

Spill Volume(Bbls) Calculator		
<i>Inputs in blue, Outputs in red</i>		
Length(Ft)	Width(Ft)	Depth(In)
<u>150.000</u>	<u>55.000</u>	<u>0.500</u>
Cubic Feet Impacted		<u>343.750</u>
Barrels		<u>61.22</u>
Soil Type		Clay
Bbls Assuming 100% Saturation		<u>6.12</u>
Saturation	Fluid present with shovel/backhoe	
Estimated Barrels Released		6.20000

Instructions
1. Input spill measurements below. Length and width need to be input in feet and depth in inches.
2. Select a soil type from the drop down menu.
3. Select a saturation level from the drop down menu.
(For data gathering instructions see appendix tab)

Measurements	
Length (ft)	150
Width (ft)	55
Depth (in)	0.500



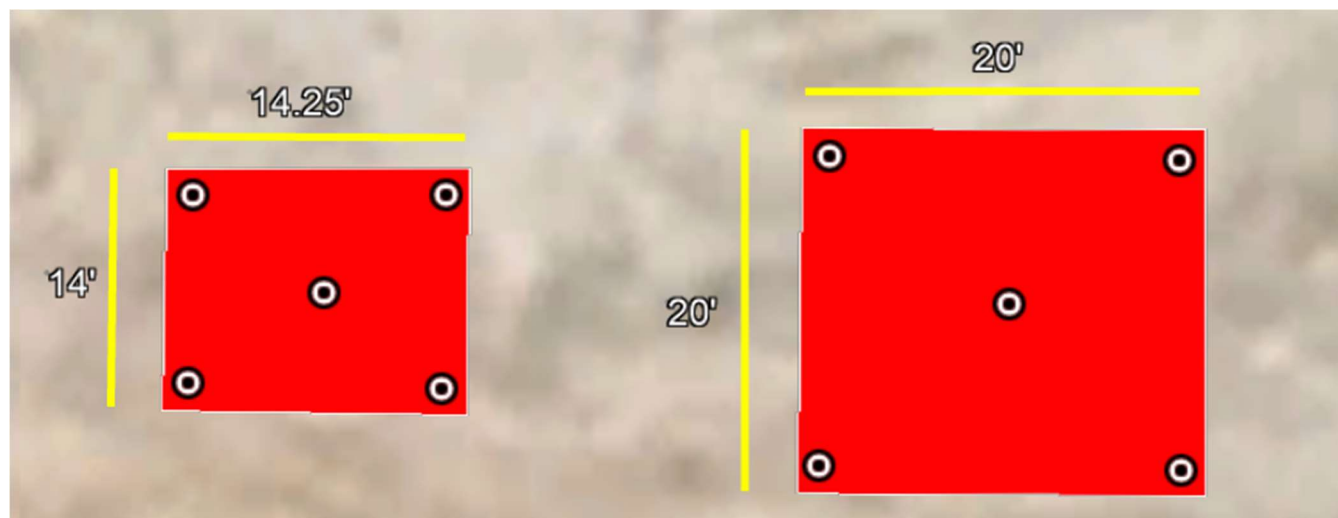




Written Demonstration of Equal Protection

The purpose of this demonstration is to provide sufficient evidence that samples taken from every 400 square feet versus samples taken from every 200 square feet would provide equal or better protection of fresh water, public health, and the environment.

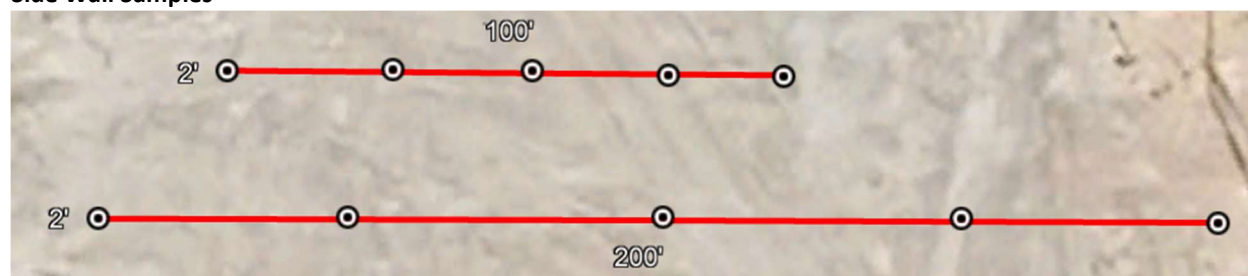
1. This site lies in a low karst zone. (Figure 3).
2. The nearest surface water feature to this site is an unnamed salt playa located approximately 18.21 miles to the south (Appendix A).
3. According to FEMA, this site is in a minimal flood hazard area (Appendix B).
4. According to the U.S. Fish and Wildlife Service - National Wetlands Inventory, this site is approximately 2,062 feet east of a freshwater emergent wetland (Appendix B).
5. OSE POD (RA 13286 POD1) was drilled on site to prove the absence of ground water. It was drilled to 101' bgs and no ground water was encountered (Appendix A).
6. The impacted difference in collecting 5-point composite samples from every 400 square feet versus every 200 square feet can be seen in the following illustrations.



200 Square Foot

400 Square Foot

Side Wall Samples



Top Line = 200 Square Foot

Bottom Line = 400 Square Foot



Pima Environmental Services, LLC
5614 N. Lovington Hwy.
Hobbs, NM 88240
575-964-7740

January 29, 2025

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

Re: Site Assessment and Sampling Variance Request
Puckett 13 Federal 38H
API No. 30-015-43074
GPS: Latitude 32.8451387 Longitude -103.816103
UL "P", Sec. 12, T17S, R31E
Eddy County, NM
NMOCD Ref. No. NAPP2104043158, NAPP2110639937

Pima Environmental Services, LLC (Pima) has been contracted by Spur Energy to conduct a spill assessment and submit a Sampling Variance Request for two separate incidents resulting in the release of crude oil and produced water at the Puckett 13 Federal 38H (Puckett) site. The initial C-141 for incident ID NAPP2104043158 was submitted on February 9, 2021 (Appendix C), while the initial C-141 for incident ID NAPP2110639937 was submitted on April 16, 2021.

Site Characterization

The Puckett is located approximately 3 miles southwest of Maljamar, NM. This spill site is in Unit P, Section 12, Township 17S, Range 31E, Latitude 32.8451387, Longitude -103.816103, Eddy County, NM. Figure 1 references a location map.

As per the New Mexico Bureau of Geology and Mineral Resources, the geological classification encompasses Eolian and Piedmont deposits (Holocene to middle Pleistocene), detailed in Appendix B. The soil composition in this vicinity predominantly consists of Berino-Pajarito complex, exhibiting 0 to 3 percent slopes, as indicated in the United States Department of Agriculture Natural Resources Conservation Service soil survey (refer to Appendix B). Drainage courses in this area are characterized as well-drained. Notably, the geographical data suggests a low likelihood of karst geology in the vicinity of Puckett (refer to Figure 3).

According to data from the New Mexico Office of the State Engineer, the nearest groundwater depth in this area is approximately 101 feet below ground surface (BGS), located about 0.04 miles from the site, as measured by water well RA 13286 POD1, drilled on March 23, 2023. Additionally, the United States Geological Survey (USGS) reports that the closest groundwater well, USGS 325119103450101, is approximately 3.72 miles from the site, with a recorded water depth of 139 feet BGS. For exact well locations, please refer to Appendix A, which includes a comprehensive water well map with both OSE and USGS well sites marked. The closest waterway, an unnamed salt playa, is located roughly 18.21 miles south of the site. Additional details on these water surveys are also available in Appendix A for reference.

Table 1 NMAC and Closure Criteria 19.15.29

Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50'	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' (RA 13286 POD1)	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

NAPP2104043158: On February 7, 2021, a failure of the 2-inch steel tubing nipple on the wellhead led to a fluid release onto the ground, which remained contained within the pad area. The total volume released was estimated at approximately 6 barrels (bbls) of crude oil, with a vacuum truck successfully recovering around 2 bbls. All liquids remained within the engineered pad.

NAPP2110639937: On April 11, 2021, a quarter-inch needle valve broke off a one-inch nipple on the wellhead, causing the release of approximately 2 barrels of crude oil and 5 barrels of produced water. Spur personnel promptly dispatched a crew to stop the release and contain the affected area. The response team successfully recovered 2 barrels of crude oil and 4 barrels of produced water, with all liquids remaining within the engineered pad.

Summary of Past Site Remediation and Reasons for Rejection

From April 14 to May 13, 2021, Pima Environmental personnel conducted an initial area assessment, performed remediation, and collected excavation samples at the site. A subsequent closure report was drafted and submitted to the NMOCD but was rejected due to inadequate confirmation sampling of impacted material. The Chain of Custody and Analysis Request form for April 14, 2021, indicated that samples were not received at the required temperature of 6°C or below, instead arriving at 18.6°C. Similarly, the form for May 13, 2021, showed samples delivered at 9.4°C, exceeding the acceptable temperature range. As a result, the confirmation samples were deemed unacceptable. A detailed summary of the remediation process and sampling results is available on the NMOCD portal.

Following the initial rejected report Etech Environmental & Safety Solutions, Inc mobilized to the location and resampled the impacted area, conducted additional remediation activities and collected a second panel of confirmation samples. Closure was denied due to several unresolved issues. The remediated area was smaller than the reported release area, and previous concerns, such as inadequate discussion of sampling protocols and improper sample handling, were not addressed. Confirmation samples from April 14 and May 13, 2021, were rejected due to improper temperatures, exceeding the required 6°C. Additionally, the bioremediation process was implemented without prior approval, violating 19.15.29.12 B.(1) NMAC. Delineation and confirmation samples from April 14 and May 13, 2021, were also rejected. Future submissions must include a thorough discussion of bioremediation, with confirmation samples from both the treated backfill and excavation areas. Horizontal delineation was incomplete and did not meet 19.15.29.11 NMAC standards, requiring laboratory data and additional sampling if criteria are exceeded. The operator also failed to provide the required Sampling Notification under 19.15.29.12.D.(1)(a) NMAC, which is a compliance issue, and the OCD may take further action. The operator must ensure compliance with these requirements moving forward. A detailed summary of the remediation process and sampling results is available on the NMOCD portal.

Proposed Sampling Technique

Pima Environmental proposes to resample the impacted area outlined in the initial sampling map from the rejected closure report, covering approximately 10,300 square feet. We request a variance from the original sampling requirement of one sample per 200 square feet, proposing instead one sample per 400 square feet. The plan includes collecting 25 vertical delineation samples (V1-V25) and 24 horizontal delineation samples (H1-H24), all overlapping the original spill area. If contamination exceeding NMOCD closure criteria is detected, additional remediation using a dig-and-haul method will be conducted. Should the samples meet closure criteria, we will move directly toward closure. All soil samples will be collected in one-foot intervals down to a depth of four feet below ground surface. A map detailing the proposed sampling area is provided in Figure 4.

For questions or additional information, please feel free to contact:

Spur Energy – Katherine Purvis at 575-441-8619 or katherine.purvis@spurenergy.com

Pima Environmental Services – Sebastian Orozco at 619-721-4813 or Sebastian@pimaoil.com.

Attachments

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Proposed Sampling Map

Appendices:

Appendix A – Referenced Water Surveys

Appendix B – Soil Survey and Geological Map

Figures:

Figure 1- Location Map

Figure 2- Topographic Map



Figure 3- Karst Map

Figure 4- Proposed Sampling Map

Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
Location Map

Legend

-  3 miles Southwest of Maljamar, NM
-  Puckett 13 Federal Com #038H



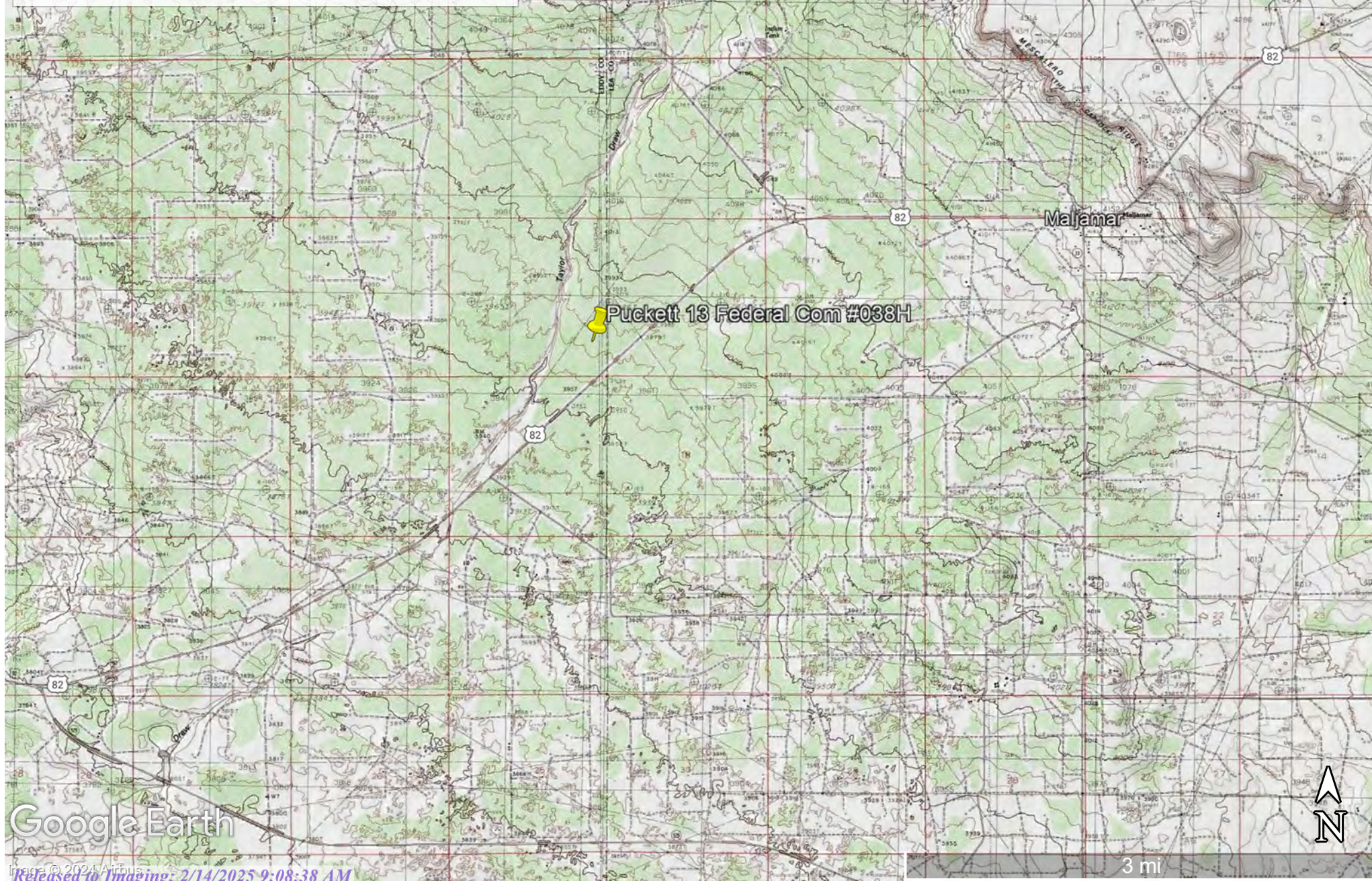
Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
Topographic Map

Legend



Puckett 13 Federal Com #038H





Google Earth


Puckett 13 Federal Com #038H


Spur Energy
API: 30-015-43074
Eddy County, NM
Karst Map

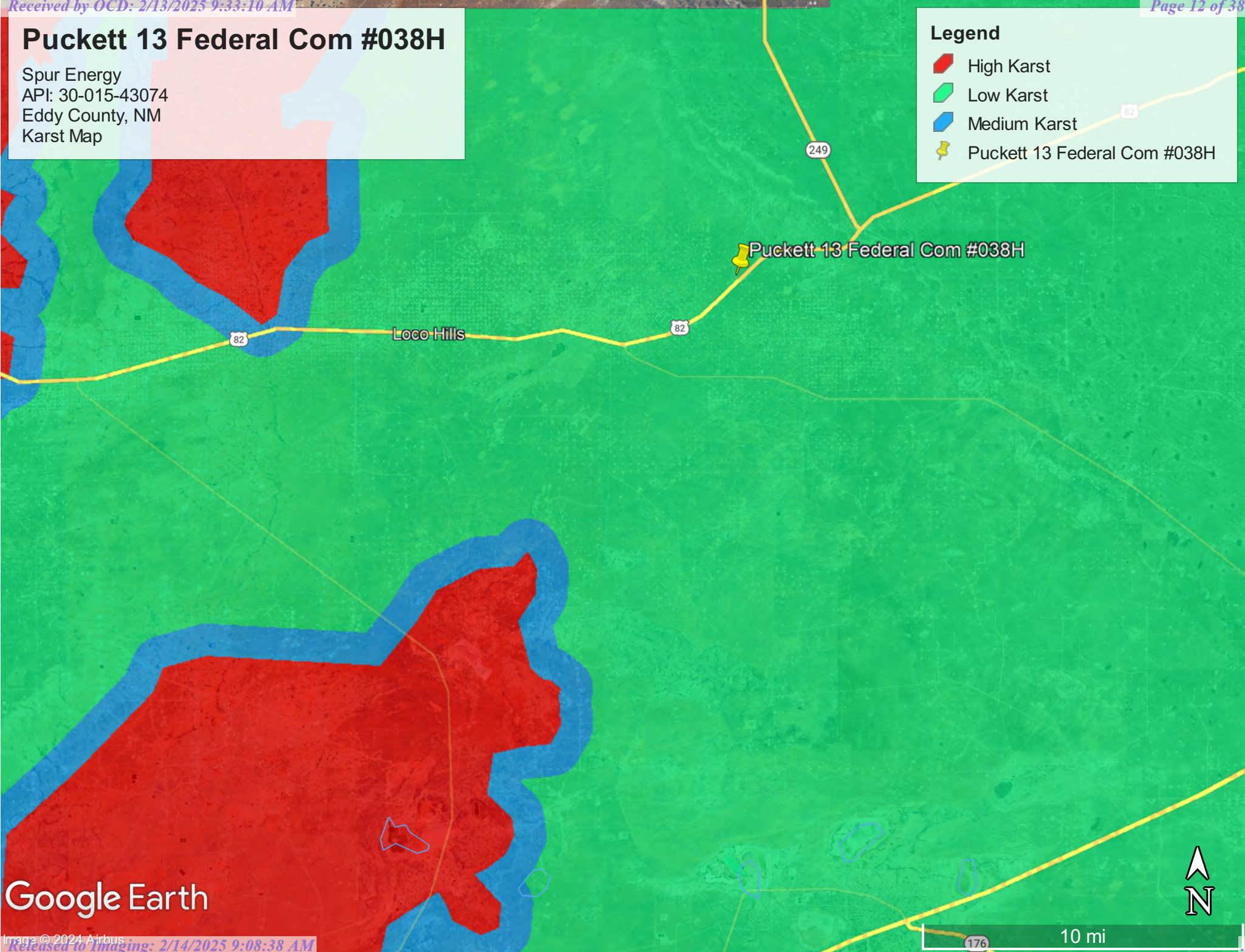
Legend

 High Karst

 Low Karst

 Medium Karst

 Puckett 13 Federal Com #038H



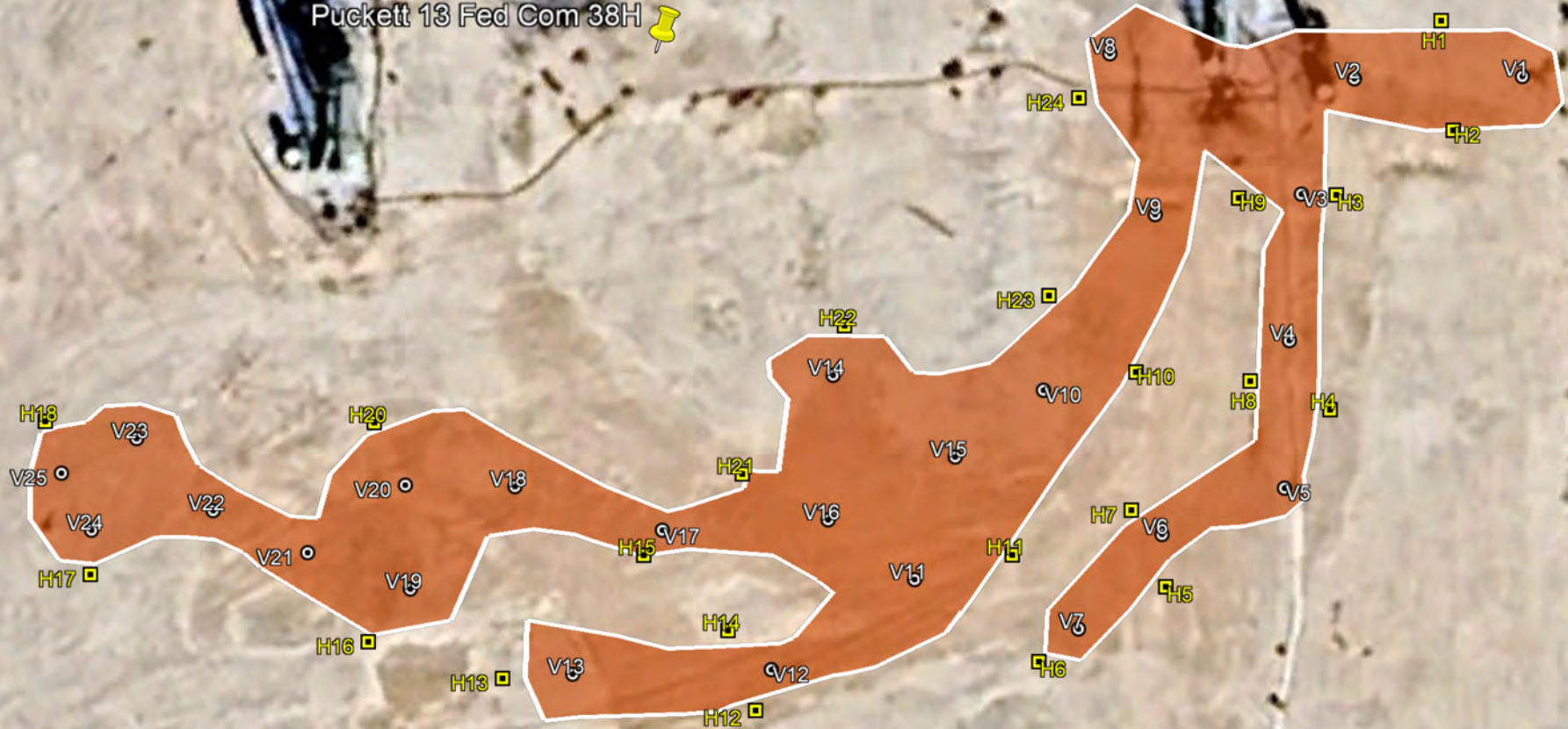
Google Earth

Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
Proposed Sampling Map

Legend

- Horizontal Delineation Sample
- Puckett 13 Fed Com 38H
- Release Area
- Vertical Delineation Sample



Appendix A


Water Surveys:

- OSE
- USGS
- Surface Water Map

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
NA	RA 13286 POD1	NE	SE	SE	12	17S	31E	610741.6	3634697.7	

* UTM location was derived from PLSS - see Help




Driller License:	1249	Driller Company:	ATKINS ENGINEERING ASSOC. INC.
Driller Name:	JACKIE ATKINS		
Drill Start Date:	2023-03-23	Drill Finish Date:	2023-03-23
Log File Date:	2023-06-27	PCW Rcv Date:	
Pump Type:		Pipe Discharge Size:	
Casing Size:		Depth Well:	101
		Depth Water:	

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.

Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
OSE POD Map

Legend

-  0.04 of a mile
-  Puckett 13 Federal Com #038H
-  RA 13286 POD1



Google Earth



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation



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

Search Results -- 1 sites found

site_no list =

- 325119103450101

Minimum number of levels = 1

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

USGS 325119103450101 17S.32E.03.43333

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°51'23", Longitude 103°45'12" NAD27

Land-surface elevation 4,206.30 feet above NGVD29

This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

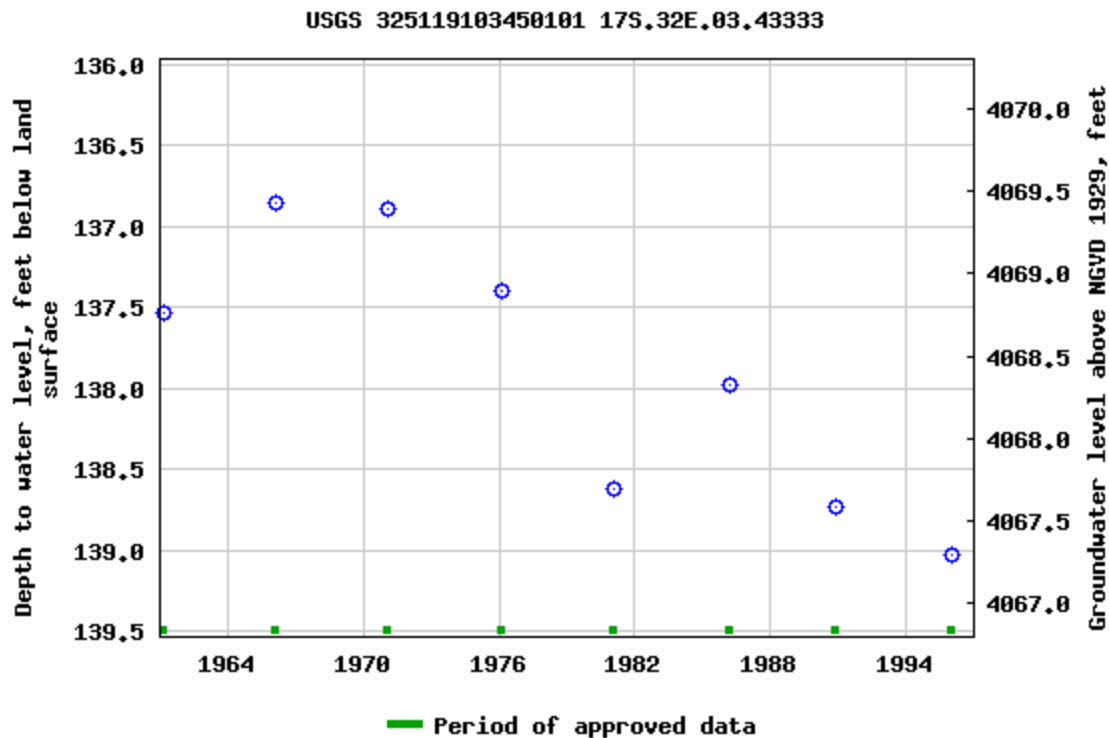
Output formats

[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.

[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2024-10-02 13:28:46 EDT

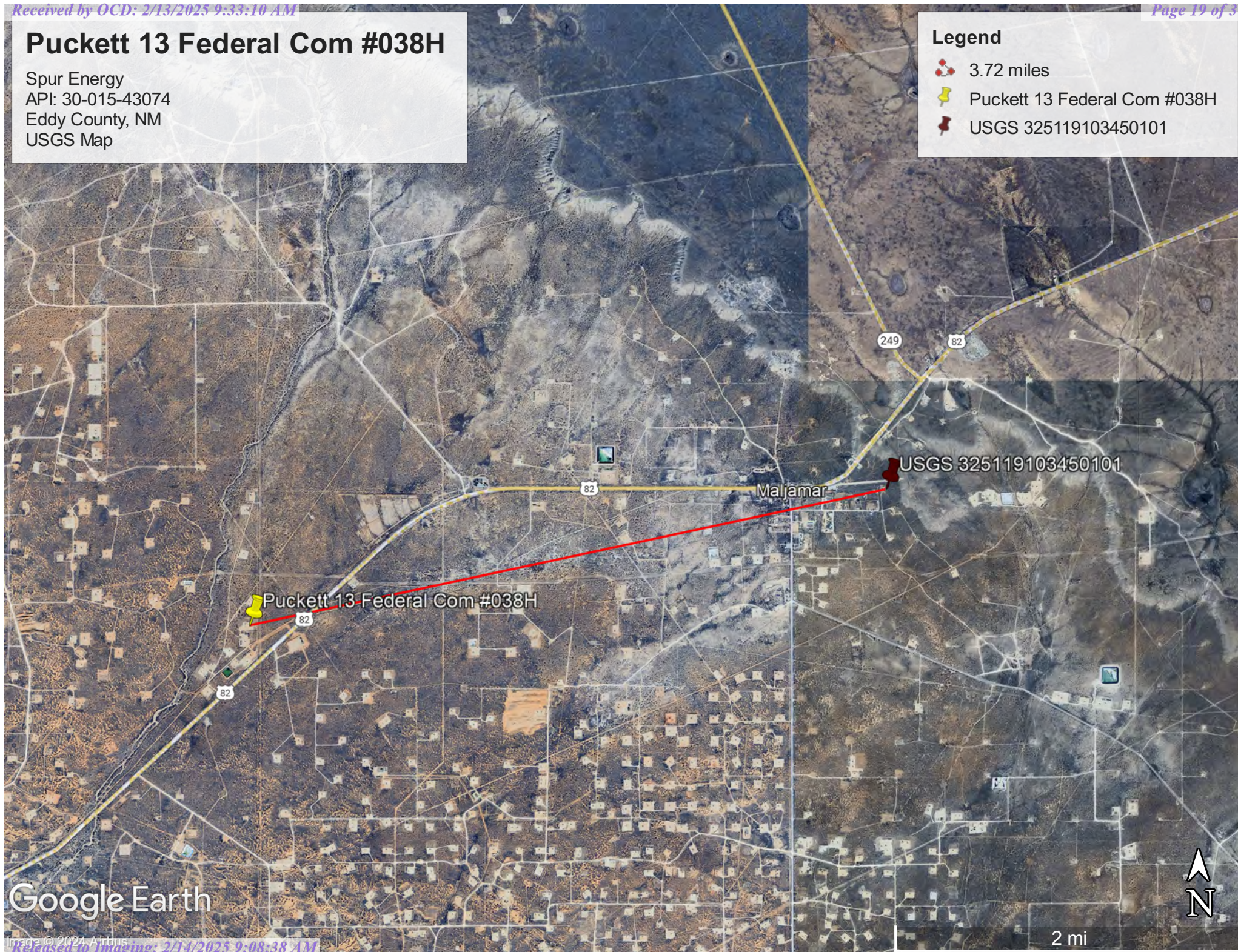
0.76 0.55 nadww02

Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
USGS Map

Legend

-  3.72 miles
-  Puckett 13 Federal Com #038H
-  USGS 325119103450101






Google Earth

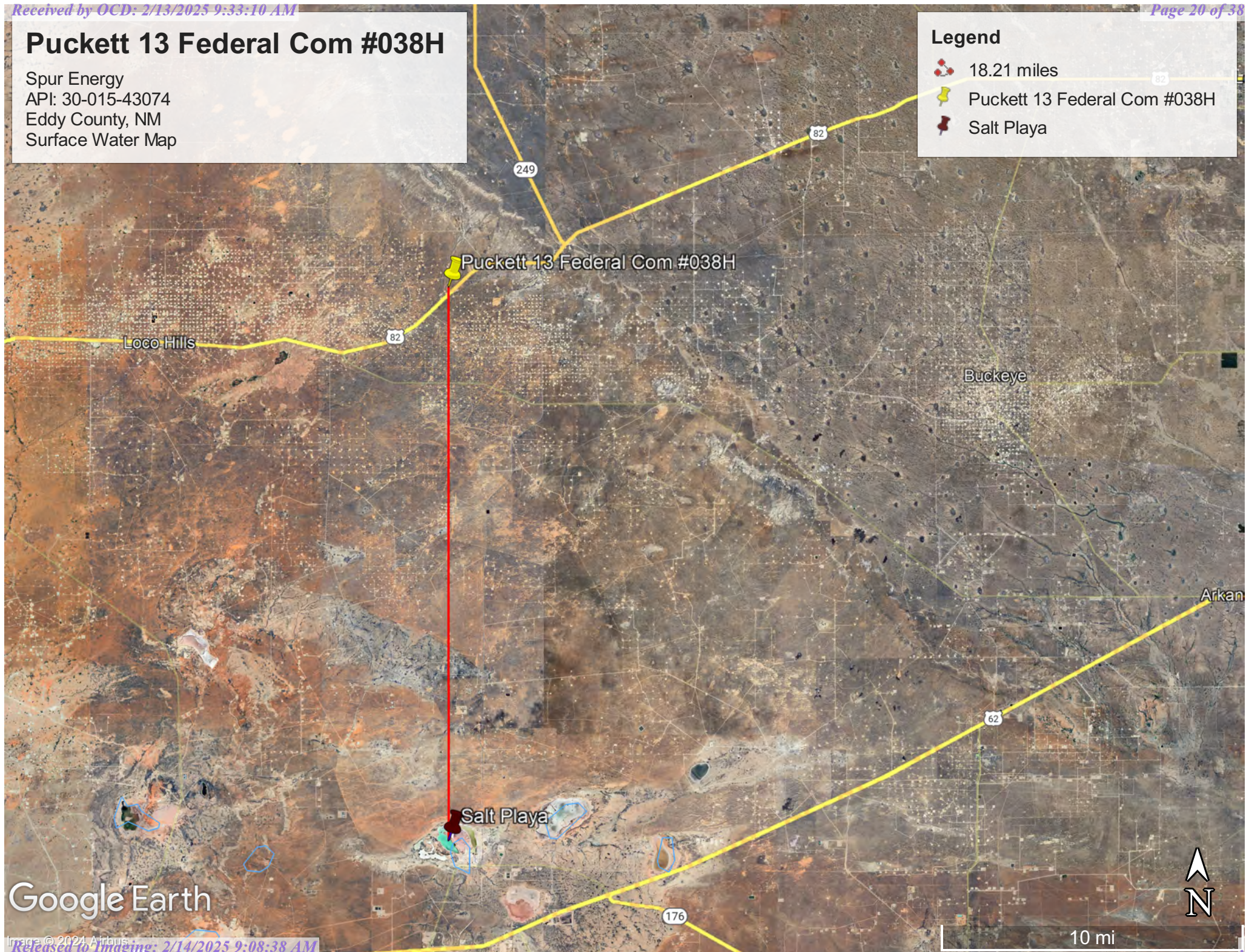
2 mi

Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
Surface Water Map

Legend

-  18.21 miles
-  Puckett 13 Federal Com #038H
-  Salt Playa



Google Earth

Appendix B

- Soil Survey & Soil Maps
- Geological Data
- FEMA Flood Map
- Wetlands Map

Map Unit Description: Berino-Pajarito complex, 0 to 3 percent slopes, eroded---Eddy Area,
New Mexico

Eddy Area, New Mexico

BP—Berino-Pajarito complex, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w45

Elevation: 2,450 to 4,200 feet

Mean annual precipitation: 5 to 15 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 190 to 250 days

Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 46 percent

Pajarito and similar soils: 45 percent

Minor components: 9 percent

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

Description of Berino

Setting

Landform: Plains, fan piedmonts

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: sandy loam

H3 - 50 to 60 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 supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Map Unit Description: Berino-Pajarito complex, 0 to 3 percent slopes, eroded---Eddy Area,
New Mexico

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Pajarito

Setting

Landform: Plains, interdunes, dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 36 inches: fine sandy loam
H3 - 36 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 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: Moderate (about 8.0
inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Wink

Percent of map unit: 3 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Dune land

Percent of map unit: 3 percent
Hydric soil rating: No

Map Unit Description: Berino-Pajarito complex, 0 to 3 percent slopes, eroded---Eddy Area,
New Mexico

Kermi

Percent of map unit: 3 percent

Ecological site: R070BD005NM - Deep Sand

Hydric soil rating: No

Data Source Information

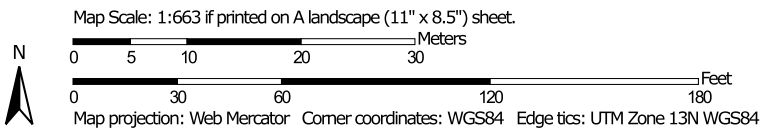
Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 20, Sep 3, 2024

Soil Map—Eddy Area, New Mexico



Soil Map may not be valid at this scale.



Natural Resources
Conservation Service


Web Soil Survey
National Cooperative Soil Survey

10/2/2024
Page 1 of 3

Soil Map—Eddy Area, New Mexico

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BP	Berino-Pajarito complex, 0 to 3 percent slopes, eroded	2.3	100.0%
Totals for Area of Interest		2.3	100.0%

(<https://www.usgs.gov/>)

Mineral Resources (<https://www.usgs.gov/energy-and-minerals/mineral-resources-program>)
/ Online Spatial Data (/) / Geology (/geology/) / by state (/geology/state/)
/ New Mexico (/geology/state/state.php?state=NM)

Eolian and piedmont deposits

XML (/geology/state/xml/NMQep;0)	JSON (/geology/state/json/NMQep;0)
Shapefile (/geology/state/unit-shape.php?unit=NMQep;0)	

Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits.

State	New Mexico (/geology/state/state.php?state=NM)
Name	Eolian and piedmont deposits
Geologic age	Holocene to middle Pleistocene
Lithologic constituents	Major Unconsolidated (Eolian) Interlayered eolian sands and piedmont-slope deposits
References	New Mexico Bureau of Geology and Mineral Resources, 2003, Geologic Map of New Mexico, scale 1:500,000 (includes some new polygons, faults, and attributes not in NM001 - heads up digitizing by JHorton).
NGMDB product	NGMDB product page for 22974 (https://ngmdb.usgs.gov/Prodesc/proddesc_22974.htm)
Counties	Chaves (/geology/state/fips-unit.php?code=f35005) - DeBaca (/geology/state/fips-unit.php?code=f35011) - Eddy (/geology/state/fips-unit.php?code=f35015) - Lea (/geology/state/fips-unit.php?code=f35025) - Roosevelt (/geology/state/fips-unit.php?code=f35041)

DOI Privacy Policy (<https://www.doi.gov/privacy>) | Legal (https://www.usgs.gov/laws/policies_notices.html) |
Accessibility (<https://www2.usgs.gov/laws/accessibility.html>) | Site Map (<https://www.usgs.gov/sitemap.html>) |
Contact USGS (<https://answers.usgs.gov/>)

U.S. Department of the Interior (<https://www.doi.gov/>) | DOI Inspector General (<https://www.doiig.gov/>) |

White House (<https://www.whitehouse.gov/>) | E-gov (<https://www.whitehouse.gov/omb/management/egov/>) |

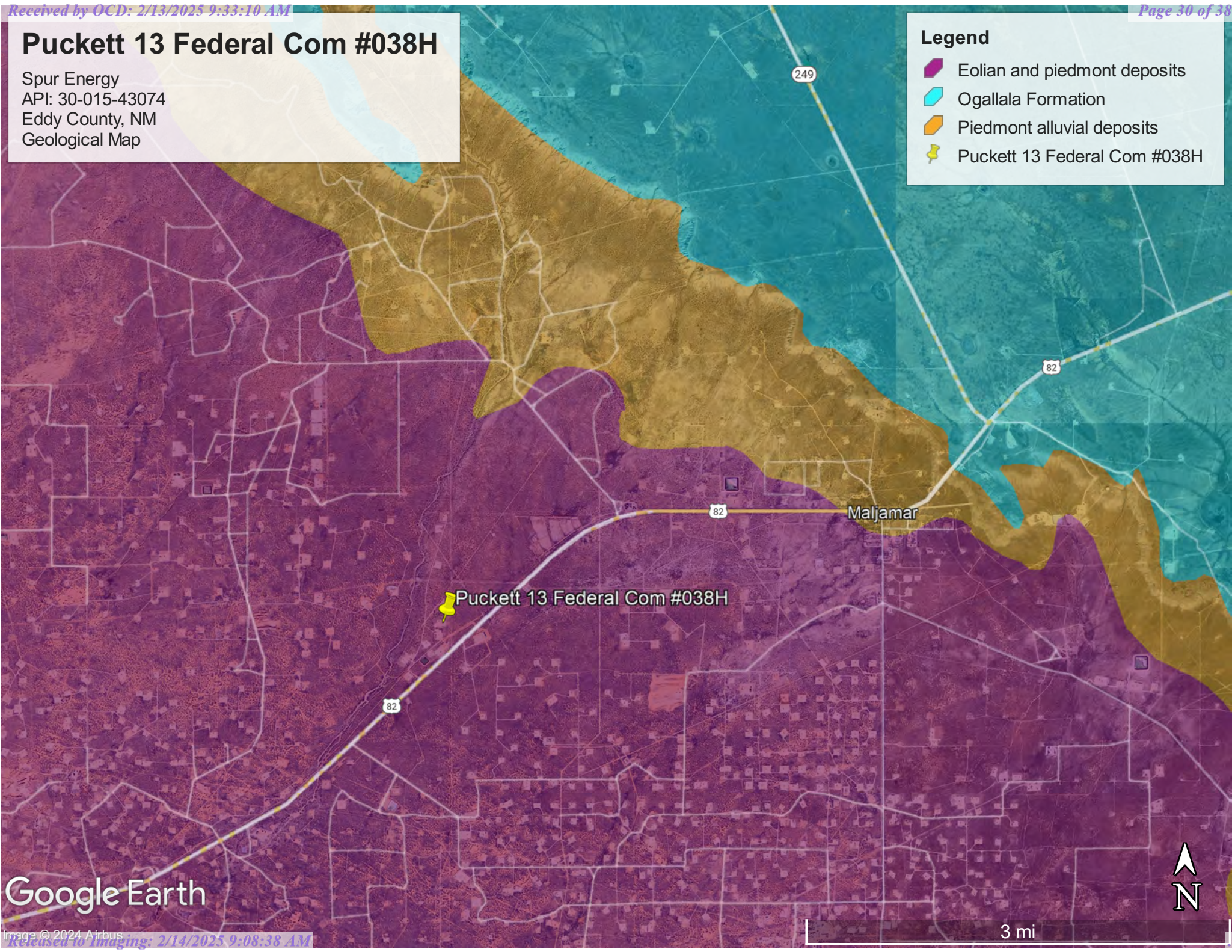
No Fear Act (<https://www.doi.gov/pmb/eeo/no-fear-act>) | FOIA (<https://www2.usgs.gov/foia>)

Puckett 13 Federal Com #038H

Spur Energy
API: 30-015-43074
Eddy County, NM
Geological Map

Legend

- Eolian and piedmont deposits
- Ogallala Formation
- Piedmont alluvial deposits
- Puckett 13 Federal Com #038H



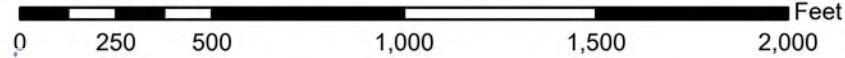
Google Earth

3 mi

National Flood Hazard Layer FIRMMette



103°49'17"W 32°50'58"N



1:6,000

103°48'39"W 32°50'27"N

Basemap Imagery Source: USGS National Map 2023

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 |
| | | 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 X |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard Zone X |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard Zone D |
| | | Channel, Culvert, or Storm Sewer |
| OTHER FEATURES | | Levee, Dike, or Floodwall |
| | | Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | | Profile Baseline |
| | | Hydrographic Feature |
| | MAP PANELS | |
| | | 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 10/2/2024 at 1:34 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



Received by OCD: 2/14/2025 9:33:10 AM

Page 31 of 38



October 2, 2024

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

FACILITY NAME	Puckett 13 Federal #038H
DATE OF RELEASE	
INCIDENT NO.	NAPP2104043158, NAPP2110639937

Site Characterization																									
	<table> <tr> <td>DTGW What is the shallowest DTGW beneath the area affected by the release in ft below ground surface (ft bgs)</td><td>Between 100 and 500 ft.</td></tr> <tr> <td>GW Depth Determination What method was used to determine the DTGW?</td><td>NM OSE iWaters Database Search</td></tr> <tr> <td>Ground or Surface Water Impacted Did this release impact GW or Surface Water?</td><td>No</td></tr> </table>	DTGW What is the shallowest DTGW beneath the area affected by the release in ft below ground surface (ft bgs)	Between 100 and 500 ft.	GW Depth Determination What method was used to determine the DTGW?	NM OSE iWaters Database Search	Ground or Surface Water Impacted Did this release impact GW or Surface Water?	No																		
DTGW What is the shallowest DTGW beneath the area affected by the release in ft below ground surface (ft bgs)	Between 100 and 500 ft.																								
GW Depth Determination What method was used to determine the DTGW?	NM OSE iWaters Database Search																								
Ground or Surface Water Impacted Did this release impact GW or Surface Water?	No																								
What is the min. distance between the closest lateral extents of the release and the following surace areas?																									
	<table> <tr> <td>Distance to Watercourse A continuously flowing watercourse or any other significant watercourse?</td><td>> 5 mi.</td></tr> <tr> <td>Distance to Lakebed Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?</td><td>Between 1 mi. and 5 mi.</td></tr> <tr> <td>Distance to Public An occupied permanent residence, school, hospital, institution, or church?</td><td>> 5 mi.</td></tr> <tr> <td>Distance to Private A spring or a private domestic FW well used by less than five households for domestic or stock watering purposes?</td><td>> 5 mi.</td></tr> <tr> <td>Distance to Fresh Water Any other FW well spring?</td><td>> 5 mi.</td></tr> <tr> <td>Within Municipal Boundaries Incorporated municipal boundaries or a defined municipal FW well field?</td><td>> 5 mi.</td></tr> <tr> <td>Distance to Wetland A wetland?</td><td>Between 500 ft and 1/2 mi.</td></tr> <tr> <td>Overlying Subsurface Mine A subsurface mine?</td><td>> 5 mi.</td></tr> <tr> <td>Overlying (Non-Karst) Unstable Area An (non-karst) unstable area?</td><td>> 5 mi.</td></tr> <tr> <td>Risk of Karst Geology Categorize the risk of this well/site being in a karst geology?</td><td>Low</td></tr> <tr> <td>Distance to or Within 100 yr Floodplain A 100-year floodplain?</td><td>> 5 mi.</td></tr> <tr> <td>Areas NOT Other Site Did the release impact areas not on exploration, development, production, or storage site?</td><td>No</td></tr> </table>	Distance to Watercourse A continuously flowing watercourse or any other significant watercourse?	> 5 mi.	Distance to Lakebed Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Between 1 mi. and 5 mi.	Distance to Public An occupied permanent residence, school, hospital, institution, or church?	> 5 mi.	Distance to Private A spring or a private domestic FW well used by less than five households for domestic or stock watering purposes?	> 5 mi.	Distance to Fresh Water Any other FW well spring?	> 5 mi.	Within Municipal Boundaries Incorporated municipal boundaries or a defined municipal FW well field?	> 5 mi.	Distance to Wetland A wetland?	Between 500 ft and 1/2 mi.	Overlying Subsurface Mine A subsurface mine?	> 5 mi.	Overlying (Non-Karst) Unstable Area An (non-karst) unstable area?	> 5 mi.	Risk of Karst Geology Categorize the risk of this well/site being in a karst geology?	Low	Distance to or Within 100 yr Floodplain A 100-year floodplain?	> 5 mi.	Areas NOT Other Site Did the release impact areas not on exploration, development, production, or storage site?	No
Distance to Watercourse A continuously flowing watercourse or any other significant watercourse?	> 5 mi.																								
Distance to Lakebed Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Between 1 mi. and 5 mi.																								
Distance to Public An occupied permanent residence, school, hospital, institution, or church?	> 5 mi.																								
Distance to Private A spring or a private domestic FW well used by less than five households for domestic or stock watering purposes?	> 5 mi.																								
Distance to Fresh Water Any other FW well spring?	> 5 mi.																								
Within Municipal Boundaries Incorporated municipal boundaries or a defined municipal FW well field?	> 5 mi.																								
Distance to Wetland A wetland?	Between 500 ft and 1/2 mi.																								
Overlying Subsurface Mine A subsurface mine?	> 5 mi.																								
Overlying (Non-Karst) Unstable Area An (non-karst) unstable area?	> 5 mi.																								
Risk of Karst Geology Categorize the risk of this well/site being in a karst geology?	Low																								
Distance to or Within 100 yr Floodplain A 100-year floodplain?	> 5 mi.																								
Areas NOT Other Site Did the release impact areas not on exploration, development, production, or storage site?	No																								
Remediation Plan																									
	<table> <tr> <td>Have the lateral and vertical extents of contamination been fully delineated?</td><td>Yes</td></tr> <tr> <td>Lined Containment Area Only Was this release entirely contained within a lined containment area?</td><td>No</td></tr> </table>	Have the lateral and vertical extents of contamination been fully delineated?	Yes	Lined Containment Area Only Was this release entirely contained within a lined containment area?	No																				
Have the lateral and vertical extents of contamination been fully delineated?	Yes																								
Lined Containment Area Only Was this release entirely contained within a lined containment area?	No																								
Soil Containment Sampling	(EPA 300.00 or SM4500 CI B?)																								
	<table> <tr> <td>Chloride Constituent Chloride (mg/kg)</td><td></td></tr> <tr> <td></td><td>(EPA SW-846 Method 8015M)?</td></tr> <tr> <td>TPH (GRO+DRO+MRO) Constituent TPH (mg/kg)</td><td></td></tr> <tr> <td></td><td>(EPA SW-846 Method 8015M)?</td></tr> <tr> <td>GRO + DRO Constituent GRO-DRO (mg/kg)</td><td></td></tr> <tr> <td></td><td>(EPA SW-846 Method 8021B or 8260B)?</td></tr> </table>	Chloride Constituent Chloride (mg/kg)			(EPA SW-846 Method 8015M)?	TPH (GRO+DRO+MRO) Constituent TPH (mg/kg)			(EPA SW-846 Method 8015M)?	GRO + DRO Constituent GRO-DRO (mg/kg)			(EPA SW-846 Method 8021B or 8260B)?												
Chloride Constituent Chloride (mg/kg)																									
	(EPA SW-846 Method 8015M)?																								
TPH (GRO+DRO+MRO) Constituent TPH (mg/kg)																									
	(EPA SW-846 Method 8015M)?																								
GRO + DRO Constituent GRO-DRO (mg/kg)																									
	(EPA SW-846 Method 8021B or 8260B)?																								

	BTEX Constituent BTEX (mg/kg)	
		(EPA SW-846 Method 8021B or 8260B)?
	Benzene Constituent Benzene (mg/kg)	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
	Start of Remediation On what estimated date will remediation commence?	
	Start of Sampling or Liner Inspection On what date will (or did) the final sampling or liner inspection occur?	
	Finish of Remediation On what date will (or was) the remediation complete(d)?	
	Surface Area (sq ft) To Be Reclaimed What is the estimated surface area (in sq ft) that will be reclaimed?	
	Surface Area (sq ft) To Be Remediated What is the estimated surface area (in sq ft) that will be remediated?	
	Volume (cu yd) To Be Remediated What is the estimated volume (in cubic yds) that will be remediated?	
Remediation Plan (Cont.) Please answer all that apply		
	Ex Situ Excavation Off-Site (Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)?	Yes
	Ex Situ Excavation On-Site (Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)?	No
	In Situ Soil Vapor Extraction (SVE)?	No
	In Situ Chemical Processing (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)?	No
	In Situ Biological Processing (In Situ) Biological processing (i.e. Microbes/Fertilizer, etc.)?	No
	In Situ Physical Processing (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)?	No
	In Situ Ground Water Abatement GW Abatement pursuant to 19.15.30 NMAC?	No
	Remediation Other Other (Non-listed remedial process)?	No
Deferral Request Only		
	Requesting a deferral of the remediation closure due date with the approval of this submission	

Lea Land

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 431750

QUESTIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 431750
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2104043158
Incident Name	NAPP2104043158 PUCKETT 13 FEDERAL #038H @ 30-015-43074
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Well	[30-015-43074] PUCKETT 13 FEDERAL #038H

Location of Release Source

Please answer all the questions in this group.

Site Name	PUCKETT 13 FEDERAL #038H
Date Release Discovered	02/07/2021
Surface Owner	Private

Incident Details

Please answer all the questions in this group.

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Other Pipeline (Any) Crude Oil Released: 6 BBL Recovered: 2 BBL Lost: 4 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 431750

QUESTIONS (continued)

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 431750
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	N/A

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Katherine Purvis Title: EHS Coordinator Email: katherine.purvis@spurenergy.com Date: 02/13/2025
--	---

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 3

Action 431750

QUESTIONS (continued)

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 431750
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	No
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 431750

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 431750
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
crystal.walker	Spill Calculation, Initial C141 and Site Characterization are approved. Variance request for confirmation soil samples to be taken every 400 sq ft instead of 200 sq ft is denied.	2/14/2025