



EAST VACUUM (GSA) UNIT #002

nKJ1516650966

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

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

April 3, 2025



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

Re: Proposed Sampling and Remediation Work Plan  
 NMOCD Incident Number: **nKJ1516650966**  
 East Vacuum (GSA) Unit #002 API No. 30-025-26679  
 Unit A, Section 33, Township 17S, Range 35E 250 FNL 150 FEL Lea County, NM  
 GPS Coordinates: Latitude 32.7979469 Longitude -103.4545746 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 East Vacuum (GSA) Unit #002 (Site). This incident was assigned Incident ID nKJ1516650966 by the New Mexico Oil Conservation Division (NMOCD).

### ***Release Information – nKJ1516650966***

The initial Form C-141 was submitted on June 15, 2015 (Appendix A) and stated “ENV – Agency Reportable – 30 bbls oil – EVGSAU CTB – RR II – MCBU – Buckeye – On Friday June 12, 2015 at 0630 MDT, at EVGSAU CTB, MSO found a leak on a 8 inch transfer line that resulted in a release of 30 bbls of oil, with 20 bbls recovered. Immediate action was to isolate the leak and turn in a work order for repair and remediation. The affected area will be remediated according to NMOCD, BLM and COPC guidelines. This is a Tier 2 PSE. Release of 30 barrels of oil with 20 barrels of oil recovered. Affected area was 113 foot by 143 foot X 2 inch deep on caliche pad. The affected area will be remediated according to NMOCD guidelines.” This initial Form C-141 was approved by the NMOCD on June 16, 2015.

### ***Site Characterization***

This Site is in Lea County, NM, approximately eleven (11) miles southwest of Lovington, NM. The wellhead is approximately 1,020 feet northeast of the release area, and both are in Unit A, Section 33, Township 17S, Range 35E. The point of release is at 32.796231 degrees latitude and -103.457526 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 Ogallala Formation. Alluvial and eolian deposits, and petrocalcic soils of the southern High Plains. Locally includes Qoa. A Geologic Unit Map can be found in Appendix C.

The soil type present at the Site is Kimbrough-Lea complex, dry, 0 to 3 percent slopes. The drainage class for this soil type 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 26.75 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 80 feet below grade surface (bgs). This information is recorded by L-05362 which is situated approximately 0.23 miles north of the Site. The information, however, is older than 25 years. The United States Geological Survey (USGS) offers the site USGS 324746103272801 17S.35E.33.2241413 which shows depth to the nearest groundwater is 57 feet bgs. The latest gauge of this site was conducted in 1980, and it is located approximately 95 feet southwest.

The nearest surface water feature is Chaparral Park Pond, and it is located approximately 11.8 miles to the northeast. The U.S. Fish and Wildlife Service National Wetlands Inventory shows the nearest wetland to be a Freshwater Pond approximately 0.37 miles west. According to Fema’s National Flood Hazard Layer search, the Site is situated in Zone D – Area of Undetermined Flood Hazard and is more 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 wildlife or plant habitats. 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. If remediation activities should need to progress outside these areas, the requirements of the Cultural Properties Protection (CCP) Rule will be followed.

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

On June 16, 2015, Basin personnel were on site to assess the release. On May 20, 2016 two points within the release area were sampled with depth (Figure 1). All samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis.

Basin completed a Corrective Action Plan that was submitted to the NMOCD on May 23, 2016. The plan was approved by the NMOCD on the same day. This plan, along with the condition of approval, can be found in the Incident Files link on the OCD Permitting page for this incident. It is also included for reference as Appendix E.

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

Due to the previously approved Corrective Action Plan being almost 9 years old, the site characterization information has been updated to reflect current standards. Because no further documented activity has taken place at this Site, Maverick would like to propose the following:

- The areas of concern measure approximately 2,556 square feet combined, with all areas existing on the CTB pad surface.
- Collect discrete samples from within and around the edges of the release areas to evaluate the presence of contaminants. Forty (40) samples will be collected from 8 different sample points within the release areas 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 areas 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 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 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. Maverick understands that reclamation of this pad and road area, once it is no longer needed for production or subsequent drilling operations, will



require an approved reclamation plan addressing a minimum of four feet of non-waste containing earthen material, followed by an approved revegetation report after proper vegetation growth has been confirmed.

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

Maverick requests that this proposed sampling & remediation work plan for incident ID nKJ1516650966 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 – NMOCD-Approved Corrective Action Plan (2016)



***Figures:***

**Proposed Sample Map**

**Special Status Plant/Wildlife Map**

**Karst Map**

**Topographic Map**

**Location Map**



## East Vaccum (GSA) Unit #002

Maverick Permian  
API #30-025-26679  
Lea County, NM  
nKJ1516650966  
Proposed Sample Map

### Legend

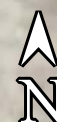
- ▲ POR
- Proposed horizontal samples
- Proposed vertical samples
- Release area 1 - 2042 sqft
- Release area 2 - 304 sqft
- Release area 3 - 210 sqft

East Vacuum (GSA) Unit #002 -->

Google Earth

Image © 2025 Airbus  
Released to Imaging: 4/8/2025 2:45:12 PM

32.795952, -103.457750



100 ft



## Special Status Plant/Wildlife Species

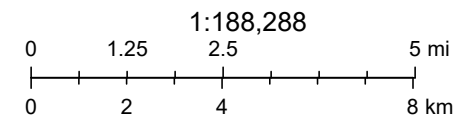


3/31/2025

- Dunes Sage Brush Lizard Habitat
- Lesser Prairie Chicken Habitat
- Habitat Evaluation Area
- Isolated Population Area

- World Imagery
- Low Resolution 15m Imagery
- 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,



## East Vaccum (GSA) Unit #002

Maverick Permian  
API #30-025-26679  
Lea County, NM  
nKJ1516650966  
Karst Map

### Legend

-  High Karst
-  Low Karst
-  Medium Karst



Google Earth



Maverick Permian  
API #30-025-26679  
Lea County, NM  
nKJ1516650966  
Topographic Map

- East Vacuum (GSA) Unit #002

East Vacuum (GSA) Unit #002

# Google Earth

Released to Imaging: 4/8/2025 2:45:12 PM

3000 ft



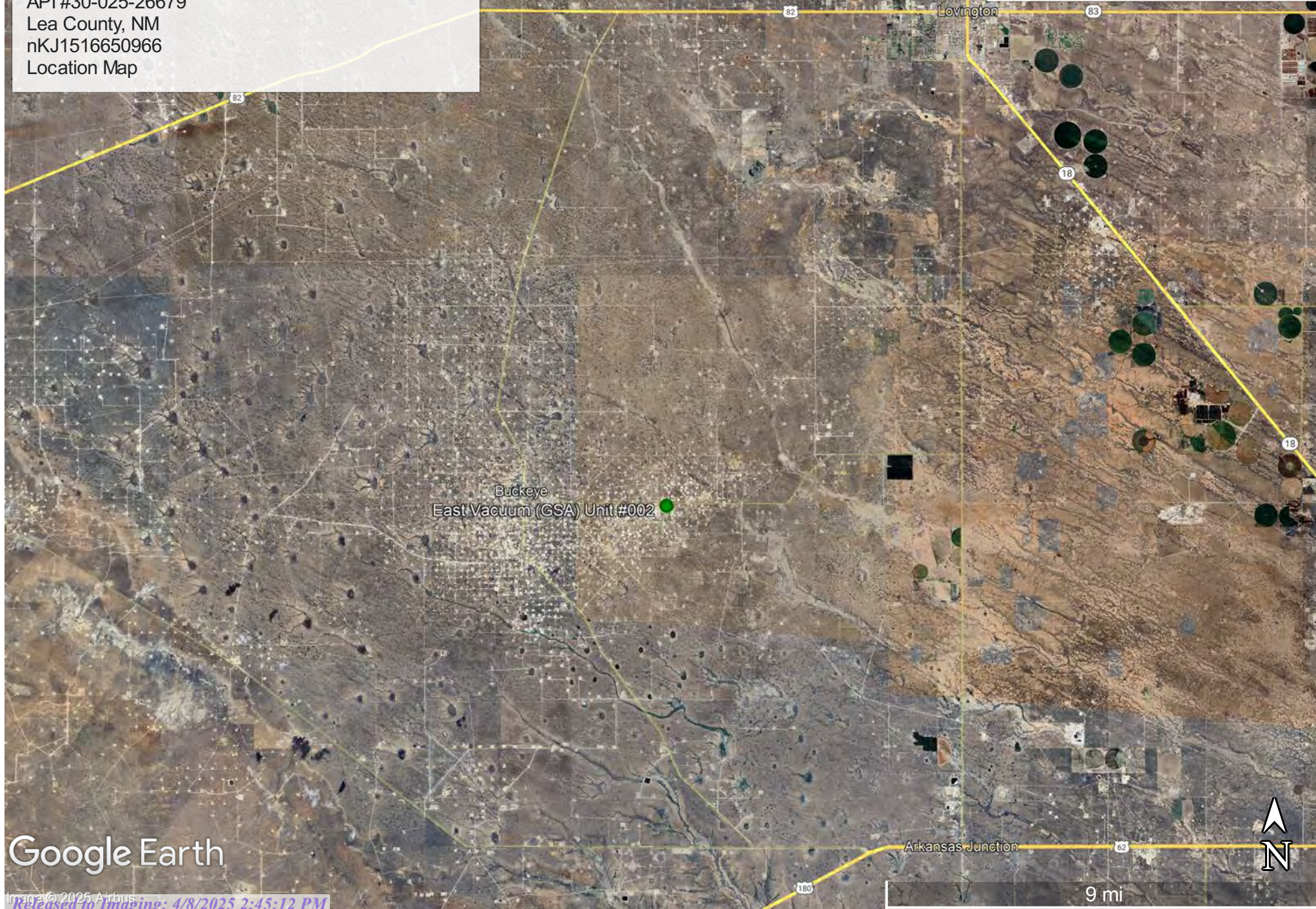


## East Vaccum (GSA) Unit #002

Maverick Permian  
API #30-025-26679  
Lea County, NM  
nKJ1516650966  
Location Map

### Legend

● East Vacuum (GSA) Unit #002



Google Earth





**Sapeco-ECO**  
**5846 E 21<sup>st</sup> Place**  
**Tulsa, OK 74114**

## ***Appendix A***

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



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

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: <b>ConocoPhillips</b>	Contact: <b>Jay Garcia</b>
Address: <b>29 Vacuum Complex Lane</b>	Telephone No. <b>575-704-2455</b>
Facility Name: <b>EVGSAU CTB</b>	Facility Type: <b>Battery</b>
Surface Owner: <b>NMOCD</b>	Mineral Owner:
API No. <b>30-025-2667900</b>	

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	33	17S	35E	250	North	150	East	<b>LEA</b>

**Latitude** 32.7979432251344 **Longitude** 103.454578927405

### NATURE OF RELEASE

Type of Release: <b>Leak</b>	Volume of Release: 30 bbl. of oil	Volume Recovered: 20 bbl. of oil
Source of Release: Discharge Line	Date and Hour of Occurrence 06/12/2015 6:30 am	Date and Hour of Discovery 06/12/2015 6:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Tomas Oberding / Kellie Jones</b>	
By Whom? <b>Jay Garcia</b>	Date and Hour: <b>06/12/2015 9:45 pm</b>	
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.\*

ENV – Agency Reportable – 30 bbls oil – EVGSAU CTB – RR II – MCBU – Buckeye – On Friday June 12, 2015 at 0630 MDT, at EVGSAU CTB, MSO found a leak on a 8 inch transfer line that resulted in a release of 30 bbls of oil, with 20 bbls recovered. Immediate action was to isolate the leak and turn in a work order for repair and remediation. The affected area will be remediated according to NMOCD, BLM and COPC guidelines. This is a Tier 2 PSE.

**RECEIVED**

**By OCD District 1 at 2:05 pm, Jun 15, 2015**

Describe Area Affected and Cleanup Action Taken.\*

Release of 30 barrels of oil with 20 barrels of oil recovered. Affected area was 113 foot by 143 foot X 2 inch deep on caliche pad. The affected area will be remediated according to NMOCD guidelines.

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

Signature: <i>Jay Garcia</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jay Garcia		Approved by Environmental Specialist: <i>[Signature]</i>	
Title: LEAD HSE	Approval Date:	Expiration Date:	
E-mail Address: <b>jay.c.garcia@conocophillips.com</b>	Conditions of Approval: <b>Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of remediation required.</b>		Attached <input type="checkbox"/> <b>217817</b> <b>1RP-3670</b>

nKJ1516650966  
pKJ1516651415

Date: 01/06/2015	Phone:575-704-2455	
------------------	--------------------	--

\* Attach Additional Sheets If Necessary



## ***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)

												(meters)		(In feet)		
POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
<a href="#">L 05362</a>		L	LE	SW	SE	SE	28	17S	35E	644444.0	3630117.0 *		367	140	80	60
<a href="#">L 10297</a>		L	LE		NW	NW	34	17S	35E	644955.0	3629819.0 *		529	150	42	108
<a href="#">L 05834</a>	R	L	LE	NE	NE	SE	33	17S	35E	644663.0	3629109.0 *		682	160	70	90
<a href="#">L 04578</a>		L	LE				33	17S	35E	643962.0	3629198.0 *		723	126	60	66
<a href="#">L 04633</a>		L	LE		NE	SE	33	17S	35E	644564.0	3629010.0 *		752	130	65	65
<a href="#">L 05834 POD5</a>		L	LE	NE	NE	SE	33	17S	35E	644751.9	3629029.3		789	234	65	169
<a href="#">L 04775</a>		L	LE		SE	NW	34	17S	35E	645365.0	3629421.0 *		991	133	68	65
<a href="#">L 04880</a>		L	LE		NE	SW	33	17S	35E	643757.0	3629002.0 *		1006	145	90	55
<a href="#">L 04829 S2</a>		L	LE		SE	SW	27	17S	35E	645352.0	3630227.0 *		1038	220	90	130
<a href="#">L 13479 POD3</a>		L	LE	SE	SE	SW	27	17S	35E	645447.6	3630066.2		1065	76	70	6
<a href="#">L 13479 POD2</a>		L	LE	NE	NE	NW	34	17S	35E	645479.6	3629941.3		1066	80	70	10
<a href="#">L 13479 POD1</a>		L	LE	NE	NE	NW	34	17S	35E	645495.4	3630015.7		1098	80	70	10
<a href="#">L 04829 S5</a>		L	LE		SW	NW	33	17S	35E	643347.0	3629400.0 *		1138	220	90	130

Average Depth to Water: 71 feet

Minimum Depth: 42 feet

Maximum Depth: 90 feet

Record Count: 13

Basin/County Search:

County: LE

UTM Filters (in meters):

Easting: 644429.93

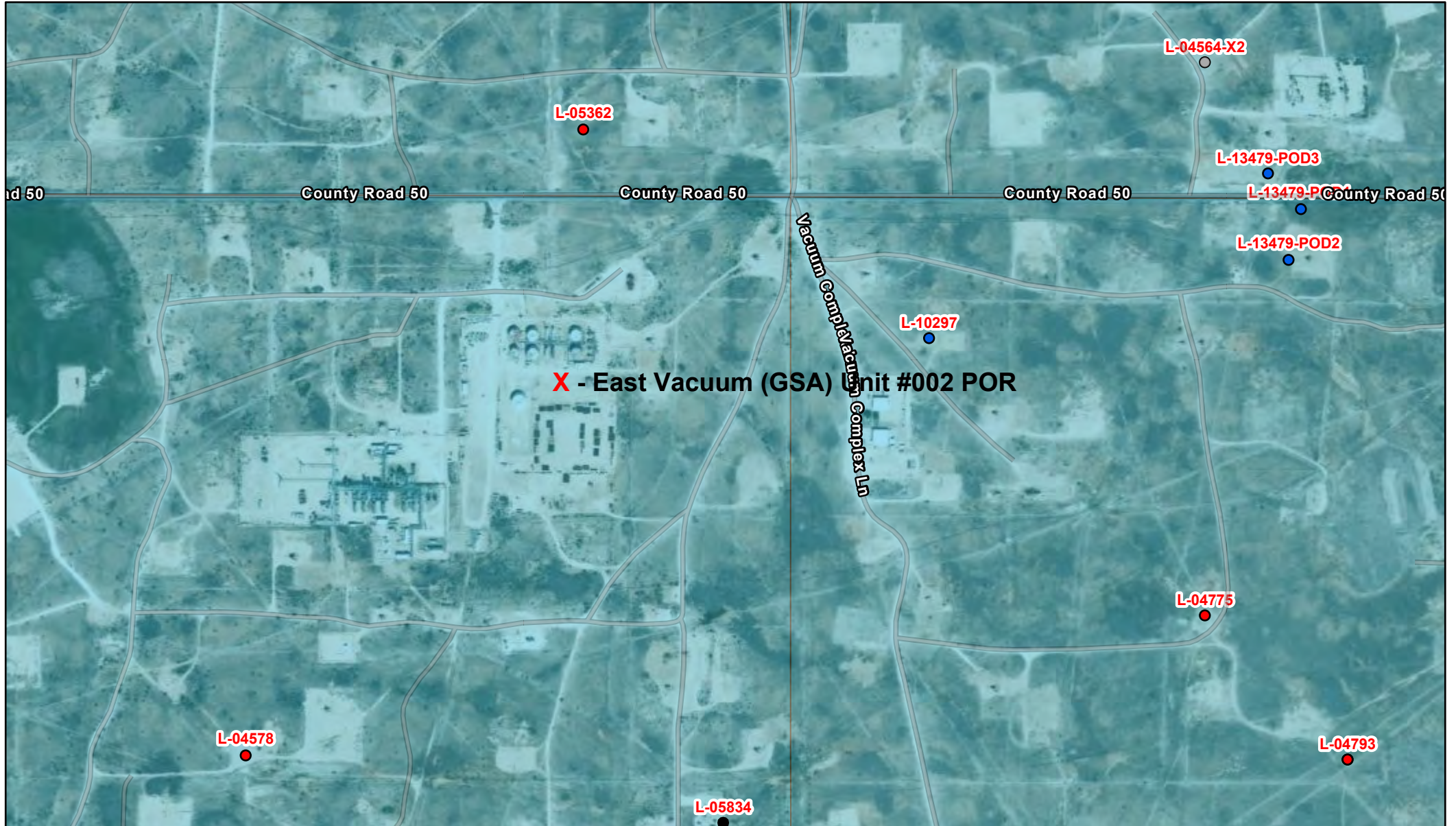
Northing: 3629750.05

Radius: 01200

\* 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.

# OSE POD Location Map



3/31/2025, 9:08:23 AM

GIS WATERS PODs

● Active

● Inactive

● Plugged

●

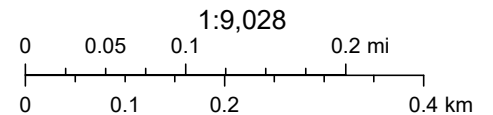
OSE District Boundary

Water Right Regulations

Artesian Planning Area

New Mexico State Trust Lands

Both Estates



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



[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 =

- 324746103272801

Minimum number of levels = 1

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

### USGS 324746103272801 17S.35E.33.2241413

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 12080003

Latitude 32°47'46", Longitude 103°27'28" NAD27

Land-surface elevation 3,938.4 feet above NGVD29

The depth of the well is 224 feet below land surface.

The depth of the hole is 224 feet below land surface.

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

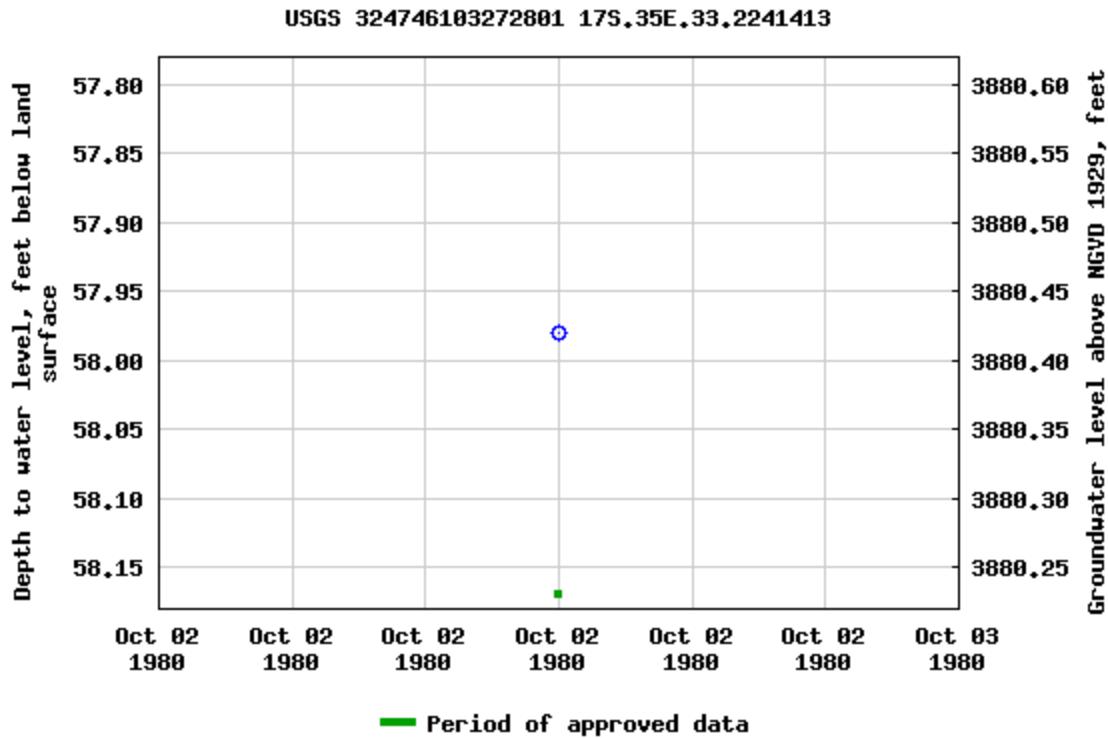
[Table of data](#)

[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](#)

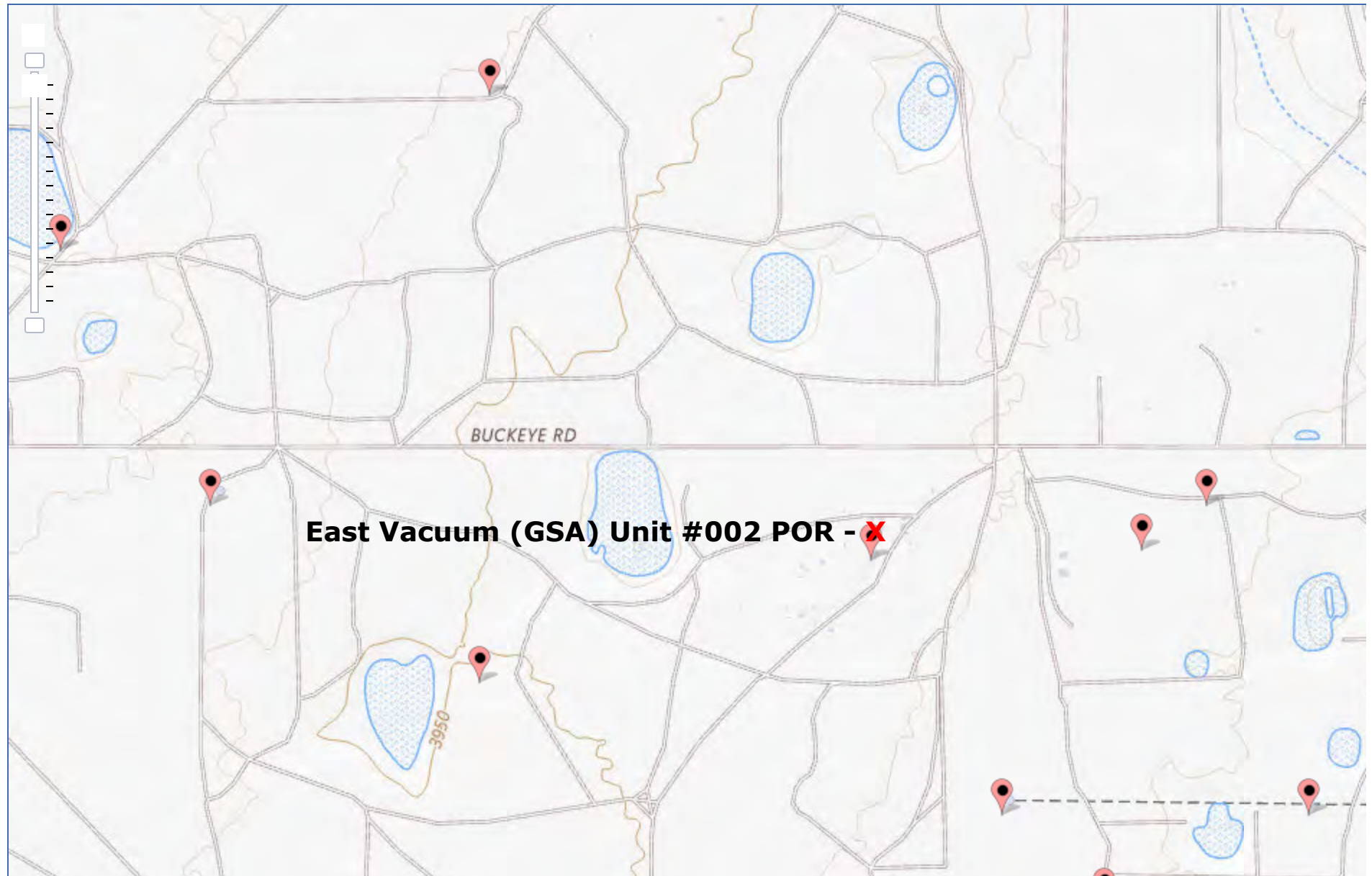
[Accessibility](#)   [FOIA](#)   [Privacy](#)   [Policies and Notices](#)  
[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)  
**Title: Groundwater for USA: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2025-03-31 10:12:46 EDT  
0.82 0.64 nadww02



## National Water Information System: Mapper







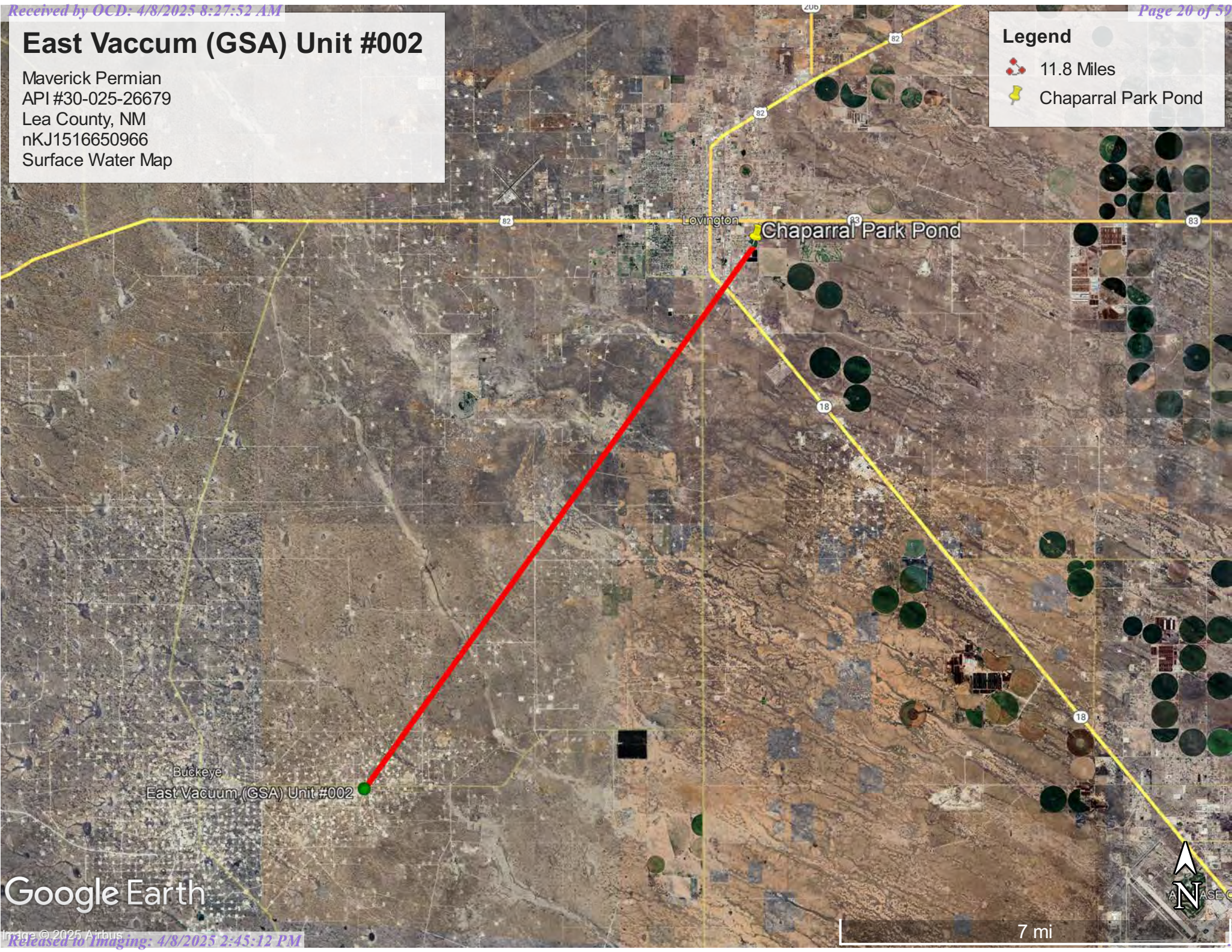
# East Vaccum (GSA) Unit #002

Maverick Permian  
API #30-025-26679  
Lea County, NM  
nKJ1516650966  
Surface Water Map

Legend

 11.8 Miles

 Chaparral Park Pond



Google Earth

7 mi





## Wetlands Map



March 31, 2025

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

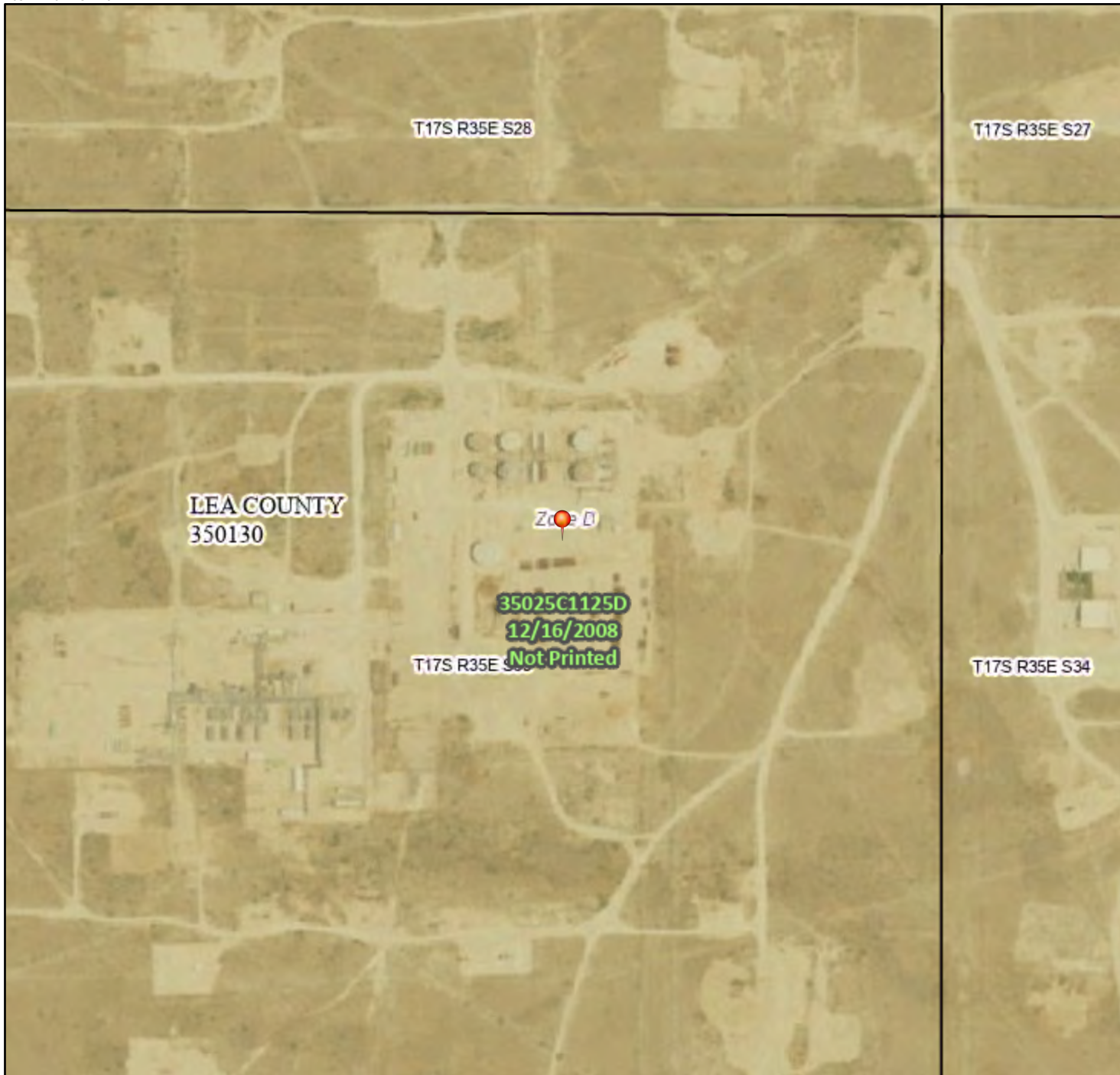
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



# National Flood Hazard Layer FIRMette



103°27'46"W 32°48'1"N



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

1:6,000

103°27'9"W 32°47'31"N

Released to Imaging: 4/8/2025 2:43:12 PM

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 Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/31/2025 at 2:16 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: Kimbrough-Lea complex, dry, 0 to 3 percent slopes---Lea County, New Mexico

---

## Lea County, New Mexico

### KU—Kimbrough-Lea complex, dry, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tw46

*Elevation:* 2,500 to 4,800 feet

*Mean annual precipitation:* 14 to 16 inches

*Mean annual air temperature:* 57 to 63 degrees F

*Frost-free period:* 180 to 220 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Kimbrough and similar soils:* 45 percent

*Lea and similar soils:* 25 percent

*Minor components:* 30 percent

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

#### Description of Kimbrough

##### Setting

*Landform:* Playa rims, plains

*Down-slope shape:* Convex, linear

*Across-slope shape:* Concave, linear

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

##### Typical profile

*A - 0 to 3 inches:* gravelly loam

*Bw - 3 to 10 inches:* loam

*Bkkm1 - 10 to 16 inches:* cemented material

*Bkkm2 - 16 to 80 inches:* cemented material

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* 4 to 18 inches to petrocalcic

*Drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.01 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 95 percent

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

*Sodium adsorption ratio, maximum:* 1.0

*Available water supply, 0 to 60 inches:* Very low (about 1.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified



Map Unit Description: Kimbrough-Lea complex, dry, 0 to 3 percent slopes---Lea County, New Mexico

---

*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: D*  
*Ecological site: R077DY049TX - Very Shallow 12-17" PZ*  
*Hydric soil rating: No*

## Description of Lea

### Setting

*Landform: Plains*  
*Down-slope shape: Convex*  
*Across-slope shape: Linear*  
*Parent material: Calcareous, loamy eolian deposits from the blackwater draw formation of pleistocene age over indurated caliche of pliocene age*

### Typical profile

*A - 0 to 10 inches: loam*  
*Bk - 10 to 18 inches: loam*  
*Bkk - 18 to 26 inches: gravelly fine sandy loam*  
*Bkkm - 26 to 80 inches: cemented material*

### Properties and qualities

*Slope: 0 to 3 percent*  
*Depth to restrictive feature: 22 to 30 inches to petrocalcic*  
*Drainage class: Well drained*  
*Runoff class: High*  
*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 90 percent*  
*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum: 3.0*  
*Available water supply, 0 to 60 inches: Very low (about 2.9 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: D*  
*Ecological site: R077DY047TX - Sandy Loam 12-17" PZ*  
*Hydric soil rating: No*

## Minor Components

### Douro

*Percent of map unit: 12 percent*  
*Landform: Plains*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Ecological site: R077DY047TX - Sandy Loam 12-17" PZ*  
*Other vegetative classification: Unnamed (G077DH000TX)*  
*Hydric soil rating: No*

Map Unit Description: Kimbrough-Lea complex, dry, 0 to 3 percent slopes---Lea County, New Mexico

---

**Kenhill**

*Percent of map unit:* 12 percent

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* R077DY038TX - Clay Loam 12-17" PZ

*Hydric soil rating:* No

**Spraberry**

*Percent of map unit:* 6 percent

*Landform:* Playa rims, plains

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Ecological site:* R077DY049TX - Very Shallow 12-17" PZ

*Other vegetative classification:* Unnamed (G077DH000TX)

*Hydric soil rating:* No

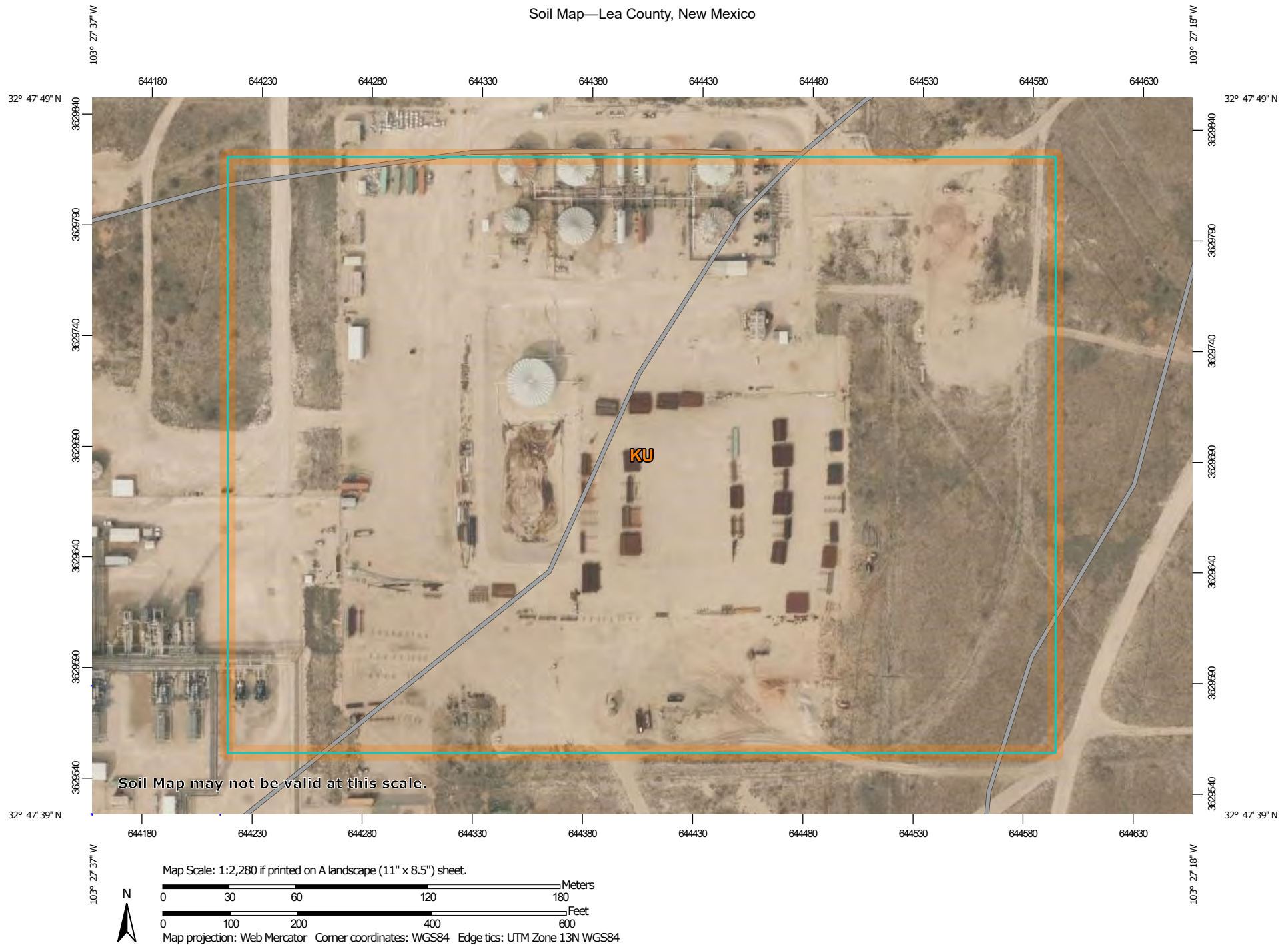
## Data Source Information

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

3/31/2025  
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
KU	Kimbrough-Lea complex, dry, 0 to 3 percent slopes	25.1	100.0%
Totals for Area of Interest		25.1	100.0%

## East Vaccum (GSA) Unit #002

Maverick Permian  
API #30-025-26679  
Lea County, NM  
nKJ1516650966  
Geologic Unit Map

### Legend

-  Ogallala Formation
-  Piedmont alluvial deposits

Buckeye

East Vaccum (GSA) Unit #002

Google Earth

Image © 2025 Airbus



5 mi



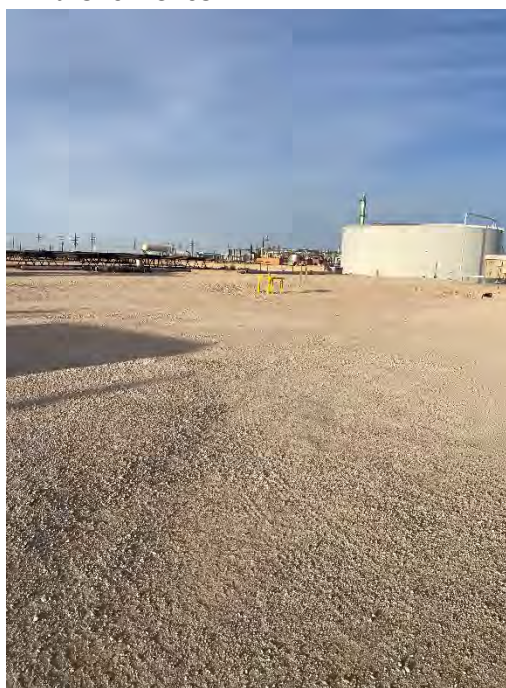
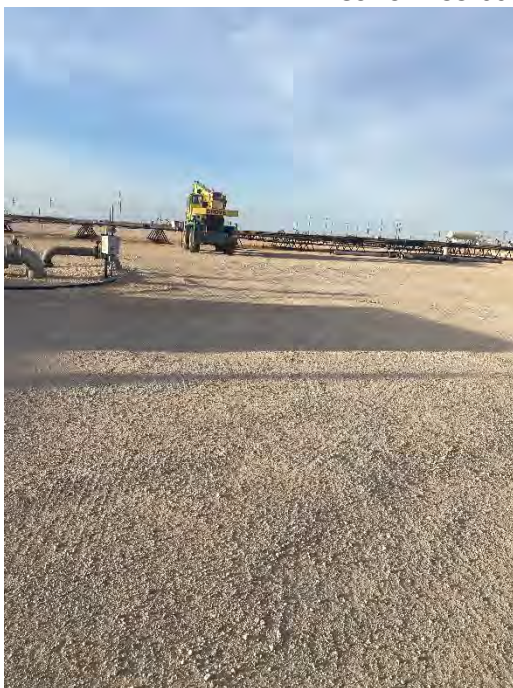


## ***Appendix D***

### **Photographic Documentation**











## ***Appendix E***

### **NMOCD-Approved Corrective Action Plan (2016)**

**APPROVED**



# CONOCOPHILLIPS

P.O. Box 2197  
Houston, TX 77252-2197  
Phone 281.293.1000

## EVGSAU CTB (1RP-3670)

---

# Corrective Action Plan

API No. 30-025-2667900

Release Date: June 12<sup>th</sup>, 2015

Unit Letter A, Section 33, Township 17S, Range 35E



PO Box 2948 | Hobbs, NM 88241 | Phone 575.393.2967

**May 23<sup>rd</sup>, 2016**

**Jamie Keyes**

Environmental Specialist – New Mexico Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
1625 N. French Dr.  
Hobbs, NM 88240

**RE: Corrective Action Plan  
ConocoPhillips EVGSAU CTB (1RP-3670)  
UL/A sec. 33 T17S R35E  
API No. 30-025-2667900**

Mr. Keyes:

ConocoPhillips (CoP) has retained Basin Environmental Service Technologies to address potential environmental concerns at the above-referenced site.

**Background and Previous Work**

The site is located approximately 2.8 miles east south east of Buckeye, New Mexico at UL/A sec. 33 T17S R35E. NM OSE and Basin installed monitor well records indicate that groundwater will likely be encountered at a depth of approximately 70 +/- feet.

On June 12<sup>th</sup>, 2015, CoP discovered a release from an eight inch transfer line. A total of 30 barrels of oil was released over 2,042 sq ft of lease pad and 414 sq ft in the lined facility with 20 barrels of oil recovered. NMOCD was notified of the release on June 12<sup>th</sup>, 2015, and an initial C-141 was submitted and approved by NMOCD on June 15<sup>th</sup>, 2015 (Appendix A).

On June 16<sup>th</sup>, 2015, Basin personnel were on site to assess the release. On May 20<sup>th</sup>, 2016 two points within the release area were sampled with depth (Figure 1). All samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis (Appendix B).

Photo Documentation of these activities may be found in Appendix C.

**Corrective Action Plan**

Based on the assessment, the release around point 1 will be excavated down to 2 ft bgs, the release around point 2 will be excavated down to 1.5 ft bgs. There are buried lines running throughout the release. To provide for the safety of people and equipment at the site, the excavation will remain 5 ft away from the buried lines.



All excavated soil will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to serve as backfill. A sample of the backfill soil will be taken to a commercial laboratory to confirm that the chloride reading is below regulatory standards. The lease pad will be backfilled with clean, imported soil. The site will be contoured to the surrounding location.

Once these activities have been completed, a report will be sent to NMOCD requesting 'remediation termination' and site closure.

Basin appreciates the opportunity to work with you on this project. Please contact me if you have any questions or wish to discuss the site.

Sincerely,

A handwritten signature in black ink, appearing to read "Kyle Norman", followed by a horizontal line.

Kyle Norman  
Project Lead  
Basin Environmental Service Technologies  
(575) 942-8542

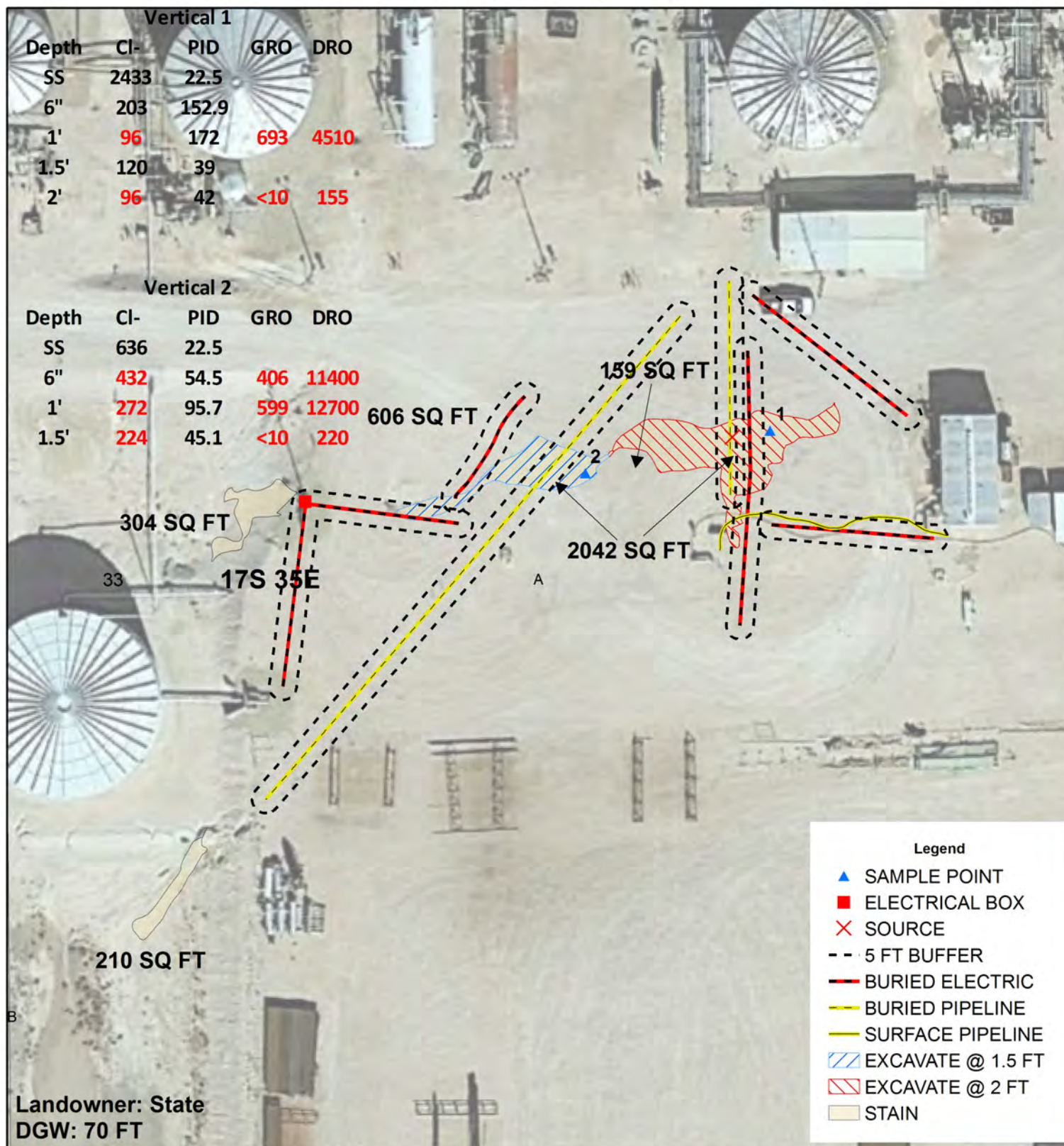
Attachments:

- Figure 1 – Initial sampling data
- Appendix A – Initial C-141
- Appendix B – Laboratory Analysis
- Appendix C – Photo Documentation

# Figures

**Basin Environmental Service Technologies, LLC**  
P.O. Box 2948, Hobbs, NM 88241  
Phone 575.393.2967

## Initial Sampling



# CONOCOPHILLIPS EVGSAU CENTRAL TANK BATTERY

1RP-3670

UL A SECTION 33  
T-17-S R-35-E  
LEA COUNTY, NM

Underground facilities are  
spatially projected  
and need to be field verified.

GPS CENTER STAIN: 32.796222 -103.457763

0 25 50  
Feet

GPS date: 6/16/15 CF  
Drawing date: 6/17/15  
Drafted by: T. Grieco





# Appendix A

Intial C-141

**Basin Environmental Service Technologies, LLC**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

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

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: <b>ConocoPhillips</b>	Contact: <b>Jay Garcia</b>
Address: <b>29 Vacuum Complex Lane</b>	Telephone No. <b>575-704-2455</b>
Facility Name: <b>EVGSAU CTB</b>	Facility Type: <b>Battery</b>

Surface Owner: <b>NMOCD</b>	Mineral Owner:	API No. <b>30-025-2667900</b>
-----------------------------	----------------	-------------------------------

#### LOCATION OF RELEASE

Unit Letter <b>A</b>	Section <b>33</b>	Township <b>17S</b>	Range <b>35E</b>	Feet from the <b>250</b>	North/South Line <b>North</b>	Feet from the <b>150</b>	East/West Line <b>East</b>	County <b>LEA</b>
-------------------------	----------------------	------------------------	---------------------	-----------------------------	----------------------------------	-----------------------------	-------------------------------	----------------------

Latitude **32.7979432251344** Longitude **103.454578927405**

#### NATURE OF RELEASE

Type of Release: <b>Leak</b>	Volume of Release: <b>30 bbl. of oil</b>	Volume Recovered: <b>20 bbl. of oil</b>
Source of Release: <b>Discharge Line</b>	Date and Hour of Occurrence <b>06/12/2015 6:30 am</b>	Date and Hour of Discovery <b>06/12/2015 6:30 am</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Tomas Oberding / Kellie Jones</b>	
By Whom? <b>Jay Garcia</b>	Date and Hour: <b>06/12/2015 9:45 pm</b>	
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.\*

ENV – Agency Reportable – 30 bbls oil – EVGSAU CTB – RR II – MCBU – Buckeye – On Friday June 12, 2015 at 0630 MDT, at EVGSAU CTB, MSO found a leak on a 8 inch transfer line that resulted in a release of 30 bbls of oil, with 20 bbls recovered. Immediate action was to isolate the leak and turn in a work order for repair and remediation. The affected area will be remediated according to NMOCD, BLM and COPC guidelines. This is a Tier 2 PSE.

**RECEIVED**

By OCD District 1 at 2:05 pm, Jun 15, 2015

Describe Area Affected and Cleanup Action Taken.\*

Release of 30 barrels of oil with 20 barrels of oil recovered. Affected area was 113 foot by 143 foot X 2 inch deep on caliche pad. The affected area will be remediated according to NMOCD guidelines.

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

Signature: <i>Jay Garcia</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Jay Garcia</b>		Approved by Environmental Specialist: <i>[Signature]</i>	
Title: <b>LEAD HSE</b>		Approval Date:	Expiration Date:
E-mail Address: <b>jay.c.garcia@conocophillips.com</b>		Conditions of Approval: <b>Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of remediation required.</b>	Attached <input type="checkbox"/> <b>217817</b> <b>IRP-3670</b>

nKJ1516650966  
pKJ1516651415



Date: 01/06/2015	Phone:575-704-2455	
------------------	--------------------	--

\* Attach Additional Sheets If Necessary

# Appendix B

## Laboratory Analysis

**Basin Environmental Service Technologies, LLC**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967



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

---

May 23, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: EVGSAU CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/20/16 14:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Coley D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

Basin Environmental Service  
 KYLE NORMAN  
 P.O. Box 301  
 Lovington NM, 88260  
 Fax To: (575) 396-1429

Received: 05/20/2016  
 Reported: 05/23/2016  
 Project Name: EVGSAU CTB  
 Project Number: 1RP-3670  
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Brittany Feller

**Sample ID: PT. 1 @ 1' (H601109-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/23/2016	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	693	10.0	05/20/2016	ND	193	96.3	200	1.82	QM-07
DRO >C10-C28	4510	10.0	05/20/2016	ND	202	101	200	6.77	QM-07

Surrogate: 1-Chlorooctane 125 % 35-147

Surrogate: 1-Chlorooctadecane 156 % 28-171

**Sample ID: PT. 1 @ 2' (H601109-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/23/2016	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/20/2016	ND	193	96.3	200	1.82	
DRO >C10-C28	155	10.0	05/20/2016	ND	202	101	200	6.77	

Surrogate: 1-Chlorooctane 79.8 % 35-147

Surrogate: 1-Chlorooctadecane 94.7 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Basin Environmental Service  
 KYLE NORMAN  
 P.O. Box 301  
 Lovington NM, 88260  
 Fax To: (575) 396-1429

Received: 05/20/2016  
 Reported: 05/23/2016  
 Project Name: EVGSAU CTB  
 Project Number: 1RP-3670  
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Brittany Feller

**Sample ID: PT. 2 @ 6" (H601109-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	05/23/2016	ND	416	104	400	0.00		
TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	406	100	05/20/2016	ND	193	96.3	200	1.82		
DRO >C10-C28	11400	100	05/20/2016	ND	202	101	200	6.77		

Surrogate: 1-Chlorooctane 135 % 35-147

Surrogate: 1-Chlorooctadecane 287 % 28-171

**Sample ID: PT. 2 @ 1' (H601109-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	05/23/2016	ND	416	104	400	0.00		
TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	599	100	05/20/2016	ND	193	96.3	200	1.82		
DRO >C10-C28	12700	100	05/20/2016	ND	202	101	200	6.77		

Surrogate: 1-Chlorooctane 160 % 35-147

Surrogate: 1-Chlorooctadecane 316 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Basin Environmental Service  
 KYLE NORMAN  
 P.O. Box 301  
 Lovington NM, 88260  
 Fax To: (575) 396-1429

Received: 05/20/2016  
 Reported: 05/23/2016  
 Project Name: EVGSAU CTB  
 Project Number: 1RP-3670  
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Brittany Feller

**Sample ID: PT. 2 @ 1.5' (H601109-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	05/23/2016	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/20/2016	ND	193	96.3	200	1.82	
DRO >C10-C28	220	10.0	05/20/2016	ND	202	101	200	6.77	

Surrogate: 1-Chlorooctane 92.5 % 35-147

Surrogate: 1-Chlorooctadecane 118 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

---

### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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

---

Cardinal Laboratories

\*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

~~QUESTIONS~~

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

<b>Company Name:</b> Conoco Phillips <b>Project Manager:</b> Kyle Norman <b>Address:</b> <b>City:</b> State: Zip: <b>Phone #:</b> Fax #: <b>Project #:</b> Project Owner: <b>Project Name:</b> <b>Project Location:</b> EVGSAU CTB (1RP-3670)				<b>P.O. #:</b> <b>Company:</b> Basin Environmental <b>Attn:</b> <b>Address:</b> 419 W. Cain <b>City:</b> Hobbs <b>State:</b> NM <b>Zip:</b> 88240 <b>Phone #:</b> Fax #:			
<b>Sample Name:</b> Kyle Norman <small>FOR LAB USE ONLY</small>				<b>BILL TO</b>			
<b>Lab I.D.</b> Sample I.D.  HUC01109-				(G)RAB OR (C)OMP.		# CONTAINERS	
				GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :		ACID/BASE: ICE / COOL OTHER :	
Pt. 1 @ 1 ft. Pt. 1 @ 2' 1 ft. Pt. 2 @ 6 in. Pt. 2 @ 1 ft. Pt. 2 @ 1.5 ft.		1 1 1 1 1		5/20/16 08:30 5/20/16 08:40 5/20/16 09:00 5/20/16 09:15 5/20/16 09:40		✓ ✓ ✓ ✓ ✓	
DATE TIME				Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS			
REMARKS:				email results: knorman@basinenvironment.com; jkamlain@basinenvironment.com; tgrieco@basinenvironment.com			

# Appendix C

## Photo Documentation

**Basin Environmental Service Technologies, LLC**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967



## Conoco Phillips EVGSAU CTB (1RP-3670)

Unit Letter A, Section 33, T17S, R35E



Initial release, facing south

6/16/2015



Initial release, facing east

6/16/2015



Initial release, facing north

6/16/2015



Initial release, facing west

6/16/2015



Initial release, facing south east

6/16/2015



Initial release, facing north west

6/16/2015



Excavating vertical 1 facing south west

5/20/2016

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 449486

**QUESTIONS**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 449486
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nKJ1516650966
Incident Name	NKJ1516650966 EAST VACUUM (GSA) UNIT #002 @ 30-025-26679
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-025-26679] EAST VACUUM (GSA) UNIT #002

**Location of Release Source**

Please answer all the questions in this group.

Site Name	EAST VACUUM (GSA) UNIT #002
Date Release Discovered	06/12/2015
Surface Owner	State

**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: Equipment Failure   Flow Line - Production   Crude Oil   Released: 30 BBL   Recovered: 20 BBL   Lost: 10 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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 449486

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 449486
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
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: 07/19/2024
--	--

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 449486

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 449486
	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 51 and 75 (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
<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 1000 (ft.) and ½ (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 ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (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)	432
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	13299
GRO+DRO (EPA SW-846 Method 8015M)	13299
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	06/01/2025
On what date will (or did) the final sampling or liner inspection occur	06/21/2025
On what date will (or was) the remediation complete(d)	06/30/2025
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	2556
What is the estimated volume (in cubic yards) that will be remediated	379
<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>	

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 4

Action 449486

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 449486
	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: 04/08/2025
<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>	



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 5

Action 449486

QUESTIONS (continued)

Operator:  Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:  331199
	Action Number:  449486
	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

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 6

Action 449486

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 449486
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	353736
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/15/2024
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
--	----

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 449486

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 449486
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation work plan approved. Submit a report via the OCD permitting portal by July 7, 2025.	4/8/2025