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Soil Assessment and Remediation Work Plan

Shugart 25 Fed Com #001
Eddy County, NM
API# 30-015-31454
*2RP-2474, *2RP-5454, *2RP-1031, *1RP-3245

Prepared For:

Devon Energy Corporation
6488 Seven Rivers Highway
Artesia, NM 88210

Prepared By:

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

March 25, 2020

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

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**
Shugart 25 Fed Com #001
Eddy County, NM
API# 30-015-31454

Dear Mr. Amos & Mr. Bratcher,

Devon Energy Corporation (Devon) has contracted Talon/LPE (Talon) to perform soil assessment and a remediation work plan for the above-referenced location. The results of our soil assessment and proposed remediation activities are contained herein.

Site Information

The Shugart 25 Fed Com #1 is located approximately forty (40) miles southeast of Artesia, New Mexico. The legal location for this release is Unit Letter K, Section 25, Township 18 South, and Range 31 East in Eddy County, New Mexico. More specifically, the latitude and longitude for the release are 32.7167778 North and -103.8251343 West. A site map is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Kermit-Berino fine sands, 0 to 3 percent slopes. See [Appendix II](#) for the referenced soil survey. 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 alluvium and eolian sand deposits. Drainage courses in this area are well drained.

Ground Water and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 430-feet below ground surface (BGS). See [Appendix II](#) for the referenced groundwater depth. This site is located within a low potential Karst area.

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

Approximate Depth to Groundwater	430 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 playa lake |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet from an occupied permanent residence, school, hospital, institution or church |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 500 feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock watering purposes |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 1000 feet of any freshwater well or spring |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978 |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet of a wetland |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within the area overlying a subsurface mine |
| <input 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 |

Because the release did not occur in any of these areas and the depth to groundwater is greater than 100-feet in-depth, based on the site characterization data, the cleanup criteria for this site are as follows.

Table I Closure Criteria for Soils Impacted by a Release			
Depth below horizontal extents of release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
>100 feet	Total Chlorides***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

Incident Descriptions

*2RP-1031. On February 2, 2012, the lease operator, upon arriving onto location, discovered a tank running over. An estimated 35 barrels (bbls) of oil and 20 bbls of produced water were released into the steel-lined containment. The 55 bbls of mixed fluids were recovered by a vac truck that had been dispatched.

*1RP-3245 & *2RP-2474 (Same Leak). On August 8, 2014, a leak occurred on a 3" ball valve on a poly transfer line causing an estimated 7 bbls of produced water to be released outside the containment of the tank battery. There was no produced water recovered and the line was repaired.

*2RP-5454. On May 13, 2019, a lovejoy on the water transfer pump failed to causing multiple leaks resulting in a total release of 106.6 bbls of produced water. 105 bbls of fluid were released inside the lined containment and were recovered. 1.6 bbls of fluid were released onto the location.

On November 27, 2019, a transfer pump failed causing a water tank to overflow. An estimated 400 bbls of produced water were released with the vac truck being able to recover the 400 bbls. All fluids were contained and retrieved within the steel-lined containment.

The initial C-141's are attached in [Appendix III](#).

Soil Sampling

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO combined = 1000 mg/kg			2500 mg/kg	20,000 mg/kg
W. Composite	2/26/2020	0	ND	ND	ND	314	62.1	375.1	14900
N. Composite	2/26/2020	0	ND	ND	ND	42.9	ND	42.9	7600
E. Composite	2/26/2020	0	ND	ND	ND	401	157	558	6530
S. Composite	2/26/2020	0	ND	ND	ND	ND	ND	ND	47600
S-1	2/26/2020	0-1	ND	ND	ND	ND	ND	ND	9730
		2	ND	ND	ND	ND	ND	ND	432
		3	ND	ND	ND	ND	ND	ND	192
		4	ND	ND	ND	ND	ND	ND	96
S-2	2/26/2020	0-1	ND	ND	ND	ND	ND	ND	1260
		2- R	ND	ND	ND	ND	ND	ND	368
S-3	2/26/2020	0-1	ND	ND	ND	ND	ND	ND	7330
		2	ND	ND	ND	ND	ND	ND	160
		3	ND	ND	ND	ND	ND	ND	80
		4	ND	ND	ND	ND	ND	ND	32
S-4	2/26/2020	0-1	ND	ND	ND	ND	ND	ND	4160
		2- R	ND	ND	ND	ND	ND	ND	112
S-5	2/26/2020	0-1	ND	ND	ND	ND	ND	ND	2000
		2	ND	ND	ND	ND	ND	ND	64
		3	ND	ND	ND	ND	ND	ND	48

ND-Analyte Not Detected

Proposed Remedial Actions

- The impacted area labeled S-Composite, which is comprised of a five-point composite sample taken from the south side of the containment wall, will be excavated to a depth of 1.0-feet deep.
- The bottom and sidewalls of the excavations will be advanced until field titration results for total chlorides are below Table 1 Closure Criteria 19.15.29 NMAC. Five-point composite samples will then be collected from the bottom and each side wall of the excavation. The samples will be laboratory analyzed for total chlorides via EPA Method 300.0 to verify field results before the excavation is backfilled.
- All of the excavated material will be hauled to Lea Land, LLC, a NMOCD approved solid waste disposal facility.
- The NMOCD will be notified via an email to be given the opportunity to be present for the liner inspection before this project is completed.
- A final closure report documenting the remedial actions and a Final C-141 will be provided to the NMOCD District II Artesia Office.

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

Respectfully submitted,

TALON/LPE



Chris Jones
Project Manager



David J. Adkins
District Manager

Attachments:

- Appendix I Site Map, Karst Map, TOPO Map & Location Map
- Appendix II Groundwater Data, Soil Survey & FEMA Flood Zone
- Appendix III Initial C-141's
- Appendix IV Laboratory Data



APPENDIX I

SITE MAP

KARST MAP

TOPO MAP

LOCATION MAP

Shugart 25 Fed Com #1
Devon Energy Production Company
Eddy County, NM
API 30-015-31454
Karst Map

Legend

	High
	Low
	Medium



Google Earth
2020 Google
Image Landsat / Copernicus

7 mi

Shugart 25 Fed Com #1

Devon Energy Production Company
Eddy County, NM
API 30-015-31454
TOPO Map

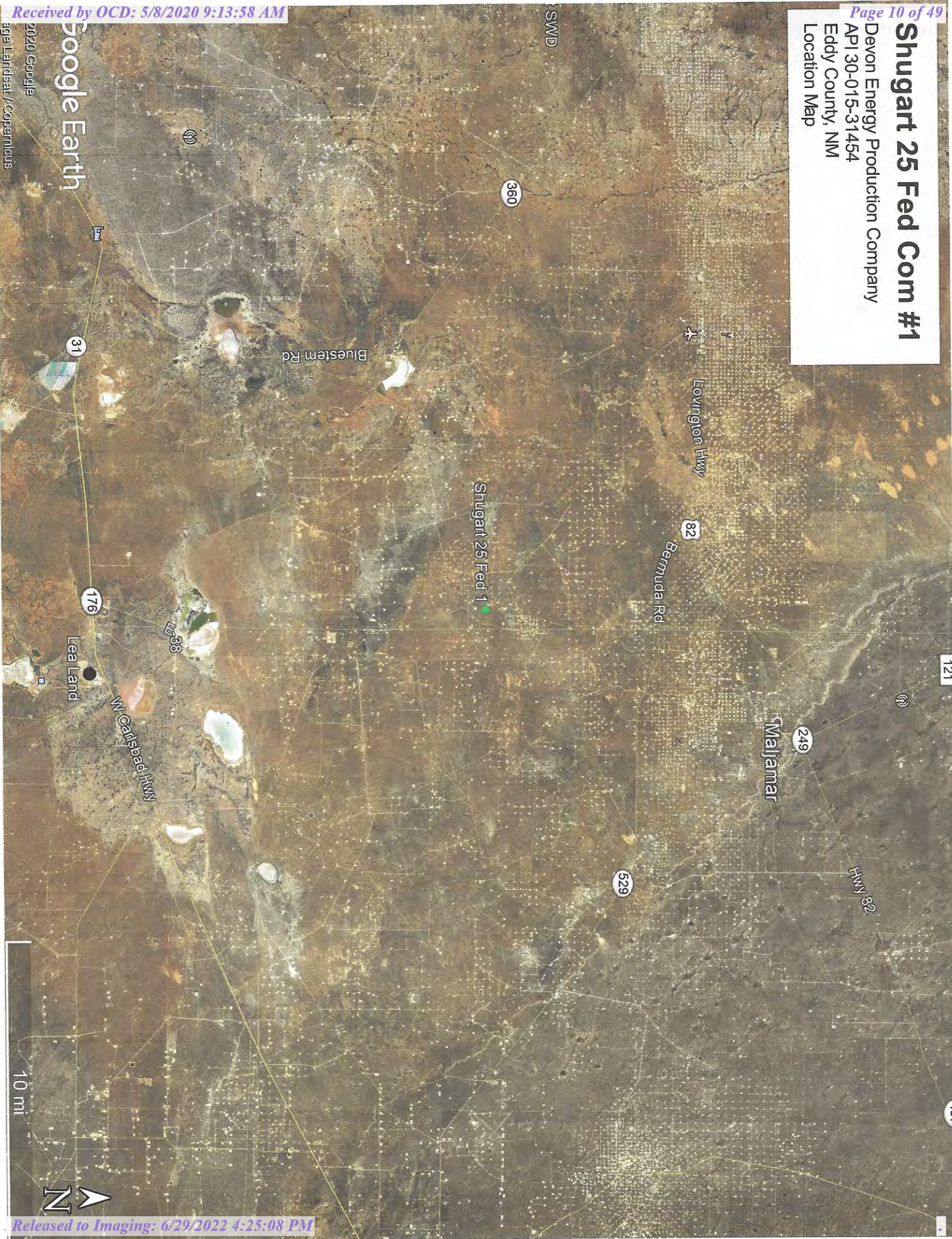


Shugart 25 Fed Com #1

Devon Energy Production Company
API 30-015-31454
Eddy County, NM
Location Map

Received by OCD: 5/8/2020 9:13:58 AM

Google Earth
2020 Google
Image Landsat / Copernicus





APPENDIX II

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD ZONE



New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

(R=POD has been replaced,
O=orphaned.

C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Q Sec	Tws	Rng	X	Y	Distance	Depth	Well	Depth	Water	Column
CP 00849 POD1	O	CP	LE	3	1	3	35	18S	31E	608012	3618757*	2722	300				
CP 00672		CP	LE		4	4	07	18S	32E	612475	3624947*	5040	524		430	94	
CP 00672 CLW475398		CP	LE		4	4	07	18S	32E	612475	3624947*	5040	540		460	80	
CP 00814 POD1		CP	LE		2	2	08	18S	32E	614074	3626168*	6920	480				
CP 00563 POD1		CP	LE	1	1	2	19	19S	32E	612118	3613376*	7402	300				
CP 01656 POD2		CP	LE	3	4	3	17	19S	32E	613364	3613648	7586	70				
CP 01656 POD1		CP	LE	3	4	3	17	19S	32E	613368	3613646	7590	70				
CP 00829 POD1		CP	LE		2	4	16	19S	31E	606165	3614009*	7592	120				
CP 01656 POD3		CP	LE	3	4	3	17	19S	32E	613374	3613633	7604	30				
CP 00640 POD1		CP	LE		2	2	19	19S	32E	612621	3613280*	7645	260		102	158	
CP 00677	CP	LE		1	1	26	18S	32E	617750	3621373*	7695	700					
CP 01554 POD1	CP	LE		2	2	1	22	19S	31E	607166	3613354	7725	400				
CP 01554 POD2	CP	LE		2	2	1	22	19S	31E	607165	3613322	7755	400				

Average Depth to Water: 330 feet

Minimum Depth: 102 feet

Maximum Depth: 460 feet

Record 13

Count:

UTMNAD83 Radius Search (in meters):

Easting (X): 610104.484

Northing (Y): 3620499.205

Radius: 8000

*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.

1/23/20 11:07 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

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: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
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
Natural 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
Salinity, maximum in profile: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: Deep Sand (R042XC005NM)
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
Natural 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 in profile: 40 percent
Salinity, maximum in profile: Very slightly saline to slightly saline
(2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: Loamy Sand (R042XC003NM)
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 15, Sep 15, 2019



National Flood Hazard Layer FIRMette



43°15.54'N



Legend

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

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

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with draining 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	NO SCREEN Effective LOMRs Area of Minimal Flood Hazard Zone X Area of Undetermined Flood Hazard Zone X Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
-------------	--

GENERAL STRUCTURES	20.2 17.5 Base Flood Elevation (BFE) Limit of Study Jurisdiction Boundary Coastal Transact Baseline Profile Baseline Hydrographic Feature
--------------------	--

OTHER FEATURES	Digital Data Available No Digital Data Available Unmapped
----------------	---

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

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/23/2020 at 1:14:55 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 undemonstrated areas cannot be used for regulatory purposes.



APPENDIX III

INITIAL C-141's

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, 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 March 17, 1999

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

30-015- 31454

Release Notification and Corrective Action

nmlb1204749715

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company Devon Energy 6/37	Contact Roger Hernandez
Address P. O. Box 250 Artesia, NM 88211	Telephone No. 575-748-5238
Facility Name Shugart 25 Fed #1	Facility Type Oil Well

Surface Owner	Mineral Owner	Lease No.
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LOCATION OF RELEASE

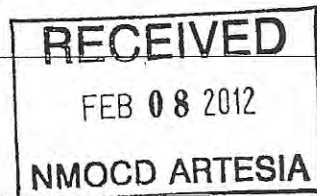
Unit Letter	Section 25	Township T18S	Range 31E	Feet from the 1980	North/South Line South	Feet from the 1980	East/West Line West	County Eddy
-------------	---------------	------------------	--------------	-----------------------	---------------------------	-----------------------	------------------------	----------------

NATURE OF RELEASE

Type of Release 35 oil & 20 PW	Volume of Release 55bbls	Volume Recovered 55bbls
Source of Release Tank Overflow	Date and Hour of Occurrence 2/2/12, 8:19 AM	Date and Hour of Discovery 2/2/12, 8:19AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Justin Frye, BLM - Eddy County & Mike Bratcher, OCD	
By Whom?	Date and Hour 2/3/12, 8:05 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A



Describe Cause of Problem and Remedial Action Taken.*

Upon arrival at the Shugart 25-1, the lease operator discovered a tank running over resulting in a 55 bbls spill that was kept within the containment, recovering 35 bbls of Oil and 20 bbls of water. Vacuum truck was contacted for clean up.

Describe Area Affected and Cleanup Action Taken.*

25x70, All Fluid was contained inside steel line containment.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC D 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 NMOC D 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, NMOC D 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: Gracie Bustamante		OIL CONSERVATION DIVISION	
Printed Name: Gracie Bustamante		Approved by District Supervisor <i>Mike Bratcher</i>	
Title: Contract Field Tech		Approval Date: FEB 16 2012	Expiration Date: N/A
Date: 2/2/12 Phone: (575) 746-5559		Conditions of Approval: N/A Final	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

2RP-1031

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

HOBBS OCD State of New Mexico
Energy Minerals and Natural Resources

AUG 15 2014 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	Contact Rudy Zuniga
Address PO Box 250 Artesia, NM 88211	Telephone No. 575-390-5435
Facility Name Shugart 25 Federal Com 1	Facility Type Gas

Surface Owner: Federal	Mineral Owner	API No. 30-015-31454
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LOCATION OF RELEASE

Unit Letter K	Section 25	Township 18S	Range 31E	Feet from the 1980	North/South Line SOUTH	Feet from the 1980	East/West Line WEST	County EDDY
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Latitude: _____ Longitude: _____

NATURE OF RELEASE

Type of Release Ball valve to load line left open	Volume of Release: 7 bbls	Volume Recovered: 0
Source of Release: Produced Water	Date and Hour of Occurrence 08/08/14 3:30 AM	Date and Hour of Discovery 08/08/14 3:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Rudy Zuniga-Foreman/Hubert Perry-Night Foreman/Randy Gladden-Assistant Foreman/Amancio Cruz-EHS/Roy White-Senior Production Foreman/Mike Bratcher-OCD/Jeff Robertson-BLM	
By Whom? Freddy Ramirez/Jason Anderson - Night lease operators	Date and Hour: 08/08/14 3:30 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

On August 8, 2014 at the Shugart 25 Federal #1, a leak occurred on a 3" ball valve on poly transfer line causing an estimated 7 bbls of produced water to be released outside the facility. There was no produced water recovered. Banta was called to repair the poly line.

Describe Area Affected and Cleanup Action Taken.*

The area affected outside the facility was 7 feet wide by 12 feet long. Diversified was contacted to perform the site assessment and soil sampling activities.

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: Shammy Ingram	OIL CONSERVATION DIVISION	
Printed Name: Shammy Ingram	Approved By Environmental Specialist:	
Title: Field Admin Support	Approval Date: 8-15-14	Expiration Date: 10-17-14
E-mail Address: Shammy.Ingram@dvn.com	Conditions of Approval: Site sample required. Reliant & ranch area on per NMOCD guidelines. Submit final C-141 by 10-17-14	Attached <input type="checkbox"/> 1RP-3245
Date: August 15, 2014 Phone: 575-748-0174	08/15/14 6137 N701422 75130 P 701422	

* Attach Additional Sheets If Necessary

AUG 15 2014

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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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

SEP 08 2014
Submit to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

NAB1425241401

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy	Contact Rudy Zuniga
Address PO Box 250 Artesia, NM 88211	Telephone No. 575-390-5435
Facility Name Shugart 25 Federal Com 1	Facility Type Gas
Surface Owner: Federal	Mineral Owner
API No. 30-015-31454	

LOCATION OF RELEASE

Unit Letter K	Section 25	Township 18S	Range 31E	Feet from the 1980	North/South Line SOUTH	Feet from the 1980	East/West Line WEST	County EDDY
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Latitude: _____ Longitude: _____

NATURE OF RELEASE

Type of Release Ball valve to load line left open	Volume of Release: 7 bbls	Volume Recovered: 0
Source of Release: Produced Water	Date and Hour of Occurrence 08/08/14 3:30 AM	Date and Hour of Discovery 08/08/14 3:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Rudy Zuniga-Foreman/Hubert Perry-Night Foreman/Randy Gladden-Assistant Foreman/Amancio Cruz-EHS/Roy White-Senior Production Foreman/Mike Bratcher-OCD/Jeff Robertson-BLM	
By Whom? Freddy Ramirez/Jason Anderson - Night lease operators	Date and Hour: 08/08/14 3:30 AM	
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Describe Area Affected and Cleanup Action Taken.*

The area affected outside the facility was 7 feet wide by 12 feet long. Diversified was contacted to perform the site assessment and soil sampling activities.

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>Shammy Ingram</i>	OIL CONSERVATION DIVISION	
Printed Name: Shammy Ingram	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Field Admin Support	Approval Date: <i>9/9/14</i>	Expiration Date: <i>NA</i>
E-mail Address: Shammy.Ingram@dmv.com	Conditions of Approval: Remediation per OCD Rule & Guidelines.	
Date: August 15, 2014 Phone: 575-748-0174	Attached <input type="checkbox"/>	

SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: *10/9/14*

2BP-2474

* 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	NAB1914957336
District RP	2RP-5454
Facility ID	
Application ID	pAB1914956037

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Amanda T. Davis	Contact Telephone 575-748-0176
Contact email amanda.davis@dvn.com	Incident # (assigned by OCD) NAB1914957336
Contact mailing address 6488 Seven Rivers HWY	

Location of Release Source

Latitude 32.7167778 Longitude -103.8251343
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Shugart 25 Fed Com #001	Site Type Gas
Date Release Discovered 5/13/2019	API# (if applicable) 30-015-31454

Unit Letter	Section	Township	Range	County
K	25	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) 106.6	Volume Recovered (bbls) 105
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Water transfer pump was leaking from lovejoy and caused it to leak from multiple spots on the pump. Affected area inside containment 30'x60'x5". Affected area outside of containment 25'x10'x3/4". All fluid stayed on the pad.

Form C-141

State of New Mexico

Oil Conservation Division

Page 2

Incident ID	NAB1914957336
District RP	2RP-5454
Facility ID	
Application ID	pAB1914956037

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? This is considered a major spill because it is over 25 BBLs.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Email notification sent to Debhorah Mckinne, Crystal Weaver, Robert Hamlet, Victoria Venegas, Mike Bratcher and Jim Griswold from Wesley Mathews on 5/13/19.	

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>Kendra DeHoyos</u> Signature: <u>Kendra DeHoyos</u> email: <u>kendra.dehoyos@dvn.com</u>	Title: <u>EHS Associate</u> Date: <u>5/21/2019</u> Telephone: <u>575-748-3371</u>
<u>OCD Only</u> Received by: <u>Amalia Bustamante</u> Date: <u>5/29/2019</u>	

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Amanda T. Davis	Contact Telephone 575-748-0176
Contact email amanda.davis@dvn.com	Incident # (assigned by OCD)
Contact mailing address 6488 Seven Rivers HWY	

Location of Release Source

Latitude 32.71680 Longitude -103.82510
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Shugart 25 Federal #1	Site Type Oil
Date Release Discovered 11/27/2019	API# (if applicable)

Unit Letter	Section	Township	Range	County
K	25	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) 400	Volume Recovered (bbls) 400
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Water tank over flowed due to transfer pump failure. Fluid stayed within containment.

Form C-141

State of New Mexico
Oil Conservation Division

Page 2

Incident ID	
District RP	
Facility ID	
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? This is considered a major release because it is over 25 BBLS.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Email notification sent to blm_nm_cfo_spill@blm.gov, Robert Hamlet, Jim Griswold, Victoria Venegas and Mike Bratcher from Amanda Davis on 11/27/2019.	

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>Kendra DeHoyos</u> Signature: <u>Kendra DeHoyos</u> email: <u>kendra.dehoyos@dvn.com</u>	Title: <u>EHS Associate</u> Date: <u>12/4/2019</u> Telephone: <u>575-748-3371</u>
<u>OCD Only</u> Received by: _____ Date: _____	



APPENDIX IV

LABORATORY DATA



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

March 05, 2020

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SHUGART 25 FED 1

Enclosed are the results of analyses for samples received by the laboratory on 03/02/20 14:10.

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

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: W. COMP (H000660-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/03/2020	ND	1.89	94.6	2.00	3.00	
Toluene*	<0.050	0.050	03/03/2020	ND	1.90	94.9	2.00	2.81	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.91	95.4	2.00	2.84	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.52	92.0	6.00	2.81	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 97.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14900	16.0	03/03/2020	ND	432	108	400	0.00	QM-07

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	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	314	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	62.1	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 86.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: N. COMP (H000660-02)

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	03/03/2020	ND	1.89	94.6	2.00	3.00	
Toluene*	<0.050	0.050	03/03/2020	ND	1.90	94.9	2.00	2.81	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.91	95.4	2.00	2.84	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.52	92.0	6.00	2.81	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	42.9	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 88.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.8 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: E. COMP (H000660-03)

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	03/03/2020	ND	1.89	94.6	2.00	3.00	
Toluene*	<0.050	0.050	03/03/2020	ND	1.90	94.9	2.00	2.81	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.91	95.4	2.00	2.84	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.52	92.0	6.00	2.81	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6530	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	401	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	157	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 87.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 103 % 42.2-156

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S. COMP (H000660-04)

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	03/03/2020	ND	1.89	94.6	2.00	3.00	
Toluene*	<0.050	0.050	03/03/2020	ND	1.90	94.9	2.00	2.81	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.91	95.4	2.00	2.84	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.52	92.0	6.00	2.81	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.4 % 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	47600	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 87.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.1 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 1 0-1' (H000660-05)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9730	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 91.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.4 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 1 2' (H000660-06)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEx	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.8 % 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	432	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 85.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 1 3' (H000660-07)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 98.2 % 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	192	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 92.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 1 4' (H000660-08)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 91.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 2 0-1' (H000660-09)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/03/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/03/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/03/2020	ND					

Surrogate: 1-Chlorooctane 87.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 2 2' R (H000660-10)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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	368	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 90.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.4 % 42.2-156

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Caley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 3 0-1' (H000660-11)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 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	7330	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 87.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 3 2' (H000660-12)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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	160	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 89.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 3 3' (H000660-13)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.8 % 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	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 84.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 3 4' (H000660-14)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.8 % 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	32.0	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 83.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 4 0-1' (H000660-15)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	181	90.6	200	0.385	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	192	96.0	200	1.25	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 84.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 4 2' R (H000660-16)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.2 % 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	112	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	171	85.7	200	3.17	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	182	90.8	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 74.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 5 0-1' (H000660-17)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 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	2000	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	177	88.5	200	0.342	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	166	82.8	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 82.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 5 2' (H000660-18)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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	64.0	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	177	88.5	200	0.342	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	166	82.8	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.0 % 42.2-156

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Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 03/02/2020
Reported: 03/05/2020
Project Name: SHUGART 25 FED 1
Project Number: 700794.304.01
Project Location: DEVON - LEA CO NM

Sampling Date: 02/26/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 5 3' (H000660-19)

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	03/03/2020	ND	1.92	95.9	2.00	1.68	
Toluene*	<0.050	0.050	03/03/2020	ND	1.92	96.1	2.00	1.45	
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	1.95	97.7	2.00	1.78	
Total Xylenes*	<0.150	0.150	03/03/2020	ND	5.63	93.8	6.00	2.14	
Total BTEX	<0.300	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/03/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/04/2020	ND	177	88.5	200	0.342	
DRO >C10-C28*	<10.0	10.0	03/04/2020	ND	166	82.8	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	03/04/2020	ND					

Surrogate: 1-Chlorooctane 87.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 2003045

Date Reported: 3/5/2020

CLIENT: Talon Artesia**Client Sample ID:** S-8 0'**Project:** Devon State Jr 1**Collection Date:** 2/28/2020 10:10:00 AM**Lab ID:** 2003045-008**Matrix:** SOIL**Received Date:** 3/3/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 12:39:19 PM	50837
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	29000	950		mg/Kg	100	3/3/2020 2:19:33 PM	50823
Motor Oil Range Organics (MRO)	15000	4800		mg/Kg	100	3/3/2020 2:19:33 PM	50823
Surr: DNOP	0	55.1-146	S	%Rec	100	3/3/2020 2:19:33 PM	50823
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	460	20		mg/Kg	5	3/3/2020 10:58:47 AM	G66977
Surr: BFB	621	66.6-105	S	%Rec	5	3/3/2020 10:58:47 AM	G66977
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.11	0.099		mg/Kg	5	3/3/2020 10:58:47 AM	B66977
Toluene	1.1	0.20		mg/Kg	5	3/3/2020 10:58:47 AM	B66977
Ethylbenzene	1.8	0.20		mg/Kg	5	3/3/2020 10:58:47 AM	B66977
Xylenes, Total	12	0.40		mg/Kg	5	3/3/2020 10:58:47 AM	B66977
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	5	3/3/2020 10:58:47 AM	B66977

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

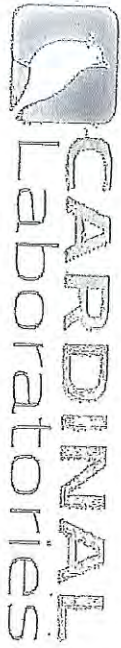
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting 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 8 of 20

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Released to Imaging: 6/29/2022 4:25:08 PM



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: TALON CPE

Project Manager: CHRIS JONES

Address: 408 W. TEXAS AVE

City: ALBUQUERQUE

State: NM Zip: 88210

Phone #: 505-631-6977

Fax #:

Project #: 700794-304.01

Project Owner: DEUBS

Project Location: LEA COUNTY

Date: FEB 1

Sample Name: MICHAEL COLLIER

FOR LAB USE ONLY

Matrix: GROUNDWATER

Preserv: ICE/COOL

Sampling: 2:20-20

ANALYSIS REQUEST

P.O. #: 700794-304.01

Company: TALON CPE

Attn: C. JONES

Address:

City:

State: NM Zip:

Phone #:

Fax #:

Lab I.D.

Sample I.D.

H0060

S-3 6-1

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE/COOL

OTHER:

DATE

TIME

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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 8160

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 8160
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	6/29/2022