



**Pima Environmental Services**  
**5614 N. Lovington Highway**  
**Hobbs, NM 88240**  
**575-964-7740**

March 20<sup>th</sup>, 2022

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

Bureau of Land Management  
 620 East Green Street  
 Carlsbad, NM 88220

**Re: Site Assessment, Remediation, and Closure Report**  
**Rose #002H**  
**API No. 30-015-45113**  
**GPS: Latitude 32.682299 Longitude -104.426263**  
**UL "D", Sec. 7, T19S, R26E**  
**Eddy County, NM**  
**NMOCD Ref. No. NRM2025560181**

Pima Environmental Services, LLC (Pima) has been contracted by Spur Energy Partners (Spur) to perform a spill assessment and submit this closure report for a produced water release that occurred at the Rose #002H (Rose). The initial C-141 was submitted on September 11<sup>th</sup>, 2020 (Appendix C). This incident was assigned Incident ID NRM2025560181, by the New Mexico Oil Conservation Division (NMOCD).

### Site Characterization

The Rose is located approximately twelve (12) miles south of Artesia, NM. This spill site is in Unit D, Section 7, Township 19S, Range 26E, Latitude 32.32.682299, Longitude -104.426263, 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. 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. The soil in this area is made up of Reagan-Upton association, 0 to 9 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 medium potential for karst geology to be present around the Rose (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 100 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 70 feet BGS. The closest waterway is Brantley Lake located approximately 6.43 miles to the southeast of this location. See Appendix A for referenced water surveys.

**Table 1 NMAC and Closure Criteria 19.15.29**

Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50' (Lack of GW data)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
>100'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg

Reference Figure 2 for a Topographic map.

**Release Information**

**NRM2025560181:** On September 8<sup>th</sup>, 2020, the check valve developed a pin hole on the Rose CTB Water Line. The leak is located SE of the battery approximately 300 yards in the pasture area, the estimated area of impact is 12'x7'. The volume of the release was calculated to be approximately 30 barrels (bbls) of produced water. A vacuum truck was able to recover approximately 27 bbls of total fluid.

**Site Assessment and Soil Sampling Results**

On September 17<sup>th</sup>, 2021, Pima mobilized personnel to the site to assess the area. We sampled the impacted pasture area. Laboratory results of this sampling event can be found in the following data table. A Site map can be found in Figure 4.

9-17-2021 Soil Sample Results								
NMOCD Table 1 Closure Criteria 19.15.29 NMAC - Depth to Groundwater is <100'								
SPUR ENERGY - ROSE #2H								
9/17/2021	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	6"	--	--	--	--	--	0	16
	1'	--	--	--	--	--	0	112
S-2	6"	--	--	--	--	--	0	14900
	1'	--	--	--	--	--	0	8000
	3'	--	--	--	--	--	0	32
S-3	6"	--	--	--	--	--	0	6960
	1'	--	--	--	--	--	0	2360
	2'	--	--	--	--	--	0	32
S-4	6"	--	--	--	--	--	0	3000
	1'	--	--	--	--	--	0	80
S-5	6"	--	--	--	--	--	0	1800
	1'	--	--	--	--	--	0	656
SW-1	6"	--	--	--	--	--	0	32
SW-2	6"	--	--	--	--	--	0	ND
SW-3	6"	--	--	--	--	--	0	ND
SW-4	6"	--	--	--	--	--	0	ND
SW-5	6"	--	--	--	--	--	0	ND
SW-6	6"	--	--	--	--	--	0	ND
SW-7	6"	--	--	--	--	--	0	ND
SW-8	6"	--	--	--	--	--	0	ND
SW-9	6"	--	--	--	--	--	0	ND
BG-1	6"	--	--	--	--	--	0	ND
BG-2	6"	--	--	--	--	--	0	ND

ND- Analyte Not Detected

**Remediation Activities**

On November 29<sup>th</sup>, 2021, Pima returned to the site for the purpose of remediation of the contaminated areas. A Remediation map shows areas of contamination and can be found in Figure 5. A total of approximately 130 cubic yards of contaminated materials were removed. See Appendix D for photographic documentation.

On December 1<sup>st</sup>, 2021, after sending a 48-hour notification, Pima returned to collect confirmation samples of the affected area. The laboratory results of this sampling event can be found in the following table. A confirmation sample map can be found in Figure 6.

## 12-1-2021 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC - Depth to Groundwater is <50'								
SPUR ENERGY - ROSE #2H								
Date 12/1/2021		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
CS-1	2'	ND	ND	ND	ND	ND	0	32
CS-2	2'	ND	ND	ND	ND	ND	0	ND
CS-3	2'	ND	ND	ND	ND	ND	0	ND
CS-4	2'	ND	ND	ND	ND	ND	0	16
CS-5	1'	ND	ND	ND	ND	ND	0	16
CS-6	1'	ND	ND	ND	ND	ND	0	ND
CS-7	1'	ND	ND	ND	ND	ND	0	ND
CS-8	1'	ND	ND	ND	ND	ND	0	ND
CS-9	1'	ND	ND	ND	ND	ND	0	ND
CS-10	1'	ND	ND	ND	ND	ND	0	ND
CS-11	1'	ND	ND	ND	ND	ND	0	ND
CS-12	1'	ND	ND	ND	ND	ND	0	ND
SW-1	1'	ND	ND	ND	ND	ND	0	ND
SW-2	2'	ND	ND	ND	ND	ND	0	ND
SW-3	2'	ND	ND	ND	ND	ND	0	ND
SW-4	1'	ND	ND	ND	ND	ND	0	ND
SW-5	1'	ND	ND	ND	ND	ND	0	ND
SW-6	1'	ND	ND	ND	ND	ND	0	ND
SW-7	1'	ND	ND	ND	ND	ND	0	ND

ND – Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Based on the sample results, the bottom and sidewalls were below NMOCD Closure Criteria 19.15.29 NMAC. The contaminated material was transported to Lea Land, a NMOCD approved disposal site. The excavation was then backfilled with clean like material, machine compacted and contoured to match the surrounding terrain.

**Closure Request**

After careful review, Pima requests that this incident, NRM2025560181 be closed. Spur 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 Gio Gomez at 806-782-1151 or [gio@pimaoil.com](mailto:gio@pimaoil.com).

Respectfully,

**Gio Gomez**

Gio Gomez  
Environmental Project Manager  
Pima Environmental Services, LLC

**Attachments**

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Site Map
- 5- Remediation Map
- 6- Confirmation Sample Map

Appendices:

- Appendix A – Referenced Water Surveys
- Appendix B – Soil Survey and Geological Data
- Appendix C – C-141 Form & 48-Hour Notification
- 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

5-Remediation Map

6-Confirmation Sample Map

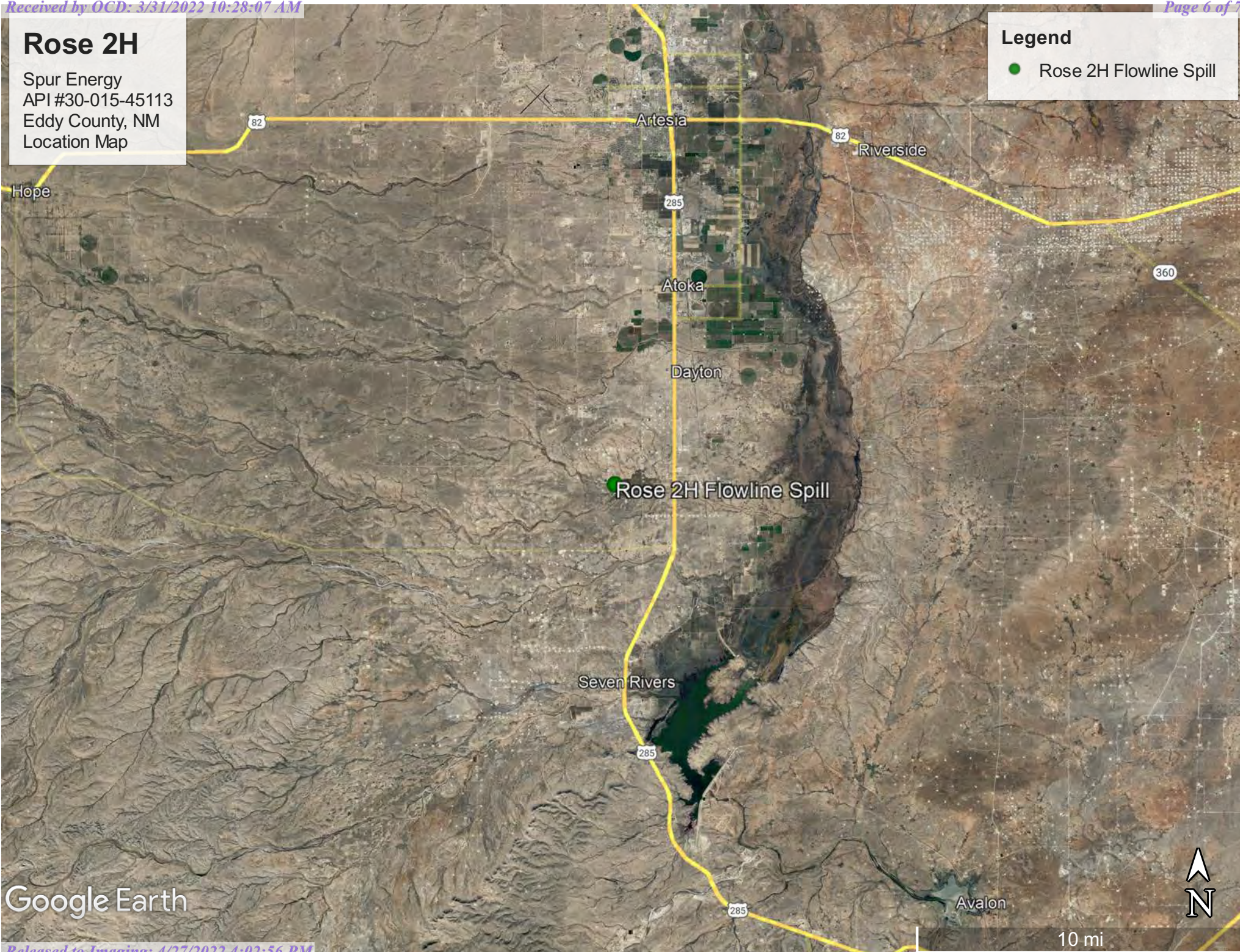


## Rose 2H

Spur Energy  
API #30-015-45113  
Eddy County, NM  
Location Map

### Legend

● Rose 2H Flowline Spill



Google Earth

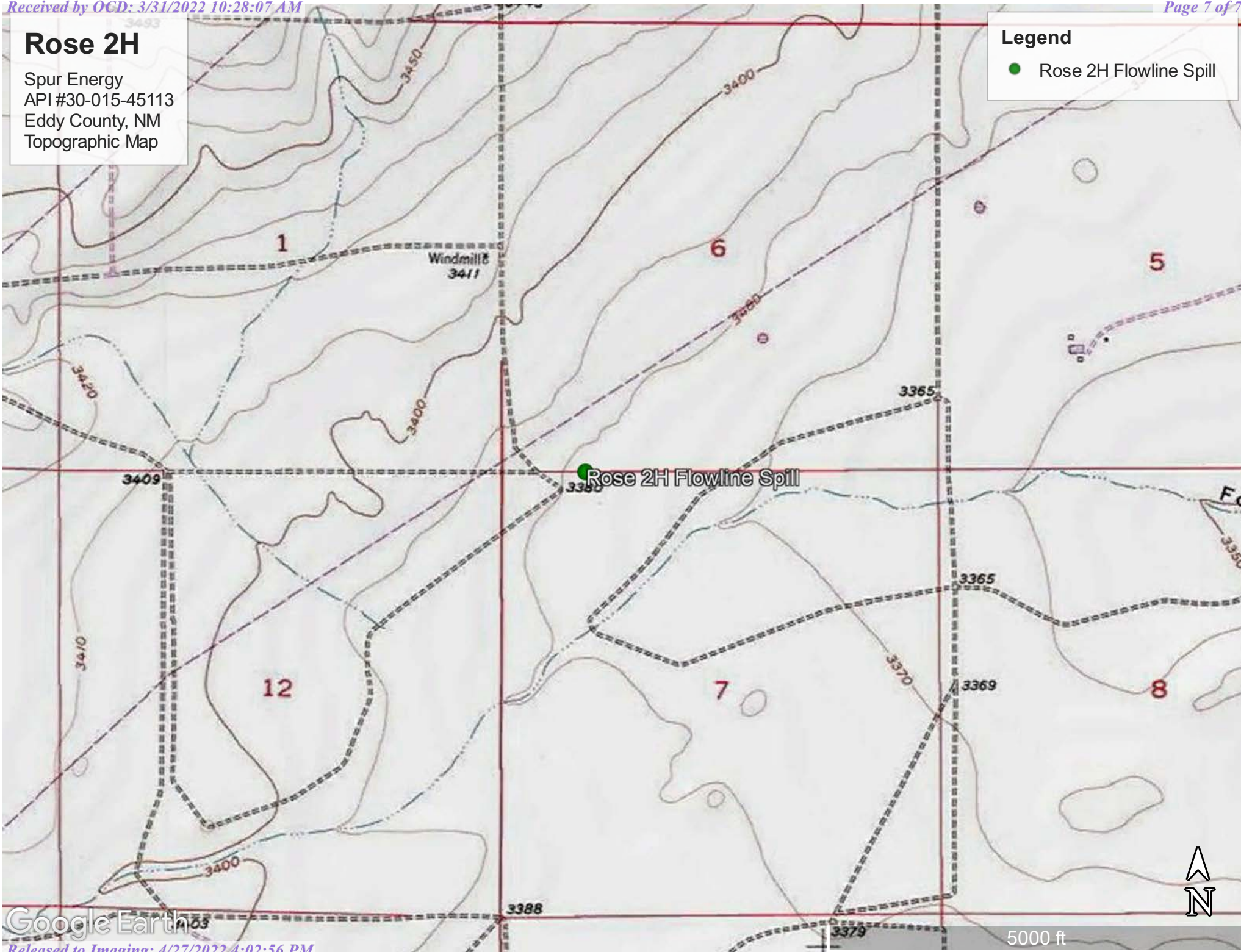


## Rose 2H

Spur Energy  
API #30-015-45113  
Eddy County, NM  
Topographic Map

### Legend

- Rose 2H Flowline Spill

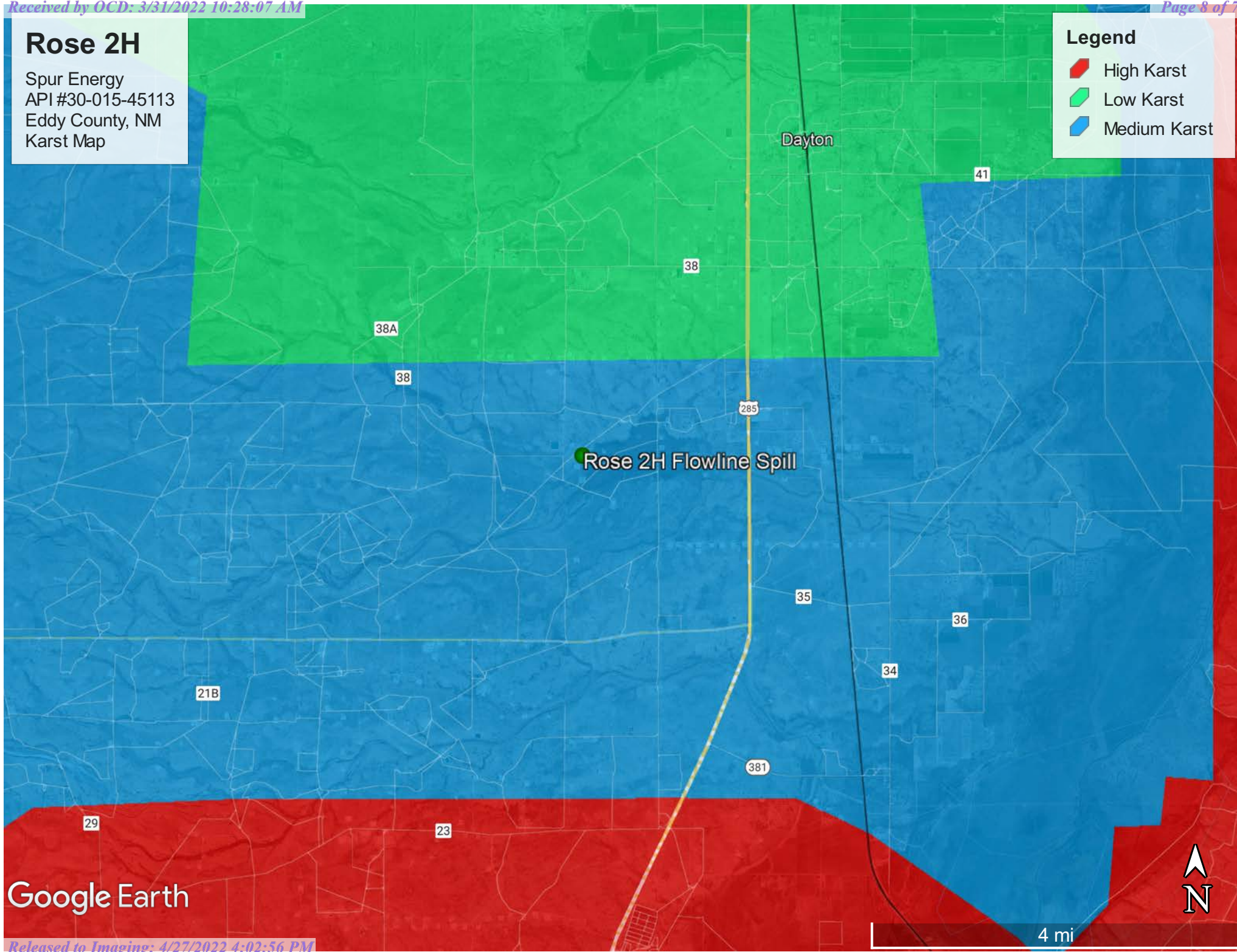




## Rose 2H

Spur Energy  
API #30-015-45113  
Eddy County, NM  
Karst Map

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





## Rose #2H

Spur Energy  
AP# 30-015-45113  
Eddy County, NM  
Site Map

### Legend

- Backgrounds
- Samples
- Sidewalls
- Spill Area

32.682425, -104.426462

CG-2

CG-1

CSW-2

CSW-3

CS-2

CS-1

CSW-1

CSW-9

CS-3

CSW-4

CSW-8

CS-4

CSW-7

CSW-5

CS-5

CSW-6

Google Earth

Released to Imaging: 4/27/2022 4:02:56 PM



70 ft



## Rose #002H

Spur Energy  
API #30-015-45113  
Eddy County, NM  
Remediation Map

### Legend


- 1' Excavation
- 2' Excavation
- Samples









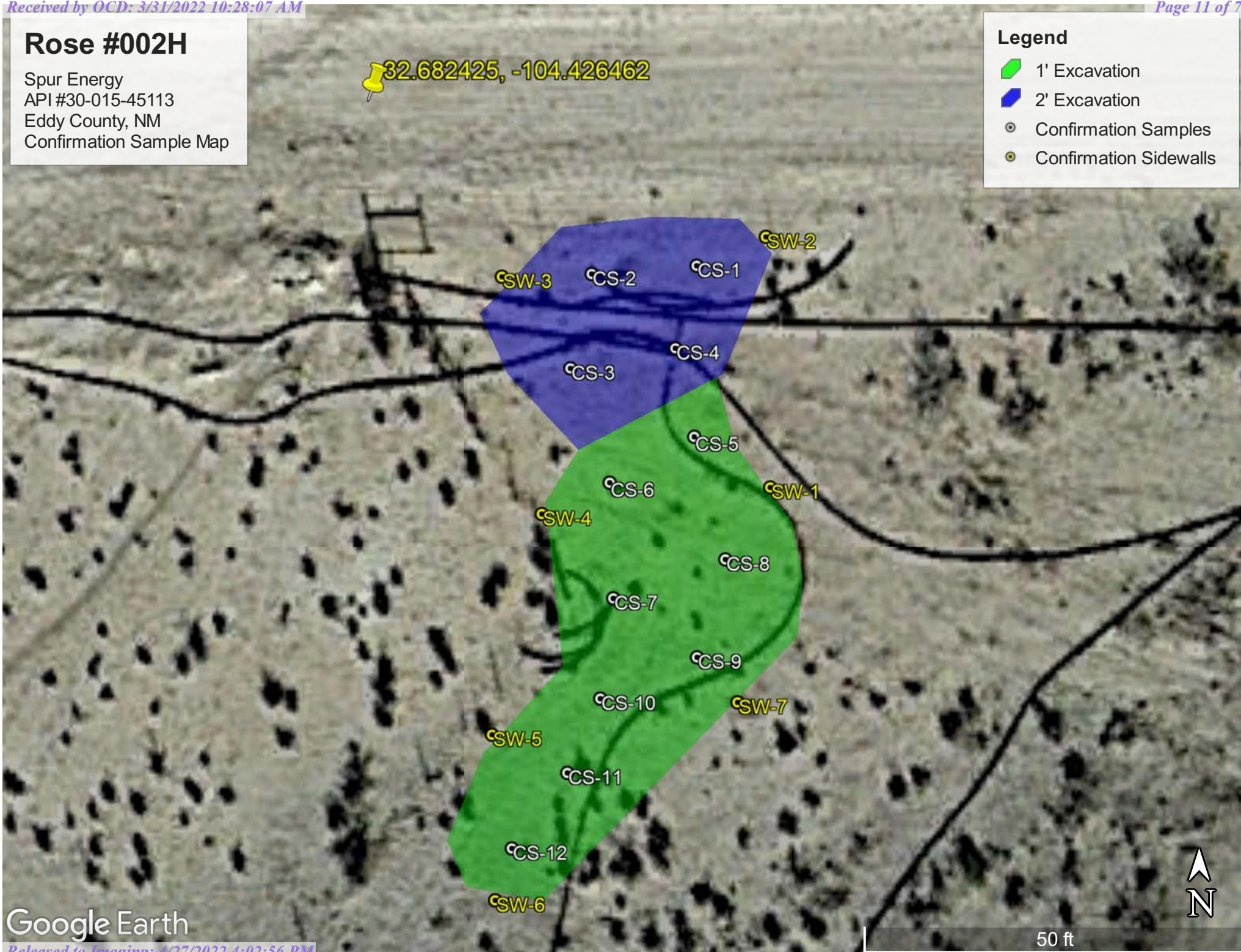
## Rose #002H

Spur Energy  
API #30-015-45113  
Eddy County, NM  
Confirmation Sample Map

 32.682425, -104.426462

### Legend

-  1' Excavation
-  2' Excavation
-  Confirmation Samples
-  Confirmation Sidewalls





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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 Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">RA 03983</a>		RA	CH	4	3	01	19S	25E		552457	3616444*	1330	375	100	275
<a href="#">RA 01343</a>		RA	ED	2	1	1	18	19S	26E	553777	3614525*	1701	440	69	371
<a href="#">RA 07954</a>		RA	ED	3	2	3	05	19S	26E	555566	3616763*	1874	290	175	115
<a href="#">RA 07639</a>		RA	ED	3	1	01	19S	25E		552049	3617250*	2002	260	172	88
<a href="#">RA 07066</a>		RA	ED	3	4	1	05	19S	26E	555561	3617166*	2022	202	100	102
<a href="#">RA 07066 POD2</a>		RA	ED	4	4	1	05	19S	26E	555761	3617166*	2201	150		
<a href="#">RA 06986</a>		RA	ED	1	4	05	19S	26E		556070	3616865*	2387	195	165	30
<a href="#">RA 07172</a>		RA	ED	1	4	05	19S	26E		556070	3616865*	2387	210	95	115
<a href="#">RA 06588</a>		RA	ED	4	3	4	05	19S	26E	556173	3616360*	2406	200		

Average Depth to Water: **125 feet**

Minimum Depth: **69 feet**

Maximum Depth: **175 feet**

**Record Count:** 9

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 553769.9

**Northing (Y):** 3616226.17

**Radius:** 2500

\*UTM location was derived from PLSS - see Help

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

10/27/21 3:34 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

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- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

### Search Results -- 1 sites found

site\_no list =

- 324025104254201

Minimum number of levels = 1

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

### USGS 324025104254201 19S.26E.07.33111

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°40'25", Longitude 104°25'42" NAD27

Land-surface elevation 3,383 feet above NAVD88

The depth of the well is 725 feet below land surface.

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Grayburg Formation of Artesia Group (313GRBG) local aquifer.

#### Output formats

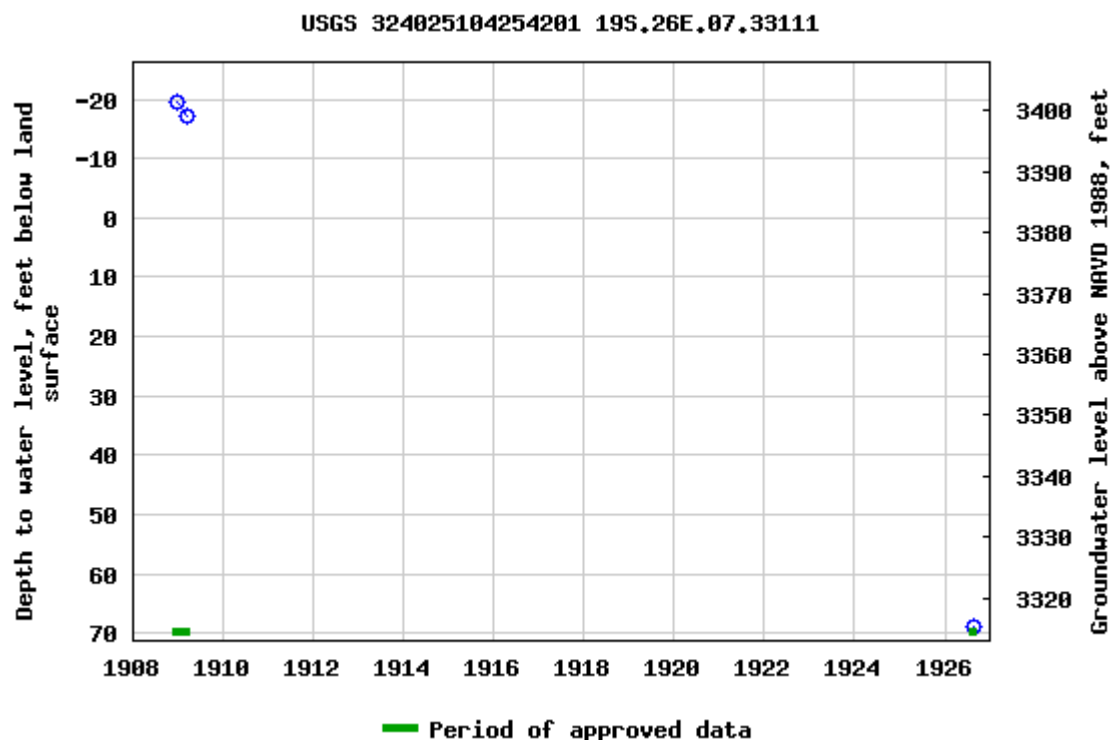
[Table of data](#)

[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: 2021-10-27 17:37:28 EDT

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## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

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- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

### Search Results -- 1 sites found

site\_no list =

- 324019104254201

Minimum number of levels = 1

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

### USGS 324019104254201 19S.26E.07.33311

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°40'19", Longitude 104°25'42" NAD27

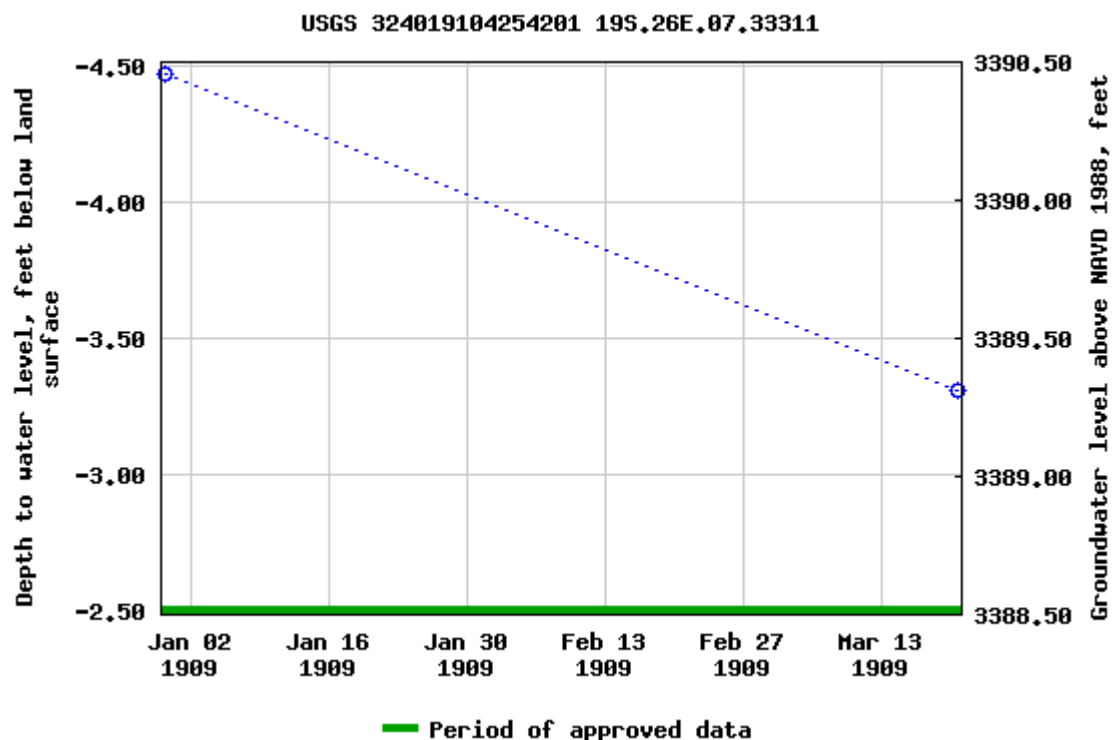
Land-surface elevation 3,386 feet above NAVD88

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Grayburg Formation of Artesia Group (313GRBG) local aquifer.

#### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



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](#)

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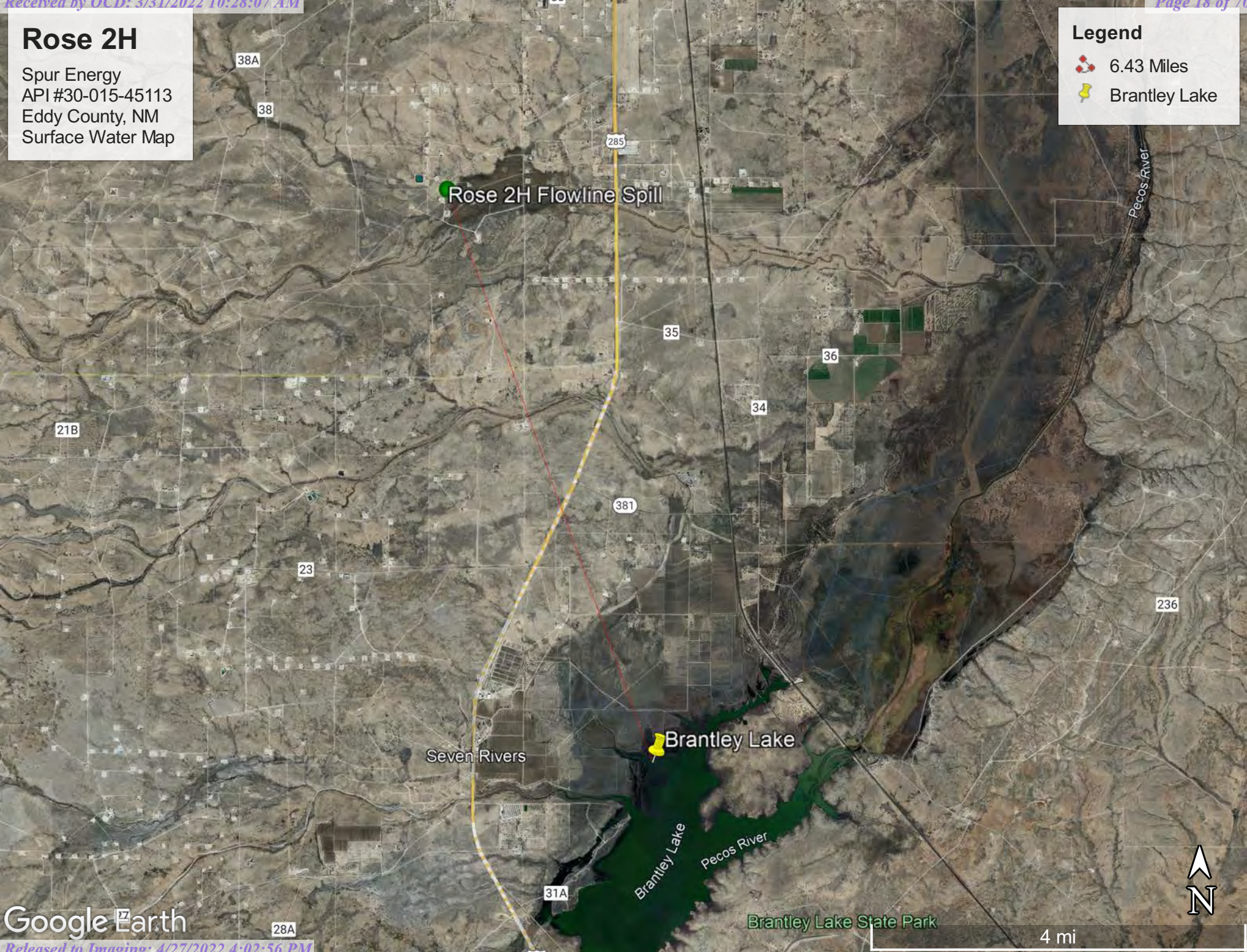
# Rose 2H

Spur Energy  
API #30-015-45113  
Eddy County, NM  
Surface Water Map

Legend

 6.43 Miles

 Brantley Lake







Pima Environmental Services

**Appendix B**

Soil Survey & Geological Data

FEMA Flood Map

Map Unit Description: Reagan-Upton association, 0 to 9 percent slopes---Eddy Area, New Mexico

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## Eddy Area, New Mexico

### RE—Reagan-Upton association, 0 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1w5d

*Elevation:* 1,100 to 5,400 feet

*Mean annual precipitation:* 6 to 14 inches

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

*Frost-free period:* 180 to 240 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Reagan and similar soils:* 70 percent

*Upton and similar soils:* 25 percent

*Minor components:* 5 percent

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

#### Description of Reagan

##### Setting

*Landform:* Fan remnants, alluvial fans

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Parent material:* Alluvium and/or eolian deposits

##### Typical profile

*H1 - 0 to 8 inches:* loam

*H2 - 8 to 60 inches:* loam

##### 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 moderately saline (2.0 to 8.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 1.0

*Available water supply, 0 to 60 inches:* Moderate (about 8.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 6e



Map Unit Description: Reagan-Upton association, 0 to 9 percent slopes---Eddy Area, New Mexico

---

*Hydrologic Soil Group:* B  
*Ecological site:* R070DY153NM - Loamy  
*Hydric soil rating:* No

### Description of Upton

#### Setting

*Landform:* Ridges, fans  
*Landform position (three-dimensional):* Side slope, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from limestone

#### Typical profile

*H1 - 0 to 9 inches:* gravelly loam  
*H2 - 9 to 13 inches:* gravelly loam  
*H3 - 13 to 21 inches:* cemented  
*H4 - 21 to 60 inches:* very gravelly loam

#### Properties and qualities

*Slope:* 0 to 9 percent  
*Depth to restrictive feature:* 7 to 20 inches to petrocalcic  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately high (0.01 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 75 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 1.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* R070DY159NM - Shallow Loamy  
*Hydric soil rating:* No

### Minor Components

#### Atoka

*Percent of map unit:* 3 percent  
*Ecological site:* R042XC007NM - Loamy  
*Hydric soil rating:* No

#### Pima

*Percent of map unit:* 2 percent  
*Ecological site:* R042XC017NM - Bottomland

Map Unit Description: Reagan-Upton association, 0 to 9 percent slopes---Eddy Area, New Mexico

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*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 17, Sep 12, 2021

# National Flood Hazard Layer FIRMette



104°25'55"W 32°41'12"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 104°25'17"W 32°40'42"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
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile 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 10/26/2021 at 12:23 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.





Pima Environmental Services

**Appendix C**

C-141 Form  
48-Hour Notification

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	NRM2025560181
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	Spur Energy Partners	OGRID	328947
Contact Name	Kenny Kidd	Contact Telephone	575-616-5400
Contact email	kkidd@spurepllc.com	Incident # (assigned by OCD)	
Contact mailing address	2407 Pecos Drive Artesia, NM 88210		

### Location of Release Source

Latitude 32.682299 Longitude -104.426263  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Rose #002H	Site Type	Production Facility
Date Release Discovered	09/08/2020	API# (if applicable)	30-015-45113

Unit Letter	Section	Township	Range	County
D	07	19S	26E	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) <b>30bbls</b>	Volume Recovered (bbls) <b>27bbls</b>
	Is the concentration of dissolved chloride 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

The check valve developed a pin hole on the Rose CTB Water Line. The leak is located SE of the battery approximately 300 yds. in the pasture area the estimated area of impact is 12'X7"

Incident ID	NRM2025560181
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  The spill was larger than a 5bbl release
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  Immediate notice was provided by Kenny Kidd with Spur Energy via email correspondence to BLM, NMOCD Mike Bratcher, and Robert Hamlet. 09/08/2020	

## Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:          	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Rebecca Pons</u>	Title: <u>Project Manager</u>
Signature: _____	Date: <u>9/11/2020</u>
email: <u>rpons@talonlpe.com</u>	Telephone: <u>575-441-0980</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	



Form C-141

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State of New Mexico  
Oil Conservation Division

Incident ID	NRM2025560181
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	70 (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.

Form C-141

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State of New Mexico  
Oil Conservation Division

Incident ID	NRM2025560181
District RP	
Facility ID	
Application ID	

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

Printed Name: Braidy Moulder Title: HSE CoordinatorSignature: Braidy Moulder Date: 3/20/2022email: bmoulder@spurepllc.com Telephone: 713-264-2517**OCD Only**

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



Form C-141

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State of New Mexico  
Oil Conservation Division

Incident ID	NRM2025560181
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Braidy Moulder Title: HSE Coordinator  
 Signature: Braidy Moulder Date: 3/20/2022  
 email: bmoulder@spurepllc.com Telephone: 713-264-2517

**OCD Only**

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

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

Closure Approved by: Jennifer Nobui Date: 04/27/2022  
 Printed Name: Jennifer Nobui Title: Environmental Specialist A



**From:** [Tom Bynum](#)  
**To:** ["ocdonline@state.nm.us"](mailto:ocdonline@state.nm.us)  
**Cc:** ["Gio PimaOil"](#); ["sebastian@pimaoil.com"](mailto:sebastian@pimaoil.com)  
**Subject:** 48-Hour Notification -- Rose 2H NRM2025560181  
**Date:** Monday, November 29, 2021 9:28:00 AM

---

Good morning,  
Pima Environmental would like to notify you that we will be collecting confirmation samples at the Rose #002H for incident NRM2025560181. Pima personnel is scheduled to be on site for this sampling event at approximately 8:00 a.m. on Wednesday, December 1<sup>st</sup>, 2021. If you have any questions or concerns, please let me know. Thank you.

**THANK YOU,**

Tom Bynum  
Environmental Project Manager  
Cell – 580-748-1613  
Office – 575-964-7740



**Pima Environmental Services, LLC.**



Pima Environmental Services

## **Appendix D**

Photographic Documentation



**SITE PHOTOGRAPHS  
SPUR ENERGY PARTNERS**

**ROSE #2 H**

**Site Assessment**











### Post Treatment











Pima Environmental Services

## **Appendix E**

Laboratory Reports



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

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September 22, 2021

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: ROSE 2H

Enclosed are the results of analyses for samples received by the laboratory on 09/20/21 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
CHRIS JONES  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 09/20/2021  
Reported: 09/22/2021  
Project Name: ROSE 2H  
Project Number: 6-45  
Project Location: EDDY COUNTY, NM

Sampling Date: 09/17/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S1 6" (H212604-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S1 1' (H212604-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S2 6" (H212604-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14900	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S2 1' (H212604-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	09/21/2021	ND	400	100	400	3.92	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

PIMA ENVIROMENTAL  
CHRIS JONES  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 09/20/2021  
Reported: 09/22/2021  
Project Name: ROSE 2H  
Project Number: 6-45  
Project Location: EDDY COUNTY, NM

Sampling Date: 09/17/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S2 3' (H212604-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S3 6" (H212604-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6960	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: S3 1' (H212604-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S3 2' (H212604-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S4 6" (H212604-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3000	16.0	09/21/2021	ND	400	100	400	3.92	QM-07

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

PIMA ENVIROMENTAL  
CHRIS JONES  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 09/20/2021  
Reported: 09/22/2021  
Project Name: ROSE 2H  
Project Number: 6-45  
Project Location: EDDY COUNTY, NM

Sampling Date: 09/17/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S4 1' (H212604-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S5 6" (H212604-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1800	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: S5 1' (H212604-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: SW-1 6" (H212604-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: SW-2 6" (H212604-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

PIMA ENVIROMENTAL  
CHRIS JONES  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 09/20/2021  
Reported: 09/22/2021  
Project Name: ROSE 2H  
Project Number: 6-45  
Project Location: EDDY COUNTY, NM

Sampling Date: 09/17/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SW-3 6" (H212604-15)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: SW-4 6" (H212604-16)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: SW-5 6" (H212604-17)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: SW-6 6" (H212604-18)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: SW-7 6" (H212604-19)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

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**Analytical Results For:**

PIMA ENVIROMENTAL  
CHRIS JONES  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 09/20/2021  
Reported: 09/22/2021  
Project Name: ROSE 2H  
Project Number: 6-45  
Project Location: EDDY COUNTY, NM

Sampling Date: 09/17/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SW-8 6" (H212604-20)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: SW-9 6" (H212604-21)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

**Sample ID: BG-1 6" (H212604-22)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92	

**Sample ID: BG-2 6" (H212604-23)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2021	ND	400	100	400	3.92		

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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

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

---

Celey D. Keene, Lab Director/Quality Manager



**CARDINAL**  
Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Pima Environmental Services				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																					
Project Manager: Chris Jones				P.O. #:				Chlorides																					
Address: 1601 N Turner St., Suite 500				Company: <i>Bill to Spur Energy</i>																									
City: Hobbs		State: NM Zip: 88240		Attn:																									
Phone #: 575-964-7740		Fax #:		Address:																									
Project #: <i>6-45</i>		Project Owner: <i>Spur Energy</i>		City:																									
Project Name: <i>Rose 2H</i>				State: Zip:																									
Project Location: <i>Eddy County, NM</i>				Phone #:																									
Sampler Name: <i>Tristan Jones</i>				Fax #:																									
FOR LAB USE ONLY																													
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX		PRESERV.		SAMPLING																			
						GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME													
<i>H212604</i>								X					X		9/17/21	0730	X												
1		51 6"														0735													
2		51 1'														0740													
3		52 6"														0745													
4		52 1'														0750													
5		52 3'														0755													
6		53 6"														0800													
7		53 1'														0805													
8		53 2'														0810													
9		54 6"														0815													
10		54 1'																											
<small>PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</small>																													
Relinquished By: <i>[Signature]</i>				Date: <i>9/20/21</i>		Received By: <i>[Signature]</i>				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:		TAT - Standard															
Time: <i>13:00</i>										Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:																	
Relinquished By:				Date:		Received By:																							
Time:																													
Delivered By: (Circle One)						Sample Condition				CHECKED BY:		Bill to Spur																	
Sampler - UPS - Bus - Other: <i>0.92 / #113</i>						Cool Intact				Initials: <i>[Signature]</i>																			
						<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No																							





# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Pima Environmental Services				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																		
Project Manager: Chris Jones				P.O. #:																						
Address: 1601 N Turner St., Suite 500				Company: <i>Spur Energy</i>																						
City: Hobbs State: NM Zip: 88240				Attn:																						
Phone #: 575-964-7740 Fax #:				Address:																						
Project #: <i>6-45</i> Project Owner: <i>Spur Energy</i>				City:																						
Project Name: <i>Rose 2H</i>				State: Zip:																						
Project Location: <i>Eddy County, NM</i>				Phone #:																						
Sampler Name: <i>Triston Jones</i>				Fax #:																						
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING		<i>Chlorides</i>																
Lab I.D.	Sample I.D.	(GRAB OR C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :													ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME
<i>H2126004</i>																										
<i>11</i>	<i>55-6"</i>	<i>6</i>				<i>X</i>																<i>X</i>			<i>9/17/21</i>	<i>0820</i>
<i>12</i>	<i>55-1'</i>																									<i>0825</i>
<i>13</i>	<i>SW-1 6"</i>																									<i>0830</i>
<i>14</i>	<i>SW-2</i>																									<i>0835</i>
<i>15</i>	<i>SW-3</i>																									<i>0840</i>
<i>16</i>	<i>SW-4</i>																									<i>0845</i>
<i>17</i>	<i>SW-5</i>																									<i>0850</i>
<i>18</i>	<i>SW-6</i>													<i>0855</i>												
<i>19</i>	<i>SW-7</i>													<i>0900</i>												
<i>20</i>	<i>SW-8</i>													<i>0905</i>												

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Relinquished By:	Date: <i>9/20/21</i>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <i>13:00</i>	<i>Jodi Benson</i>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One)	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other: <i>0.92/#113</i>	Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>[Signature]</i>		

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



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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]

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Relinquished By:		Date: 9/20/21	Received By: Gadi Henson	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
		Time: 13:00		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:	
		Time:			
Delivered By: (Circle One)		Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other: 0.92 / #113		Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		(Initials) GPH	

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



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

---

December 03, 2021

TOM BYNUM

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: ROSE 002H

Enclosed are the results of analyses for samples received by the laboratory on 12/01/21 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 1 (H213438-01)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTX	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	225	112	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	217	109	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 88.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 2 (H213438-02)**

BTEx 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTEx	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.3 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	225	112	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	217	109	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 90.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.9 % 38.9-142

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 3 (H213438-03)**

BTEx 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 73.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 69.0 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 4 (H213438-04)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTEx	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 73.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 69.8 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 5 (H213438-05)**

BTEx 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 69.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 65.7 % 38.9-142

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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:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 6 (H213438-06)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTX	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 79.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.6 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 7 (H213438-07)**

BTEx 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 77.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.6 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 8 (H213438-08)**

BTEx 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.2 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 76.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 72.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 9 (H213438-09)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTEx	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 76.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 71.7 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 10 (H213438-10)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTX	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 75.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 70.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 11 (H213438-11)**

BTEx 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTEx	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 76.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 70.8 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: CS - 12 (H213438-12)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTX	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 74.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 69.7 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 1 (H213438-13)**

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	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 79.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 2 (H213438-14)**

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	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 75.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 70.5 % 38.9-142

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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:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 3 (H213438-15)**

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	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 78.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.7 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 4 (H213438-16)**

BTEx 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 76.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 72.0 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 5 (H213438-17)**

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	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTX	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 69.9-140

Chloride, SM4500CI-B			mg/kg							
			Analyzed By: GM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0		
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8		
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND						

Surrogate: 1-Chlorooctane 77.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 6 (H213438-18)**

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	12/02/2021	ND	2.06	103	2.00	0.552	
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124	
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338	
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326	
Total BTEx	<0.300	0.300	12/02/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 74.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 69.3 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

PIMA ENVIROMENTAL  
TOM BYNUM  
1601 N TURNER STE. 500  
HOBBS NM, 88240  
Fax To:

Received: 12/01/2021  
Reported: 12/03/2021  
Project Name: ROSE 002H  
Project Number: 6-45  
Project Location: SPUR - EDDY COUNTY, NM

Sampling Date: 12/01/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW - 7 (H213438-19)**

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	12/02/2021	ND	2.06	103	2.00	0.552		
Toluene*	<0.050	0.050	12/02/2021	ND	2.07	103	2.00	0.124		
Ethylbenzene*	<0.050	0.050	12/02/2021	ND	2.02	101	2.00	0.338		
Total Xylenes*	<0.150	0.150	12/02/2021	ND	6.17	103	6.00	0.326		
Total BTEx	<0.300	0.300	12/02/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/02/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/02/2021	ND	211	105	200	18.0	
DRO >C10-C28*	<10.0	10.0	12/02/2021	ND	198	99.2	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	12/02/2021	ND					

Surrogate: 1-Chlorooctane 72.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 67.1 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager





# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Pima Environmental Services				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																		
Project Manager: Tom Bynum				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>Chlorides</div> <div>TPH</div> <div>BTEX</div> </div>																		
Address: 1601 N Turner St., Suite 500				Company: SPUR																						
City: Hobbs State: NM Zip: 88240				Attn:																						
Phone #: 575-964-7740 Fax #:				Address:																						
Project #: 6-45 Project Owner: SPUR				City:																						
Project Name: Rose 002 H				State: Zip:																						
Project Location: Artesic				Phone #:																						
Sampler Name: Angel O. Peña				Fax #:																						
FOR LAB USE ONLY						MATRIX		PRESERV.		SAMPLING																
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME												
H213438																										
1	CS-1	G				✓				✓			12-1	08:00												
2	CS-2					✓				✓				08:05												
3	CS-3					✓				✓				8:10												
4	CS-4					✓				✓				8:15												
5	CS-5					✓				✓				8:20												
6	CS-6					✓				✓				8:25												
7	CS-7					✓				✓				8:30												
8	CS-8					✓				✓				8:35												
9	CS-9					✓				✓				8:40												
10	CS-10					✓				✓				8:45												

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Relinquished By:	Date: 12-1	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
<i>Angel O. Peña</i>	Time: 1235	<i>Jamara Delgado</i>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		Bill to SPUR	
Delivered By: (Circle One) 0.8" C-0.5"	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other: 0.3" #113	Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Initials) TO		



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Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Pima Environmental Services				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: Tom Bynum				P.O. #:				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chlorides</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PH</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX</div> </div>											
Address: 1601 N Turner St., Suite 500				Company: SPur															
City: Hobbs State: NM Zip: 88240				Attn:															
Phone #: 575-964-7740 Fax #:				Address:															
Project #: 6-45 Project Owner: SPur				City:															
Project Name: ROSE 00214				State: Zip:															
Project Location: Artesia				Phone #:															
Sampler Name: Angel O. Peña				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		GIRAB OR (C)OMP. # CONTAINERS		MATRIX				PRESERV.		SAMPLING							
						GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		ACID/BASE: ICE / COOL OTHER:		DATE TIME									
H213438																			
11		CS-11		4						12-1		8:50							
12		CS-12										8:55							
13		SW-1										9:00							
14		SW-2										9:05							
15		SW-3										9:10							
16		SW-4										9:15							
17		SW-5										9:20							
18		SW-6										9:25							
19		SW-7										9:30							

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Relinquished By: <u>Angel O. Pena</u>		Date: <u>12-1</u>		Received By: <u>Tamara Aldridge</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:	
Relinquished By:		Time: <u>1235</u>		Received By:		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #:	
Delivered By: (Circle One) <u>0.8i</u> <u>C-0.5i</u>		Date:		Time:		REMARKS:  <div style="font-size: 2em; margin-top: 20px;">Bill for SPur</div>	
Sampler - UPS - Bus - Other:		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/>		CHECKED BY: (Initials) <u>T.A.</u>			

**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  
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**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
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**District IV**  
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State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 94760

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 94760
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	4/27/2022