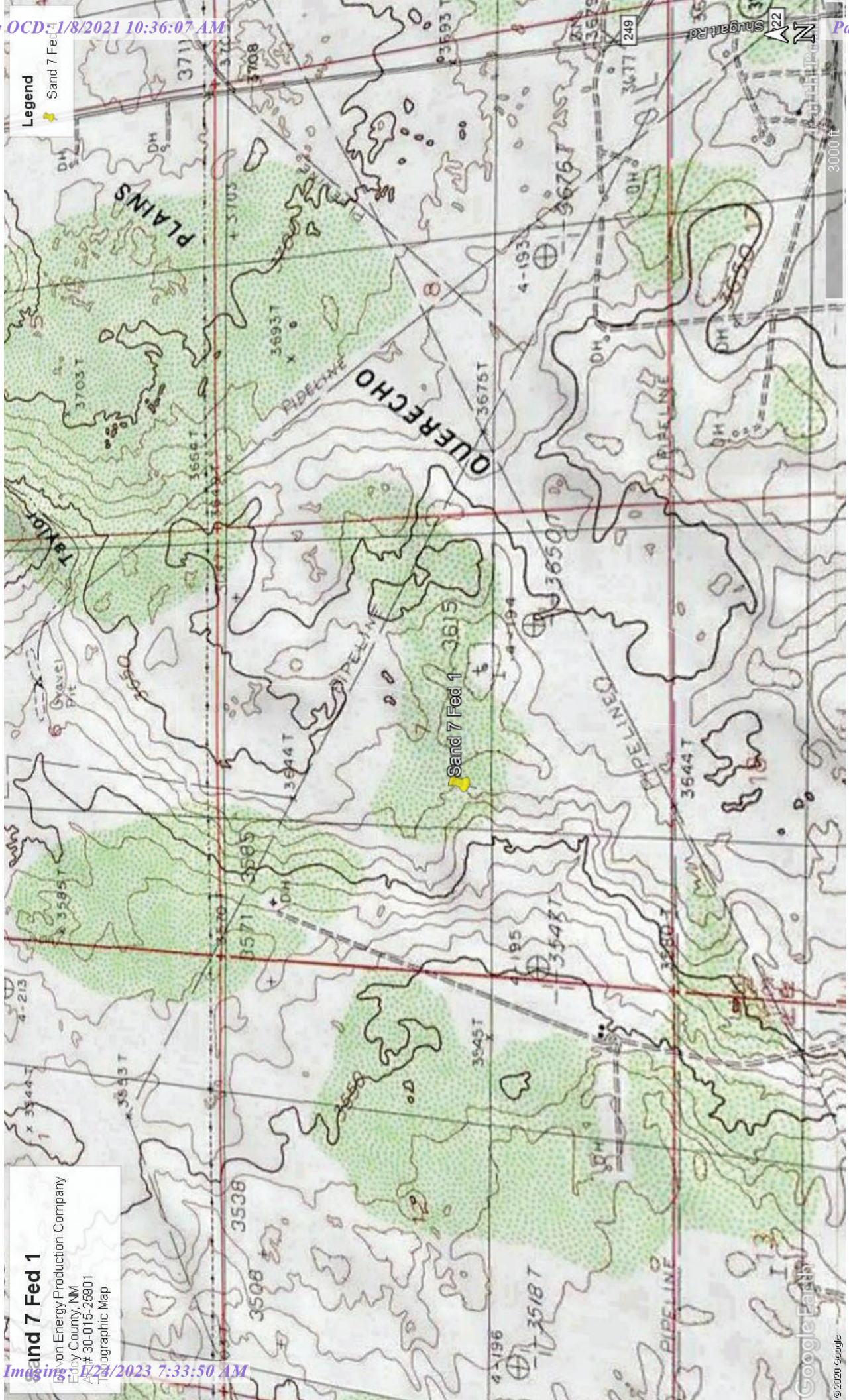
Legend

Sand 7 Fed 1



Sand 7 Fed 1

von Energy Production Company  
El Paso County, NM  
A# 30-015-25801  
Topographic Map



Google Earth

© 2020 Google





## APPENDIX II

# SOIL SURVEY, GROUNDWATER DATA



Map Unit Description: Kermit-Berino fine sands, 0 to 3 percent slopes---Eddy Area, New Mexico

---

## Eddy Area, New Mexico

### KM—Kermit-Berino fine sands, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1w4q

*Elevation:* 3,100 to 4,200 feet

*Mean annual precipitation:* 10 to 14 inches

*Mean annual air temperature:* 60 to 64 degrees F

*Frost-free period:* 190 to 230 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Kermit and similar soils:* 50 percent

*Berino and similar soils:* 35 percent

*Minor components:* 15 percent

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

#### Description of Kermit

##### Setting

*Landform:* Alluvial fans, plains

*Landform position (three-dimensional):* Rise, tal

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Parent material:* Mixed alluvium and/or eolian sands

##### Typical profile

*H1 - 0 to 7 inches:* fine sand

*H2 - 7 to 60 inches:* fine sand

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Excessively drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* Very high (20.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.0 to 1.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 1.0

*Available water capacity:* Low (about 3.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* A

*Ecological site:* R042XC005NM - Deep Sand

*Hydric soil rating:* No

Map Unit Description: Kermit-Berino fine sands, 0 to 3 percent slopes---Eddy Area, New Mexico

---

## Description of Berino

### Setting

*Landform:* Fan piedmonts, plains  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium and/or eolian sands

### Typical profile

*H1 - 0 to 17 inches:* fine sand  
*H2 - 17 to 50 inches:* fine sandy loam  
*H3 - 50 to 58 inches:* loamy sand

### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 40 percent  
*Maximum salinity:* Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water capacity:* Moderate (about 7.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B  
*Ecological site:* R042XC003NM - Loamy Sand  
*Hydric soil rating:* No

## Minor Components

### Active dune land

*Percent of map unit:* 15 percent  
*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Eddy Area, New Mexico  
Survey Area Data: Version 16, Jun 8, 2020









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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Q Sec	Tws	Rng	X	Y	Distance	Depth	Well	Depth	Water Column
<a href="#">RA 11590 POD1</a>		RA	ED	2	1	3	32	17S	31E	603315	3628545		3517	158		
<a href="#">RA 11590 POD4</a>		RA	ED	4	1	1	32	17S	31E	603308	3629253		4186	55		
<a href="#">RA 11590 POD3</a>		RA	ED	3	1	2	32	17S	31E	603932	3629260		4413	60		
<a href="#">CP 00767 POD1</a>		CP	ED		3	2	35	18S	30E	599300	3619158*		6699	500		
<a href="#">CP 00853 POD1</a>	O	CP	ED		2	4	28	18S	30E	596472	3620340*		7462	350		
<a href="#">RA 11914 POD1</a>		RA	ED	2	4	2	20	17S	30E	594801	3632002		9941	85	80	5

80 feet

**80 feet**

80 feet

**Basin/County Search:**

**County:** Eddy

**UTMNAD83 Radius Search (in meters):**

Easting (X): 602095.22

**Northing (Y):** 3625246.54

**Radius:** 10000

\*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.

11/13/20 11:35 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



## APPENDIX III

### C-141 Forms

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

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

Form C-141  
Revised August 8, 2011  
Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Rudy Zuniga, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-390-5435
Facility Name Sand 7 Fed 1	Facility Type Oil
Surface Owner Federal	Mineral Owner Federal
API No. 30-015-25901	

### LOCATION OF RELEASE

Unit Letter <b>K</b>	Section <b>7</b>	Township <b>18S</b>	Range <b>31E</b>	Feet from the <b>1980'</b>	North/South Line <b>FSL</b>	Feet from the <b>2121'</b>	East/West Line <b>FWL</b>	County <b>Eddy</b>
-------------------------	---------------------	------------------------	---------------------	-------------------------------	--------------------------------	-------------------------------	------------------------------	-----------------------

Latitude: 32.75989

Longitude: -103.90954

### NATURE OF RELEASE

Type of Release Spill	Volume of Release 7bbls	Volume Recovered 2bbls
Source of Release hammer union on recirculation pump	Date and Hour of Occurrence December 3, 2014 10:30 AM	Date and Hour of Discovery December 3, 2014 10:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeff Robertson, BLM & Mike Bratcher, OCD	
By Whom? Rudy Zuniga, Production Foreman	Date and Hour December 3, 2014 11:20 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	

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

#### Describe Cause of Problem and Remedial Action Taken.\*

On December 3, 2014 at 10:30am Lease Operator was transferring oil with the recirculation pump at the Sand 7 Fed 1 when he discovered the hammer union leaking releasing 7bbls of oil in pasture. When Lease Operator discovered the leak he immediately shut down the recirculation pump and notified the Assistant Production Foreman.

#### Describe Area Affected and Cleanup Action Taken.\*

The area affected is approximately 2'x10' in the pasture area North of the Sand 7 Fed 1. Franco's Trucking was contacted and were able to recover 2bbls of oil from the spill by vac truck.

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

Signature: <i>Sheila Fisher</i>	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Sheila Fisher		
Title: Field Admin Support	Approved by Environmental Specialist:	Expiration Date:
E-mail Address: Sheila.Fisher@dvn.com	Approval Date:	Conditions of Approval:
Date: Phone: 575.748.1829	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

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	NAB143385565
District RP	2RP-2642
Facility ID	30-015-25901
Application ID	

## Release Notification

### Responsible Party

Responsible Party: Devon Energy	OGRID: 328947
Contact Name: Lupe Carrasco	Contact Telephone: 580-748-0765
Contact email: Lupe.Carrasco@dnv.com	Incident # (assigned by OCD): NAB1914957336
Contact mailing address: PO Box 250 Artesia, NM 88211	

### Location of Release Source

Latitude 32.75989 Longitude -103.90954 (NAD 83 in decimal degrees to 5 decimal places)

Site Name: Sand 7 Federal 1	Site Type: Oil Production
Date Release Discovered: 12/03/2014	API# (if applicable) 30-015-25901

Unit Letter	Section	Township	Range	County
K	07	18S	31E	Eddy

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 7 bbl	Volume Recovered (bbls) 2
	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:

The lease operator was in the process of transferring oil with the recirculation pump at the Sand 7 Fed1. He discovered that the hammer union was leaking and had released approximately 7 bbls of oil into the pasture area. The lease operator shut down the recirculation pump and notified the assistant production foreman with Devon Energy. Franco's trucking was dispatched and recovered approximately 2 bbls of fluid.

Incident ID	NAB143385565
District RP	2RP-2642
Facility ID	30-015-25901
Application ID	

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? The volume of release was in excess of 5bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given to the NMOCD by Rudy Zuniga, the production foreman. Notice was provided to Mike Bratcher with the NMOCD and Jeff Robertson with the BLM on December 03, 2014	

## 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: <u>Rebecca Pons</u> Title: <u>Project Manager</u>	
Signature: <u>Rebecca Pons</u> <small>Digitally signed by Rebecca Pons DN: cn=Rebecca Pons, o=State of New Mexico, email=Rebecca.Pons@state.nm.us, c=US</small>	Date: <u>12/31/2020</u>
email: <u>Rpons@talonlpe.com</u>	Telephone: <u>575-441-0980</u>
<b><u>OCD Only</u></b>	
Received by: _____ Date: _____	



Incident ID	NAB143385565
District RP	2RP-2642
Facility ID	30-015-25901
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>80</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 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.



State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NAB143385565
District RP	2RP-2642
Facility ID	30-015-25901
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: Rebecca Pons Title: Project ManagerSignature: Rebecca Pons Digitally signed by Rebecca Pons  
DN: cn=Rebecca Pons, o=Talon LPE,  
ou=Artesia,  
email=Rpons@talonlpe.com, c=US  
Date: 2021.01.08 09:30:19 -07'00' Date: 12/31/2020email: Rpons@talonlpe.com Telephone: 575-441-0980**OCD Only**

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

Incident ID	NAB1433855615
District RP	2RP-2642
Facility ID	30-015-25901
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: Lupe Carrasco Title: Environmental Professional  
Signature: *Lupe Carrasco* Date: 12/31/2020  
email: Lupe.Carrasco@dvn.com Telephone: 575--748-0765

**OCD Only**

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

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

Closure Approved by: *Brittany Hall* Date: 1/24/2023  
Printed Name: Brittany Hall Title: Environmental Specialist



# APPENDIX IV

## Work Plan



December 18, 2014

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

AMARILLO  
 921 North Bivins  
 Amarillo, Texas 79107  
 Phone 806.467.0607  
 Fax 806.467.0622

ARTESIA  
 408 West Texas Ave.  
 Artesia, New Mexico 88210  
 Phone 575.746.8768  
 Fax 575.746.8905

Subject: **Soil Assessment and Remediation Work Plan**  
 Devon Energy Corporation  
 Sand 7 Federal #1  
 API # 30-015-25901 – 2RP-2642

Dear Mr. Bratcher

HOBBS  
 318 East Taylor Street  
 Hobbs, New Mexico 88240  
 Phone 575.393.4261  
 Fax 575.393.4658

Devon Energy Corporation (Devon) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

#### Incident Date

MIDLAND  
 2901 State Hwy 349  
 Midland, Texas 79706  
 Phone 432.522.2133  
 Fax 432.522.2180

December 3, 2014

#### Background Information

OKLAHOMA CITY  
 7700 North Hudson Avenue  
 Suite 10  
 Oklahoma City, Oklahoma 73116  
 Phone 405.486.7030  
 Fax 806.467.0622

The Sand 7 Federal #1 is located approximately thirty-eight (38) miles southeast of Artesia, New Mexico. The legal location for the site is Unit letter K of Section 7, Township 18S, Range 31E in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.75989 North and -103.90954 West. See site plan in [Appendix I](#).

SAN ANTONIO  
 13111 Lookout Way  
 San Antonio, Texas 78233  
 Phone 210.265.8025  
 Fax 210.568.2191

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 Kermit-Berino fine sands with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to middle Pleistocene in age and is comprised of eolian sands. Drainage courses in this area are normally dry. Ground water in the project vicinity is greater than 100-feet below ground surface (bgs), according to the New Mexico Office of the State Engineer. See [Appendix II](#) for the referenced groundwater data.

The ranking for this site is **0** based on the following:

ENVIRONMENTAL CONSULTING	Depth to ground water	>100'
ENGINEERING	Wellhead protection area	>1000'
DRILLING	Distance to surface water body	>1000'
CONSTRUCTION		
SPILL MANAGEMENT		
GENERAL CONTRACTING		

Page 1 of 3

Toll Free: 866.742.0742

www.talonlpe.com

Released to Imaging: 1/24/2023 7:33:50 AM



## Incident Description

On December 3, 2014 the hammer union on the recirculation pump malfunctioned causing a release of 7 barrels of mix fluids. The well was shut-in and the pump replaced. A vac truck was called to the location and recovered 2 barrels of fluid. The area affected was on location surrounding the transfer pump with a flow path that moved north along the lease road and west into the pasture. See site plan in [Appendix I](#).

## Actions Taken

On December 5, 2014 Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected utilizing a hand auger to a depth of 2-feet below ground surface. See [Table 1](#).

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The chloride samples were analyzed per Method SM4500Cl-B.

## Laboratory Results

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

December 15, 2014

**Table 1**

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0'	2780	<16	15100	30100
Refusal	0.5'	14.6	<16	87.5	336
S-2	0'	2270	<16	10600	22800
	0.5'	147	<16	892	2700
S-3	0'	67.5	240	680	2990
	1'	0.419	<16	<10	<10
S-4	0'	1510	270	8470	16100
	1'	62.1	<16	287	762
	2'	35.3	<16	320	1140
S-5	0'	1710	<16	10900	20700
	1'	22.6	<16	278	893
Refusal	2'	1.41	<16	<10	170
S-6	0'	1900	<16	11100	20400
	1'	2.28	<16	<10	164
	2'	0.395	<16	<10	67.6
S-7	0'	2420	<16	13700	28900
	1'	169	<16	703	1840
	2'	1.67	<16	<10	100

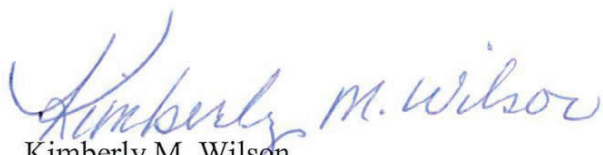
Based upon the site ranking of 0, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 5,000 mg/kg for TPH. The chloride standard is considered to be 1,000 mg/kg.


### Proposed Remedial Actions

- The impacted area in the vicinity of sample points S-1, S-3, S-5, S-6 and S-7 will be excavated to a depth of 0.5-feet deep. The impacted area in the vicinity of sample point S-2 will be excavated to depth of 1-foot deep. Field PID readings will be used to guide the excavation. Once field results indicate that the impacted soil is below NMOCD Recommended Remedial Action Level's (RRAL's), a confirmation soil sample will be taken to insure all of the impacted material was removed.
- The impacted area in the vicinity of sample points S-4 and S-7 will be excavated to a depth of 1.5-feet deep.
- All the contaminated soil will be transported to Lea Land, LLC, an approved disposal facility.
- The excavated areas will be backfilled with new/clean caliche and topsoil from Lea Land. The excavation will be re-contoured to match the surrounding location. The areas in the pasture will be seeded using the BLM LPC seed mix.
- A final closure report documenting all remedial actions and analytical results will be provided to the NMOCD Artesia Office along with a Final C-141 Form.

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,

  
Kimberly M. Wilson  
Project Manager

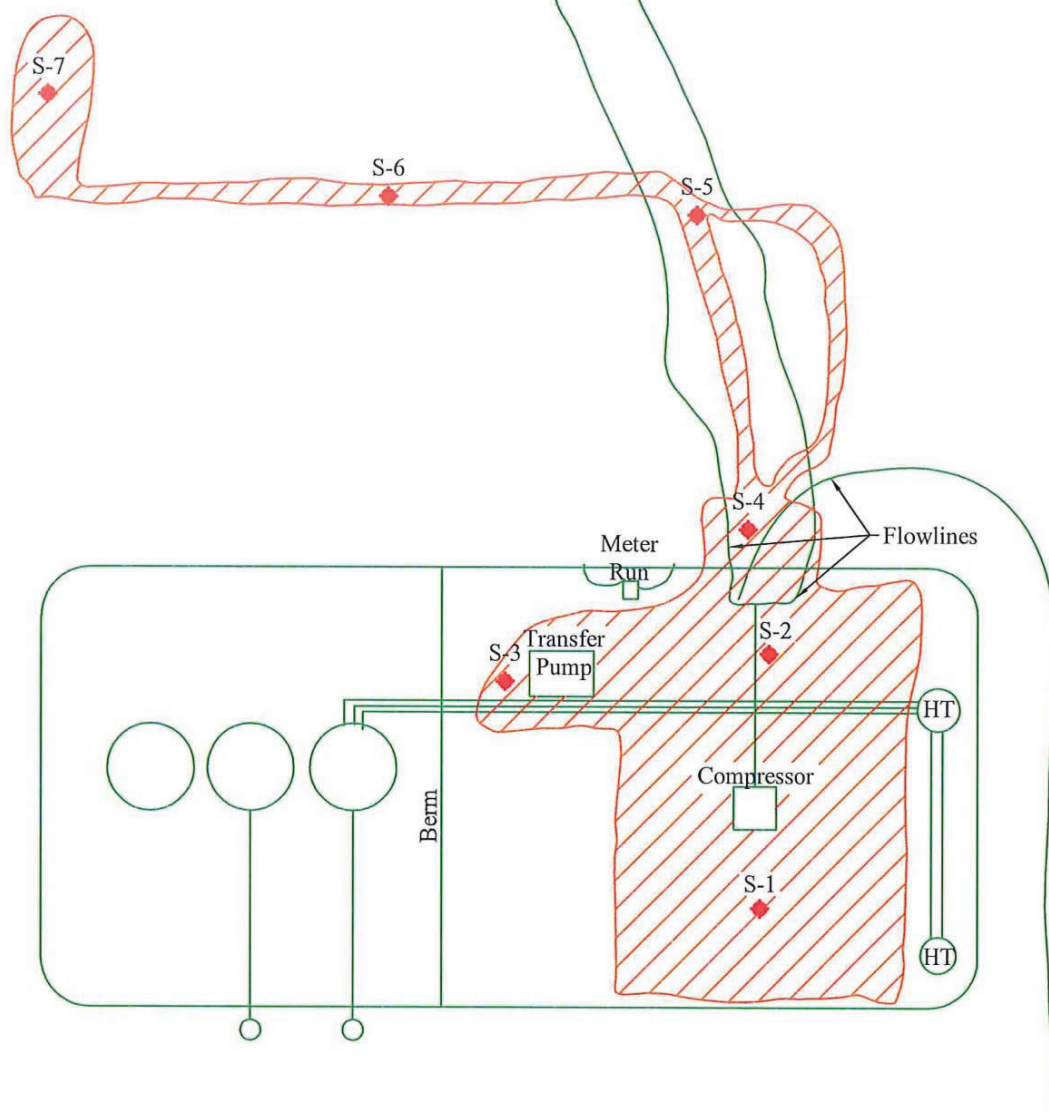
  
David J. Adkins  
District Manager

**APPENDIX I**

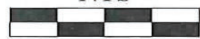
**SITE MAP**



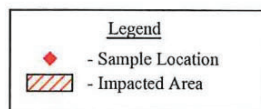
Lease Road



NTS



Scale in Feet



Date: 12/11/2014

Scale: NTS

Drawn By: NTS

Sand 7 Fed #1  
Devon Energy Corporation  
Eddy County, New Mexico  
Figure 1 - Site Plan



**APPENDIX II**  
**GROUNDWATER DATA**  
**INITIAL C-141**



# 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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">RA 11590 POD1</a>			ED	2	1	3	32	17S	31E	603315	3628545	3954	158		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 601760

**Northing (Y):** 3624909

**Radius:** 4000

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.

12/9/14 9:44 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

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

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

## NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141  
Revised August 8, 2011

DEC 04 2014  
Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

## Release Notification and Corrective Action

*NAB1433855615*

<b>OPERATOR</b>		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
<b>Name of Company</b> Devon Energy Production <i>60137</i>		<b>Contact</b> Rudy Zuniga, Production Foreman	
<b>Address</b> 6488 Seven Rivers Hwy Artesia, NM 88220		<b>Telephone No.</b> 575-390-5435	
<b>Facility Name</b> Sand 7 Fed 1		<b>Facility Type</b> Oil	
<b>Surface Owner</b> Federal		<b>Mineral Owner</b> Federal	
		<b>API No.</b> 30-015-25901	

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	7	18S	31E	1980'	FSL	2121'	FWL	Eddy

Latitude: 32.75989

Longitude: -103.90954

## NATURE OF RELEASE

<b>Type of Release Spill</b>	<b>Volume of Release</b> 7bbls	<b>Volume Recovered</b> 2bbls
<b>Source of Release</b> hammer union on recirculation pump	<b>Date and Hour of Occurrence</b> December 3, 2014 10:30 AM	<b>Date and Hour of Discovery</b> December 3, 2014 10:30 AM
<b>Was Immediate Notice Given?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	<b>If YES, To Whom?</b> Jeff Robertson, BLM & Mike Bratcher, OCD	
<b>By Whom?</b> Rudy Zuniga, Production Foreman	<b>Date and Hour</b> December 3, 2014 11:20 AM	
<b>Was a Watercourse Reached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If YES, Volume Impacting the Watercourse</b> N/A	
<b>If a Watercourse was Impacted, Describe Fully.*</b> N/A		

## Describe Cause of Problem and Remedial Action Taken.\*

On December 3, 2014 at 10:30am Lease Operator was transferring oil with the recirculation pump at the Sand 7 Fed 1 when he discovered the hammer union leaking releasing 7bbls of oil in pasture. When Lease Operator discovered the leak he immediately shut down the recirculation pump and notified the Assistant Production Foreman.

## Describe Area Affected and Cleanup Action Taken.\*

The area affected is approximately 2'x10' in the pasture area North of the Sand 7 Fed 1. Franco's Trucking was contacted and were able to recover 2bbls of oil from the spill by vac truck.

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

<b>Signature:</b> <i>Sheila Fisher</i>	<b>OIL CONSERVATION DIVISION</b>	
<b>Printed Name:</b> Sheila Fisher	<b>Signed By</b> <i>Mike Bratcher</i>	
<b>Title:</b> Field Admin Support	<b>Approved by Environmental Specialist:</b>	
<b>E-mail Address:</b> Sheila.Fisher@dvn.com	<b>Approval Date:</b> 12/4/14	<b>Expiration Date:</b> N/A
<b>Date:</b>	<b>Conditions of Approval:</b>	<b>Attached</b> <input type="checkbox"/>
<b>Phone:</b> 575.748.1829	<b>Remediation per O.C.D. Rules &amp; Guidelines</b>	

\* Attach Additional Sheets If Necessary

SUBMIT REMEDIATION PROPOSAL NO  
LATER THAN: 1/4/15

2RP-2642

**APPENDIX III**  
**LABORATORY RESULTS**



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

December 15, 2014

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SAND 7 FED. NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 12/08/14 12:00.

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





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

**Analytical Results For:**

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

Received: 12/08/2014  
Reported: 12/15/2014  
Project Name: SAND 7 FED. NO. 1  
Project Number: 700794.010.01  
Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-1 0' (H403734-01)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	319	10.0	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	1260	10.0	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	504	10.0	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	702	30.0	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTX	2780	60.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	15100	100	12/09/2014	ND	205	102	200	0.0332		
DRO >C10-C28	30100	100	12/09/2014	ND	214	107	200	2.07		

Surrogate: 1-Chlorooctane 450 % 47.2-157

Surrogate: 1-Chlorooctadecane 768 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-1 0.5' REFUSAL (H403734-02)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.478	0.050	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	2.76	0.050	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	3.97	0.050	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	7.39	0.150	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTX	14.6	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 131 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	87.5	10.0	12/09/2014	ND	205	102	200	0.0332	
DRO >C10-C28	336	10.0	12/09/2014	ND	214	107	200	2.07	

Surrogate: 1-Chlorooctane 125 % 47.2-157

Surrogate: 1-Chlorooctadecane 146 % 52.1-176

Cardinal Laboratories

\*—Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-2 0' (H403734-03)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	182	10.0	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	1040	10.0	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	439	10.0	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	611	30.0	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTX	2270	60.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 108 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	10600	200	12/09/2014	ND	205	102	200	0.0332		
DRO >C10-C28	22800	200	12/09/2014	ND	214	107	200	2.07		

Surrogate: 1-Chlorooctane 339 % 47.2-157

Surrogate: 1-Chlorooctadecane 570 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-2 0.5' REFUSAL (H403734-04)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	6.46	0.500	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	57.8	0.500	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	33.0	0.500	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	49.5	1.50	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTEX	147	3.00	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 115 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	892	10.0	12/09/2014	ND	205	102	200	0.0332		
DRO >C10-C28	2700	10.0	12/09/2014	ND	214	107	200	2.07		

Surrogate: 1-Chlorooctane 169 % 47.2-157

Surrogate: 1-Chlorooctadecane 172 % 52.1-176

Cardinal Laboratories

\*—Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-3 0' (H403734-05)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.569	0.500	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	7.68	0.500	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	18.2	0.500	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	41.0	1.50	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTX	67.5	3.00	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 125 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	12/09/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	680	100	12/09/2014	ND	205	102	200	0.0332		
DRO >C10-C28	2990	100	12/09/2014	ND	214	107	200	2.07		

Surrogate: 1-Chlorooctane 108 % 47.2-157

Surrogate: 1-Chlorooctadecane 223 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
Reported: 12/15/2014  
Project Name: SAND 7 FED. NO. 1  
Project Number: 700794.010.01  
Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-3 1' REFUSAL (H403734-06)**

BTX 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.171	0.050	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	0.186	0.050	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	0.061	0.050	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	<0.150	0.150	12/11/2014	ND	5.75	95.9	6.00	1.57	
<b>Total BTX</b>	<b>0.419</b>	<b>0.300</b>	<b>12/11/2014</b>	<b>ND</b>					

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

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

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2014	ND	205	102	200	0.0332	
DRO >C10-C28	<10.0	10.0	12/09/2014	ND	214	107	200	2.07	

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 121 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/08/2014  
Reported: 12/15/2014  
Project Name: SAND 7 FED. NO. 1  
Project Number: 700794.010.01  
Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-4 0' (H403734-07)**

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	176	5.00	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	677	5.00	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	273	5.00	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	383	15.0	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTEX	1510	30.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	12/09/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	8470	100	12/09/2014	ND	205	102	200	0.0332		
DRO >C10-C28	16100	100	12/09/2014	ND	214	107	200	2.07		

Surrogate: 1-Chlorooctane 235 % 47.2-157

Surrogate: 1-Chlorooctadecane 402 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
Reported: 12/15/2014  
Project Name: SAND 7 FED. NO. 1  
Project Number: 700794.010.01  
Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-4 1' (H403734-08)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.87	0.200	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	22.6	0.200	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	15.0	0.200	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	22.7	0.600	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTEX	62.1	1.20	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 118 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	287	10.0	12/09/2014	ND	205	102	200	0.0332	
DRO >C10-C28	762	10.0	12/09/2014	ND	214	107	200	2.07	

Surrogate: 1-Chlorooctane 124 % 47.2-157

Surrogate: 1-Chlorooctadecane 131 % 52.1-176

Cardinal Laboratories

\*—Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-4 2' (H403734-09)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.460	0.200	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	9.51	0.200	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	9.63	0.200	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	15.7	0.600	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTEX	35.3	1.20	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 116 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	320	10.0	12/09/2014	ND	205	102	200	0.0332	
DRO >C10-C28	1140	10.0	12/09/2014	ND	214	107	200	2.07	

Surrogate: 1-Chlorooctane 137 % 47.2-157

Surrogate: 1-Chlorooctadecane 144 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-5 0' (H403734-10)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	189	10.0	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	768	10.0	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	316	10.0	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	441	30.0	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTEX	1710	60.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	10900	100	12/10/2014	ND	188	93.9	200	0.211		
DRO >C10-C28	20700	100	12/10/2014	ND	201	100	200	0.909		

Surrogate: 1-Chlorooctane 277 % 47.2-157

Surrogate: 1-Chlorooctadecane 335 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-5 1' (H403734-11)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.637	0.200	12/11/2014	ND	2.06	103	2.00	0.335	
Toluene*	7.08	0.200	12/11/2014	ND	2.03	101	2.00	0.553	
Ethylbenzene*	5.82	0.200	12/11/2014	ND	1.91	95.7	2.00	1.50	
Total Xylenes*	9.09	0.600	12/11/2014	ND	5.75	95.9	6.00	1.57	
Total BTEX	22.6	1.20	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	278	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	893	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 89.3 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-5 2' REFUSAL (H403734-12)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.051	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	0.241	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	0.363	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	0.759	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTX	1.41	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	170	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 85.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 80.5 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-6 0' (H403734-13)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	193	10.0	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	869	10.0	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	352	10.0	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	491	30.0	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTX	1900	60.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	11100	200	12/10/2014	ND	188	93.9	200	0.211		
DRO >C10-C28	20400	200	12/10/2014	ND	201	100	200	0.909		

Surrogate: 1-Chlorooctane 255 % 47.2-157

Surrogate: 1-Chlorooctadecane 503 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-6 1' (H403734-14)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.299	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	0.589	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	0.462	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	0.926	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	2.28	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	164	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 93.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 87.3 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-6 2' REFUSAL (H403734-15)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	<b>0.108</b>	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	<b>0.097</b>	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	<b>0.189</b>	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	<b>0.395</b>	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	<b>67.6</b>	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 84.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 81.3 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
Reported: 12/15/2014  
Project Name: SAND 7 FED. NO. 1  
Project Number: 700794.010.01  
Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-7 0' (H403734-16)**

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	176	10.0	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	1070	10.0	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	484	10.0	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	689	30.0	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	2420	60.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	13700	200	12/10/2014	ND	188	93.9	200	0.211		
DRO >C10-C28	28900	200	12/10/2014	ND	201	100	200	0.909		

Surrogate: 1-Chlorooctane 290 % 47.2-157

Surrogate: 1-Chlorooctadecane 422 % 52.1-176

Cardinal Laboratories

\*—Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-7 1' (H403734-17)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	4.75	0.500	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	65.2	0.500	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	39.5	0.500	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	59.1	1.50	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	169	3.00	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 117 % 61-154

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

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	703	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	1840	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 88.7 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 12/08/2014  
 Reported: 12/15/2014  
 Project Name: SAND 7 FED. NO. 1  
 Project Number: 700794.010.01  
 Project Location: SEC.7 - T18S - R31E

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

**Sample ID: S-7 2' (H403734-18)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.054	0.050	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	0.378	0.050	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	0.433	0.050	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	0.810	0.150	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	1.67	0.300	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 61-154

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

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

Surrogate: 1-Chlorooctane 87.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.3 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

### 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

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

**Sheldon Hitchcock**

---

**From:** eticket@nm811.org  
**Sent:** Monday, December 15, 2014 4:21 PM  
**To:** Sheldon Hitchcock  
**Subject:** DO NOT REPLY: Request 2014510660

New Mexico One Call

Locate Request Confirmation Header Code: STANDARD LOCATE

Request Type:

Ticket No: 2014510660 Seq. No: 0

Update of:

Original Call Date: 12/15/2014 Time: 04:18:15 PM OP: 240

Transmit Date: 12/15/2014 Time: 04:20:31 PM

Work to Begin Date: 12/17/2014 Time: 04:18:00 PM

Company: TALON LPE

Contact Name: SHELDON HITCHCOCK Contact Phone: (575)689-5198

Alternate Contact: KIMBERLY WILSON Alternate Phone: (575)602-3826

Best Time to Call: Fax No:

Cell Phone: Pager No:

Email: slhitchcock@talonlpe.com

State: NM County: EDDY City: RURAL EDDY

Address: , SAND 7 FED #1

To Address:

Nearest Intersecting Street:

2nd Intersecting Street:

Subdivision:

Latitude: 32.75988200 Longitude: -103.90950500

Zip Code:

Grid:

Location of Work: W1412151558070 FROM US-82 & CR-222, DRIVE S ON 222  
FOR 2.8MI, R ON LEASE RD, CONT ON MAIN LEASE RD  
FOR 1.33MI, TRN L, GO 0.2MI R, GO 0.2MI L, GO  
0.53MI R, GO 0.17MI TURN R TO LOCATION. SPOT  
BATTERY AND NNW OF BATTERY FOR 200-FEET.

Remarks: MARKED IN WHITE LAT:32.75989 LONG:-103.90954

Type of Work: SOIL SAMPLING

Private Property: Street: Overhead Lines: Blasting:

Easement: Mechanical Boring: Premarked: Y

Work Being Done For: DEVON ENERGY

The following utility owners have been notified:

NAVA PENA LIN FFS TW07

DEVN





ANALYSIS REQUEST

es

7:33:50 AM

03-1471 Rhana #.

Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #:
Fax Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Fax #:

STIMULUS

--

754





ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2626 #54



## APPENDIX V

# PHOTOGRAPHIC DOCUMENTATION



Devon Energy Sand 7 Fed 1

PHOTO DOCUMENTATION



West Side



Liner View



East Side





## APPENDIX VI

# Laboratory Data



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

---

October 05, 2020

REBECCA PONS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SANDS 7 FED 1

Enclosed are the results of analyses for samples received by the laboratory on 09/30/20 11:29.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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,

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

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 1 0-1' R (H002582-01)**

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	10/01/2020	ND	2.14	107	2.00	0.547	
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25	
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56	
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42	
Total BTEX	<0.300	0.300	10/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	80.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	240	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	115	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 91.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.2 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 2 0-1' (H002582-02)**

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	10/01/2020	ND	2.14	107	2.00	0.547		
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42		
Total BTEX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	32.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 93.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.0 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 2 2' R (H002582-03)**

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	10/01/2020	ND	2.14	107	2.00	0.547		
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42		
Total BTEX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 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	16.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 93.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.9 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 3 0-1' (H002582-04)**

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	10/01/2020	ND	2.14	107	2.00	0.547		
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42		
Total BTEx	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 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	80.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	95.9	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	83.8	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 85.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.3 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 3 1.5' R (H002582-05)**

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	10/01/2020	ND	2.14	107	2.00	0.547		
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42		
Total BTEX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	32.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	23.7	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	14.5	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 92.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.5 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 4 0-1' R (H002582-06)**

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	10/01/2020	ND	2.14	107	2.00	0.547		
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42		
Total BTEX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	112	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 97.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.3 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 5 0-1' R (H002582-07)**

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	10/01/2020	ND	2.14	107	2.00	0.547	
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25	
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56	
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42	
Total BTEx	<0.300	0.300	10/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	16.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 92.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.7 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 6 O' R (H002582-08)**

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	10/01/2020	ND	2.14	107	2.00	0.547	
Toluene*	<0.050	0.050	10/01/2020	ND	2.07	103	2.00	1.25	
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.10	105	2.00	1.56	
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.13	102	6.00	1.42	
Total BTEX	<0.300	0.300	10/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 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	<16.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	38.3	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	23.2	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 95.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.4 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: S - 7 O' R (H002582-09)**

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	10/01/2020	ND	2.19	110	2.00	0.301		
Toluene*	<0.050	0.050	10/01/2020	ND	2.11	105	2.00	0.696		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.18	109	2.00	0.947		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.38	106	6.00	0.883		
Total BTX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 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	<16.0	16.0	10/01/2020	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	10/01/2020	ND	199	99.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	182	90.9	200	12.1	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 87.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.0 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: BG - 1 0' (H002582-10)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2020	ND	2.19	110	2.00	0.301	
Toluene*	<0.050	0.050	10/02/2020	ND	2.11	105	2.00	0.696	
Ethylbenzene*	<0.050	0.050	10/02/2020	ND	2.18	109	2.00	0.947	
Total Xylenes*	<0.150	0.150	10/02/2020	ND	6.38	106	6.00	0.883	
Total BTEx	<0.300	0.300	10/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	11600	16.0	10/01/2020	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	10/01/2020	ND	204	102	200	1.25	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	204	102	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 89.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.6 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: BG - 2 0' (H002582-11)**

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	10/01/2020	ND	2.19	110	2.00	0.301		
Toluene*	<0.050	0.050	10/01/2020	ND	2.11	105	2.00	0.696		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.18	109	2.00	0.947		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.38	106	6.00	0.883		
Total BTX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	<16.0	16.0	10/01/2020	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	10/01/2020	ND	204	102	200	1.25	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	204	102	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 93.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.1 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: BG - 3 0' (H002582-12)**

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	10/01/2020	ND	2.19	110	2.00	0.301		
Toluene*	<0.050	0.050	10/01/2020	ND	2.11	105	2.00	0.696		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.18	109	2.00	0.947		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.38	106	6.00	0.883		
Total BTEX	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	<16.0	16.0	10/01/2020	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	10/01/2020	ND	204	102	200	1.25	
DRO >C10-C28*	<10.0	10.0	10/01/2020	ND	204	102	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 94.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.2 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	09/30/2020	Sampling Date:	09/29/2020
Reported:	10/05/2020	Sampling Type:	Soil
Project Name:	SANDS 7 FED 1	Sampling Condition:	Cool & Intact
Project Number:	700794.363.01	Sample Received By:	Yvonne Muniz
Project Location:	DEVON ENERGY - EDDY CO NM		

**Sample ID: BG - 4 0' (H002582-13)**

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	10/01/2020	ND	2.19	110	2.00	0.301		
Toluene*	<0.050	0.050	10/01/2020	ND	2.11	105	2.00	0.696		
Ethylbenzene*	<0.050	0.050	10/01/2020	ND	2.18	109	2.00	0.947		
Total Xylenes*	<0.150	0.150	10/01/2020	ND	6.38	106	6.00	0.883		
Total BTEx	<0.300	0.300	10/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	48.0	16.0	10/01/2020	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	10/01/2020	ND	204	102	200	1.25	
DRO >C10-C28*	45.8	10.0	10/01/2020	ND	204	102	200	4.35	
EXT DRO >C28-C36	33.3	10.0	10/01/2020	ND					

Surrogate: 1-Chlorooctane 90.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.4 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name: <b>THORN CPE</b>		P.O. #: <b>20890433</b>	
Project Manager: <b>R. PONS</b>		Company: <b>DEVON</b>	
Address: <b>408 W. TEXAS AVE</b>		Attn: <b>TON BYNUM</b>	
City: <b>ARTESIA</b>	State: <b>NM</b> Zip: <b>88210</b>	Address:	
Phone #: <b>575-744-8148</b>	Fax #:	City:	
Project #: <b>760794.343.01</b>	Project Owner: <b>DEVON ENERGY</b>	State:	
Project Name: <b>SANDS 7 FEED</b>	City:	Zip:	
Project Location: <b>EDDY COUNTY</b>	Phone #:	Fax #:	
Sampler Name: <b>MICHAEL COUER</b>	FOR LAB USE ONLY		

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 :	BTEX	TPH	TOTAL CHLORIDES	
<b>H00882</b>	<b>1</b>	<b>5-1 0-1'R</b>	<b>6</b>	<b>1</b>														
	<b>2</b>	<b>5-2 0-1</b>																
	<b>3</b>	<b>5-2 2'R</b>																
	<b>4</b>	<b>5-3 0-1'</b>																
	<b>5</b>	<b>5-3 1.5'R</b>																
	<b>6</b>	<b>5-4 0-1'R</b>																
	<b>7</b>	<b>5-5 0-1'R</b>																
	<b>8</b>	<b>5-6 0'R</b>																
	<b>9</b>	<b>5-7 0'R</b>																
	<b>10</b>	<b>5-8 0'</b>																

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: **M. PONS** Date: **1/30/20** Received By: **Y. PONS** Date: **1/30/20**

Delivered By: (Circle One) **UPS** **3.92 #113** Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No ☐ Yes ☐ No CHECKED BY: **Y. PONS**

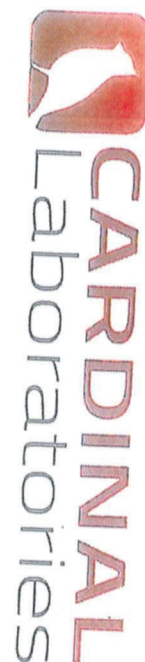
Sampler - UPS - Bus - Other: **3.92 #113**

REMARKS: **PK 10F2**

Phone Result: ☐ Yes ☐ No ☐ Add'l Phone #: **575-744-8148**

Fax Result: ☐ Yes ☐ No ☐ Add'l Fax #: **575-744-8148**

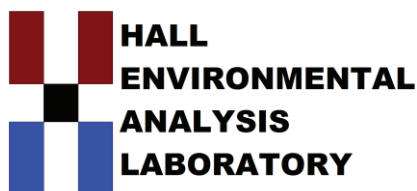




## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

<b>Company Name:</b> TALON UPE <b>Project Manager:</b> R. PONS <b>Address:</b> 408 W. TEXAS AVE <b>City:</b> ARTESIA <b>State:</b> NM <b>Zip:</b> 88210 <b>Phone #:</b> 575-746-8168 <b>Fax #:</b> <b>Project #:</b> 760794.343.01 <b>Project Owner:</b> DEVON ENERGY <b>Project Name:</b> SANDS 7 FEE1 <b>Project Location:</b> EDOY COUNTY <b>Sampler Name:</b> MICHAEL COLLIER <b>FOR LAB USE ONLY</b>				<b>BILL TO</b> <b>P.O. #:</b> 20890633 <b>Company:</b> DEVON <b>Attn:</b> TOM GYNUM <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>				<b>ANALYSIS REQUEST</b>			
<b>Lab I.D.</b> <b>Sample I.D.</b>				<b>Matrix</b> <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER : <b>ACID/BASE:</b> <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER :							
<b>PLEASE NOTE:</b> Liability and Damages. Cardinals liability and clients exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.				<b>Relinquished By:</b> [Signature] <b>Relinquished Date:</b> 11/29 <b>Time:</b>				<b>Received By:</b> [Signature] <b>Received Date:</b> 11/29 <b>Time:</b>			
<b>Delivered By:</b> (Circle One) <b>Sampler - UPS - Bus - Other:</b>				<b>Sample Condition</b> <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<b>CHECKED BY:</b> [Signature] <b>REMARKS:</b>			
<b>Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326</b>				<b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>Fax Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Fax #:</b>							



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

November 20, 2020

Rebecca Pons  
Talon Artesia  
408 West Texas Ave  
Artesia, NM 88210  
TEL:  
FAX:

RE: Sand 7 Fed 1

OrderNo.: 2011762

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/14/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2011762

Date Reported: 11/20/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-1 0.5'

Project: Sand 7 Fed 1

Collection Date: 11/13/2020 8:43:00 AM

Lab ID: 2011762-001

Matrix: SOIL

Received Date: 11/14/2020 7:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	99	60		mg/Kg	20	11/18/2020 3:33:50 PM	56558
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	340	95		mg/Kg	10	11/18/2020 2:53:47 AM	56467
Motor Oil Range Organics (MRO)	860	480		mg/Kg	10	11/18/2020 2:53:47 AM	56467
Surr: DNOP	0	30.4-154	S	%Rec	10	11/18/2020 2:53:47 AM	56467
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	24	D	mg/Kg	5	11/19/2020 5:10:03 AM	56468
Surr: BFB	92.9	75.3-105	D	%Rec	5	11/19/2020 5:10:03 AM	56468
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.12	D	mg/Kg	5	11/18/2020 2:24:01 AM	56468
Toluene	ND	0.24	D	mg/Kg	5	11/18/2020 2:24:01 AM	56468
Ethylbenzene	ND	0.24	D	mg/Kg	5	11/18/2020 2:24:01 AM	56468
Xylenes, Total	ND	0.49	D	mg/Kg	5	11/18/2020 2:24:01 AM	56468
Surr: 4-Bromofluorobenzene	95.1	80-120	D	%Rec	5	11/18/2020 2:24:01 AM	56468

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 9



## Analytical Report

Lab Order 2011762

Date Reported: 11/20/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-3 0.5'

Project: Sand 7 Fed 1

Collection Date: 11/13/2020 8:40:00 AM

Lab ID: 2011762-002

Matrix: SOIL

Received Date: 11/14/2020 7:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	250	60		mg/Kg	20	11/18/2020 3:46:14 PM	56558
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	160	93		mg/Kg	10	11/18/2020 3:17:42 AM	56467
Motor Oil Range Organics (MRO)	660	460		mg/Kg	10	11/18/2020 3:17:42 AM	56467
Surr: DNOP	0	30.4-154	S	%Rec	10	11/18/2020 3:17:42 AM	56467
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	25	D	mg/Kg	5	11/19/2020 11:41:30 AM	56468
Surr: BFB	90.4	75.3-105	D	%Rec	5	11/19/2020 11:41:30 AM	56468
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.12	D	mg/Kg	5	11/18/2020 2:47:22 AM	56468
Toluene	ND	0.25	D	mg/Kg	5	11/18/2020 2:47:22 AM	56468
Ethylbenzene	ND	0.25	D	mg/Kg	5	11/18/2020 2:47:22 AM	56468
Xylenes, Total	ND	0.50	D	mg/Kg	5	11/18/2020 2:47:22 AM	56468
Surr: 4-Bromofluorobenzene	96.0	80-120	D	%Rec	5	11/18/2020 2:47:22 AM	56468

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2011762

Date Reported: 11/20/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BG-1 0.5'

Project: Sand 7 Fed 1

Collection Date: 11/13/2020 8:46:00 AM

Lab ID: 2011762-003

Matrix: SOIL

Received Date: 11/14/2020 7:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	1000	60		mg/Kg	20	11/18/2020 3:58:38 PM	56558
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	210	9.6		mg/Kg	1	11/18/2020 11:35:50 AM	56505
Motor Oil Range Organics (MRO)	300	48		mg/Kg	1	11/18/2020 11:35:50 AM	56505
Surr: DNOP	111	30.4-154		%Rec	1	11/18/2020 11:35:50 AM	56505
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/19/2020 12:05:08 PM	56468
Surr: BFB	88.9	75.3-105		%Rec	1	11/19/2020 12:05:08 PM	56468
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	11/18/2020 3:10:43 AM	56468
Toluene	ND	0.049		mg/Kg	1	11/18/2020 3:10:43 AM	56468
Ethylbenzene	ND	0.049		mg/Kg	1	11/18/2020 3:10:43 AM	56468
Xylenes, Total	ND	0.098		mg/Kg	1	11/18/2020 3:10:43 AM	56468
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	11/18/2020 3:10:43 AM	56468

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2011762  
20-Nov-20

Client: Talon Artesia  
Project: Sand 7 Fed 1

Sample ID: <b>MB-56558</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>56558</b>		RunNo: <b>73446</b>						
Prep Date: <b>11/18/2020</b>		Analysis Date: <b>11/18/2020</b>		SeqNo: <b>2587359</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-56558</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>56558</b>		RunNo: <b>73446</b>						
Prep Date: <b>11/18/2020</b>		Analysis Date: <b>11/18/2020</b>		SeqNo: <b>2587360</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 9

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011762

20-Nov-20

**Client:** Talon Artesia**Project:** Sand 7 Fed 1

Sample ID: <b>LCS-56505</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>56505</b>			RunNo: <b>73426</b>						
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/17/2020</b>			SeqNo: <b>2585499</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.1	70	130			
Surr: DNOP	4.6		5.000		92.2	30.4	154			

Sample ID: <b>MB-56505</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>56505</b>			RunNo: <b>73426</b>						
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/17/2020</b>			SeqNo: <b>2585500</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.7	30.4	154			

Sample ID: <b>LCS-56467</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>56467</b>			RunNo: <b>73413</b>						
Prep Date: <b>11/16/2020</b>	Analysis Date: <b>11/17/2020</b>			SeqNo: <b>2586231</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.5	70	130			
Surr: DNOP	2.2		5.000		43.0	30.4	154			

Sample ID: <b>MB-56467</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>56467</b>			RunNo: <b>73413</b>						
Prep Date: <b>11/16/2020</b>	Analysis Date: <b>11/17/2020</b>			SeqNo: <b>2586232</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	5.6		10.00		56.2	30.4	154			

Sample ID: <b>MB-56518</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>56518</b>			RunNo: <b>73443</b>						
Prep Date: <b>11/18/2020</b>	Analysis Date: <b>11/18/2020</b>			SeqNo: <b>2586506</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		103	30.4	154			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011762

20-Nov-20

**Client:** Talon Artesia**Project:** Sand 7 Fed 1

Sample ID: <b>LCS-56518</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>56518</b>				RunNo: <b>73443</b>					
Prep Date: <b>11/18/2020</b>	Analysis Date: <b>11/18/2020</b>				SeqNo: <b>2586507</b>	Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.0	30.4	154			

Sample ID: <b>2011762-003AMS</b>	SampType: <b>MS</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>BG-1 0.5'</b>	Batch ID: <b>56505</b>				RunNo: <b>73443</b>					
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/18/2020</b>				SeqNo: <b>2586586</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	240	9.4	46.95	209.5	57.2	15	184			
Surr: DNOP	6.3		4.695		134	30.4	154			

Sample ID: <b>2011762-003AMSD</b>	SampType: <b>MSD</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>BG-1 0.5'</b>	Batch ID: <b>56505</b>				RunNo: <b>73443</b>					
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/18/2020</b>				SeqNo: <b>2586587</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	220	9.6	47.89	209.5	29.3	15	184	5.58	23.9	
Surr: DNOP	6.3		4.789		131	30.4	154	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011762

20-Nov-20

**Client:** Talon Artesia**Project:** Sand 7 Fed 1

Sample ID: <b>mb-56468</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56468</b>	RunNo: <b>73411</b>								
Prep Date: <b>11/16/2020</b>	Analysis Date: <b>11/17/2020</b>	SeqNo: <b>2585443</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.8	75.3	105			

Sample ID: <b>lcs-56468</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56468</b>	RunNo: <b>73411</b>								
Prep Date: <b>11/16/2020</b>	Analysis Date: <b>11/17/2020</b>	SeqNo: <b>2585444</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.3	72.5	106			
Surr: BFB	1000		1000		101	75.3	105			

Sample ID: <b>MB-56503</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56503</b>	RunNo: <b>73447</b>								
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2586929</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.7	75.3	105			

Sample ID: <b>lcs-56503</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56503</b>	RunNo: <b>73447</b>								
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2586930</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: <b>mb-56536</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56536</b>	RunNo: <b>73491</b>								
Prep Date: <b>11/18/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2588062</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		91.9	75.3	105			

Sample ID: <b>lcs-56536</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56536</b>	RunNo: <b>73491</b>								
Prep Date: <b>11/18/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2588063</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		100	75.3	105			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
 D Sample Diluted Due to Matrix  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 PQL Practical Quantitative Limit  
 S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P Sample pH Not In Range  
 RL Reporting Limit

Page 7 of 9

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011762

20-Nov-20

**Client:** Talon Artesia**Project:** Sand 7 Fed 1

Sample ID: <b>mb-56468</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56468</b>	RunNo: <b>73411</b>								
Prep Date: <b>11/16/2020</b>	Analysis Date: <b>11/17/2020</b>	SeqNo: <b>2585459</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		95.5	80	120			

Sample ID: <b>LCS-56468</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56468</b>	RunNo: <b>73411</b>								
Prep Date: <b>11/16/2020</b>	Analysis Date: <b>11/17/2020</b>	SeqNo: <b>2585460</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	80	120			
Toluene	0.95	0.050	1.000	0	95.0	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.1	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	80	120			

Sample ID: <b>LCS-56503</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56503</b>	RunNo: <b>73447</b>								
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2586977</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: <b>MB-56503</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56503</b>	RunNo: <b>73447</b>								
Prep Date: <b>11/17/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2586993</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: <b>mb-56536</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56536</b>	RunNo: <b>73491</b>								
Prep Date: <b>11/18/2020</b>	Analysis Date: <b>11/19/2020</b>	SeqNo: <b>2588108</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2011762  
20-Nov-20

Client: Talon Artesia  
Project: Sand 7 Fed 1

Sample ID: <b>LCS-56536</b>		SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>56536</b>			RunNo: <b>73491</b>						
Prep Date: <b>11/18/2020</b>		Analysis Date: <b>11/19/2020</b>			SeqNo: <b>2588109</b>		Units: <b>%Rec</b>				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		0.98		1.000		97.9	80	120			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: Talon Artesia

Work Order Number: 2011762

RcptNo: 1

Received By: Juan Rojas

11/14/2020 7:37:00 AM

*Juan Rojas*

Completed By: Juan Rojas

11/14/2020 8:14:10 AM

*Juan Rojas*

Reviewed By:

*11/14/2020*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: *JR 11/14/20*

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good				
2	0.6	Good				

## Chain-of-Custody Record

Client: TALON LE

Mailing Address: 408 W. TEXAS AVE.

ARTESIA, NM 88210

Phone #: 575-746-8768

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time: 4-DAY

☒ Standard ☐ Rush

Project Name: SAND T FED #1

Project #: 700794.363.01

Project Manager: R. PONS

Sampler: MICHAEL COLLIER

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): 0.1-0.0.1 (°C)

Container Type and #

Preservative Type

HEAL No.

2011762

-001

-002

-003

Date

Time

Matrix

Sample Name

11-13-20 8:43 501L S-1 0.5'

8:40 S-3 0.5'

8:46 BG-1 0.5'

Date

Time

Relinquished by:

11/13/20 1200

11/13/20 1900

Relinquished by:

11/13/20 1200

11/14/20 7:37

Received by:

Via:

Date

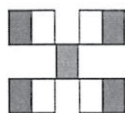
Time

Received by:

Via:

Date

Time



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

BTEX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

(C), F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

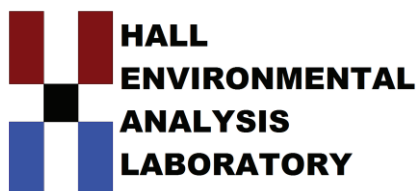
8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks:

DIRECT BILL TO DEVON ENERGY

w/o # 20890633



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

December 16, 2020

Rebecca Pons  
Talon Artesia  
408 West Texas Ave  
Artesia, NM 88210  
TEL:  
FAX

RE: Sand 7 Fed 1

OrderNo.: 2012523

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/10/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2012523

Date Reported: 12/16/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: SSW-COMP

Project: Sand 7 Fed 1

Collection Date: 12/8/2020 12:30:00 PM

Lab ID: 2012523-001

Matrix: SOIL

Received Date: 12/10/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	240	61		mg/Kg	20	12/13/2020 9:54:04 PM	56964
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/11/2020 1:51:42 PM	56913
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/11/2020 1:51:42 PM	56913
Surr: DNOP	134	30.4-154		%Rec	1	12/11/2020 1:51:42 PM	56913
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/12/2020 8:35:20 PM	56906
Surr: BFB	90.0	75.3-105		%Rec	1	12/12/2020 8:35:20 PM	56906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/12/2020 8:35:20 PM	56906
Toluene	ND	0.050		mg/Kg	1	12/12/2020 8:35:20 PM	56906
Ethylbenzene	ND	0.050		mg/Kg	1	12/12/2020 8:35:20 PM	56906
Xylenes, Total	ND	0.10		mg/Kg	1	12/12/2020 8:35:20 PM	56906
Surr: 4-Bromofluorobenzene	88.5	80-120		%Rec	1	12/12/2020 8:35:20 PM	56906

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012523

16-Dec-20

Client: Talon Artesia

Project: Sand 7 Fed 1

Sample ID: <b>MB-56964</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>56964</b>		RunNo: <b>73975</b>						
Prep Date: <b>12/13/2020</b>		Analysis Date: <b>12/13/2020</b>		SeqNo: <b>2609319</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-56964</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>56964</b>		RunNo: <b>73975</b>						
Prep Date: <b>12/13/2020</b>		Analysis Date: <b>12/13/2020</b>		SeqNo: <b>2609320</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	90	110			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2012523  
16-Dec-20

Client: Talon Artesia  
Project: Sand 7 Fed 1

Sample ID: MB-56913	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56913	RunNo: 73941								
Prep Date: 12/10/2020	Analysis Date: 12/11/2020	SeqNo: 2608563	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	30.4	154			

Sample ID: LCS-56913	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56913	RunNo: 73974								
Prep Date: 12/10/2020	Analysis Date: 12/12/2020	SeqNo: 2609395	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	112	70	130			
Surr: DNOP	5.1		5.000		101	30.4	154			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2012523  
16-Dec-20

Client: Talon Artesia  
Project: Sand 7 Fed 1

Sample ID: <b>lcs-56906</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56906</b>	RunNo: <b>73970</b>								
Prep Date: <b>12/10/2020</b>	Analysis Date: <b>12/12/2020</b>	SeqNo: <b>2609029</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.8	72.5	106			
Surr: BFB	990		1000		99.2	75.3	105			

Sample ID: <b>mb-56906</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56906</b>	RunNo: <b>73970</b>								
Prep Date: <b>12/10/2020</b>	Analysis Date: <b>12/12/2020</b>	SeqNo: <b>2609031</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.7	75.3	105			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012523

16-Dec-20

**Client:** Talon Artesia**Project:** Sand 7 Fed 1

Sample ID: <b>LCS-56906</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>56906</b>		RunNo: <b>73970</b>							
Prep Date: <b>12/10/2020</b>	Analysis Date: <b>12/12/2020</b>		SeqNo: <b>2609081</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.9	80	120			
Toluene	0.98	0.050	1.000	0	97.8	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.1	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	80	120			

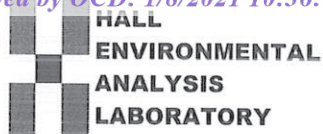
Sample ID: <b>mb-56906</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>56906</b>		RunNo: <b>73970</b>							
Prep Date: <b>12/10/2020</b>	Analysis Date: <b>12/12/2020</b>		SeqNo: <b>2609083</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.1	80	120			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: Talon Artesia

Work Order Number: 2012523

RcptNo: 1

Received By: Scott Anderson 12/10/2020 8:00:00 AM

Completed By: Desiree Dominguez 12/10/2020 9:11:25 AM

Reviewed By: SGL 12/10/20

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: JR 12/10/20

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good				
2	0.1	Good				



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

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

CONDITIONS  
  
Action 14272

CONDITIONS

Operator: Talon LPE 408 W Texas Artesia, NM 88210	OGRID: 329944
	Action Number: 14272
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	1/24/2023