



Pima Environmental Services, LLC  
1601 N. Turner Ste 500  
Hobbs, NM 88240  
575-964-7740

February 25<sup>th</sup>, 2020

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

Bureau of Land Management  
Mr. Jim Amos  
620 East Green Street  
Carlsbad, NM 88220

**Re: Site Assessment and Closure Report  
W Shugart 19 Fed #2  
API No. 30-015-30780  
GPS: Latitude 32.722393 Longitude -103.829475  
UL "C", Sec. 19, T18S, R31E  
Eddy County, NM  
NMOCD Ref. No. NJMW1327756448 (2RP-1971)**

Dear Mr. Bratcher and Mr. Amos,

Pima Environmental Services, LLC (Pima) has been contracted by Devon Energy Production Company (Devon) to perform a spill assessment and has prepared this Closure Report for a produced water release that occurred at the W Shugart 19 Fed #2 (W Shugart). The initial C-141 was submitted on September 29<sup>th</sup>, 2013 (Appendix C). This incident was assigned 2RP-1971, Incident ID NJMW1327756448, by the New Mexico Oil Conservation Division (NMOCD).

#### **Site Characterization**

The W Shugart is located approximately eleven (11) miles southeast of Loco Hills, NM. This spill site is in Unit C, Section 19, Township 18S, Range 31E, Latitude 32.722393, Longitude -103.829475, Eddy County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation- Piedmont alluvial deposits (Holocene to lower Pleistocene)-includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits (QP). The soil in this area is made up of Simona and Wink fine sandy loams, 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well-drained. There is a low potential for karst geology to be present in the area of the Capella (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 430 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is greater than 250 feet BGS. The closest waterway is a playa located approximately 7.9 miles to the southwest of this location. See Appendix A for referenced Surface Water Map.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix B)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
250'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
If the release occurred within any of the following areas, the responsible party would treat the release as if the groundwater was less than 50 feet per Rule 19.15.29					
Water Issues				Yes	No
Within <b>300</b> feet of any continuously flowing watercourse or any other significant watercourse					x
Within <b>200</b> feet of any lakebed, sinkhole or playa lake (measures from the ordinary high-water mark)					x
Within <b>300</b> feet from an occupied permanent residence, school, hospital, institution or church					x
Within <b>500</b> feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock water purposes					x
Within <b>1000</b> feet of any freshwater well or spring					x
Within incorporated municipal boundaries or within a defined municipal freshwater well field					x
Within <b>300</b> feet of a wetlands					x
Within the area overlying a subsurface mine					x
Within an unstable area (Karst)					x
Within a 100-year floodplain					x

Reference Figure 2 for a TOPO Map.

#### Release Information

2RP-1971: On September 29<sup>th</sup>, 2013, the heater treater developed a hole in the bottom of the vessel causing fluid to release onto the pad surface. The lease operator shut the well down so repairs could be made. A vac truck was called out to recover standing fluid, of which approximately 2 barrels of produced water were recovered.

#### Site Assessment and Soil Sampling Results

On February 1<sup>st</sup>, 2021 Pima Environmental conducted a site assessment and obtained soil samples. The laboratory results of this sampling event can be found in the following data table.

2-1-21 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
Sample Date 2-1-21		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-1	0-6"	ND	ND	ND	ND	ND	ND	ND
S-2	0-6"	ND	ND	ND	ND	ND	ND	ND
S-3	0-6"	ND	ND	ND	ND	ND	ND	ND
S-4	0-6"	ND	ND	ND	ND	ND	ND	ND
BG-1	0-6"	ND	ND	ND	ND	ND	ND	ND
BG-2	0-6"	ND	ND	ND	ND	ND	ND	ND
BG-3	0-6"	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Complete Laboratory results can be found attached in Appendix D.

### **Remediation Activities**

The sample results were below NMOCD Closure Criteria 19.15.29 NMAC. Based on these findings, no remediation activities were needed at this location.

### **Closure Request**

After careful review, Pima requests that this incident, NJMW1327756448 (2RP-1971), be closed. Devon has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Tom Bynum at 575-964-7740 or tom@pimaoil.com.

Respectfully,

*Tom Bynum*

Tom Bynum  
Environmental Project Manager  
Pima Environmental Services, LLC

### **Attachments**

Figures:

- 1- Location Map
- 2- TOPO Map
- 3- Karst Map
- 4- Site Map

Appendices:

- Appendix A- Referenced Water Surveys
- Appendix B- Soil Survey and Geological Data
- Appendix C- C-141's
- Appendix D- Photographic Documentation
- Appendix E- Laboratory Reports



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**Figures:**

1-Location Map

2-TOPO Map

3-Karst Map

4-Site Map

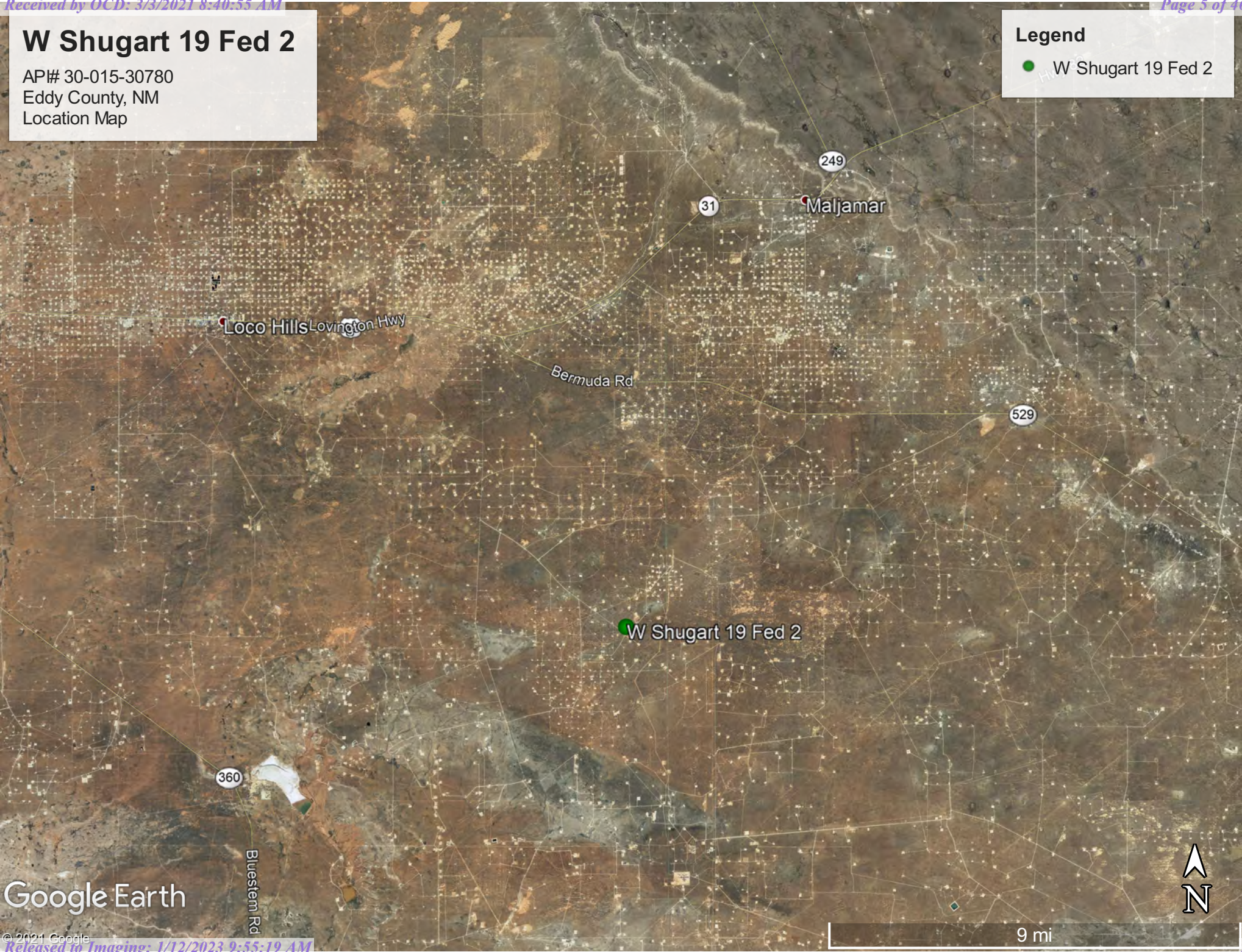


# W Shugart 19 Fed 2

API# 30-015-30780  
Eddy County, NM  
Location Map

## Legend

● W Shugart 19 Fed 2



Google Earth

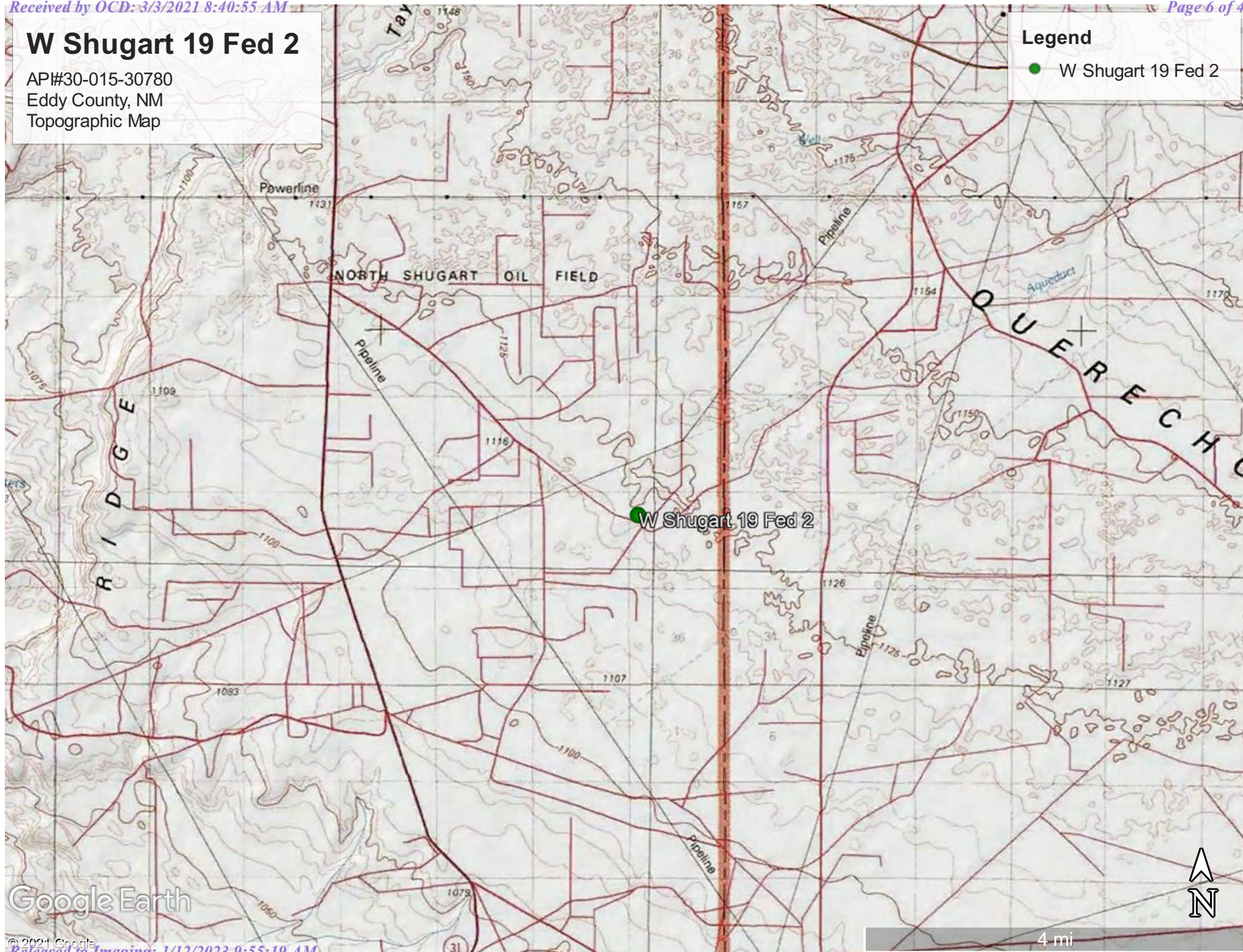


# W Shugart 19 Fed 2

API#30-015-30780  
Eddy County, NM  
Topographic Map

## Legend

● W Shugart 19 Fed 2



Google Earth



## W Shugart 19 Fed 2

API#30-015-30780  
Eddy County, NM  
Karst Map

- Legend**
- High Karst
  - Low Karst
  - Medium Karst

W Shugart 19 Fed 2

Google Earth








4 mi



## W Shugart 19 Fed 2

API#30-015-30780  
Eddy County, NM  
Site Map

### Legend

-  32.722035, -103.829510
-  Backgrounds
-  Samples
-  Spill Area
-  W Shugart 19 Fed 2



Google Earth





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**Appendix A**

Water Surveys:

OSE

USGS

Surface Water Map





# 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	County	Q Q Q						X	Y	Distance	DepthWell	DepthWater	Water Column
		Sub-basin		64	16	4	Sec	Tws	Rng						
<a href="#">CP 00849 POD1</a>		CP	LE	3	1	3	35	18S	31E	608012	3618757* 	2862	300		
<a href="#">CP 00672</a>		CP	LE		4	4	07	18S	32E	612475	3624947* 	4768	524	430	94
<a href="#">CP 00672 CLW475398</a>	O	CP	LE		4	4	07	18S	32E	612475	3624947* 	4768	540	460	80

Average Depth to Water: **445 feet**

Minimum Depth: **430 feet**

Maximum Depth: **460 feet**

**Record Count:** 3

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 609687.94

**Northing (Y):** 3621077.5

**Radius:** 6000

\*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.

2/25/21 1:18 PM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER





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## National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

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- [Full News](#) 

Groundwater levels for the Nation

\* IMPORTANT: [Next Generation Station Page](#)

### Search Results -- 1 sites found

site\_no list =

- 324159103503801

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 324159103503801 18S.31E.35.31324

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°42'07.3", Longitude 103°50'50.1" NAD83

Land-surface elevation 3,630 feet above NAVD88

The depth of the well is 300 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

#### Output formats

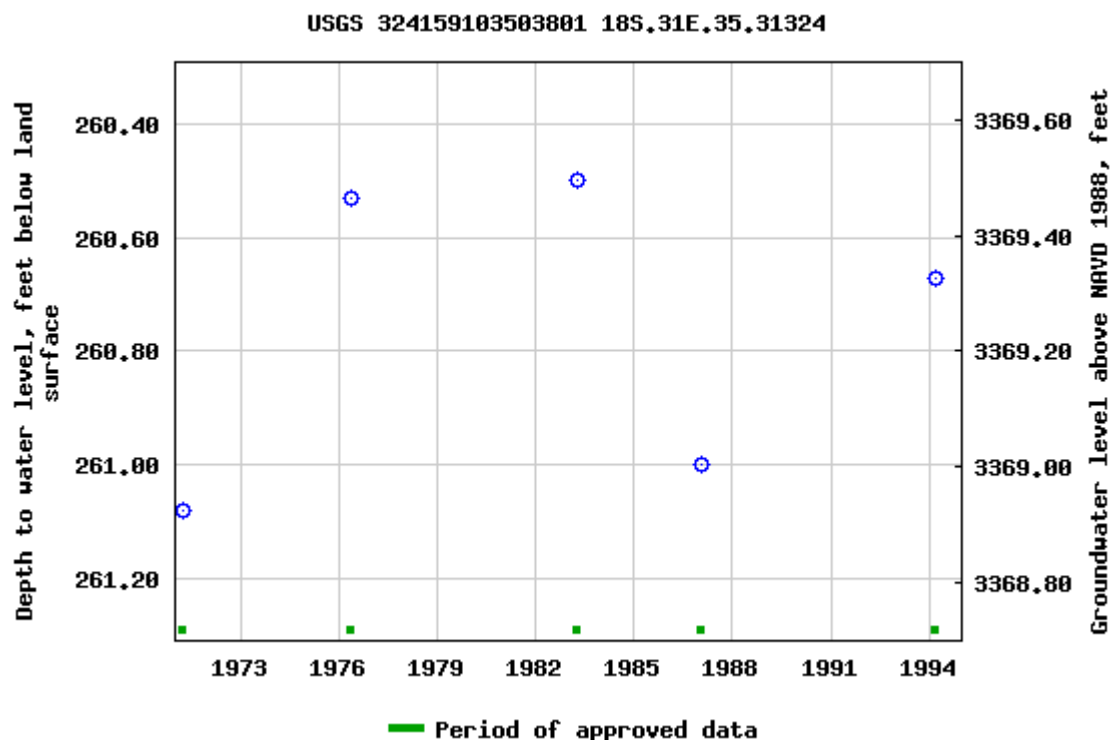
[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)





Breaks in the plot represent a gap of at least one year between field measurements.

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-02-25 15:20:07 EST

0.74 0.62 nadww01





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USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

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Groundwater levels for the Nation

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### Search Results -- 1 sites found

site\_no list =

- 324356103471601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 324356103471601 18S.32E.20.14411

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°43'56", Longitude 103°47'16" NAD27

Land-surface elevation 3,746 feet above NAVD88

The depth of the well is 270 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

#### Output formats

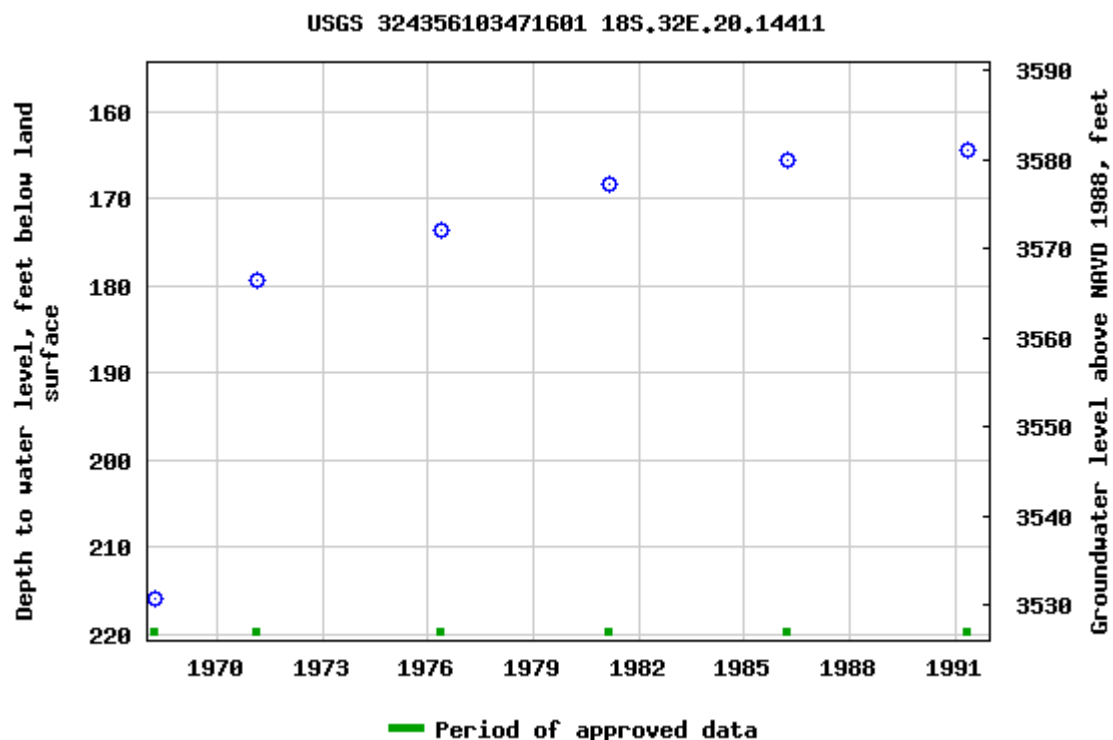
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Breaks in the plot represent a gap of at least one year between field measurements.

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

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## National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

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Groundwater levels for the Nation

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### Search Results -- 1 sites found

site\_no list =

- 324502103495801

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 324502103495801 18S.31E.14.22133

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°45'02", Longitude 103°49'58" NAD27

Land-surface elevation 3,736 feet above NAVD88

The depth of the well is 400 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

#### Output formats

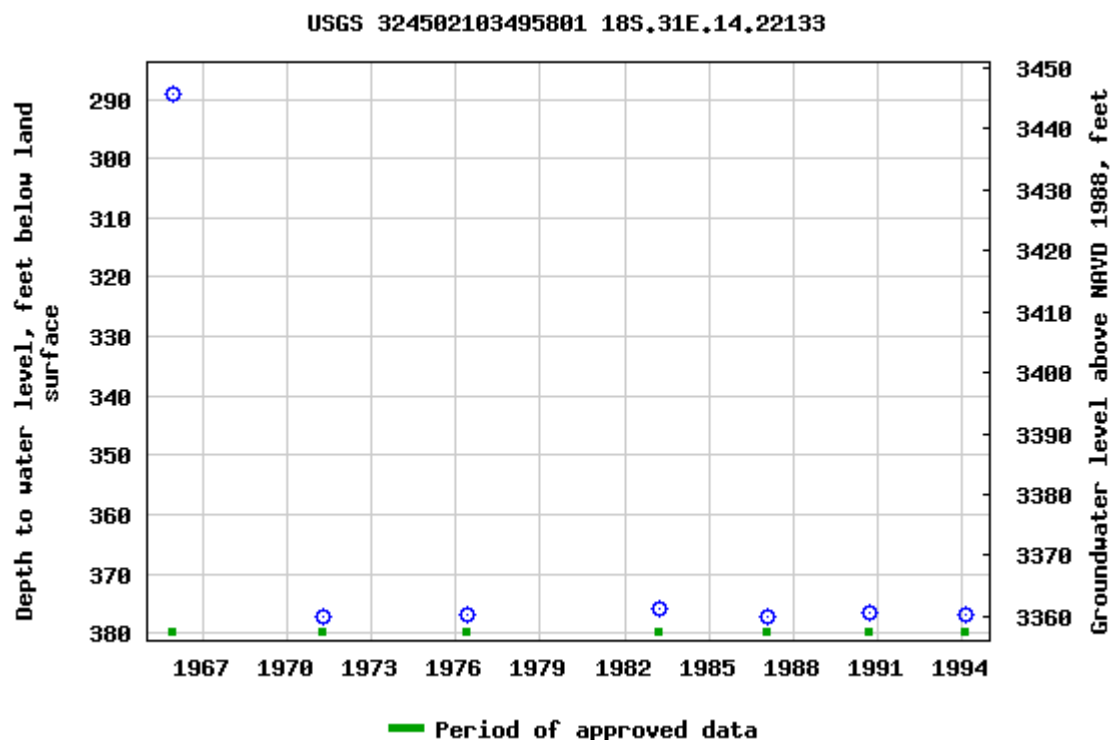
[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)





Breaks in the plot represent a gap of at least one year between field measurements.

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-02-25 15:21:11 EST

0.66 0.58 nadww02






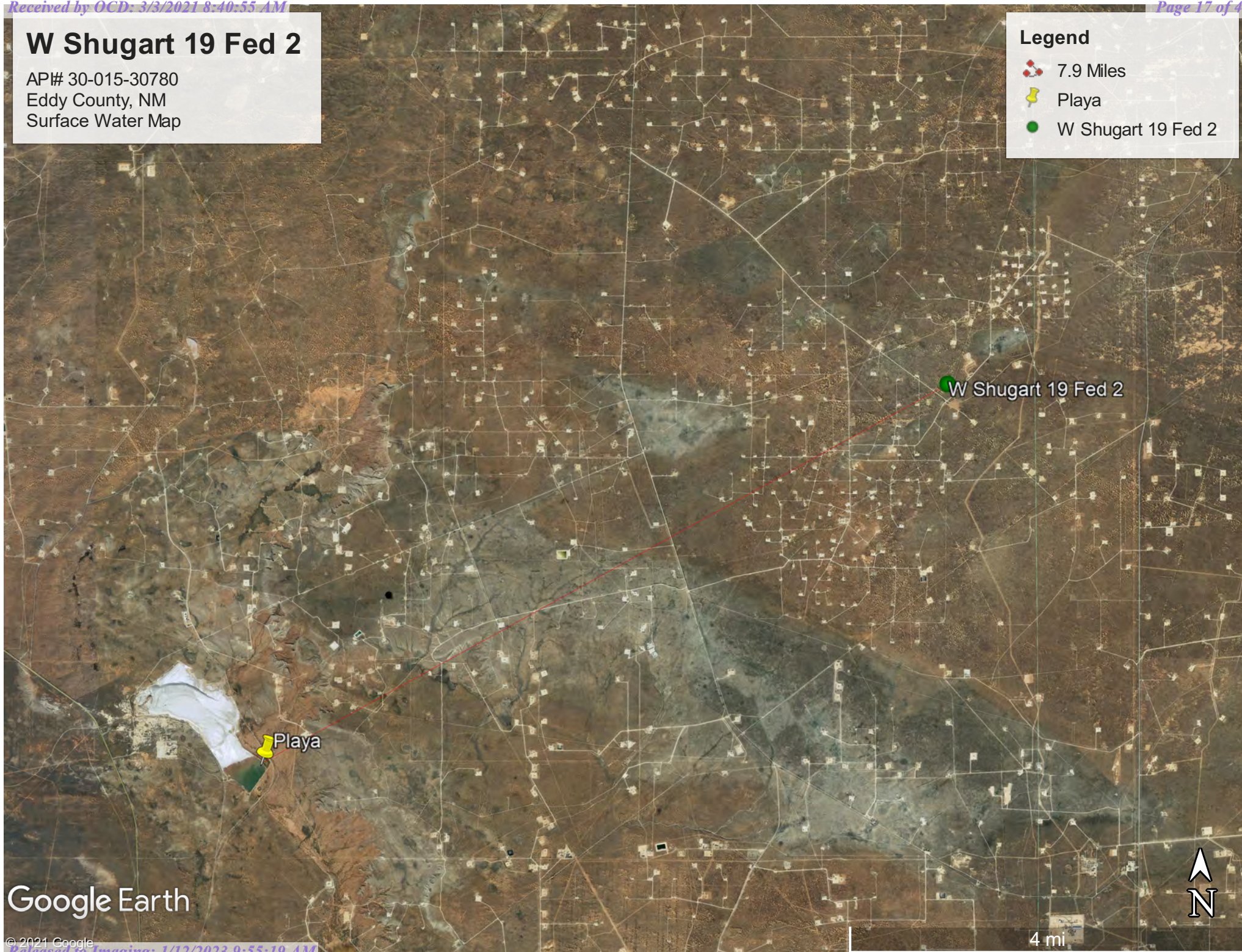


## W Shugart 19 Fed 2

AP# 30-015-30780  
Eddy County, NM  
Surface Water Map

### Legend

-  7.9 Miles
-  Playa
-  W Shugart 19 Fed 2



Google Earth





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**Appendix B**

Soil Survey & Geological Data

FEMA Flood Map

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

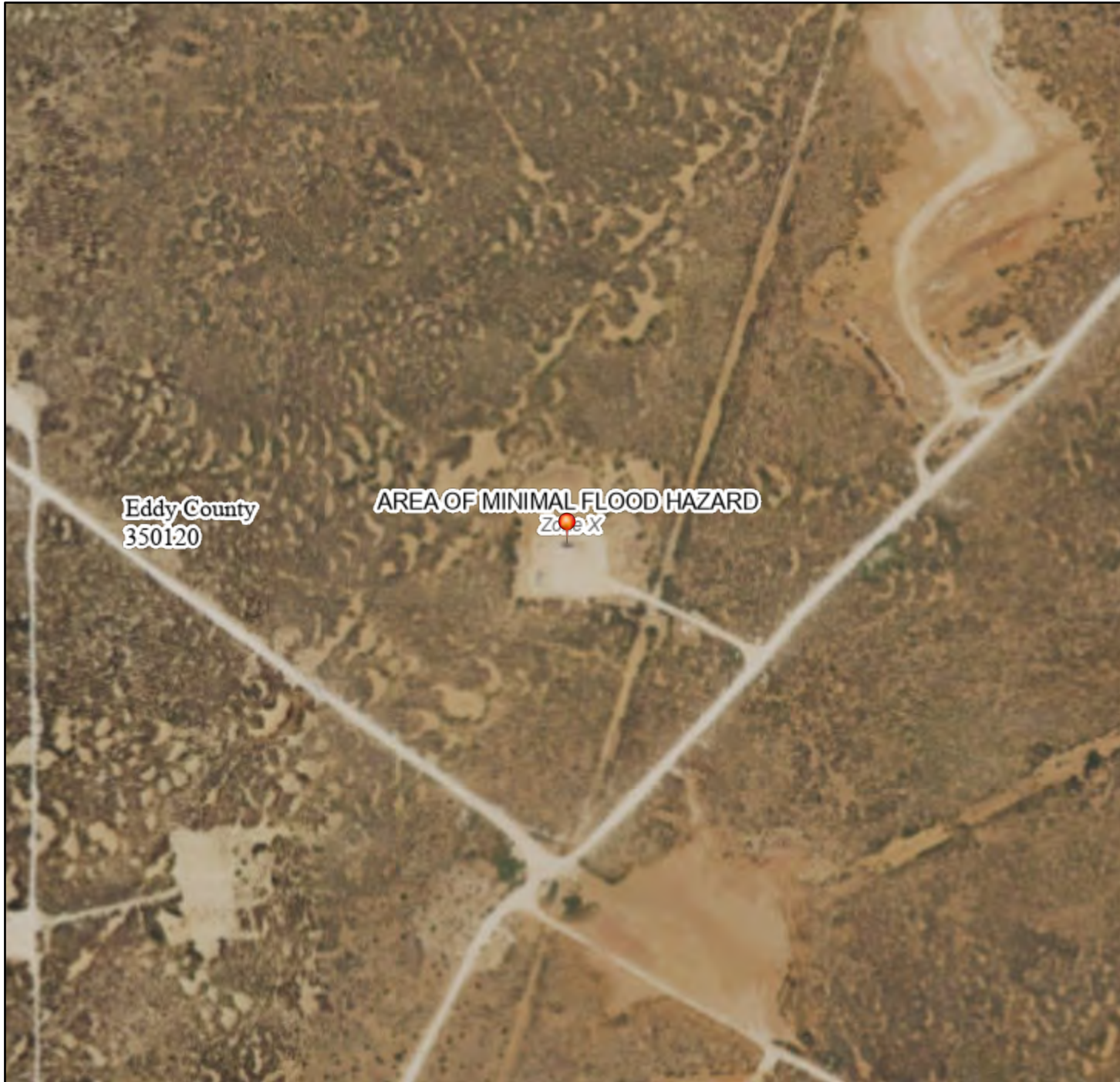
## Data Source Information

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

# National Flood Hazard Layer FIRMMette



103°50'5"W 32°43'36"N



## Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/25/2021 at 5:18 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.



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## **Appendix C**

C-141's:

Initial

Final



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 <i>60137</i>	Contact Merle Lewis
Address P.O. Box 250, Artesia, NM 88211	Telephone No. 575-748-6304
Facility Name West Shugart 19 Federal 2	Facility Type Oil Well

Surface Owner	Mineral Owner	API No. 30-015-30780
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#### LOCATION OF RELEASE

Unit Letter C	Section 19	Township 18S	Range 31E	Feet from the 510	North/South Line SOUTH	Feet from the 2310	East/West Line WEST	County EDDY
------------------	---------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	----------------

**Latitude** 32.722393 **Longitude** -103.829475

#### NATURE OF RELEASE

Type of Release Spill	Volume of Release 7 bbls	Volume Recovered 2
Source of Release Hole in heater treater vessel <i>* 9-29-13</i>	Date and Hour of Occurrence <i>10/29/13, 3:00 PM</i>	Date and Hour of Discovery <i>10/29/13, 3:00 PM</i>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeffery Robins/BLM, Mike Bratcher/OCD	
By Whom? Jaime Castillo, Assistant Foreman	Date and Hour 10/01/2013, BLM 2:27pm, OCD 2:31pm	
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.\*

*(Spoke w/Gracie via phone 10/4/13 to get a corrected date for the release, Sean Marie Leavins)*

**RECEIVED**

OCT 04 2013

**NMOCD ARTESIA**

Describe Cause of Problem and Remedial Action Taken.\*

At the Shugart 19-2, the heater treater developed a hole in the bottom of the vessel and leaked 7 bbls of produced water.

Describe Area Affected and Cleanup Action Taken.\*

At the Shugart 19-2, the heater treater developed a hole in the bottom of the vessel and leaked 7 bbls of produced water. Lease operator shut in production, and plans to repair or replace heater treater before putting back into operation. At this time it is still under investigation to see if repairs can be made or it must be replaced. 2 bbls of produced water was recovered.

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.

#### OIL CONSERVATION DIVISION

Signature: *Graciela C. Bustamante*

Printed Name: Graciela C. Bustamante

Title: Field Admin. Tech

E-mail Address: Gracie.Bustamante@dvn.com

Date: 10/02/2013

Phone: 575-746-5561

Approved by Environmental Specialist:  
Signed By *Mike Bratcher*

**OCT 04 2013**

Approval Date:

Expiration Date:

Conditions of Approval:  
Remediation per OCD Rule & Guidelines, &  
like approval by BLM. **SUBMIT REMEDIATION**

Attached ☐

\* Attach Additional Sheets If Necessary

PROPOSAL NO LATER THAN:

*November 4, 2013*

*2RP-1971*

Incident ID	NJMW1327756448
District RP	2RP-1971
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input 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	NJMW1327756448
District RP	2RP-1971
Facility ID	
Application ID	

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

Printed Name: Lupe Carrasco Title: EHS Professional  
Signature: Lupe Carrasco Date: 2/25/2021  
email: lupe.carrasco@dvni.com Telephone: 575-725-0787

**OCD Only**

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



Incident ID	NJMW1327756448
District RP	2RP-1971
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Lupe Carrasco Title: EHS Professional  
Signature: Lupe Carrasco Date: 2/25/2021  
email: lupe.carrasco@dvn.com Telephone: 575-725-0787

**OCD Only**

Received by: OCD Date: 03/03/2021

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

Closure Approved by: Ashley Maxwell Date: 01/12/2023  
Printed Name: Ashley Maxwell Title: Environmental Specialist



Pima Environmental Services

## **Appendix D**

Photographic Documentation











Pima Environmental Services

## **Appendix E**

Laboratory Reports





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)

February 05, 2021

Chris Jones

Pima Environmental Services LLC

1601 N. Turner Ste 500

Hobbs, NM 88240

TEL: (575) 631-6977

FAX:

RE: West Shugart 19 Fed 2

OrderNo.: 2102063

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/2/2021 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 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG1

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:20:00 PM

Lab ID: 2102063-001

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/3/2021 11:12:57 PM	57892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/3/2021 3:00:07 PM	57853
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/3/2021 3:00:07 PM	57853
Surr: DNOP	89.8	70-130		%Rec	1	2/3/2021 3:00:07 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/3/2021 8:14:59 PM	57850
Surr: BFB	107	75.3-105	S	%Rec	1	2/3/2021 8:14:59 PM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	2/3/2021 8:14:59 PM	57850
Toluene	ND	0.049		mg/Kg	1	2/3/2021 8:14:59 PM	57850
Ethylbenzene	ND	0.049		mg/Kg	1	2/3/2021 8:14:59 PM	57850
Xylenes, Total	ND	0.098		mg/Kg	1	2/3/2021 8:14:59 PM	57850
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	2/3/2021 8:14:59 PM	57850

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		

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## Analytical Report

Lab Order 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG2

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:25:00 PM

Lab ID: 2102063-002

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/3/2021 11:25:22 PM	57892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/3/2021 4:12:15 PM	57853
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/3/2021 4:12:15 PM	57853
Surr: DNOP	90.9	70-130		%Rec	1	2/3/2021 4:12:15 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/3/2021 9:26:11 PM	57850
Surr: BFB	102	75.3-105		%Rec	1	2/3/2021 9:26:11 PM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	2/3/2021 9:26:11 PM	57850
Toluene	ND	0.049		mg/Kg	1	2/3/2021 9:26:11 PM	57850
Ethylbenzene	ND	0.049		mg/Kg	1	2/3/2021 9:26:11 PM	57850
Xylenes, Total	ND	0.099		mg/Kg	1	2/3/2021 9:26:11 PM	57850
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	1	2/3/2021 9:26:11 PM	57850

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		

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## Analytical Report

Lab Order 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG3

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:30:00 PM

Lab ID: 2102063-003

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/3/2021 11:37:47 PM	57892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/3/2021 4:36:18 PM	57853
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/3/2021 4:36:18 PM	57853
Surr: DNOP	90.4	70-130		%Rec	1	2/3/2021 4:36:18 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/3/2021 10:36:45 PM	57850
Surr: BFB	107	75.3-105	S	%Rec	1	2/3/2021 10:36:45 PM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	2/3/2021 10:36:45 PM	57850
Toluene	ND	0.050		mg/Kg	1	2/3/2021 10:36:45 PM	57850
Ethylbenzene	ND	0.050		mg/Kg	1	2/3/2021 10:36:45 PM	57850
Xylenes, Total	ND	0.10		mg/Kg	1	2/3/2021 10:36:45 PM	57850
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	2/3/2021 10:36:45 PM	57850

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		

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## Analytical Report

Lab Order 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:35:00 PM

Lab ID: 2102063-004

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	59		mg/Kg	20	2/4/2021 1:28:05 PM	57911
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/3/2021 5:00:23 PM	57853
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/3/2021 5:00:23 PM	57853
Surr: DNOP	92.1	70-130		%Rec	1	2/3/2021 5:00:23 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/3/2021 11:00:26 PM	57850
Surr: BFB	105	75.3-105		%Rec	1	2/3/2021 11:00:26 PM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	2/3/2021 11:00:26 PM	57850
Toluene	ND	0.049		mg/Kg	1	2/3/2021 11:00:26 PM	57850
Ethylbenzene	ND	0.049		mg/Kg	1	2/3/2021 11:00:26 PM	57850
Xylenes, Total	ND	0.099		mg/Kg	1	2/3/2021 11:00:26 PM	57850
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	2/3/2021 11:00:26 PM	57850

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		

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## Analytical Report

Lab Order 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:40:00 PM

Lab ID: 2102063-005

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/4/2021 1:40:29 PM	57911
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	2/3/2021 5:24:29 PM	57853
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/3/2021 5:24:29 PM	57853
Surr: DNOP	94.0	70-130		%Rec	1	2/3/2021 5:24:29 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/3/2021 11:24:07 PM	57850
Surr: BFB	104	75.3-105		%Rec	1	2/3/2021 11:24:07 PM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	2/3/2021 11:24:07 PM	57850
Toluene	ND	0.050		mg/Kg	1	2/3/2021 11:24:07 PM	57850
Ethylbenzene	ND	0.050		mg/Kg	1	2/3/2021 11:24:07 PM	57850
Xylenes, Total	ND	0.099		mg/Kg	1	2/3/2021 11:24:07 PM	57850
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	1	2/3/2021 11:24:07 PM	57850

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 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:45:00 PM

Lab ID: 2102063-006

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/4/2021 1:52:53 PM	57911
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/3/2021 5:48:31 PM	57853
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/3/2021 5:48:31 PM	57853
Surr: DNOP	93.0	70-130		%Rec	1	2/3/2021 5:48:31 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/3/2021 11:47:46 PM	57850
Surr: BFB	103	75.3-105		%Rec	1	2/3/2021 11:47:46 PM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	2/3/2021 11:47:46 PM	57850
Toluene	ND	0.049		mg/Kg	1	2/3/2021 11:47:46 PM	57850
Ethylbenzene	ND	0.049		mg/Kg	1	2/3/2021 11:47:46 PM	57850
Xylenes, Total	ND	0.099		mg/Kg	1	2/3/2021 11:47:46 PM	57850
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	2/3/2021 11:47:46 PM	57850

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		

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## Analytical Report

Lab Order 2102063

Date Reported: 2/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4

Project: West Shugart 19 Fed 2

Collection Date: 2/1/2021 12:50:00 PM

Lab ID: 2102063-007

Matrix: SOIL

Received Date: 2/2/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/4/2021 2:05:17 PM	57911
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/3/2021 6:12:31 PM	57853
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/3/2021 6:12:31 PM	57853
Surr: DNOP	93.1	70-130		%Rec	1	2/3/2021 6:12:31 PM	57853
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/4/2021 12:11:11 AM	57850
Surr: BFB	105	75.3-105	S	%Rec	1	2/4/2021 12:11:11 AM	57850
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	2/4/2021 12:11:11 AM	57850
Toluene	ND	0.049		mg/Kg	1	2/4/2021 12:11:11 AM	57850
Ethylbenzene	ND	0.049		mg/Kg	1	2/4/2021 12:11:11 AM	57850
Xylenes, Total	ND	0.098		mg/Kg	1	2/4/2021 12:11:11 AM	57850
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/4/2021 12:11:11 AM	57850

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		

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

WO#: 2102063

05-Feb-21

**Client:** Pima Environmental Services LLC**Project:** West Shugart 19 Fed 2

Sample ID: <b>MB-57892</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>	Batch ID: <b>57892</b>			RunNo: <b>75031</b>						
Prep Date: <b>2/3/2021</b>	Analysis Date: <b>2/3/2021</b>			SeqNo: <b>2649254</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-57892</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>57892</b>			RunNo: <b>75031</b>						
Prep Date: <b>2/3/2021</b>	Analysis Date: <b>2/3/2021</b>			SeqNo: <b>2649255</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	96.3	90	110			

Sample ID: <b>MB-57911</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>	Batch ID: <b>57911</b>			RunNo: <b>75086</b>						
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/4/2021</b>			SeqNo: <b>2650452</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-57911</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>57911</b>			RunNo: <b>75086</b>						
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/4/2021</b>			SeqNo: <b>2650453</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.8	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#: 2102063

05-Feb-21

**Client:** Pima Environmental Services LLC**Project:** West Shugart 19 Fed 2

Sample ID: <b>MB-57853</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57853</b>	RunNo: <b>75034</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649194</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	8.5		10.00		84.5	70	130			

Sample ID: <b>LCS-57853</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57853</b>	RunNo: <b>75034</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649195</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.3	68.9	141			
Surr: DNOP	4.1		5.000		81.3	70	130			

Sample ID: <b>2102063-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BG1</b>	Batch ID: <b>57853</b>	RunNo: <b>75034</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649197</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.8	48.97	0	94.9	15	184			
Surr: DNOP	4.5		4.897		91.2	70	130			

Sample ID: <b>2102063-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BG1</b>	Batch ID: <b>57853</b>	RunNo: <b>75034</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649198</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	8.8	43.82	0	93.3	15	184	12.9	23.9	
Surr: DNOP	3.9		4.382		90.0	70	130	0	0	

**Qualifiers:**

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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#: 2102063

05-Feb-21

**Client:** Pima Environmental Services LLC**Project:** West Shugart 19 Fed 2

Sample ID: <b>ics-57850</b>		SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>57850</b>			RunNo: <b>75040</b>						
Prep Date: <b>2/2/2021</b>		Analysis Date: <b>2/3/2021</b>			SeqNo: <b>2649132</b>		Units: <b>mg/Kg</b>				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		27	5.0	25.00	0	108	80	120			
Surr: BFB		1200		1000		117	75.3	105			S

Sample ID: <b>2102063-002ams</b>		SampType: <b>MS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>					
Client ID: <b>BG2</b>		Batch ID: <b>57850</b>			RunNo: <b>75040</b>					
Prep Date: <b>2/2/2021</b>		Analysis Date: <b>2/3/2021</b>			SeqNo: <b>2649135</b>		Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	24.85	0	115	61.3	114			S
Surr: BFB	1200		994.0		117	75.3	105			S

Sample ID: 2102063-002amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BG2		Batch ID: 57850			RunNo: 75040					
Prep Date: 2/2/2021		Analysis Date: 2/3/2021			SeqNo: 2649136		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.34	0	115	61.3	114	1.93	20	S
Surr: BFB	1100		973.7		116	75.3	105	0	0	S

Sample ID: <b>mb-57850</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>		Batch ID: <b>57850</b>		RunNo: <b>75040</b>						
Prep Date: <b>2/2/2021</b>		Analysis Date: <b>2/4/2021</b>		SeqNo: <b>2649192</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	1000		1000		105	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#: 2102063

05-Feb-21

**Client:** Pima Environmental Services LLC**Project:** West Shugart 19 Fed 2

Sample ID: <b>mb-57850</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57850</b>	RunNo: <b>75040</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/4/2021</b>	SeqNo: <b>2649180</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	1.0		1.000		99.5	80	120			

Sample ID: <b>LCS-57850</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57850</b>	RunNo: <b>75040</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649181</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.4	80	120			
Toluene	0.99	0.050	1.000	0	99.0	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: <b>2102063-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BG1</b>	Batch ID: <b>57850</b>	RunNo: <b>75040</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649183</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	0.9911	0	94.7	76.3	120			
Toluene	0.97	0.050	0.9911	0.01078	96.9	78.5	120			
Ethylbenzene	0.99	0.050	0.9911	0	99.8	78.1	124			
Xylenes, Total	3.0	0.099	2.973	0.01843	99.1	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9911		101	80	120			

Sample ID: <b>2102063-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BG1</b>	Batch ID: <b>57850</b>	RunNo: <b>75040</b>								
Prep Date: <b>2/2/2021</b>	Analysis Date: <b>2/3/2021</b>	SeqNo: <b>2649184</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9794	0	96.6	76.3	120	0.826	20	
Toluene	0.98	0.049	0.9794	0.01078	99.3	78.5	120	1.29	20	
Ethylbenzene	0.99	0.049	0.9794	0	101	78.1	124	0.394	20	
Xylenes, Total	3.0	0.098	2.938	0.01843	101	79.3	125	0.356	20	
Surr: 4-Bromofluorobenzene	0.99		0.9794		101	80	120	0	0	

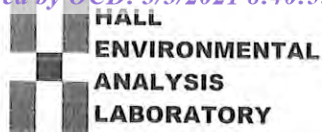
**Qualifiers:**

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RL Reporting Limit

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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: Pima Environmental Services LLC

Work Order Number: 2102063

RcptNo: 1

Received By: Juan Rojas 2/2/2021 7:30:00 AM

Completed By: Cheyenne Cason 2/2/2021 7:56:47 AM

Reviewed By: SGL 2/2/21

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:

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	1.1	Good				
2	2.0	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 19555

CONDITIONS

Operator: Pima Environmental Services, LLC 5614 N Lovington Hwy Hobbs, NM 88240	OGRID: 329999
	Action Number: 19555
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	1/12/2023