



SEMU EUMONT #042  
nLWJ1032639357

PREPARED BY SAPEC-ECO, LLC.  
PREPARED FOR MAVERICK PERMIAN, LLC.

## **Proposed Sampling and Remediation Work Plan**

May 20, 2025



Attn: NMOCD District 1  
 1625 N French Dr.  
 Hobbs, NM 88240

Bureau of Land Management  
 620 E Green St.  
 Carlsbad, NM 88220

Re: Proposed Sampling and Remediation Work Plan  
 NMOCD Incident Number: **nLWJ1032639357**  
 SEMU Eumont #042 API No. 30-025-06089  
 Unit N, Section 13, Township 20S, Range 37E 660 FSL 1980 FWL Lea County, NM  
 GPS Coordinates: Latitude 32.5676537 Longitude -103.2071686 NAD83

Sapec-Eco (Sapec) has been contracted by Maverick Permian, LLC. (Maverick) to review and research this historic incident then prepare this proposed sampling and remediation work plan for a produced water release that occurred at the SEMU Eumont #042 (Site). This incident was assigned Incident ID nLWJ1032639357 by the New Mexico Oil Conservation Division (NMOCD).

### ***Release Information - nLWJ1032639357***

The initial Form C-141 was submitted on November 19, 2010 (Appendix A) and stated that "MSO found a leak on a steel 1 inch (25+ years) line at the header. MSO shut in and isolated injection line. Release was due to internal corrosion. Line will be replaced before putting well back into service. Total release was 12 BPW. A vacuum truck was called out and recovered 8 BPW. Affected area was 50 feet X 80 feet, 90% on caliche pad. Sample area and submit work plan for clean up." This initial Form C-141 was approved by the NMOCD the same day.

### ***Site Characterization***

This Site is in Lea County, NM, approximately nine (9) miles north of Eunice, NM. The wellhead and release area are in Unit N, Section 13, Township 20S, Range 37E, at 32.5676537 degrees latitude and -103.2071686 degrees longitude. A Location Map is included for reference in Figure 5.

The New Mexico Bureau of Geology and Mineral Resources shows the geology at this Site includes Eolian and piedmont deposits. 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. A Geologic Unit Map can be found in Appendix C.

The soil type present at the Site is Pyote soils and Dune land. The slope property is 0 to 3 percent. The drainage class is well drained. Soil type information is according to the United States Department of Agriculture Natural Resources Conservation Service soil survey. The Soil Survey and a Soil Map can be referenced in Appendix C. Reference Figure 4 for a Topographic Map.

The Site resides in a low karst zone and is approximately 33.65 miles away from the nearest medium karst zone. Figure 3 refers to the Karst Map.

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 84 feet below grade surface (bgs). This information is recorded by L-04412-S which is situated approximately 0.71 miles away from the Site. This information is from 1967. The United States Geological Survey (USGS) offers the site USGS 323358103123001 20S.37E.13.32130 which shows depth to the nearest groundwater is 80 feet bgs. The latest gauge of this site was conducted in 1991, and it is located approximately 0.11 miles from the Site.

The nearest surface water feature is Stephens Park Pond, and it is located approximately 7.12 miles to the south. The U.S. Fish and Wildlife Service National Wetlands Inventory shows the nearest wetland to be a Freshwater Emergent Wetland approximately 2.02 miles north. According to Fema's National Flood Hazard Layer search, the Site is situated in Zone D - Area of Undetermined Flood Hazard and is greater than 5 miles away from the nearest flood hazard zone. See Appendix B for referenced Water Surveys and Water-Related Maps.

Readily available data were reviewed to determine if the Site lies within biologically sensitive areas. The U.S. Fish and Wildlife Services (USFWS) Information for Planning and Consultation (IPaC) and the New Mexico Department of Game and Fish (NMDGF) Environmental Review Tool (ERT) were queried to determine if sensitive wildlife or plant areas are present at the Site. The Site is not identified to be within biologically sensitive areas where remediation/reclamation would impact sensitive plant habitats. However, the Site does lie within the Isolated Population Area of the Lesser Prairie Chicken Habitat and the Dunes Sage Brush Lizard Habitat. Any work taking place at this location between March 1 and June 15 will strictly adhere to the timing restrictions outlined in the Special Status Species Resource Management Plan Amendment. A Special Status Plant/Wildlife Map is included in Figure 2.

The remediation area at the Site is in previously disturbed areas developed for oil and gas extraction; therefore, a cultural resource survey will not be required at the Site for planned remediation activities. The requirements of the Cultural Properties Protection (CCP) Rule will be followed should the need arise for the area to be extended to previously undisturbed areas.

### ***Assessment and Delineation Activities***

"At the request of ConocoPhillips, Tetra Tech personnel conducted a records review and a visual Site inspection on July 6, 2020 at the release area to evaluate current conditions at the Site. The formerly impacted area was identified from the description in the C-141 (and correspondence with ConocoPhillips) and was corroborated by aerial imagery. Photographic documentation from the visual inspection is included as Attachment C. A list of observations made during the records review and visual Site inspection follow:

- Review of available historical aerial imagery revealed no evidence of the release in the vicinity of the injection station.
- No staining was noted on the injection station lease pad or in the adjacent pasture areas during the July 2020 visual Site inspection."

On October 15, 2020, ConocoPhillips submitted a Closure Letter Report for this incident. This report was denied by the NMOCD on April 14, 2023. This documentation is available for reference in Appendix E.

### ***Proposed Sampling & Remediation Activities***

In response to the previously denied Closure Letter Report, Maverick would like to propose the following:

- The area of concern measures approximately 4,000 square feet and is entirely on the pad surface and lease road.
- Collect discrete samples from within and around the edges of the release area to evaluate the presence of contaminants. Forty-five (45) samples will be collected from 9 different sample points within the release area from depths of surface, 1', 2', 3', and 4' bgs. Fifty (50) samples will be collected from 10 different sample points around the edges of the release area from depths of surface, 1', 2', 3', and 4' bgs.
- All samples will be put on ice, prepared for delivery, then delivered to Envirotech Analytical Laboratories where they will be analyzed for all the constituents listed in Table 1 19.15.29.12 NMAC.
- A 48-hour sampling notification will be issued to the NMOCD for these sampling events. A variance request is included below for permission to use the delineation samples as confirmation samples depending on the sample results of the soil. A Proposed Sample Map referencing the release area and the previously remediated area can be found in Figure 1.
- If any samples do not verify delineation, then the "step-out" method will be used for horizontal delineation samples until sample results can confirm delineation. Also, for vertical delineation samples, any samples not verifying delineation will be advanced deeper until sample results can confirm delineation.
- Sample results that are over the regulatory limits of the less than 50-foot depth to groundwater section of Table 1 will be measured for total area and affected volume then removed via mechanical excavation means. The contaminated soil will be hauled to an NMOCD-approved disposal facility and clean, like material will be brought to the Site for backfilling the excavated area.
- Once all sample results confirm delineation is complete, and contamination isn't present or has been removed, a remediation closure report will be drafted and submitted to the NMOCD Pay Portal for review/approval.

### ***Variance Request***

Maverick would like to respectfully request to use the delineation samples as confirmation samples in the event the laboratory samples results confirm that no contamination is present at any or all of the sample points. Maverick will



diligently remediate all contaminants found that have reported results being over the regulatory limits of the less than 50-foot depth to groundwater section of Table 1 19.15.29.12 NMAC. Chlorides should be no more than 600 mg/kg. TPH (GRO+DRO+ORO) should be no more than 100 mg/kg. BTEX should be no more than 50 mg/kg. Benzene should be no more than 10 mg/kg.

Once official verification is received that contaminants are not present, or have been successfully removed from all areas within and around the Site, a remediation closure report will be drafted and submitted for approval.

### ***Request for Proposed Sampling & Remediation Work Plan Approval***

Maverick requests that this proposed sampling & remediation work plan for incident ID nLWJ1032639357 be approved. All rules and regulations set forth in 19.15.29.12 NMAC have been complied with.

For questions or additional information, please reach out to:

Maverick Permian – Bryce Wagoner – [Bryce.Wagoner@mavresources.com](mailto:Bryce.Wagoner@mavresources.com) – (928) 241-1862

Sapec-Eco, LLC – Tom Bynum – [tombynum@sapec-eco.com](mailto:tombynum@sapec-eco.com) – (580) 748-1613

### ***Attachments***

#### **Figures:**

- 1- Proposed Sample Map
- 2- Special Status Plant/Wildlife Map
- 3- Karst Map
- 4- Topographic Map
- 5- Location Map

#### **Appendices:**

- Appendix A – Initial Form C-141
- Appendix B – Water Surveys & Water-Related Maps
- Appendix C – Soil Surveys, Soil Map, & Geologic Unit Map
- Appendix D – Photographic Documentation
- Appendix E – Closure Letter Report 2020



***Figures:***

**Proposed Sample Map**

**Special Status Plant/Wildlife Map**

**Karst Map**

**Topographic Map**

**Location Map**

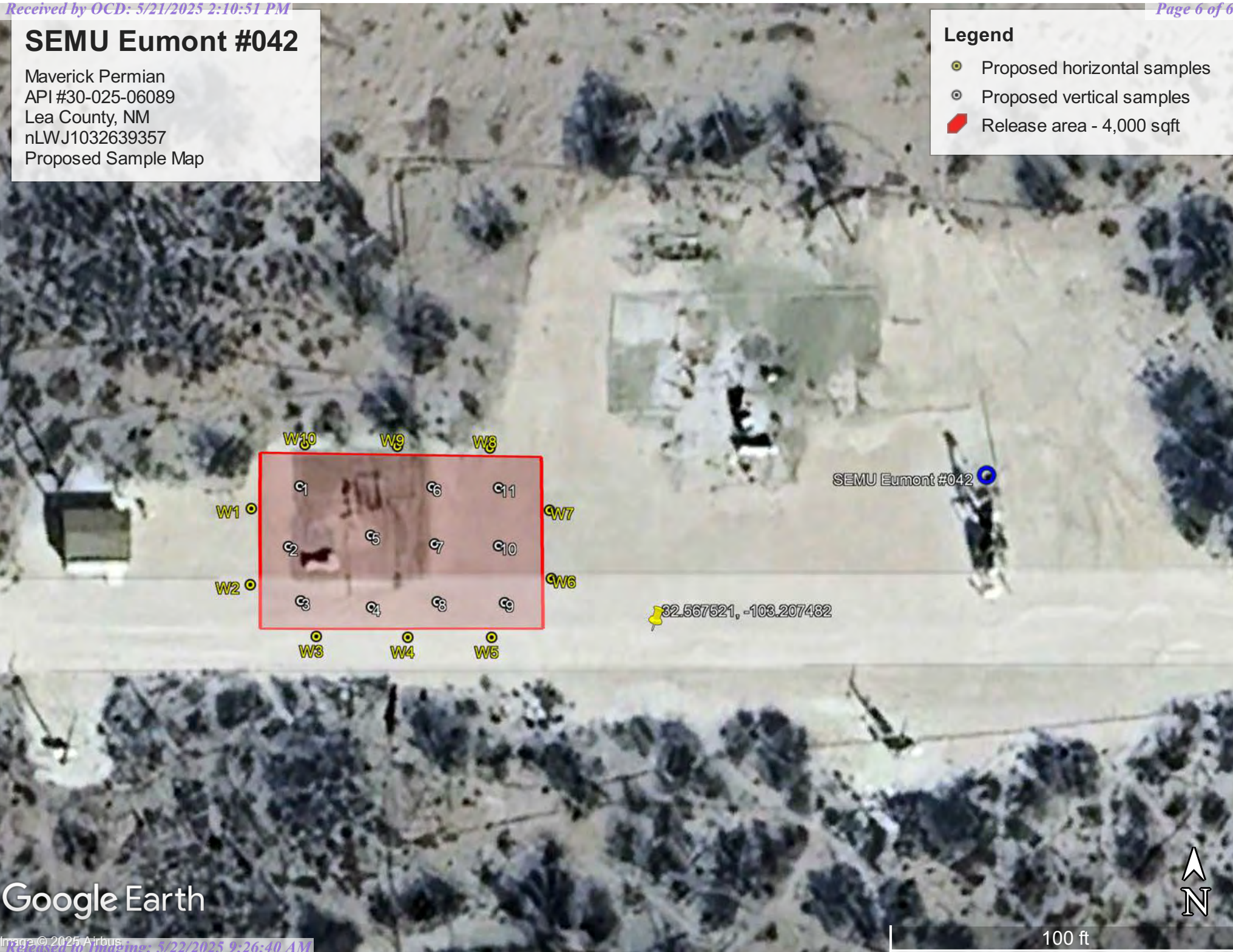


# SEMU Eumont #042

Maverick Permian  
API #30-025-06089  
Lea County, NM  
nLWJ1032639357  
Proposed Sample Map

## Legend

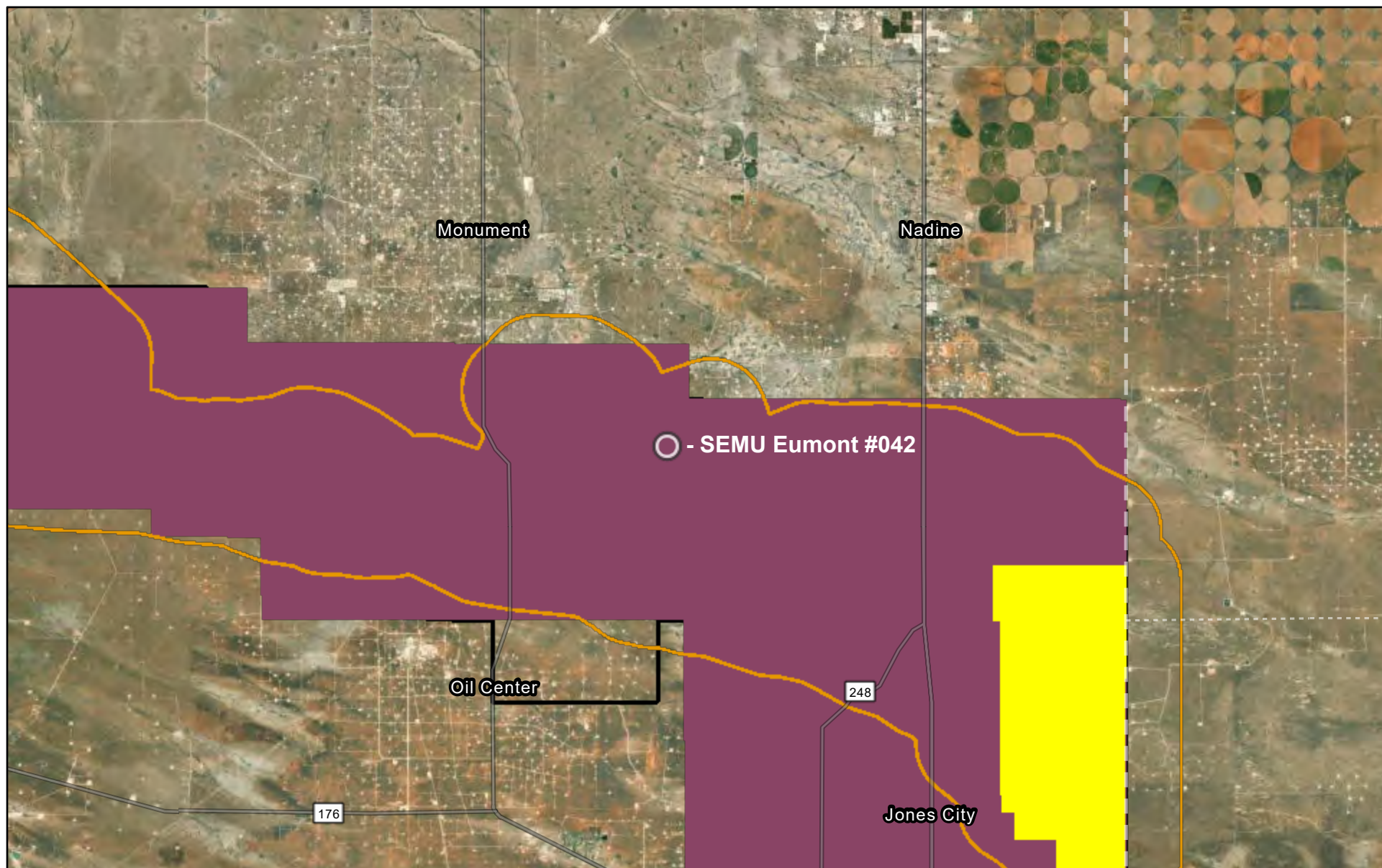
- Proposed horizontal samples
- Proposed vertical samples
- Release area - 4,000 sqft











Google Earth



# Special Status Plant/Wildlife Map



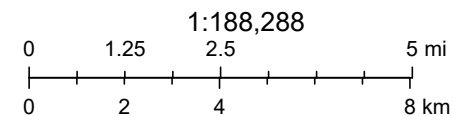
4/22/2025

- |  |  |
|--|--|
|  Dunes Sage Brush Lizard Habitat |  Lesser Prairie Chicken TR    |
|  Lesser Prairie Chicken Habitat  |  World Imagery                |
|  Habitat Evaluation Area         |  Low Resolution 15m Imagery   |
|  Isolated Population Area        |  High Resolution 60cm Imagery |

High Resolution 30cm Imagery

Citations

38m Resolution Metadata



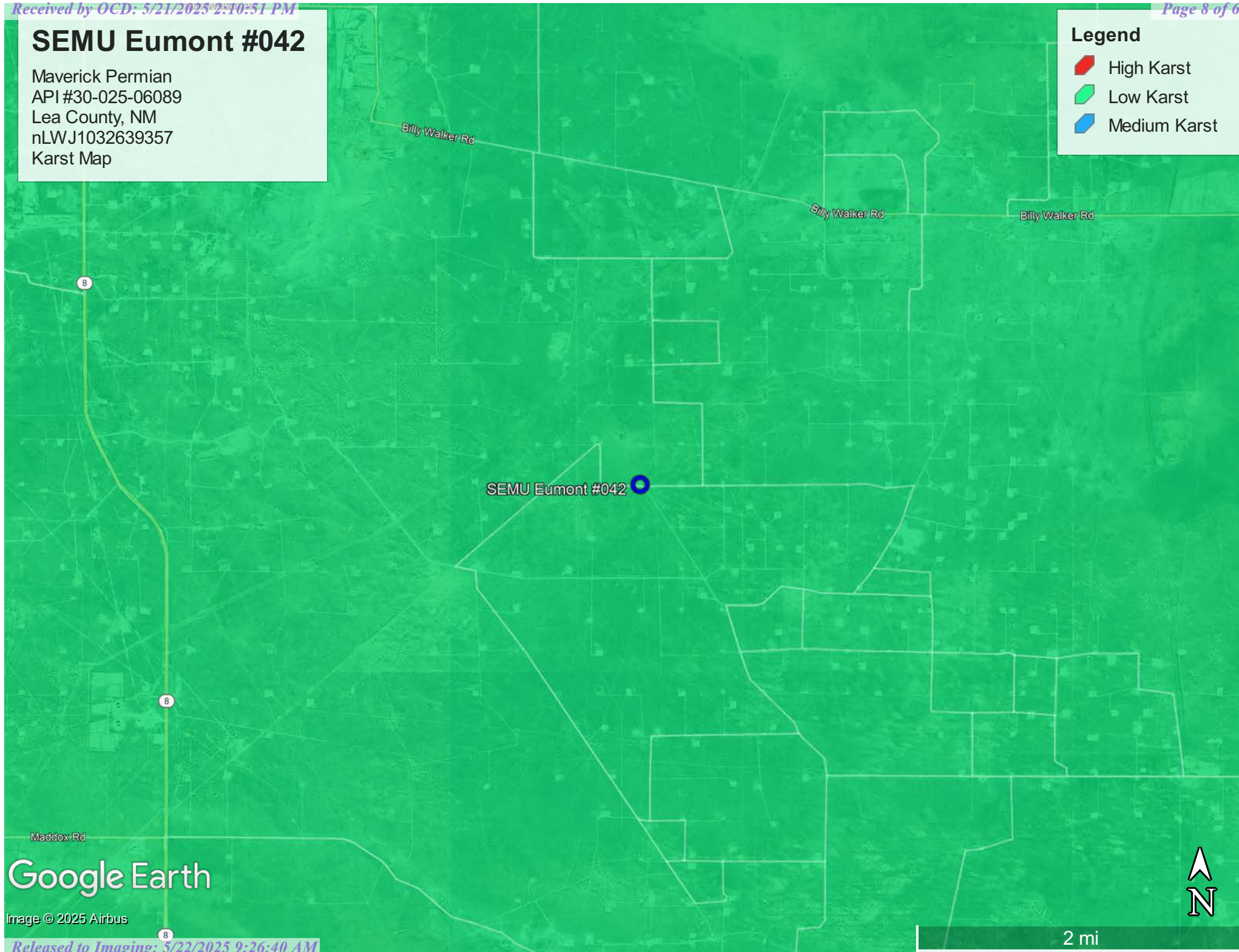
Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community,

# SEMU Eumont #042

Maverick Permian  
API #30-025-06089  
Lea County, NM  
nLWJ1032639357  
Karst Map

## Legend

- High Karst
- Low Karst
- Medium Karst



Google Earth

Image © 2025 Airbus

2 mi

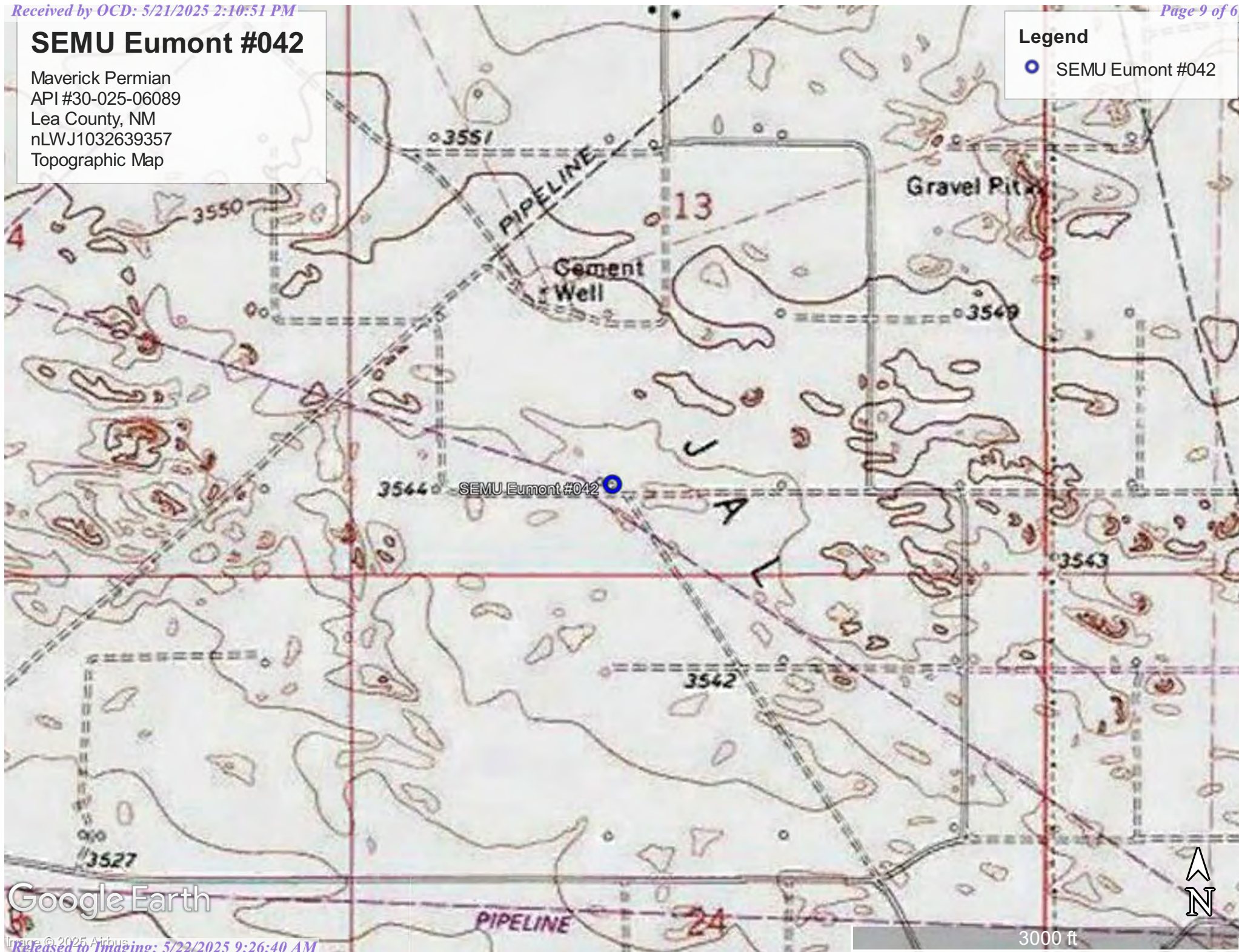


## SEMU Eumont #042

Maverick Permian  
API #30-025-06089  
Lea County, NM  
nLWJ1032639357  
Topographic Map

### Legend

● SEMU Eumont #042





# SEMU Eumont #042

Maverick Permian  
API #30-025-06089  
Lea County, NM  
nLWJ1032639357  
Location Map

## Legend

SEMU Eumont #042

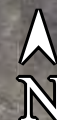
SEMU Eumont #042

New Mexico Official Scenic Historic Markers

Oil Center

Google Earth

5 mi







## ***Appendix A***

### **Initial Form C-141**



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

RECEIVED

NOV  
DEC 19 2010

HOBBSUCD

Form C-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

## OPERATOR

☒ Initial Report ☐ Final Report

Name of Company ConocoPhillips Company	Contact Jesse A. Sosa
Address 3300 N. "A" St., Bldg. 6 #247 Midland, TX 79705-5	Telephone No. (505)391-3126
Facility Name North Skaggs Injection Station	Facility Type Injection Station
Surface Owner <del>NMOCD</del> <del>BLM</del> <del>FED</del>	Mineral Owner BLM
Lease No. 3002506089	

## LOCATION OF RELEASE

SEMU Eumont #42

Unit Letter N	Section 13	Township 20S	Range 37E	Feet from the 660	North/South Line South	Feet from the 1980	East/West Line West	County Lea
------------------	---------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	---------------

Latitude 32 34.055 N Longitude 103 12.431 W

WTR 60

## NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 12	Volume Recovered 8
Source of Release Injection Line	Date and Hour of Occurrence 11/18/10 8:30 am	Date and Hour of Discovery 11/18/10 9 a
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD & BLM	
By Whom? Jesse Sosa	Date and Hour 11/19/10 8:30 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

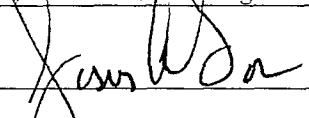

Describe Cause of Problem and Remedial Action Taken.\*

MSO found a leak on a steel 1 inch (25+ years) line at the header. MSO shut in and isolated injection line. Release was due to internal corrosion. Line will be replaced before putting well back into service.

Describe Area Affected and Cleanup Action Taken.\*

Total release was 12 BPW. A vacuum truck was called out and recovered 8 BPW. Affected area was 50 feet X 80 feet, 90% on caliche pad. Sample area and submit work plan for clean up.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Jesse A. Sosa	Approved by District Supervisor:  ENVIRONMENTAL ENGINEER	
Title: HSER Lead	Approval Date: 11.19.10	Expiration Date: 3.19.10
E-mail Address: Jesse.A.Sosa@conocophillips.com	Conditions of Approval:	
Date: 11/19/2010 Phone: (505)391-3126	Submit Final C-141 w/Docs 84 Attached <input type="checkbox"/> IRP# 11-10-2657	

\* Attach Additional Sheets If Necessary

nLWT 1032639357  
pLWT 1032639715



## ***Appendix B***

### **Water Surveys**

### **Water-Related Maps**



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 smallest to largest)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	(meters)	(In feet)		
													Distance	Well Depth	Depth Water	Water Column
L 04412 S		L	LE	SE	SE	NE	13	20S	37E	669189.0	3605491.0 *		1138	155	84	71
L 05350		L	LE		NE	NW	13	20S	37E	668279.0	3605980.0 *		1204	100		
L 10117		L	LE	NW	NW	NE	13	20S	37E	668580.0	3606086.0 *		1339	130	70	60
L 04412		L	LE	SE	NE	NE	13	20S	37E	669181.0	3605894.0 *		1421	140	85	55
L 05351		L	LE		NE	NE	13	20S	37E	669082.0	3605995.0 *		1446	115		
L 15389 POD1		L	LE	NE	NW	SE	23	20S	37E	667120.6	3603595.6		1670	100		

Average Depth to Water: 79 feet

Minimum Depth: 70 feet

Maximum Depth: 85 feet

Record Count: 6

Basin/County Search:

County: LE

UTM Filters (in meters):

Easting: 668303.39

Northing: 3604775.76

Radius: 02000

\* 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.



# 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
	L 04412 S	SE	SE	NE	13	20S	37E	669189.0	3605491.0 *	

\* UTM location was derived from PLSS - see Help

Driller License:	46	Driller Company:	ABBOTT BROTHERS COMPANY		
Driller Name:	MURRELL ABBOTT				
Drill Start Date:	1967-03-07	Drill Finish Date:	1967-03-08	Plug Date:	
Log File Date:	1967-03-16	PCW Rcv Date:	1967-05-24	Source:	Shallow
Pump Type:	TURBIN	Pipe Discharge Size:		Estimated Yield:	
Casing Size:	9.63	Depth Well:	155	Depth Water:	84

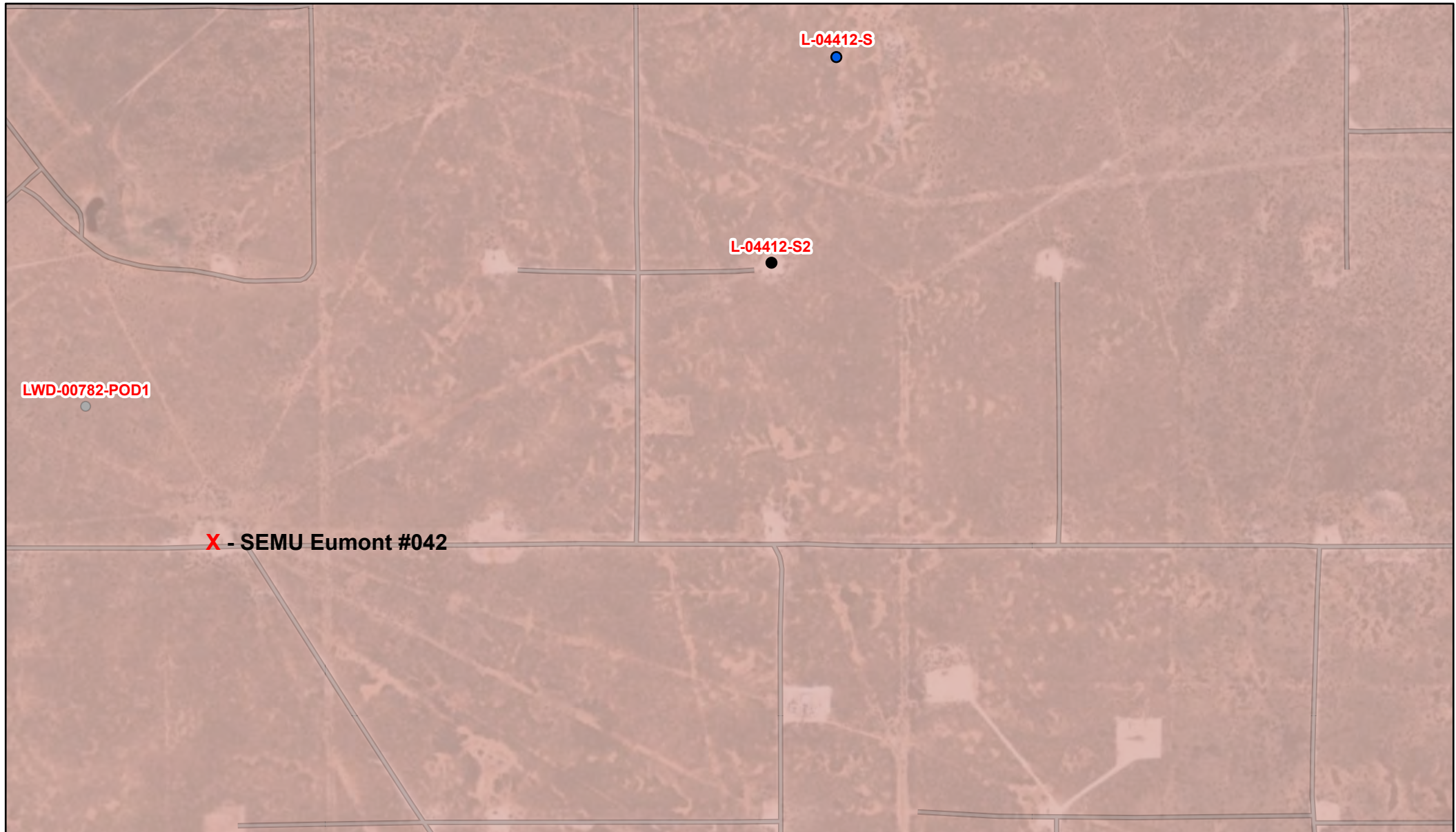
## Water Bearing Stratifications:

Top	Bottom	Description
84	90	Sandstone/Gravel/Conglomerate
100	121	Sandstone/Gravel/Conglomerate
125	145	Sandstone/Gravel/Conglomerate

## Casing Perforations:

Top	Bottom
95	155

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.



4/22/2025, 1:52:40 PM

## GIS WATERS PODs



 OSE District Boundary



Active

## Water Right Regulations



Inactive



 Critical Management Area - Guidelines



to Imaging: 5/22/2025 9:26:40 AM



Closure Area

1:9,028

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Online web user

This is an unofficial map from the OSE's online application.



[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 =

- 323358103123001

Minimum number of levels = 1

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

### USGS 323358103123001 20S.37E.13.32130

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°33'58", Longitude 103°12'30" NAD27

Land-surface elevation 3,544 feet above NAVD88

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

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

#### Output formats

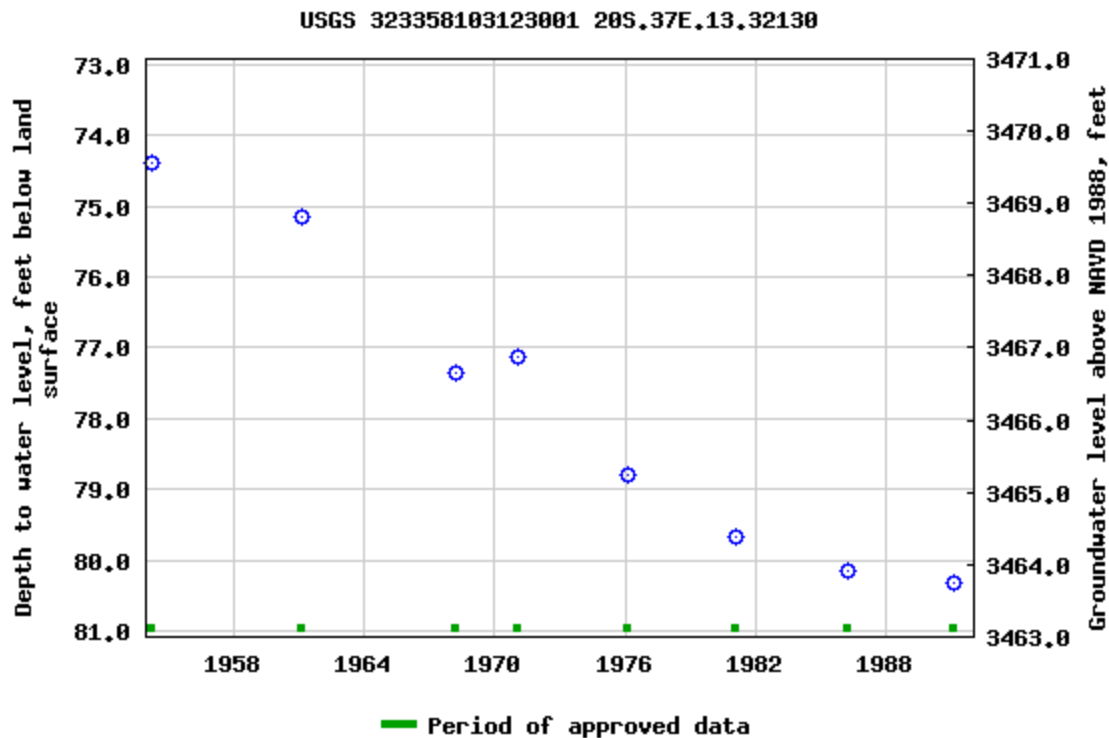
[Table of data](#)

[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](#)

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[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?>**



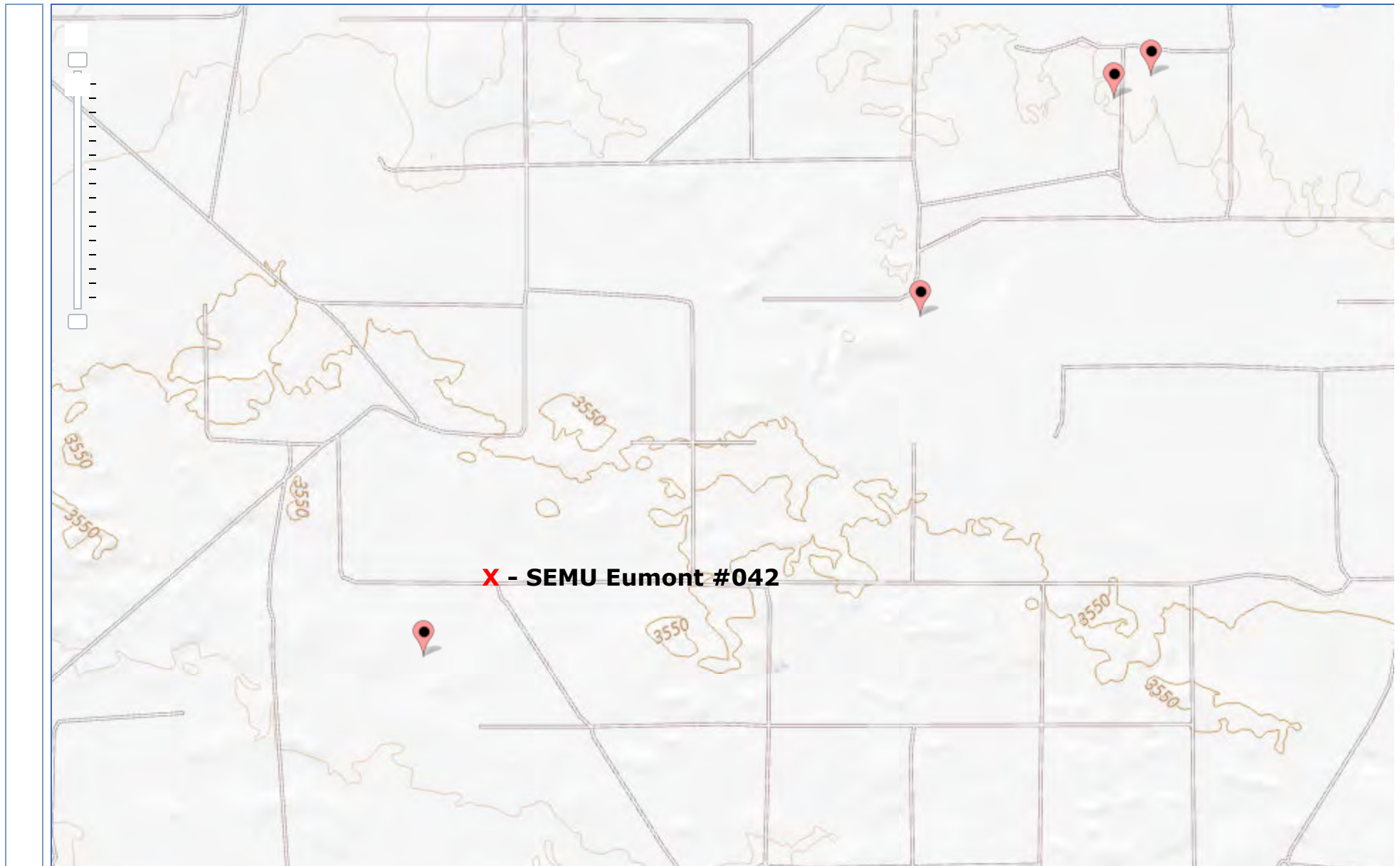
Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-04-22 14:56:49 EDT

0.64 0.5 nadww01



## National Water Information System: Mapper





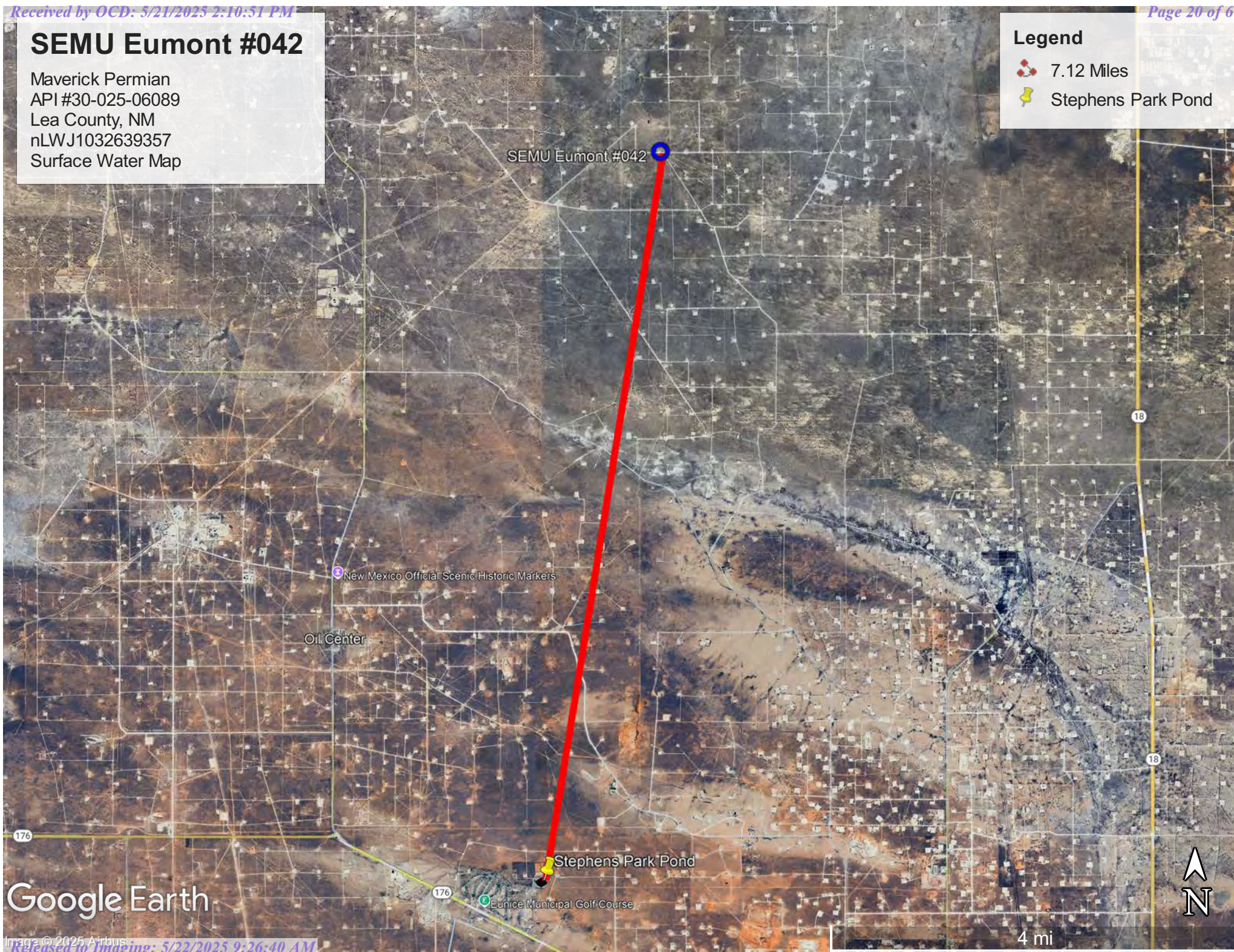


## SEMU Eumont #042

Maverick Permian  
API #30-025-06089  
Lea County, NM  
nLWJ1032639357  
Surface Water Map

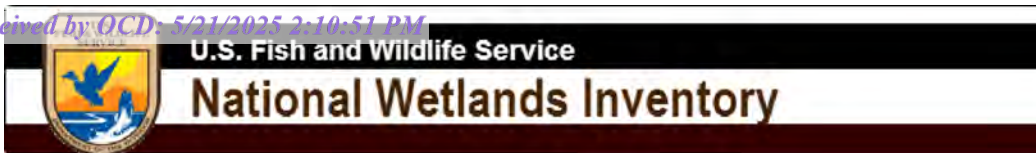
### Legend

-  7.12 Miles
-  Stephens Park Pond

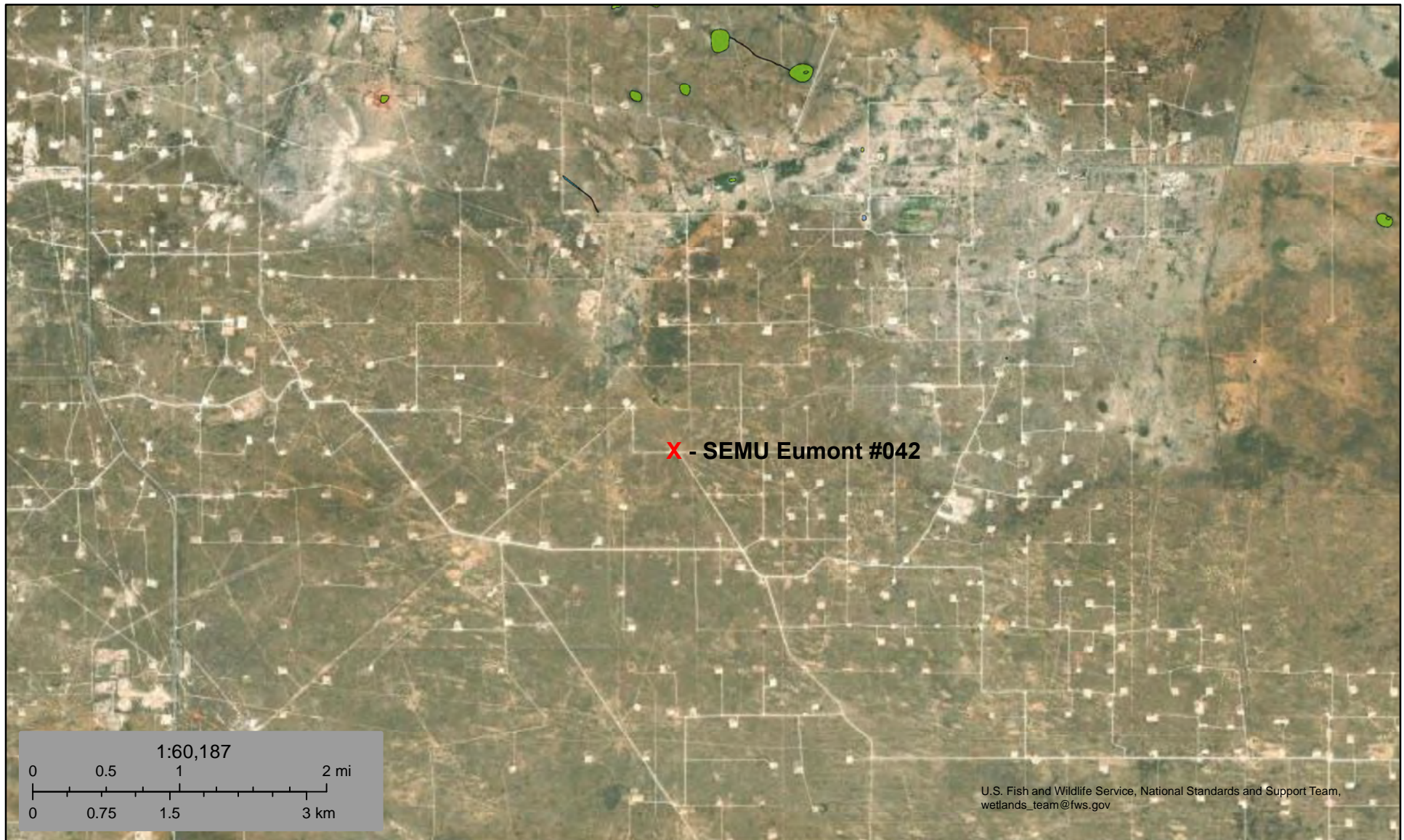


Google Earth





## Wetlands Map



April 22, 2025

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- 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.



# National Flood Hazard Layer FIRMMette



103°12'45"W 32°34'18"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°12'8"W 32°33'48"N

Released to Imaging: 5/22/2025 9:26:40 AM

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 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
		17.5 Water Surface Elevation
		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 4/22/2025 at 7:00 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.



## ***Appendix C***

### **Soil Surveys**

### **Soil Map**

### **Geologic Unit Map**

Map Unit Description: Pyote soils and Dune land---Lea County, New Mexico

---

## Lea County, New Mexico

### PY—Pyote soils and Dune land

#### Map Unit Setting

*National map unit symbol:* dmqr

*Elevation:* 3,000 to 4,400 feet

*Mean annual precipitation:* 10 to 15 inches

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

*Frost-free period:* 190 to 220 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Pyote and similar soils:* 46 percent

*Dune land:* 44 percent

*Minor components:* 10 percent

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

#### Description of Pyote

##### Setting

*Landform:* Depressions

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Sandy eolian deposits derived from sedimentary rock

##### Typical profile

*A - 0 to 30 inches:* fine sand

*Bt - 30 to 60 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:* Negligible

*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:* 5 percent

*Gypsum, maximum content:* 1 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 2.0

*Available water supply, 0 to 60 inches:* Low (about 5.1 inches)



Map Unit Description: Pyote soils and Dune land---Lea County, New Mexico

---

**Interpretive groups**

*Land capability classification (irrigated): 6e*

*Land capability classification (nonirrigated): 7s*

*Hydrologic Soil Group: A*

*Ecological site: R070BD003NM - Loamy Sand*

*Hydric soil rating: No*

**Description of Dune Land****Setting**

*Landform: Dunes*

*Landform position (two-dimensional): Shoulder, backslope*

*Landform position (three-dimensional): Side slope*

*Down-slope shape: Convex, linear*

*Across-slope shape: Convex*

*Parent material: Sandy eolian deposits derived from sedimentary rock*

**Typical profile**

*A - 0 to 6 inches: fine sand*

*C - 6 to 60 inches: fine sand*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8*

*Hydrologic Soil Group: A*

*Hydric soil rating: No*

**Minor Components****Kermi**

*Percent of map unit: 5 percent*

*Ecological site: R070BC022NM - Sandhills*

*Hydric soil rating: No*

**Maljamar, fine sand**

*Percent of map unit: 3 percent*

*Ecological site: R070BD003NM - Loamy Sand*

*Hydric soil rating: No*

**Wink**

*Percent of map unit: 2 percent*

*Ecological site: R070BD003NM - Loamy Sand*

*Hydric soil rating: No*

**Data Source Information**

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024

Soil Map—Lea County, New Mexico



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

4/22/2025  
Page 1 of 3

## Soil Map—Lea County, 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: Lea County, New Mexico

Survey Area Data: Version 21, 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
PY	Pyote soils and Dune land	1.5	100.0%
Totals for Area of Interest		1.5	100.0%

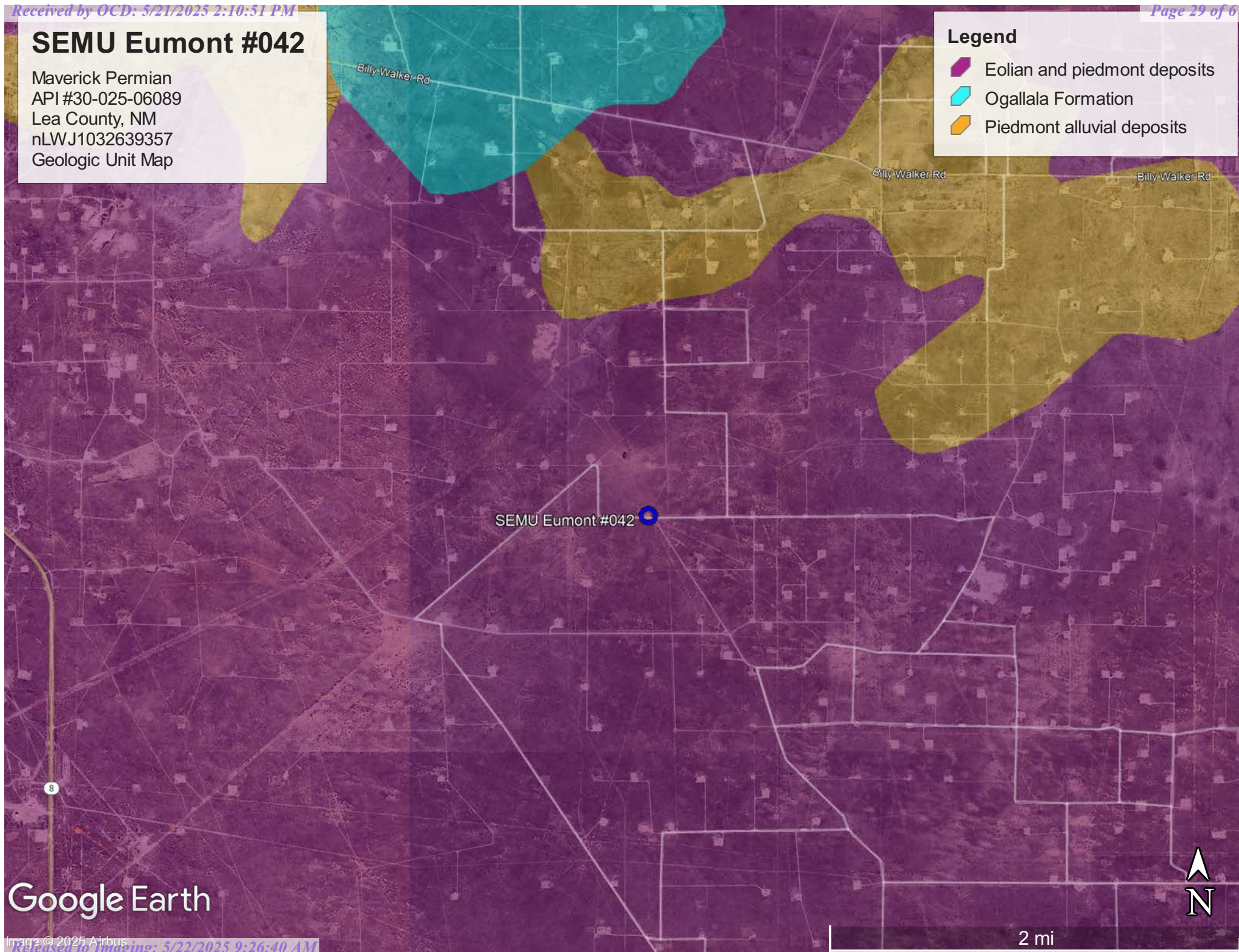


# SEMU Eumont #042

Maverick Permian  
API #30-025-06089  
Lea County, NM  
nLWJ1032639357  
Geologic Unit Map

## Legend

- Eolian and piedmont deposits
- Ogallala Formation
- Piedmont alluvial deposits



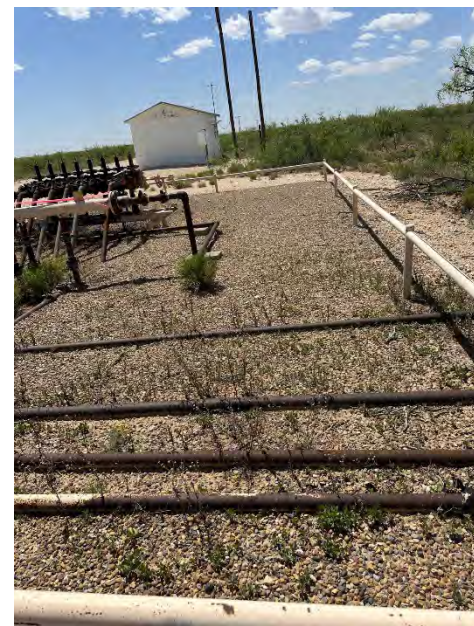
Google Earth



## ***Appendix D***

### **Photographic Documentation**









## ***Appendix E***

### **Closure Letter Report**



October 15, 2020

Bradford Billings  
Hydrologist  
District 2 Artesia  
Oil Conservation Division  
Santa Fe, NM 87505

**Subject: Closure Letter Report  
ConocoPhillips  
1RP-2657  
North Skaggs Injection Station Injection Line Release  
PLSS Unit Letter N, Section 13, Township 20 South, and Range 37 East  
Lea County, New Mexico**

Mr. Billings:

On behalf of ConocoPhillips, Tetra Tech, Inc. (Tetra Tech) submits the following Closure Report for review. The ConocoPhillips North Skaggs Injection Station is located approximately 5.15 miles southeast of Monument in Lea County, New Mexico. The well listed in the C-141 is the South East Monument Unit (SEMU) Eumont #42 (API No. 30-025-06089), which shares a lease pad with the North Skaggs Injection Station. The release area (Site) is located in the Public Land Survey System (PLSS) Unit Letter N, Section 13, Township 20 South, and Range 37 East at GPS coordinates 32.567583°, -103.207183° (Figure 1).

## BACKGROUND

According to the State of New Mexico C-141 Initial Report (Attachment A), on November 18, 2010 a leak occurred at the North Skaggs Injection Station due to internal corrosion of an old (>25 years) 1-inch (in) steel injection line at the header. The release consisted of 12 barrels (bbls) of produced water. The affected area was reported as 50-foot (ft) by 80-ft of primarily (90%) caliche pad. A vacuum truck recovered 8 bbls of produced water during initial response activities. Notice was given to the New Mexico Oil Conservation Division (NMOCD) on November 19, 2010, and the release was subsequently assigned the Remediation Permit (RP) number 1RP-2657.

## SITE CHARACTERIZATION

A site characterization was performed and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, public or private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. The Site is located in a low karst potential area.

Based on data from the New Mexico Office of the State Engineer (NMOSE), there are no water wells located within an 800-meter (approximately ½ mile) radius of the release Site. The search radius had to be extended to 1,600 meters (approximately 1 mile) before water wells (5) were encountered. Based on this dataset, the average depth to groundwater is 79 feet. The site characterization data is shown in Attachment B.

## REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total

**TETRA TECH**

8911 N. Capital of Texas Hwy, Building 2, Suite 2310, Austin, TX, 78759

Tel 512-338-1667 Fax 512-338-1331 [www.tetrattech.com](http://www.tetrattech.com)

Bradford Billings  
NMOCD  
October 15, 2020

petroleum hydrocarbons (TPH), and chlorides in soil. Based on the depth to groundwater at the Site, the RRALs for the Site are as follows:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Total BTEX (sum of benzene, toluene, ethylbenzene, and xylene): 50 mg/kg;
- TPH (GRO + DRO + ORO): 100 mg/kg (0 – 4 ft bgs);
- TPH (GRO + DRO): 1,000 mg/kg;
- TPH (GRO + DRO + ORO): 2,500 mg/kg;
- Chloride: 600 mg/kg (0 – 4 ft bgs);
- Chloride: 10,000 mg/kg (>4 ft bgs).

## VISUAL SITE INSPECTION SUMMARY

At the request of ConocoPhillips, Tetra Tech personnel conducted a records review and a visual Site inspection on July 6, 2020 at the release area to evaluate current conditions at the Site. The formerly impacted area was identified from the description in the C-141 (and correspondence with ConocoPhillips) and was corroborated by aerial imagery. Photographic documentation from the visual inspection is included as Attachment C. A list of observations made during the records review and visual Site inspection follow:

- Review of available historical aerial imagery revealed no evidence of the release in the vicinity of the injection station.
- No staining was noted on the injection station lease pad or in the adjacent pasture areas during the July 2020 visual Site inspection.

## CONCLUSION

Based on review of available historical aerial imagery and the July 2020 visual Site inspection, no existing evidence of impact was observed at the North Skaggs Injection Station lease pad. Additionally, vegetative cover was observed in the pasture. Therefore, ConocoPhillips requests closure for this release. The final C-141 form is enclosed in Attachment A.

Should you have any questions or comments regarding this report, please do not hesitate to contact me by telephone at 512-338-2861 or by email at [christian.llull@tetratech.com](mailto:christian.llull@tetratech.com).

Sincerely,

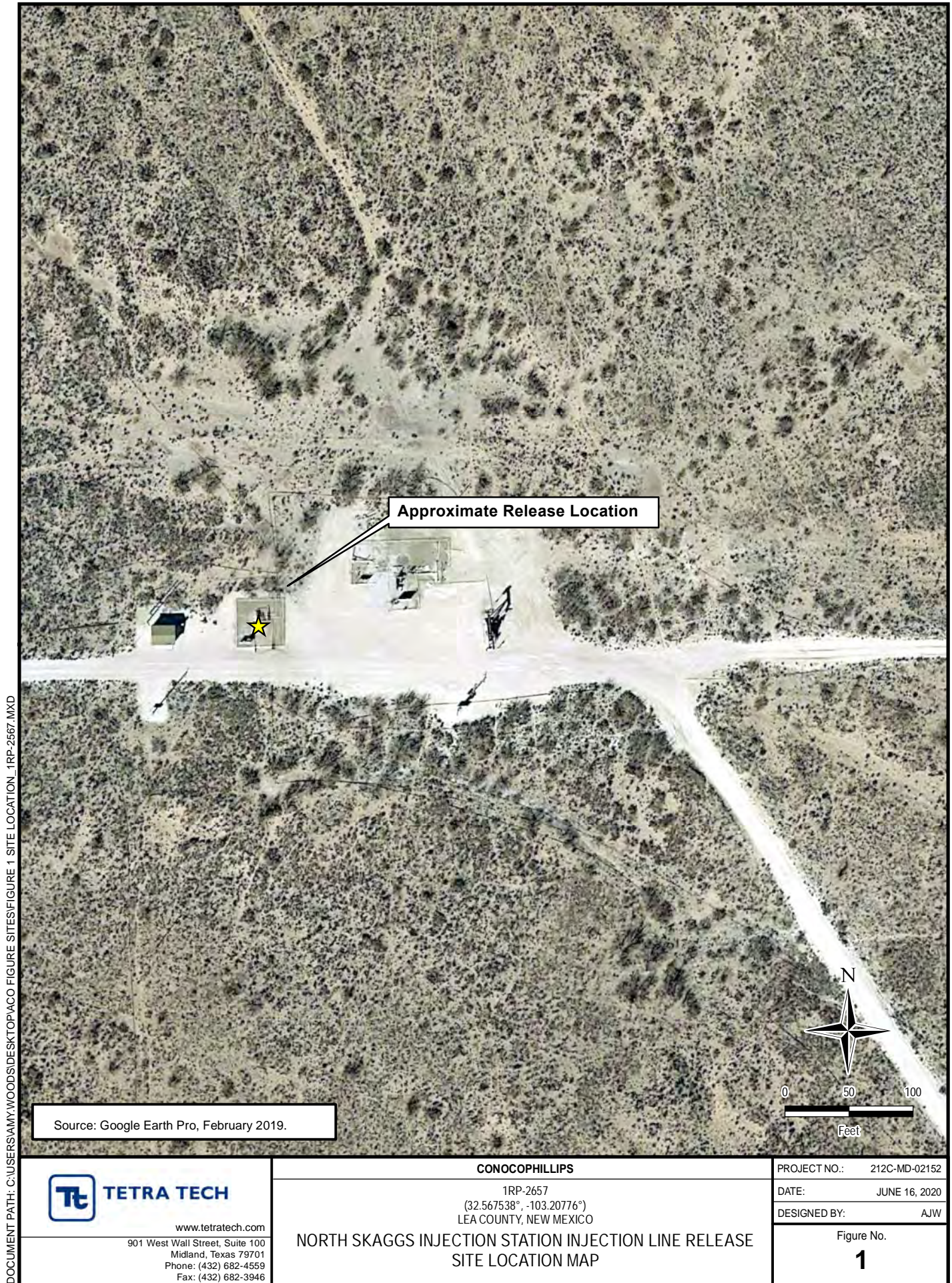


Christian M. Llull  
Project Manager  
Tetra Tech, Inc.



## **FIGURES**







## **ATTACHMENT A C-141 Forms**



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

RECEIVED

NOV  
DEC 19 2010

HOBBSD

Form C-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

## OPERATOR

☒ Initial Report ☐ Final Report

Name of Company ConocoPhillips Company	Contact Jesse A. Sosa
Address 3300 N. "A" St., Bldg. 6 #247 Midland, TX 79705-5	Telephone No. (505)391-3126
Facility Name North Skaggs Injection Station	Facility Type Injection Station
Surface Owner <del>NMOCD</del> <del>BLM</del> <del>FED</del>	Mineral Owner BLM
Lease No. 3002506089	

## LOCATION OF RELEASE

SEMU Eumont #42

Unit Letter N	Section 13	Township 20S	Range 37E	Feet from the 660	North/South Line South	Feet from the 1980	East/West Line West	County Lea
------------------	---------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	---------------

Latitude 32 34.055 N Longitude 103 12.431 W

WTR 60

## NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 12	Volume Recovered 8
Source of Release Injection Line	Date and Hour of Occurrence 11/18/10 8:30 am	Date and Hour of Discovery 11/18/10 9 a
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD & BLM	
By Whom? Jesse Sosa	Date and Hour 11/19/10 8:30 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

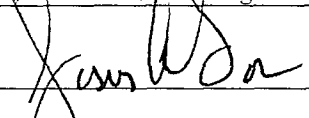

Describe Cause of Problem and Remedial Action Taken.\*

MSO found a leak on a steel 1 inch (25+ years) line at the header. MSO shut in and isolated injection line. Release was due to internal corrosion. Line will be replaced before putting well back into service.

Describe Area Affected and Cleanup Action Taken.\*

Total release was 12 BPW. A vacuum truck was called out and recovered 8 BPW. Affected area was 50 feet X 80 feet, 90% on caliche pad. Sample area and submit work plan for clean up.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Jesse A. Sosa	Approved by District Supervisor: 	
Title: HSER Lead	Approval Date: 11.19.10	Expiration Date: 3.19.10
E-mail Address: Jesse.A.Sosa@conocophillips.com	Conditions of Approval:	
Date: 11/19/2010 Phone: (505)391-3126	Submitted Final C-141 w/Docs 84	
	Attached <input type="checkbox"/> IRP# 11-10-2657	

\* Attach Additional Sheets If Necessary

nLWT 1032639357  
pLWT 1032639715

Incident ID	NLWJ1032639357
District RP	1RP-2657
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: Charles BeauvaisTitle: Environmental CoordinatorSignature: Charles R. Beauvais IIDate: 10/15/2020email: charles.r.beauvais@conocophillips.comTelephone: 575-988-2043

### OCD Only

Received by: Jocelyn HarimonDate: 04/14/2023

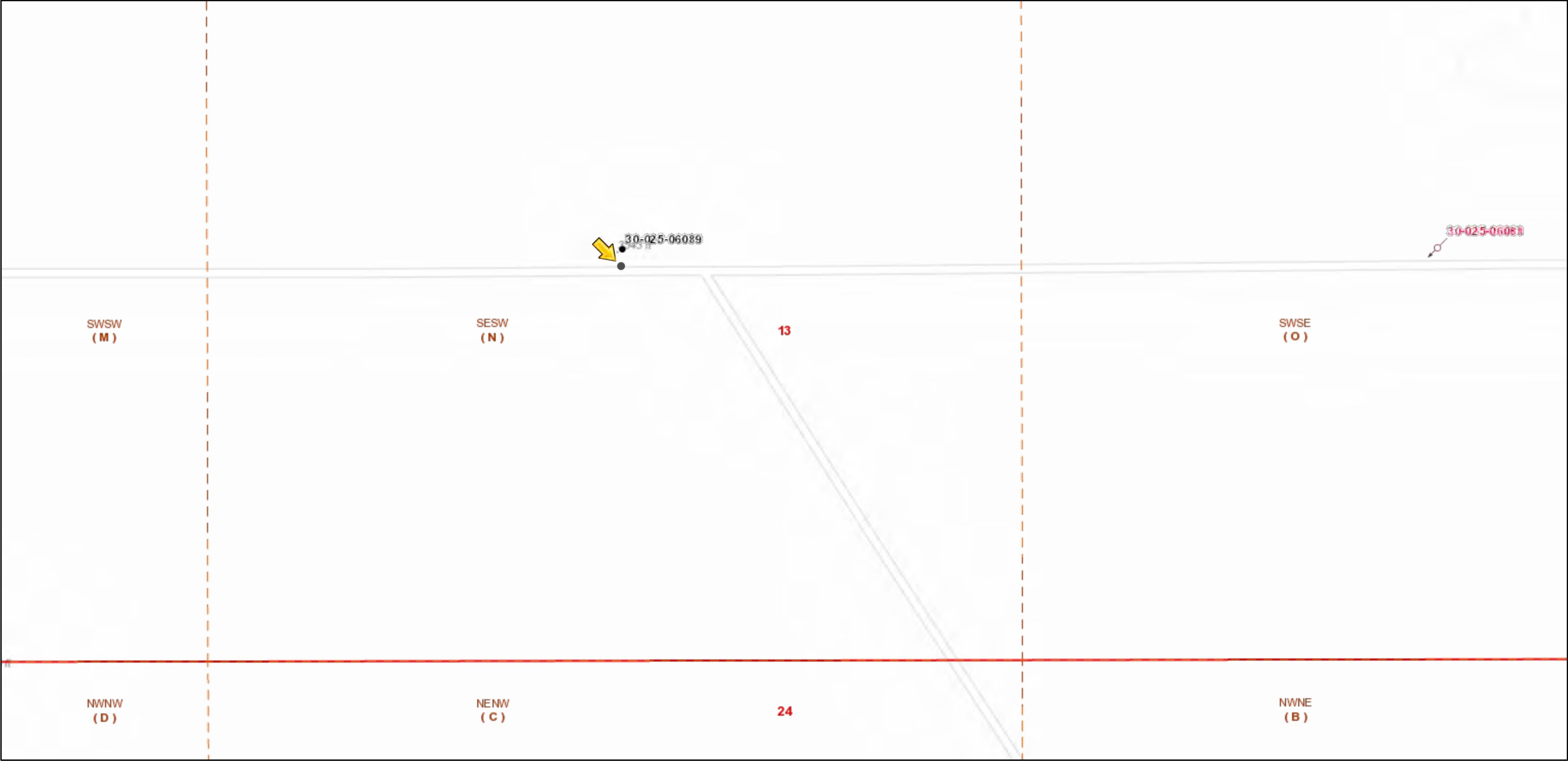
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: closure not approvedDate: 04/14/2023Printed Name: Jocelyn HarimonTitle: Environmental Specialist

**ATTACHMENT B**  
**Site Characterization Data**



1RP-2657



7/28/2020, 9:06:14 AM

- Override 1
- Wells - Large Scale

? undefined

Miscellaneous

CO2, Active

CO2, Cancelled
- CO2, New

CO2, Plugged

CO2, Temporarily Abandoned

Gas, Active

Gas, Cancelled

Gas, New
- Gas, Plugged

Gas, Temporarily Abandoned

Injection, Active

Injection, Cancelled

Injection, New

Injection, Plugged
- Injection, Temporarily Abandoned

Oil, Active

Oil, Cancelled

Oil, New

Oil, Plugged

Oil, Temporarily Abandoned
- Salt Water Injection, Active

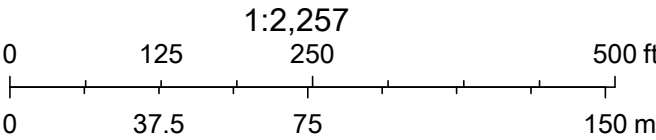
Salt Water Injection, Cancelled

Salt Water Injection, New

Salt Water Injection, Plugged

Salt Water Injection, Temporarily Abandoned

Water, Active





Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,


# KARST POTENTIAL MAP


1RP-2657

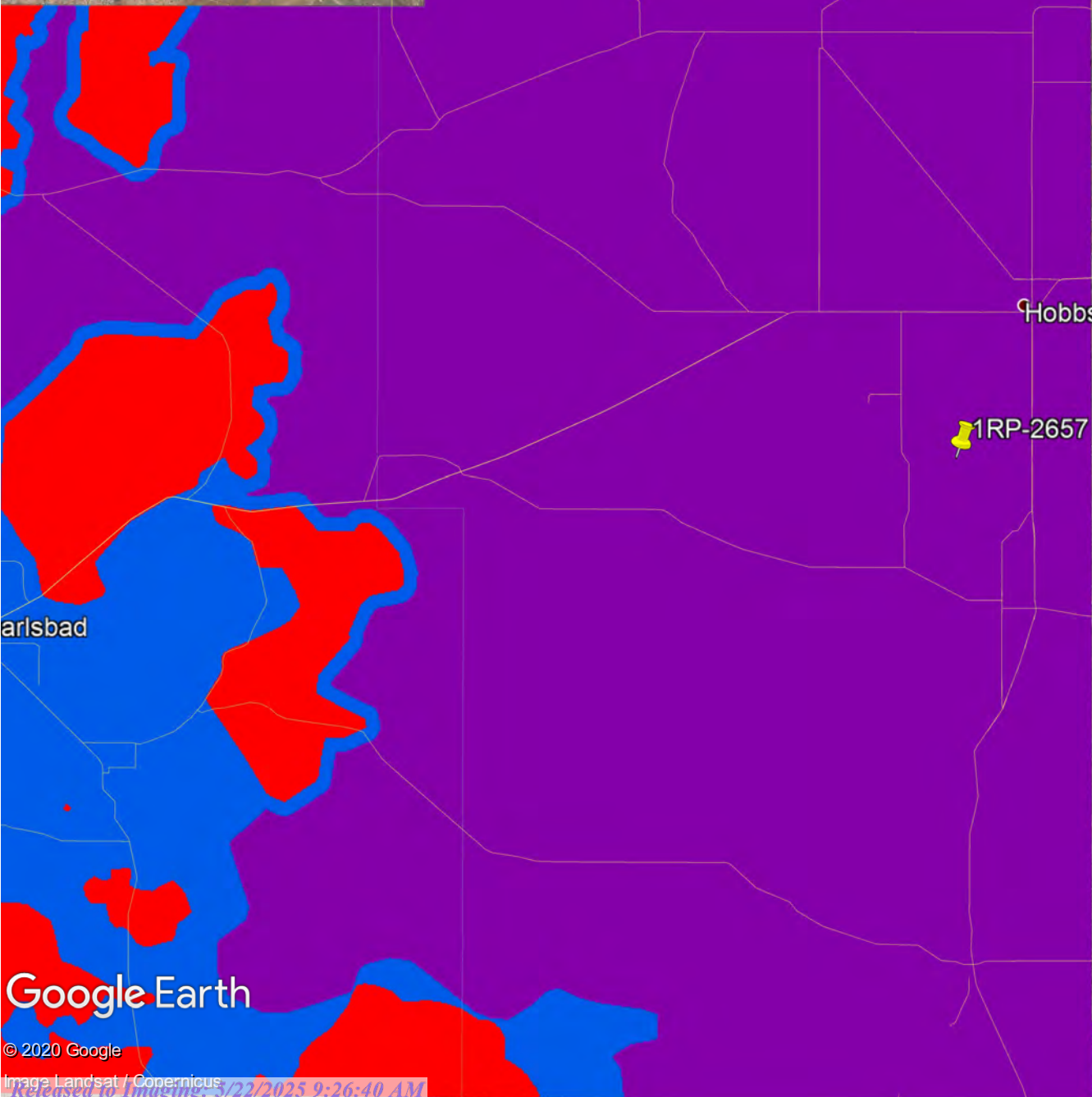
Legend

 1RP-2657

 High

 Low

 Medium 83





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">L 04412 S</a>	L	LE		4	4	2	13	20S	37E	669189	3605491*	1145	155	84	71
<a href="#">L 05350</a>	L	LE			2	1	13	20S	37E	668279	3605980*	1213	100		
<a href="#">L 10117</a>	L	LE		1	1	2	13	20S	37E	668580	3606086*	1348	130	70	60
<a href="#">L 04412</a>	L	LE		4	2	2	13	20S	37E	669181	3605894*	1429	140	85	55
<a href="#">L 05351</a>	L	LE			2	2	13	20S	37E	669082	3605995*	1455	115		

Average Depth to Water: **79 feet**

Minimum Depth: **70 feet**

Maximum Depth: **85 feet**

Record Count: 5

**UTM NAD83 Radius Search (in meters):**

**Easting (X):** 668301

**Northing (Y):** 3604767

**Radius:** 1600

\*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.

9/16/20 2:53 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

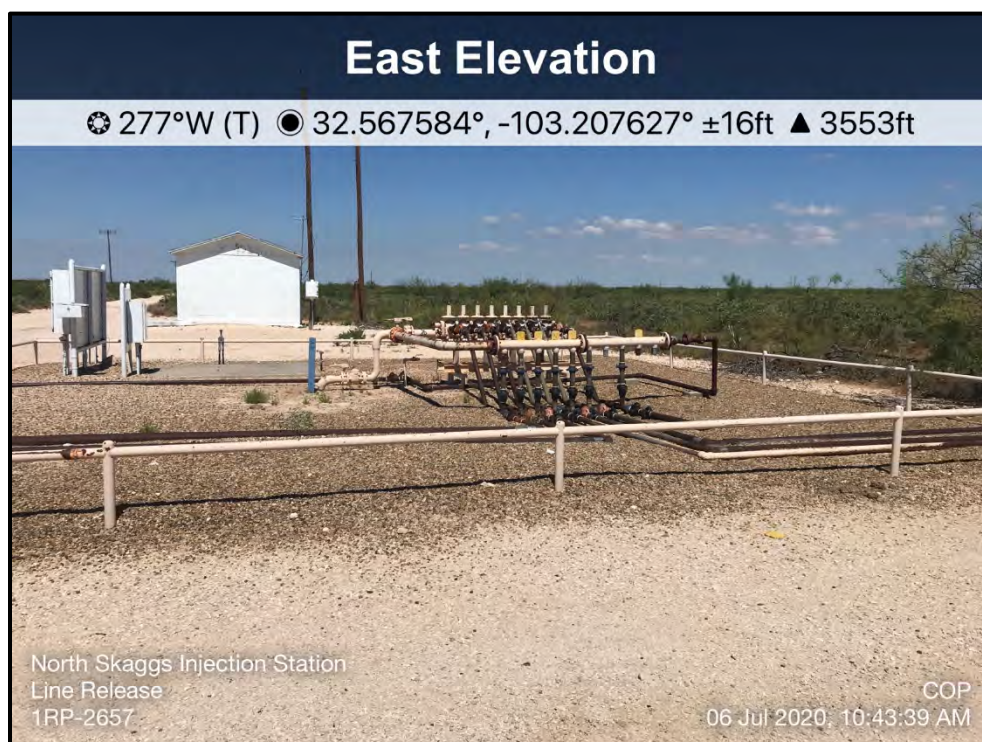


## **ATTACHMENT C**

### **Photographic Documentation**

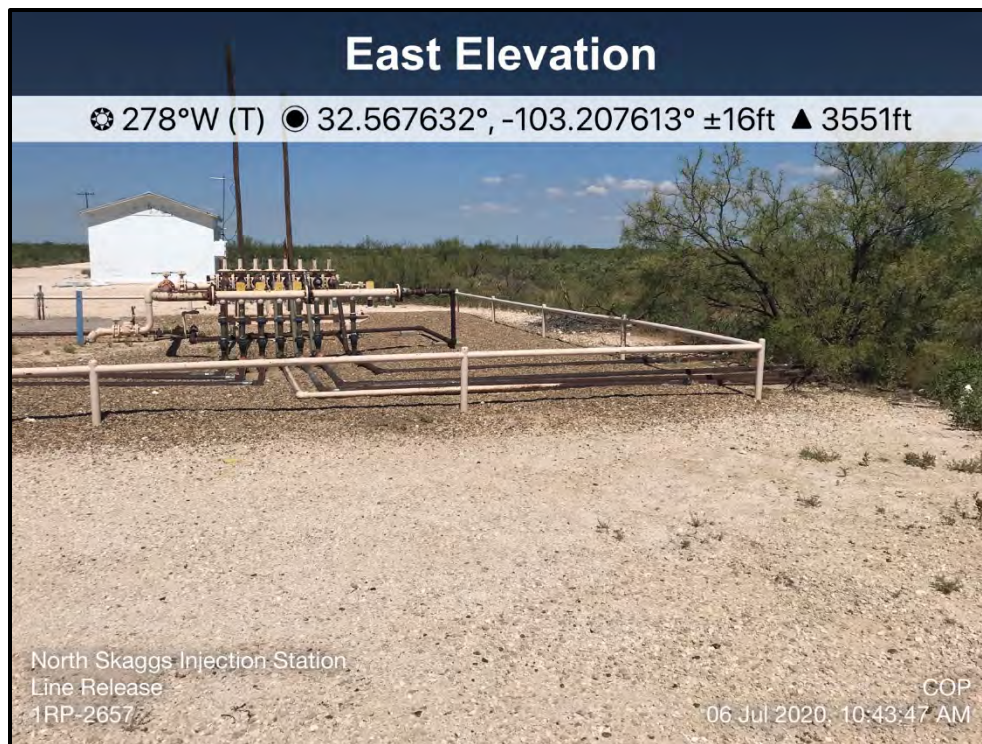


TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of lease signage.	1
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of injection station manifold.	2
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020



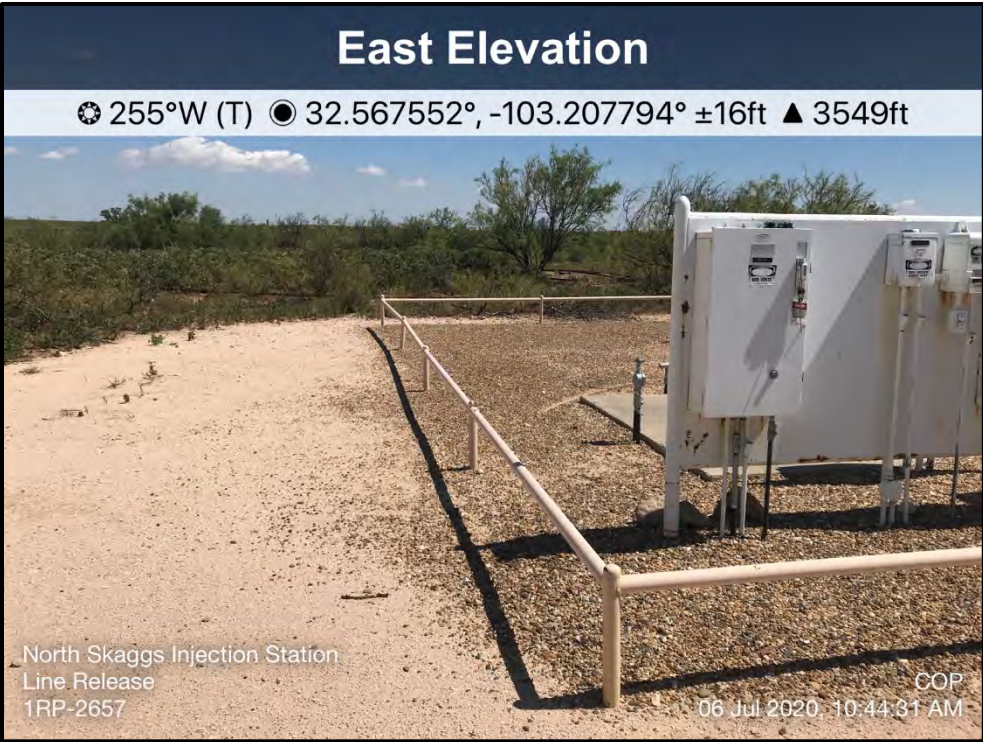


TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of injection station manifold.	3
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020

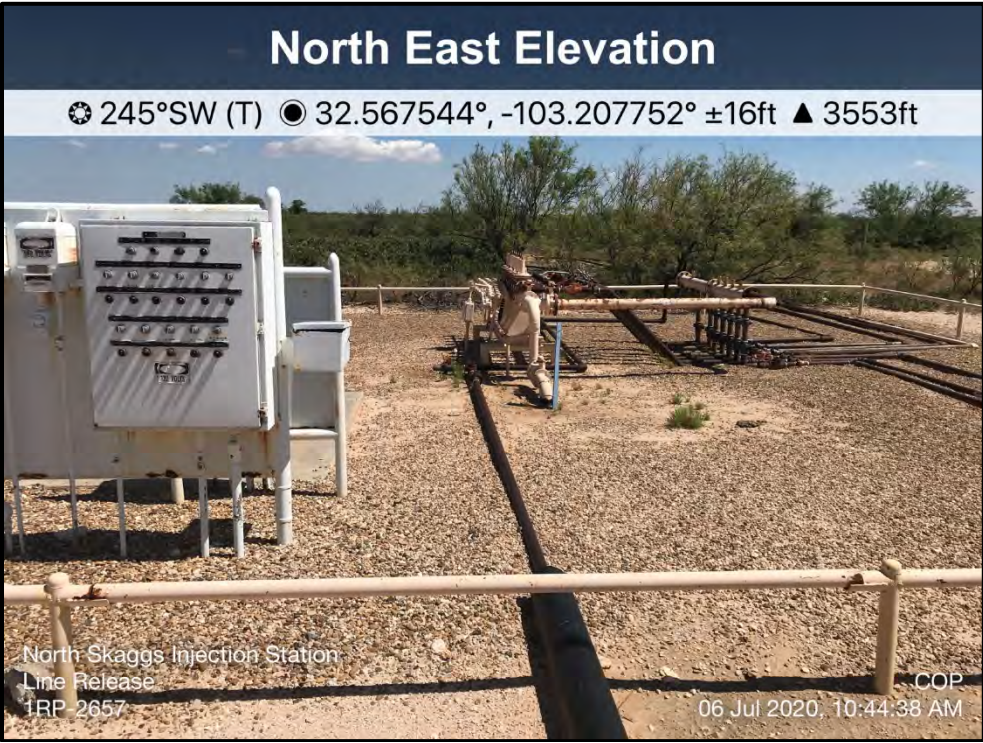


TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of injection station manifold.	4
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020





TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of injection station manifold control panels.	5
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southwest of injection station manifold control panels.	6
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020





TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of injection station area.	7
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of well pad.	8
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020





TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of injection station piping.	9
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of injection station area.	10
	SITE NAME	North Skaggs Injection Station Injection Line Release	7/6/2020





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

June 17, 2024

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU EUMONT #042

Enclosed are the results of analyses for samples received by the laboratory on 06/11/24 14:14.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 1 (0-0.5 FT) (H243384-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2024	ND	2.11	105	2.00	1.59	
Toluene*	<0.050	0.050	06/14/2024	ND	2.26	113	2.00	1.56	
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.27	113	2.00	1.55	
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.98	116	6.00	1.81	
Total BTEX	<0.300	0.300	06/14/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/14/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 87.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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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:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 1 (2-2.5 FT) (H243384-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.11	105	2.00	1.59		
Toluene*	<0.050	0.050	06/14/2024	ND	2.26	113	2.00	1.56		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.27	113	2.00	1.55		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.98	116	6.00	1.81		
Total BTEX	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/14/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 88.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 2 (0-0.5 FT) (H243384-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.10	105	2.00	1.83		
Toluene*	<0.050	0.050	06/14/2024	ND	2.09	105	2.00	2.29		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.11	106	2.00	2.60		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.28	105	6.00	2.94		
Total BTEX	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	06/14/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 89.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 2 (2-2.5 FT) (H243384-04)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.10	105	2.00	1.83		
Toluene*	<0.050	0.050	06/14/2024	ND	2.09	105	2.00	2.29		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.11	106	2.00	2.60		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.28	105	6.00	2.94		
Total BTEX	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	06/14/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 89.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 3 (0-0.5 FT) (H243384-05)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.10	105	2.00	1.83		
Toluene*	<0.050	0.050	06/14/2024	ND	2.09	105	2.00	2.29		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.11	106	2.00	2.60		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.28	105	6.00	2.94		
Total BTEX	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/14/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 78.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 3 (2-2.5 FT) (H243384-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.10	105	2.00	1.83		
Toluene*	<0.050	0.050	06/14/2024	ND	2.09	105	2.00	2.29		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.11	106	2.00	2.60		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.28	105	6.00	2.94		
Total BTEx	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/14/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 4 (0-0.5 FT) (H243384-07)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.10	105	2.00	1.83		
Toluene*	<0.050	0.050	06/14/2024	ND	2.09	105	2.00	2.29		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.11	106	2.00	2.60		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.28	105	6.00	2.94		
Total BTEX	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/14/2024	ND	416	104	400	3.77	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TETRA TECH  
 CHUCK TERHUNE  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received: 06/11/2024  
 Reported: 06/17/2024  
 Project Name: SEMU EUMONT #042  
 Project Number: NLWJ1032639357  
 Project Location: LEA CO, NM

Sampling Date: 06/11/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: BH 4 (2-2.5 FT) (H243384-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2024	ND	2.10	105	2.00	1.83		
Toluene*	<0.050	0.050	06/14/2024	ND	2.09	105	2.00	2.29		
Ethylbenzene*	<0.050	0.050	06/14/2024	ND	2.11	106	2.00	2.60		
Total Xylenes*	<0.150	0.150	06/14/2024	ND	6.28	105	6.00	2.94		
Total BTEX	<0.300	0.300	06/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/14/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2024	ND	196	98.0	200	9.88	
DRO >C10-C28*	<10.0	10.0	06/13/2024	ND	201	100	200	14.1	
EXT DRO >C28-C36	<10.0	10.0	06/13/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> <u>Taha Tech</u>		<b>P.O. #:</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
<b>Project Manager:</b> <u>Chuck Terhune</u>		<b>Company:</b> <u>Taha Tech</u>															
<b>Address:</b>		<b>Attn:</b>															
<b>City:</b> <u>Midland</u> <b>State:</b> <u>TX</u> <b>Zip:</b>		<b>Address:</b>															
<b>Phone #:</b>		<b>City:</b>															
<b>Fax #:</b>		<b>State:</b>															
<b>Project #:</b> <u>NW 5103213 9357</u> <b>Project Owner:</b>		<b>Zip:</b>															
<b>Project Name:</b> <u>SEM C EUMONT #042</u>		<b>Phone #:</b>															
<b>Project Location:</b> <u>Lee County</u>		<b>Fax #:</b>															
<b>Sampler Name:</b> <u>Gilbert Sanchez</u>		<b>PRESERV:</b>		<b>SAMPLING</b>													
<b>FOR LAB USE ONLY</b>																	
<b>Lab I.D.</b>	<b>Sample I.D.</b>	<b>(G)RAB OR (C)OMP.</b>	<b># CONTAINERS</b>	<b>GROUNDWATER</b>	<b>WASTEWATER</b>	<b>SOIL</b>	<b>OIL</b>	<b>SLUDGE</b>	<b>OTHER :</b>	<b>ACID/BASE:</b>	<b>ICE / COOL</b>	<b>OTHER :</b>	<b>DATE</b>	<b>TIME</b>	<b>BTex</b>	<b>TPH (DRO/GRO/ORO)</b>	<b>Chloride 4500</b>
<u>HA133841</u>	<u>BH1 (0-0.5 ft)</u>												<u>6-11-24</u>				
<u>1</u>	<u>BH1 (2-2.5 ft)</u>																
<u>2</u>	<u>BH2 (0-0.5 ft)</u>																
<u>3</u>	<u>BH2 (2-2.5 ft)</u>																
<u>4</u>	<u>BH3 (0-0.5 ft)</u>																
<u>5</u>	<u>BH3 (2-2.5 ft)</u>																
<u>6</u>	<u>BH4 (0-0.5 ft)</u>																
<u>7</u>	<u>BH4 (2-2.5 ft)</u>																
<u>8</u>																	

**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 analysis. 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 analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, 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, in whole or in part, on any of the above stated reasons or otherwise.

<b>Relinquished By:</b> <u>Gilbert Sanchez</u>	<b>Date:</b> <u>6-11-24</u>	<b>Received By:</b> <u>Shedaigne</u>	<b>Time:</b> <u>414</u>
<b>Relinquished By:</b>	<b>Date:</b>	<b>Received By:</b>	<b>Time:</b>

<b>Delivered By: (Circle One)</b>	<b>Observed Temp. °C</b> <u>3.3</u>	<b>Sample Condition</b>	<b>CHECKED BY:</b> <u>(initials)</u>	<b>Turnaround Time:</b>	<b>Standard</b> <u>Rush</u>	<b>Bacteria (only) Sample Condition</b>
<b>Sampler - UPS - Bus - Other:</b>	<b>Corrected Temp. °C</b>	<b>Cool Intact</b> <input type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>No</b>		<b>Thermometer ID #140</b>		<b>Cool Intact</b> <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b>
		<b>Correction Factor 0°C</b>				<b>Observed Temp. °C</b>
						<b>Corrected Temp. °C</b>

Verbal Result: ☐ Yes ☐ No Add'l Phone #: \_\_\_\_\_  
All Results are emailed. Please provide Email address: \_\_\_\_\_

REMARKS: \_\_\_\_\_

Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS

Action 465903

**QUESTIONS**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 465903
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nLWJ1032639357
Incident Name	NLWJ1032639357 SEMU EUMONT #042 @ 30-025-06089
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Well	[30-025-06089] SEMU EUMONT #042

**Location of Release Source***Please answer all the questions in this group.*

Site Name	SEMU EUMONT #042
Date Release Discovered	11/18/2010
Surface Owner	Federal

**Incident Details***Please answer all the questions in this group.*

Incident Type	Produced Water 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	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Injection   Produced Water   Released: 12 BBL   Recovered: 8 BBL   Lost: 4 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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.



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QUESTIONS, Page 2

Action 465903

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 465903
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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	Not answered.

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: Chuck Terhune Title: Program Manager Email: <a href="mailto:chuck.terhune@tetrattech.com">chuck.terhune@tetrattech.com</a> Date: 07/25/2024
--	--

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QUESTIONS, Page 3

Action 465903

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 465903
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Site Characterization</b>	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 75 and 100 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 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	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (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	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

<b>Remediation Plan</b>	
<i>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.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	96
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>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 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	08/01/2025
On what date will (or did) the final sampling or liner inspection occur	08/15/2025
On what date will (or was) the remediation complete(d)	08/30/2025
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	4000
What is the estimated volume (in cubic yards) that will be remediated	493
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>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.</i>	

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QUESTIONS, Page 4

Action 465903

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 465903
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>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.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>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 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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: Chuck Terhune Title: Program Manager Email: <a href="mailto:chuck.terhune@tetrattech.com">chuck.terhune@tetrattech.com</a> Date: 05/21/2025
<i>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.</i>	



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QUESTIONS, Page 5

Action 465903

QUESTIONS (continued)

Operator:  Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:  331199
	Action Number:  465903
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 465903

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 465903
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	352180
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/11/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	800

**Remediation Closure Request**

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	No
--	----

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CONDITIONS

Action 465903

**CONDITIONS**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 465903
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. The variance is denied using delineation samples as confirmations samples. This is an old legacy release that occurred in 2010. Sampling to a depth of 4 feet is not sufficient to verify chlorides. Chlorides most likely moved down the soil column over the years. The OCD requests a deeper soil investigation to ensure chlorides are not present. Due to the lack of groundwater data within ½ mile of the release area, the site will need to be remediated to the strictest closure criteria from Table 1 of the OCD Spill Rule. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC.	5/22/2025
rhamlet	Step-out samples are not allowed if any part of the release is considered off-pad. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined to determine if parts of the release are off-pad (lease road) and need to be remediated/reclaimed immediately. Sidewall/edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please collect confirmation samples, representing no more than 200 ft2. All off-pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.	5/22/2025