



EAST VACUUM (GSA) UNIT #006  
nGRL1013255165

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

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

April 25, 2025



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

Re: Proposed Sampling and Remediation Work Plan  
 NMOCD Incident Number: **nGRL1013255165**  
 East Vacuum (GSA) Unit #006 API No. 30-025-26385  
 Unit P, Section 29, Township 17S, Range 35E 1145 FSL 1180 FEL Lea County, NM  
 GPS Coordinates: Latitude 32.8018875 Longitude -103.4751434 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 crude oil release that occurred at the East Vacuum (GSA) Unit #006 (Site). This incident was assigned Incident ID nGRL1013255165 by the New Mexico Oil Conservation Division (NMOCD).

### ***Release Information - nGRL1013255165***

The initial Form C-141 was submitted on March 16, 2010 (Appendix A) and stated that "Release originated from a hole in a 2 7/8" Steele surface flow line due to suspected internal/external corrosion. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water. The spill site will be remediated in accordance with an agreement with NMOCD. Affected area is a 35' X 20' X .5" area of dry, hard, caliche road and pad. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water." This initial Form C-141 was approved by the NMOCD on March 25, 2010.

### ***Site Characterization***

This Site is in Lea County, NM, approximately twelve (12) miles southwest of Lovington, NM. The wellhead and release area area in Unit P, Section 29, Township 17S, Range 35E, at 32.8018875 degrees latitude and -103.4751434 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 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 25.78 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 90 feet below grade surface (bgs). This information is recorded by L-04829-S4 which is situated approximately 0.43 miles away from the Site. This information is from 1979. The United States Geological Survey (USGS) offers the site USGS 324759103284501 17S.35E.29.32322 which shows depth to the nearest groundwater is 73 feet bgs. The latest gauge of this site was conducted in 1986, and it is located approximately 0.41 miles from the Site.

The nearest surface water feature is an Unnamed Pond, and it is located approximately 1.78 miles to the west. The U.S. Fish and Wildlife Service National Wetlands Inventory shows the nearest wetland to be a Freshwater Pond approximately 0.59 miles southeast. 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 or wildlife habitats. A Special Status Plant/Wildlife Map is included in Figure 2.

The remediation area at the Site is in previously disturbed and undisturbed areas developed for oil and gas extraction; therefore, a cultural resource survey will be required in the pasture area at the Site for planned remediation activities. The requirements of the Cultural Properties Protection (CCP) Rule will be followed.

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

“On April 22, 2010 EPI and Straub Coorporation (Stanton, Texas) mobilized at the Site to direct the locale and depth of four (4) soil borings. Three (3) soil borings were advanced within confines of the release area while the fourth (4th) was used as background reference (Ref. Figure 4). Prior to advancement of soil borings, soil samples were to be collected at two (2) foot intervals initially and then a five (5) foot increments thereafter to total depth (TD) of each soil boring. However, this format was followed on the background reference soil boring (BG-1) which was advanced to a TD of 20-feet below ground surface (bgs). SB-1, SB-2 and SB-3 were advanced to depths of 5-feet bgs where TPH and chloride concentrations were below NMOCD Remedial Threshold goals (Goals). Information regarding lithology of soil borings is provided in Attachment III, Soil Boring Logs.

A portion of each soil sample was field analyzed for organic vapor and chloride concentrations. Soil samples collected for field testing of organic vapors were placed in a self-sealing polyetiylene bag and allowed to equilibrate to ~702 F. The samples were then tested for organic vapor concentrations utilizing a MiniRae™ photoionization detector (PID) equipped with a 10.6 electron-volt (eV) lamp. Chloride concentrations were analyzed in the field with use of a LaMotte Chloride Kit (titration method).

Soil samples designated for laboratory analyses were immediately inserted into laboratory provided containers, placed into coolers, iced down and transported to Cardinal Laboratory, Hobbs, New Mexico, for quantification of BTEX (benzene, toluene, ethylbenzene and total xylenes); TPH [Gasoline Range Organics (GRO) and Diesel Range Organics (GRO)] and chloride concentrations.”

On May 17, 2010, ConocoPhillips submitted a Remediation Proposal for approval. The NMOCD approved this proposal on November 5, 2010.

On October 15, 2020, ConocoPhillips submitted a Closure Letter Report for approval. The NMOCD denied this report on April 14, 2023. These documents are included for reference in Appendix E.

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

In response to the denied report from 2020, Maverick would like to propose the following:

- The area of concern measures approximately 8,894 square feet and is on the pad surface, lease road, and in the pasture.
- Collect discrete samples from within and around the edges of the potential release area to evaluate the presence of contaminants. Eighty (80) samples will be collected from 16 different sample points within the release area from depths of surface, 1', 2', 3', and 4' bgs. Sixty (60) samples will be collected from 12 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 confirmations 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. Ensuring the top layer will be topsoil suitable for seeding.
- 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 nGRL1013255165 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 – Remediation Proposal & Closure Letter Report



***Figures:***

**Proposed Sample Map**

**Special Status Plant/Wildlife Map**

**Karst Map**

**Topographic Map**

**Location Map**

# East Vacuum (GSA) Unit #006

Maverick Permian  
API #30-025-26385  
Lea County, NM  
nGRL1013255165  
Proposed Sample Map

**Legend**

- Proposed horizontal samples
- Proposed vertical samples
- Release area - 8,894 sqft



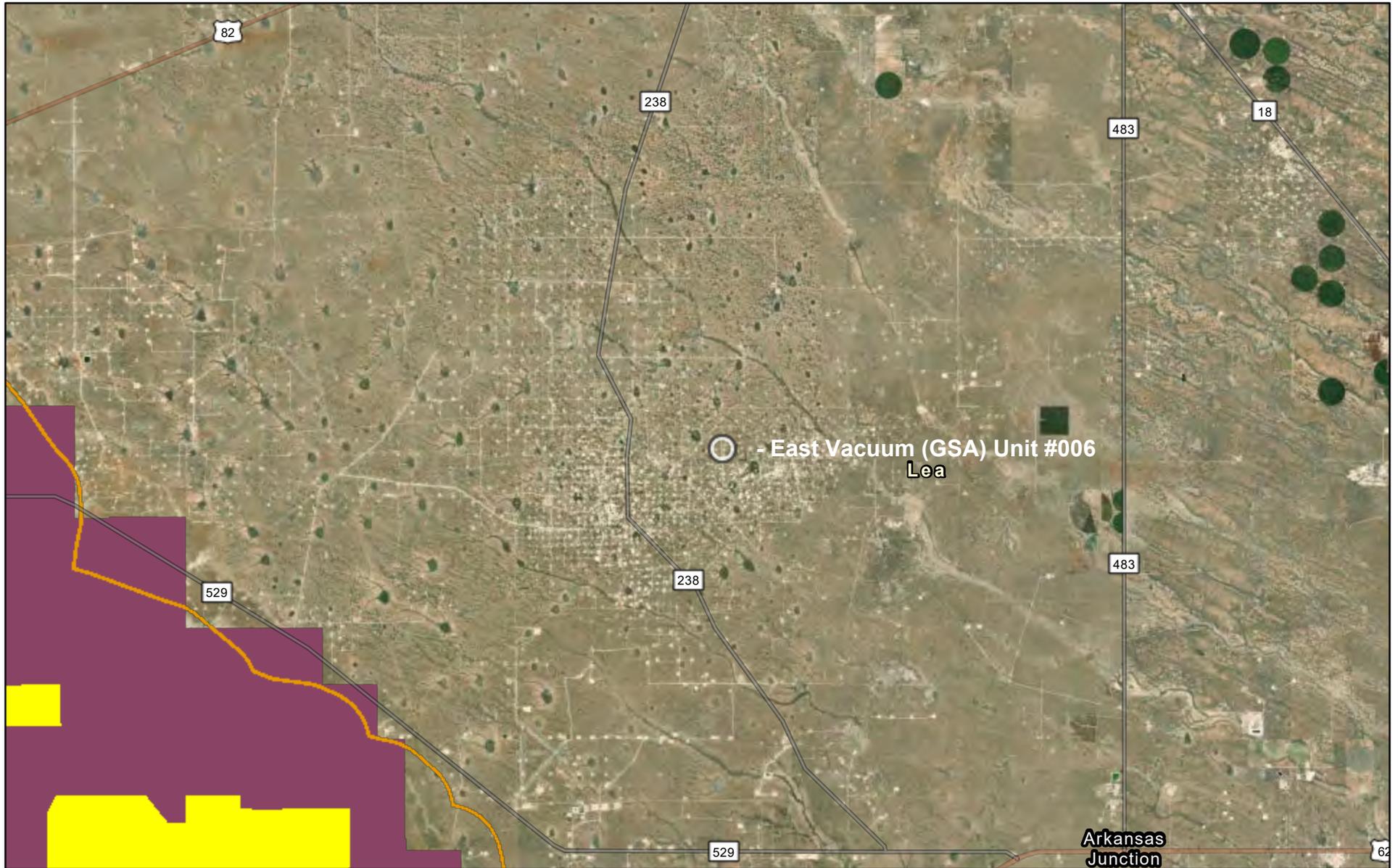
Google Earth

32.801683, -103.475930

East Vacuum (GSA) Unit #006



# Special Status Plant/Wildlife Map

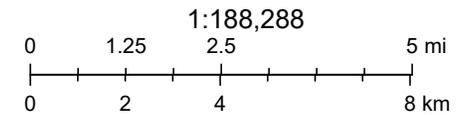


4/23/2025

- 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



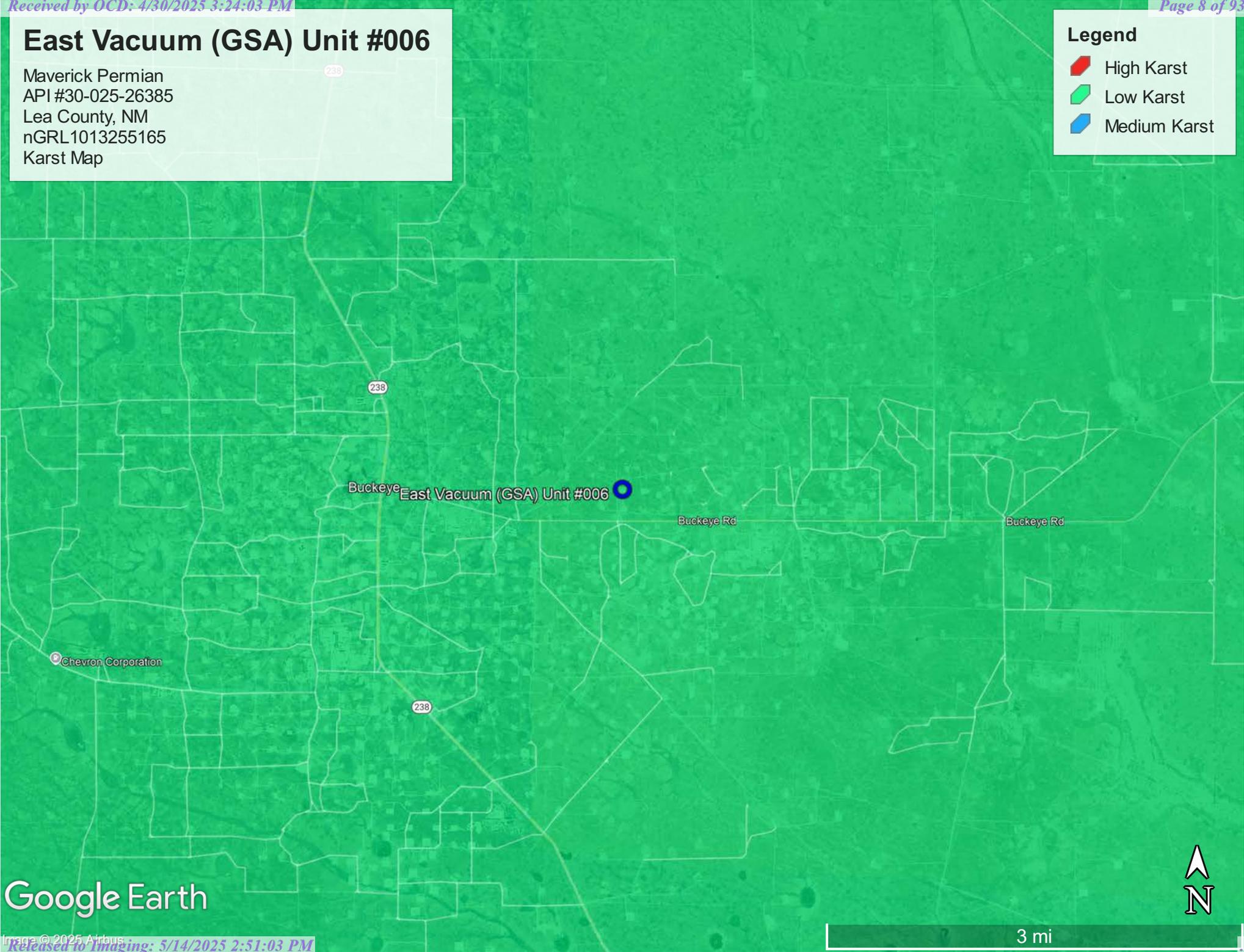
Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community,

# East Vacuum (GSA) Unit #006

Maverick Permian  
API #30-025-26385  
Lea County, NM  
nGRL1013255165  
Karst Map

**Legend**

-  High Karst
-  Low Karst
-  Medium Karst



Google Earth



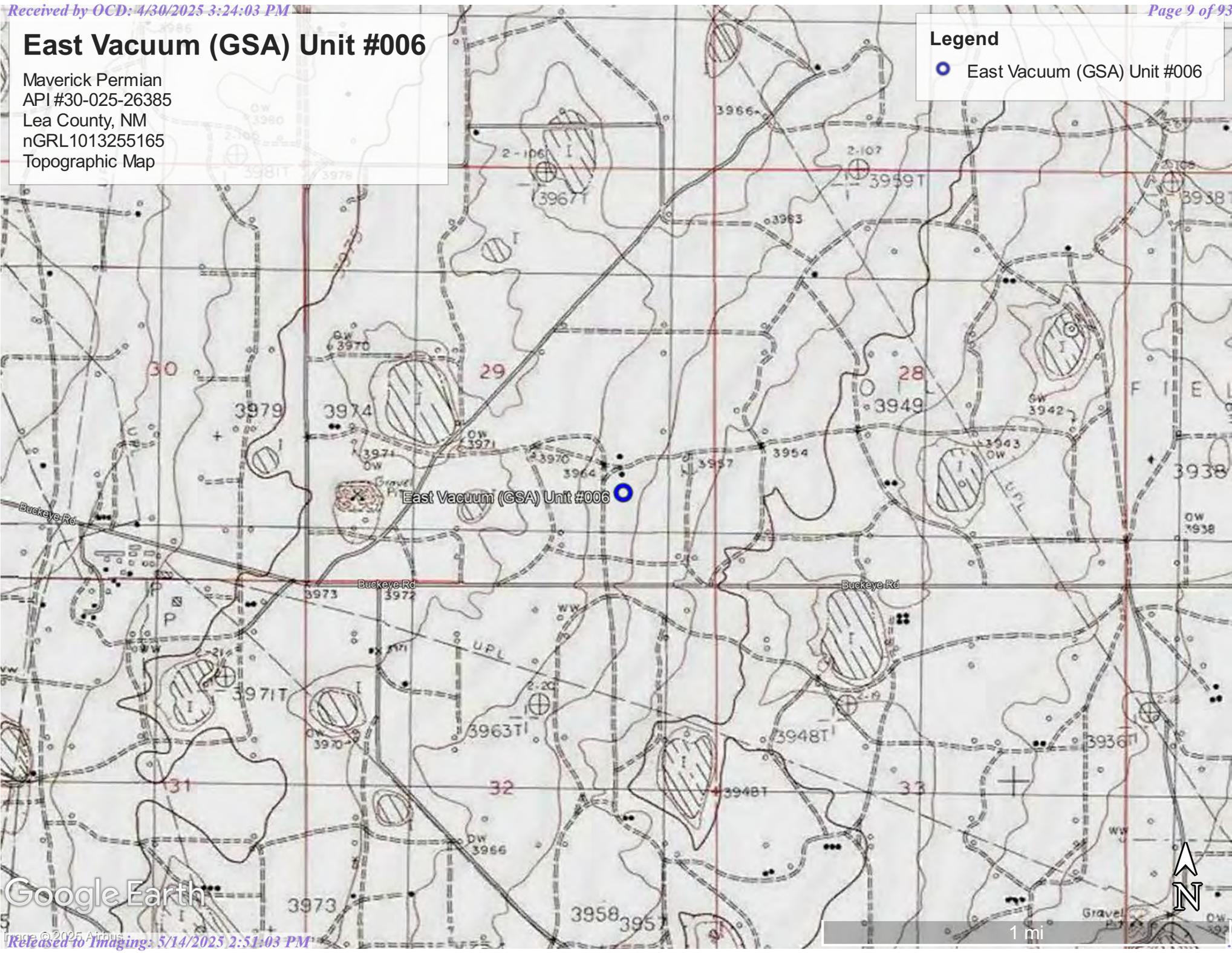
3 mi

# East Vacuum (GSA) Unit #006

Maverick Permian  
API #30-025-26385  
Lea County, NM  
nGRL1013255165  
Topographic Map

**Legend**

- East Vacuum (GSA) Unit #006



Google Earth

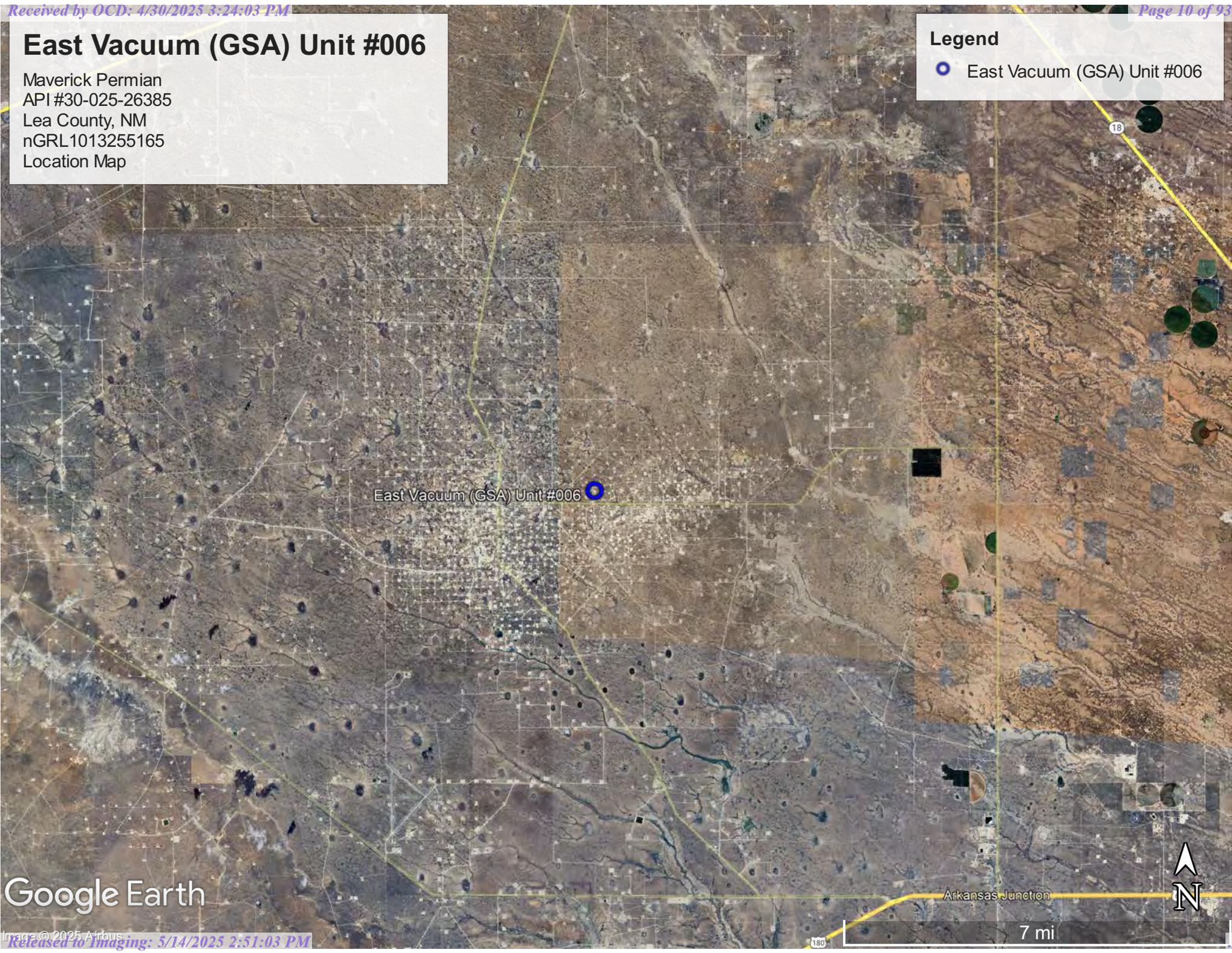
1 mi

# East Vacuum (GSA) Unit #006

Maverick Permian  
API #30-025-26385  
Lea County, NM  
nGRL1013255165  
Location Map

**Legend**

- East Vacuum (GSA) Unit #006



East Vacuum (GSA) Unit #006

Google Earth

180

7 mi

Arkansas Junction





## ***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

**RECEIVED**  
MAR 18 2010  
HOBBSCOCD

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 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 <b>ConocoPhillips Company</b>	Contact <b>John W. Gates</b>
Address <b>3300 North A St. Bldg 6, Midland, TX 79705-5406</b>	Telephone No. <b>505.391.3158</b>
Facility Name <b>EVGSAU Well# 2913-006</b>	Facility Type <b>Oil and Gas</b>
Surface Owner <b>State Of New Mexico</b>	Mineral Owner <b>State Of New Mexico</b>
	Lease No <b>300252638500</b>

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	29	17S	35E					

Latitude Longitude

**NATURE OF RELEASE**

Type of Release <b>Crude Oil &amp; Produced Water</b>	Volume of Release <b>10.3bbl (3oil, 7.3water)</b>	Volume Recovered <b>(3oil, 7water)</b>
Source of Release <b>Hole in a 2 7/8" steel surface flow line</b>	Date and Hour of Occurrence <b>3/14/10 12:00 pm</b>	Date and Hour of Discovery <b>3/14/10 12:30 pm</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.\*  
  

WATER @ 72'

Describe Cause of Problem and Remedial Action Taken.\*  
**Release originated from a hole in a 2 7/8" steele surface flow line due to suspected internal/external corrosion. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water. The spill site will be remediated in accordance with an agreement with NMOCD.**

Describe Area Affected and Cleanup Action Taken.\*  
**Affected area is a 35' X 20' X .5" area od dry, hard, caliche road and pad. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water.**

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>John W. Gates</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>John W. Gates</b>	ENV. ENGINEER: Approved by District Supervisor: <i>Jeffrey Perkins</i>	
Title: <b>HSER Lead</b>	Approval Date: <b>03/25/10</b>	Expiration Date: <b>05/25/10</b>
E-mail Address: <b>John.W.Gates@conocophillips.com</b>	Conditions of Approval: <b>DELINATE TO CLEAN +1. SUBMIT FINAL C-141 BY</b>	Attached <input type="checkbox"/>
Date: <b>3/16/10</b> Phone: <b>505.391.3158</b>		<b>IRP-10-3-2459</b>

- 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 04829 S4</a>		L	LE		NE	SW	29	17S	35E	642121.0	3630598.0 *		694	200	90	110
<a href="#">L 04829 S3</a>		L	LE	NW	SW	NW	28	17S	35E	643222.0	3631111.0 *		881	215	70	145
<a href="#">L 04829 S5</a>		L	LE		SW	NW	33	17S	35E	643347.0	3629400.0 *		1113	220	90	130
<a href="#">L 01919 POD2</a>		L	LE	NW	NW	NE	29	17S	35E	642410.0	3631507.0 *		1208	209	55	154

Average Depth to Water: **76 feet**

Minimum Depth: **55 feet**

Maximum Depth: **90 feet**

**Record Count: 4**

**Basin/County Search:**

**County:** LE

**UTM Filters (in meters):**

**Easting:** 642771.13

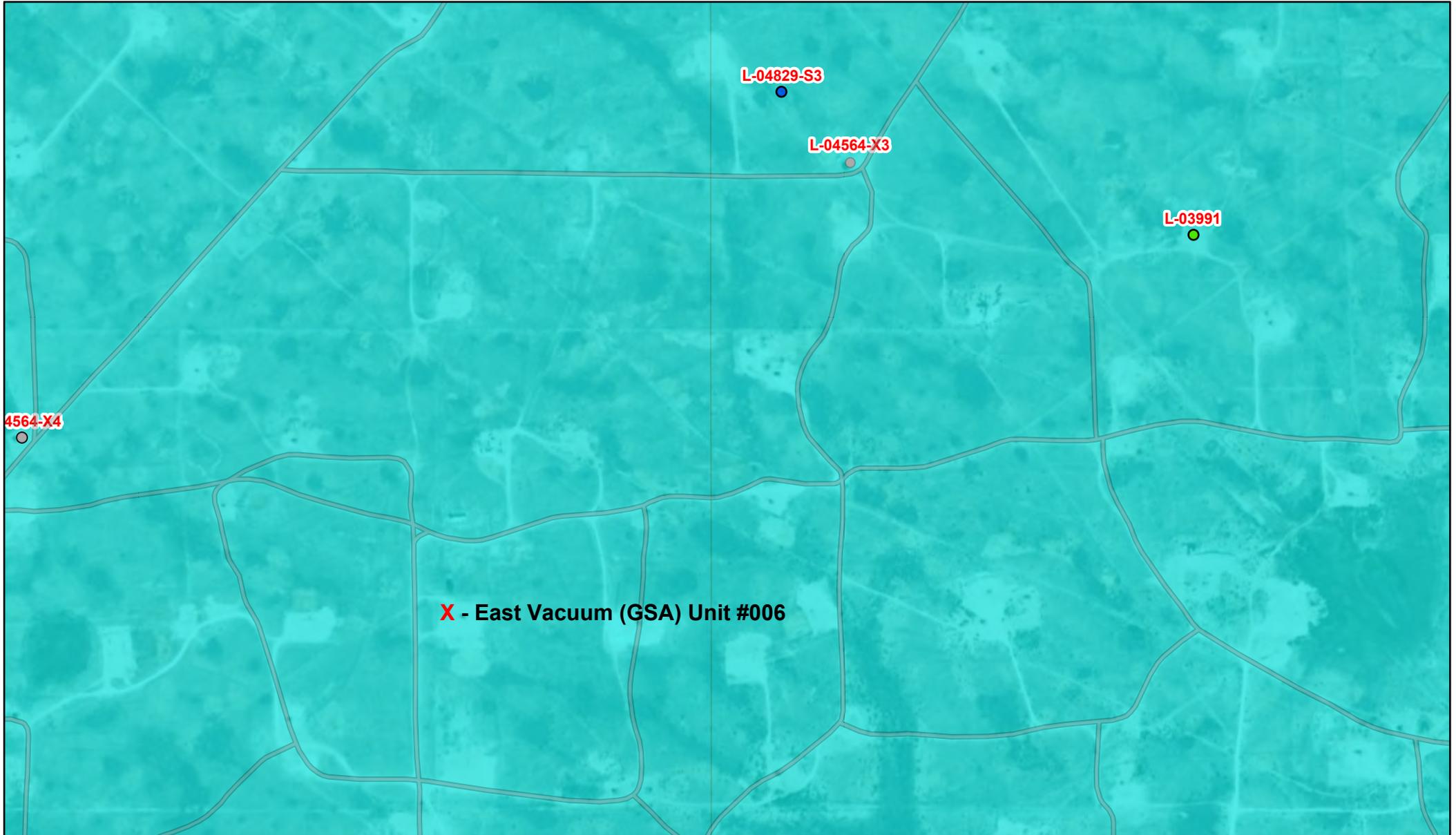
**Northing:** 3630353.28

**Radius:** 01500

\* UTM location was derived from PLSS - see Help

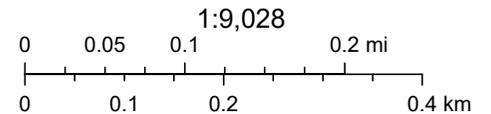
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# OSE POD Location Map



4/23/2025, 2:42:24 PM

- |  |   |   |
|--|---|---|
| GIS WATERS PODs                              | <span style="border: 1px solid red; display: inline-block; width: 15px; height: 10px;"></span> OSE District Boundary    | <span style="background-color: lightblue; display: inline-block; width: 15px; height: 10px;"></span> New Mexico State Trust Lands |
| <span style="color: blue;">●</span> Active   | <span style="border: 1px solid cyan; display: inline-block; width: 15px; height: 10px;"></span> Water Right Regulations | <span style="background-color: lightblue; display: inline-block; width: 15px; height: 10px;"></span> Both Estates                 |
| <span style="color: green;">●</span> Pending | <span style="background-color: cyan; display: inline-block; width: 15px; height: 10px;"></span> Artesian Plan Area      |   |



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



USGS Home  
Contact USGS  
Search USGS

## National Water Information System: Web Interface

USGS Water Resources

Data Category:  Geographic Area:

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

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

### Search Results -- 1 sites found

site\_no list = 

- 324759103284501

Minimum number of levels = 1

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

### USGS 324759103284501 17S.35E.29.32322

Available data for this site

Lea County, New Mexico

Hydrologic Unit Code 12080003

Latitude 32°48'14", Longitude 103°28'55" NAD27

Land-surface elevation 3,971.00 feet above NGVD29

The depth of the well is 200 feet below land surface.

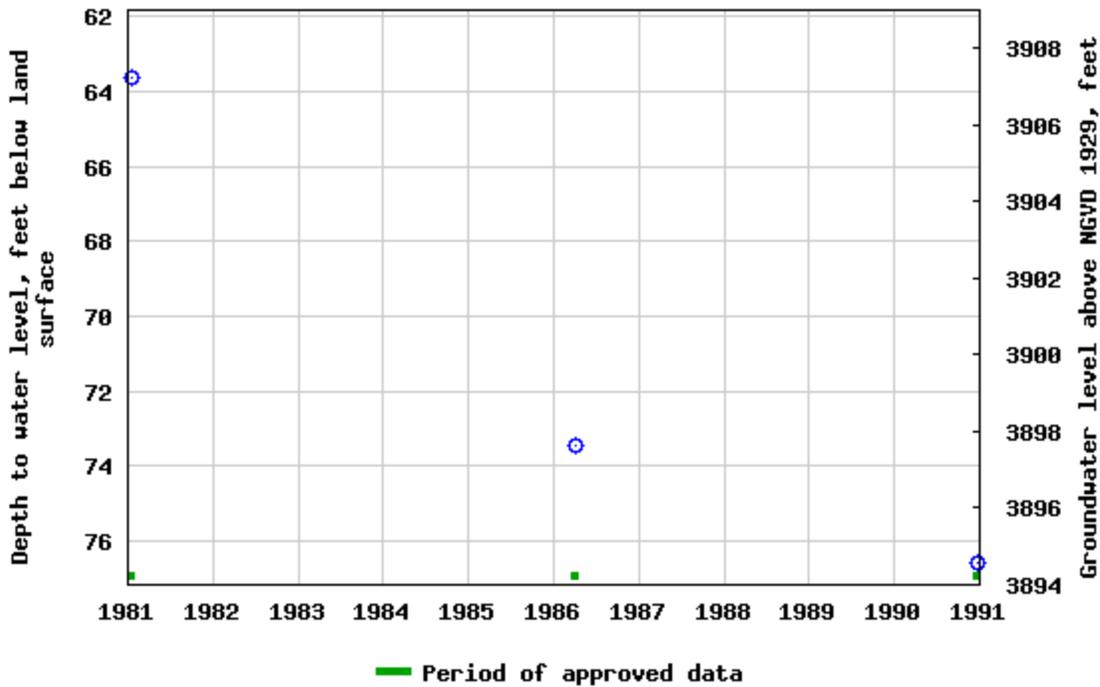
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

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

#### Output formats

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

USGS 324759103284501 17S.35E.29.32322



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?>**



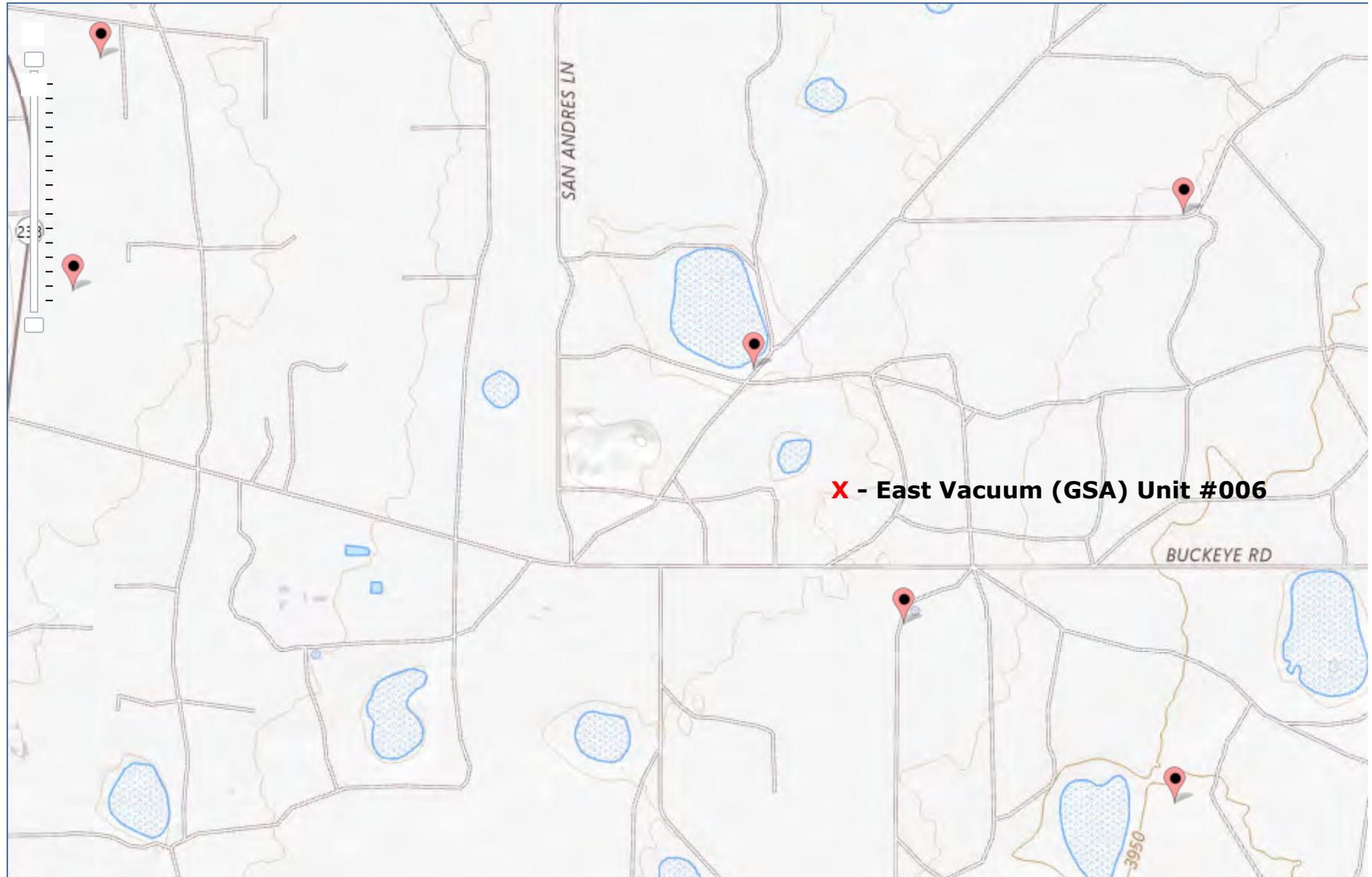
Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-04-23 15:45:18 EDT

0.64 0.46 nadww02



### National Water Information System: Mapper



# East Vacuum (GSA) Unit #006

Maverick Permian  
API #30-025-26385  
Lea County, NM  
nGRL1013255165  
Surface Water Map

**Legend**

-  1.78 Miles
-  Unnamed Pond



Google Earth

1 mi



# Wetlands Map



April 23, 2025

### Wetlands

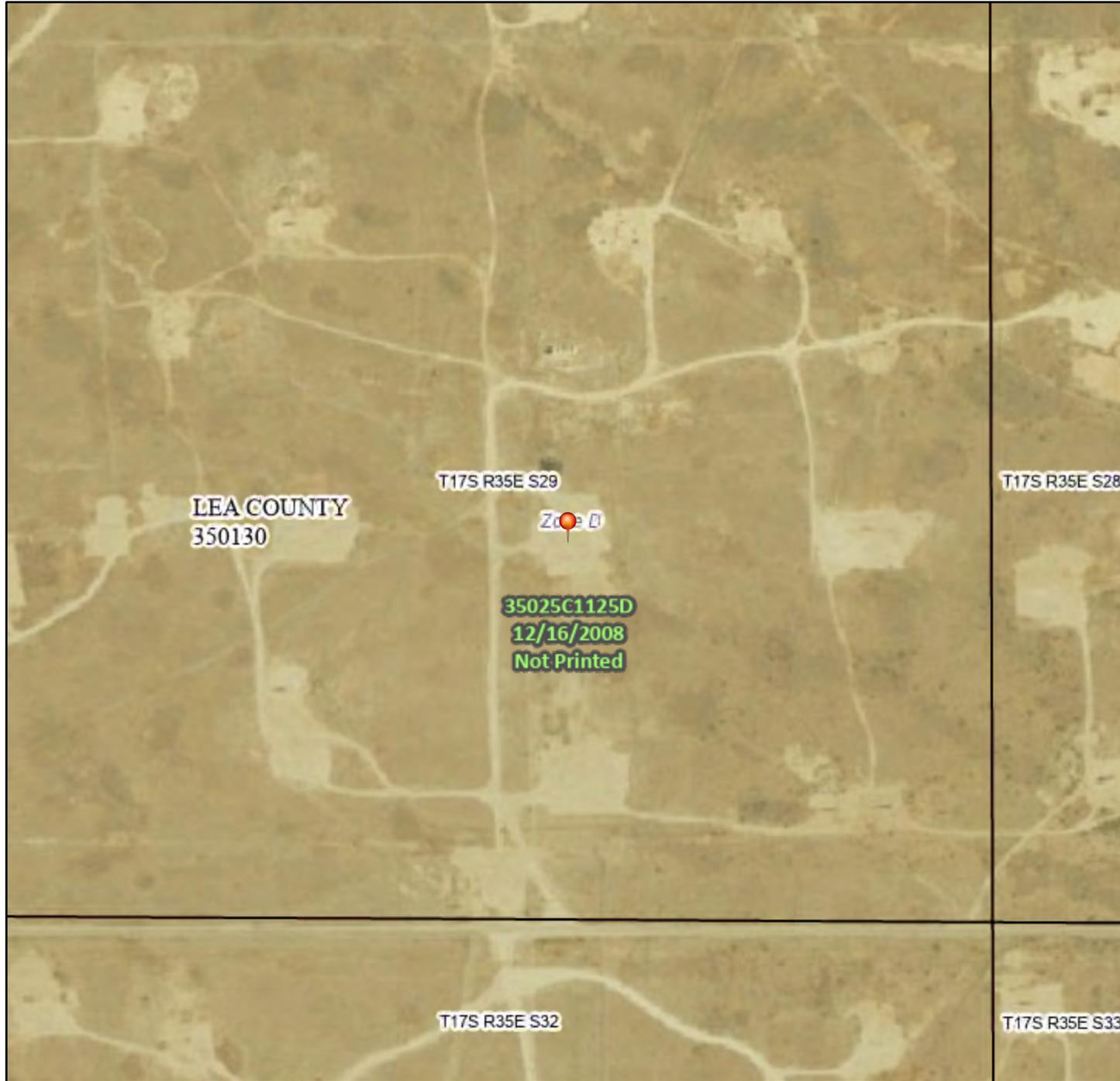
- |                                |                                   |          |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland       | Lake     |
| Estuarine and Marine Wetland   | Freshwater Forested/Shrub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

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

# National Flood Hazard Layer FIRMette



103°28'50"W 32°48'21"N



## Legend

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

- SPECIAL FLOOD HAZARD AREAS**
    - Without Base Flood Elevation (BFE) Zone A, V, A99
    - With BFE or Depth Zone AE, AO, AH, VE, AR
    - Regulatory Floodway
  - OTHER AREAS OF FLOOD HAZARD**
    - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
    - Future Conditions 1% Annual Chance Flood Hazard Zone X
    - Area with Reduced Flood Risk due to Levee. See Notes. Zone X
    - Area with Flood Risk due to Levee Zone D
  - OTHER AREAS**
    - NO SCREEN Area of Minimal Flood Hazard Zone X
    - Effective LOMRs
    - Area of Undetermined Flood Hazard Zone D
  - GENERAL STRUCTURES**
    - Channel, Culvert, or Storm Sewer
    - Levee, Dike, or Floodwall
  - OTHER FEATURES**
    - Cross Sections with 1% Annual Chance Water Surface Elevation
    - Coastal Transect
    - Base Flood Elevation Line (BFE)
    - Limit of Study
    - Jurisdiction Boundary
    - Coastal Transect Baseline
    - Profile Baseline
    - Hydrographic Feature
  - MAP PANELS**
    - 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 4/23/2025 at 7:47 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.

Released to Imaging: 5/14/2025 2:31:03 PM

1:6,000

103°28'12"W 32°47'51"N



## ***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**

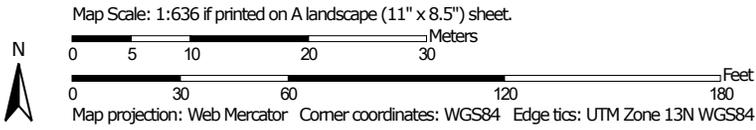
Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024

Soil Map—Lea County, New Mexico



Soil Map may not be valid at this scale.



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	2.1	100.0%
<b>Totals for Area of Interest</b>		<b>2.1</b>	<b>100.0%</b>

# East Vacuum (GSA) Unit #006

Maverick Permian  
API #30-025-26385  
Lea County, NM  
nGRL1013255165  
Geologic Unit Map

**Legend**

-  Ogallala Formation
-  Piedmont alluvial deposits

East Vacuum (GSA) Unit #006 

Google Earth



4 mi



## ***Appendix D***

### **Photographic Documentation**







## ***Appendix D***

**Remediation Proposal**

**Closure Letter Report**



17 May 2010

Mr. Geoffrey Leking  
 Environmental Engineer  
 New Mexico Oil Conservation Division  
 1625 North French Drive  
 Hobbs, New Mexico 88240

**RE: Remediation Proposal**  
**ConocoPhillips – EVGSAU #2913-006**  
**UL-P (SE ¼ of the SE ¼) of Section 29, T 17 S, R 35 E**  
**Longitude: 32° 48' 07.46"; Latitude: 103° 28' 33.70"**  
**NMOCD Ref. #1RP-2459-0; EPI Ref. #190028**

Dear Mr. Leking:

On March 14, 2010 at 12:30 p.m. approximately 7-barrels (bbls) of produced water and 3-bbls of petroleum products were released from a 2-7/8" diameter steel surface flow line. Approximately 7-bbls of produced water and 3-bbls of petroleum product were recovered. The combined fluids covered a release area of ±5,500 square feet. After initial vacuuming of fluids, ConocoPhillips retained the services of Environmental Plus, Inc., (EPI) to GPS, take photographs and delineate the release area. This letter report documents the results of the delineation activities and provides a *Remediation Proposal*.

**Site Background**

The Site is located in UL-P (SE ¼ of the SE ¼) of Section 29, T17S, R35E at an approximate elevation of 3,964 feet above mean sea level (amsl). The property is owned by the State of New Mexico and managed by the New Mexico State Land Office (NMSLO). A search for water wells was completed utilizing the *New Mexico Office of the State Engineers* website and a database maintained by the United States Geological Survey (USGS). No wells (domestic, agriculture or public) or bodies of surface water exist within a 1,000 feet radius of the Site (reference *Figure 2*). Groundwater data indicates the average water depth is approximately 72 feet below ground surface (bgs). Based on available information, it was determined the distance between the impacted soil and groundwater is less than 70 feet. Utilizing this information, the New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this Site were determined as follows:

Parameter	Remedial Goal
Benzene	10 parts per million
BTEX	50 parts per million
TPH	1,000 parts per million

Chloride residuals may not be capable of impacting local Groundwater above NMWQCC of 250 mg/L

Additional information was submitted

approved by:  
 Geoffrey Leking  
 Environmental Engineer  
 NMOCD-Field  
 1105110



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### **Field Work**

On April 22, 2010 EPI and Straub Corporation (Stanton, Texas) mobilized at the Site to direct the locale and depth of four (4) soil borings. Three (3) soil borings were advanced within confines of the release area while the fourth (4<sup>th</sup>) was used as background reference (Ref. Figure 4). Prior to advancement of soil borings, soil samples were to be collected at two (2) foot intervals initially and then a five (5) foot increments thereafter to total depth (TD) of each soil boring. However, this format was followed on the background reference soil boring (BG-1) which was advanced to a TD of 20-feet below ground surface (bgs). SB-1, SB-2 and SB-3 were advanced to depths of 5-feet bgs where TPH and chloride concentrations were below NMOCD Remedial Threshold goals (Goals). Information regarding lithology of soil borings is provided in Attachment III, *Soil Boring Logs*.

A portion of each soil sample was field analyzed for organic vapor and chloride concentrations. Soil samples collected for field testing of organic vapors were placed in a self-sealing polyethylene bag and allowed to equilibrate to ~70<sup>o</sup> F. The samples were then tested for organic vapor concentrations utilizing a MiniRae™ photoionization detector (PID) equipped with a 10.6 electron-volt (eV) lamp. Chloride concentrations were analyzed in the field with use of a LaMotte Chloride Kit (titration method).

Soil samples designated for laboratory analyses were immediately inserted into laboratory provided containers, placed into coolers, iced down and transported to Cardinal Laboratory, Hobbs, New Mexico, for quantification of BTEX (benzene, toluene, ethylbenzene and total xylenes); TPH [Gasoline Range Organics (GRO) and Diesel Range Organics (GRO)] and chloride concentrations.

### **Analytical Data**

A review of Table #2, *Summary of Soil Boring Soil Sample Analytical Results*, indicates both TPH and chloride concentrations above NMOCD Remedial Threshold goals are surficial. This is indicative that oil/produced water fluids were recovered quickly preventing deeper penetration into the soil.

### **Site Remedial Proposal**

EPI proposes remediating release areas surrounding the lease roads. Impacted material will be excavated to whatever depth and width is necessary to remove impacted soil above Goals for TPH (<1,000 mg/Kg) and chloride (250mg/Kg) concentrations. In reviewing Table 2, vertical depth of excavation should be limited to a maximum of five (5) feet bgs. Lateral excavation will proceed from shoulders of caliche lease roads and extend peripherally until sidewalls indicate Goals have been achieved. In any case, EPI will excavate minimum depth and width necessary to remove impacted material plus one (1) foot as noted on initial NMOCD Form C-141. Impacted material will be transported to Controlled Recovery, Inc., (CRI) for disposal.

A portion of soil samples collected from sidewalls and bottom of excavation will be field analyzed for TPH and chloride concentrations. After attaining TPH and chloride concentrations below



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Goals, the second portion will be placed into laboratory provided containers, stored in coolers, iced down and transported to an independent laboratory for analyses of BTEX, TPH and chloride concentrations. Upon receipt of laboratory analytical results indicating Goals have been achieved, excavated areas will be backfilled.

Excavated areas will be backfilled with clean topsoil imported from a private pit located in the Buckeye area. Said top soil will be free of large clods, rocks and deleterious material. After backfill operations are complete, the entire disturbed areas will be contoured to promote natural drainage and prevent wind/water erosion. Disturbed areas will be drill seeded with a grass mixture approved by the NMSLO.

Slightly impacted material in the overspray areas (ref. Figure #3) will be scraped surfically to remove discolored material. The bared areas will be sprayed with a six (6) percent solution of Micro@Blaze and a thin layer of clean top soil applied over the disturbed areas. Contouring and seeding of these areas will conform to previously described methods.

Due to density of caliche and vehicle usage, EPI does not recommend major remediation of the intersection of the north-south and east-west caliche lease roads. Although not delineated, lease roads should contain TPH and chloride impacts to a depth less than surrounding release areas. With groundwater noted at approximately seventy-two (72) feet, chances of contamination are remote. However, the long discolored "fingers" on the east side of the north-south and middle of the east-west lease roads will be remediated (ref. Figure #3). The "fingers" will be excavated approximately two (2) feet deep and to a width which removes the discolored impacted areas. Following excavation, the areas will be immediately backfilled with caliche and wheel rolled for compaction. Excavation of the "fingers" on the north-south lease road will be confined to an area which does not significantly impede traffic and will not remain open overnight.

Should you have any technical questions, concerns or need additional information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or via email at [dduncanepi@gmail.com](mailto:dduncanepi@gmail.com). Official communications should be directed to Mr. John Gates at (575) 391-3158 (office), (575) 390-4821 (cellular) or via email at [John.W.Gates@conocophillips.com](mailto:John.W.Gates@conocophillips.com). with correspondence addressed to:

Mr. John W. Gates  
HSER Lead  
Permian-Buckeye Operations  
29 Vacuum Complex Lane  
Lovington, New Mexico 88260-9664

# Analytical Report 370244

for

## Environmental Plus, Incorporated

**Project Manager: David P. Duncan**

**EVGSAU 2913-006**

**150028**

**27-APR-10**



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-I0380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)

North Carolina(444), Texas(T104704468-TX), Illinois(002295)



27-APR-10

Project Manager: **David P. Duncan**  
**Environmental Plus, Incorporated**  
P.O. Box 1558  
Eunice, NM 88231

Reference: XENCO Report No: **370244**  
**EVGSAU 2913-006**  
Project Address: UL-P, Sec. 29, T17S, R35E

**David P. Duncan:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 370244. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 370244 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Brent Barron, II**

Odessa Laboratory Manager

***Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.****Certified and approved by numerous States and Agencies.**A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



**Sample Cross Reference 370244**



**Environmental Plus, Incorporated, Eunice, NM**  
EVGSAU 2913-006

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
BG-1 (2')	S	Apr-22-10 10:12		370244-001
BG-1 (5')	S	Apr-22-10 10:13		370244-002
BG-1 (10')	S	Apr-22-10 10:16		370244-003
BG-1 (15')	S	Apr-22-10 10:20		370244-004
BG-1 (20')	S	Apr-22-10 10:22		370244-005
SB-1 (2')	S	Apr-22-10 12:15		370244-006
SB-1 (5')	S	Apr-22-10 12:19		370244-007
SB-2 (2')	S	Apr-22-10 11:40		370244-008
SB-2 (5')	S	Apr-22-10 11:45		370244-009
SB-3 (2')	S	Apr-22-10 10:45		370244-010
SB-3 (5')	S	Apr-22-10 10:51		370244-011

### CASE NARRATIVE



**Client Name: Environmental Plus, Incorporated**

**Project Name: EVGSAU 2913-006**



Project ID: 150028

Report Date: 27-APR-10

Work Order Number: 370244

Date Received: 04/23/2010

**Sample receipt non conformances and Comments:**

None

**Sample receipt Non Conformances and Comments per Sample:**

None

**Analytical Non Conformances and Comments:**

Batch: LBA-804002 Percent Moisture

None

Batch: LBA-804004 Percent Moisture

None

Batch: LBA-804115 Anions by E300

None

Batch: LBA-804118 TPH By SW8015 Mod

None

**TABLE 2**  
**Summary of Soil Boring Soil Sample Analytical Results**

ConocoPhillips

EVGSAU #2913-006 (UL-P, Section 29, T17S, R35E, Lea County, New Mexico)

NMOCD #: EPI Ref. #150028

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C12) (mg/Kg)	TPH (C12-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
BG-1	2	In Situ	22-Apr-10	0.90	80	--	--	--	--	--	ND	ND	ND	ND	12.1
BG-1	5	In Situ	22-Apr-10	1.70	80	--	--	--	--	--	ND	ND	ND	ND	6.96
BG-1	10	In Situ	22-Apr-10	1.30	80	--	--	--	--	--	ND	ND	ND	ND	4.93
BG-1	15	In Situ	22-Apr-10	0.70	80	--	--	--	--	--	ND	ND	ND	ND	8.24
BG-1	20	In Situ	22-Apr-10	0.90	80	--	--	--	--	--	ND	ND	ND	ND	31.6
SB-1	2	In Situ	22-Apr-10	106	480	--	--	--	--	--	72.1	111	ND	183	369
SB-1	5	In Situ	22-Apr-10	13.8	160	--	--	--	--	--	ND	ND	ND	ND	32.9
SB-2	2	In Situ	22-Apr-10	535	160	--	--	--	--	--	281	646	26.0	953	53.3
SB-2	5	In Situ	22-Apr-10	27.3	160	--	--	--	--	--	ND	50.8	ND	50.8	ND
SB-3	2	In Situ	22-Apr-10	157	1,760	--	--	--	--	--	110	339	16.8	466	1,560
SB-3	5	In Situ	22-Apr-10	27.3	240	--	--	--	--	--	ND	26.2	ND	26.2	15.8
NMOCD Remedial Threshold Goals				100		10				50				100	250 <sup>1</sup>

Bolded values are in excess of NMOCD Remediation Thresholds

<sup>1</sup> Chloride residuals may not be capable of impacting groundwater above NMWQCC Ground Water Standards of 250 mg/L

J = Detected, but below Reporting Limits. Therefore, result is an estimated concentration (CLP J-Flag)

-- = Not Analyzed; ND - Not Detected; SB- Soil Boring; BG - Background Soil Boring



# Certificate of Analysis Summary 370244

Environmental Plus, Incorporated, Eunice, NM

Project Name: EVGSAU 2913-006



Project Id: 150028

Contact: David P. Duncan

Date Received in Lab: Fri Apr-23-10 10:52 am

Project Location: UL-P, Sec. 29, T17S, R35E

Report Date: 27-APR-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	370244-001	370244-002	370244-003	370244-004	370244-005	370244-006
	Field Id:	BG-1 (2')	BG-1 (5')	BG-1 (10')	BG-1 (15')	BG-1 (20')	SB-1 (2')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-22-10 10:12	Apr-22-10 10:13	Apr-22-10 10:16	Apr-22-10 10:20	Apr-22-10 10:22	Apr-22-10 12:15
<b>Anions by E300</b>	Extracted:						
	Analyzed:	Apr-26-10 15:52					
	Units/RL:	mg/kg RL					
Chloride		12.1 5.38	6.96 5.22	4.93 4.59	8.24 5.32	31.6 4.50	369 8.89
<b>Percent Moisture</b>	Extracted:						
	Analyzed:	Apr-23-10 17:00					
	Units/RL:	% RL					
Percent Moisture		22.0 1.00	19.5 1.00	8.50 1.00	21.0 1.00	6.65 1.00	5.49 1.00
<b>TPH By SW8015 Mod</b>	Extracted:	Apr-23-10 12:45					
	Analyzed:	Apr-24-10 01:35	Apr-24-10 02:08	Apr-24-10 02:40	Apr-24-10 03:11	Apr-24-10 03:42	Apr-24-10 04:14
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 19.2	ND 18.6	ND 16.4	ND 19.0	ND 16.1	72.1 15.9
C12-C28 Diesel Range Hydrocarbons		ND 19.2	ND 18.6	ND 16.4	ND 19.0	ND 16.1	111 15.9
C28-C35 Oil Range Hydrocarbons		ND 19.2	ND 18.6	ND 16.4	ND 19.0	ND 16.1	ND 15.9
Total TPH		ND 19.2	ND 18.6	ND 16.4	ND 19.0	ND 16.1	183 15.9

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

  
Brent Barron, II  
Odessa Laboratory Manager



# Certificate of Analysis Summary 370244

Environmental Plus, Incorporated, Eunice, NM

Project Name: EVGSAU 2913-006



Project Id: 150028

Contact: David P. Duncan

Project Location: UL-P, Sec. 29, T17S, R35E

Date Received in Lab: Fri Apr-23-10 10:52 am

Report Date: 27-APR-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	370244-007	370244-008	370244-009	370244-010	370244-011	
	Field Id:	SB-1 (5')	SB-2 (2')	SB-2 (5')	SB-3 (2')	SB-3 (5')	
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Apr-22-10 12:19	Apr-22-10 11:40	Apr-22-10 11:45	Apr-22-10 10:45	Apr-22-10 10:51	
Anions by E300	Extracted:						
	Analyzed:	Apr-26-10 15:52					
	Units/RL:	mg/kg RL					
Chloride		32.9 4.76	53.3 4.51	ND 4.50	1560 22.3	15.8 5.43	
Percent Moisture	Extracted:						
	Analyzed:	Apr-23-10 17:00					
	Units/RL:	% RL					
Percent Moisture		11.7 1.00	6.81 1.00	6.70 1.00	5.84 1.00	22.6 1.00	
TPH By SW8015 Mod	Extracted:	Apr-23-10 12:45					
	Analyzed:	Apr-24-10 04:45	Apr-24-10 05:15	Apr-24-10 05:45	Apr-24-10 06:47	Apr-24-10 07:19	
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 17.0	281 16.0	ND 16.1	110 15.9	ND 19.5	
C12-C28 Diesel Range Hydrocarbons		ND 17.0	646 16.0	50.8 16.1	339 15.9	26.2 19.5	
C28-C35 Oil Range Hydrocarbons		ND 17.0	26.0 16.0	ND 16.1	16.8 15.9	ND 19.5	
Total TPH		ND 17.0	953 16.0	50.8 16.1	466 15.9	26.2 19.5	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

  
Brent Barron, II  
Odessa Laboratory Manager



## Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- \* Outside XENCO's scope of NELAC Accreditation.

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



## Form 2 - Surrogate Recoveries

**Project Name: EVGSAU 2913-006**

**Work Orders :** 370244,

**Project ID:** 150028

**Lab Batch #:** 804118

**Sample:** 561782-1-BKS / BKS

**Batch:** 1 **Matrix:** Solid

**Units:** mg/kg

**Date Analyzed:** 04/23/10 23:33

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	88.2	99.7	88	70-135	
o-Terphenyl	36.9	49.9	74	70-135	

**Lab Batch #:** 804118

**Sample:** 561782-1-BSD / BSD

**Batch:** 1 **Matrix:** Solid

**Units:** mg/kg

**Date Analyzed:** 04/24/10 00:03

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	90.1	100	90	70-135	
o-Terphenyl	37.8	50.0	76	70-135	

**Lab Batch #:** 804118

**Sample:** 561782-1-BLK / BLK

**Batch:** 1 **Matrix:** Solid

**Units:** mg/kg

**Date Analyzed:** 04/24/10 00:33

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	80.2	101	79	70-135	
o-Terphenyl	40.1	50.3	80	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-001 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 01:35

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	76.8	99.9	77	70-135	
o-Terphenyl	38.7	50.0	77	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-002 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 02:08

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	74.5	100	75	70-135	
o-Terphenyl	37.3	50.0	75	70-135	

\* Surrogate outside of Laboratory QC limits  
 \*\* Surrogates outside limits; data and surrogates confirmed by reanalysis  
 \*\*\* Poor recoveries due to dilution  
 Surrogate Recovery [D] = 100 \* A / B  
 All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

**Project Name: EVGSAU 2913-006**

**Work Orders :** 370244,

**Project ID:** 150028

**Lab Batch #:** 804118

**Sample:** 370244-003 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 02:40

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.4	100	70	70-135	
o-Terphenyl	35.1	50.1	70	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-004 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 03:11

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.8	100	78	70-135	
o-Terphenyl	37.9	50.0	76	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-005 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 03:42

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.1	99.9	70	70-135	
o-Terphenyl	35.2	50.0	70	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-006 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 04:14

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.4	100	75	70-135	
o-Terphenyl	37.5	50.2	75	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-007 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 04:45

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.4	100	83	70-135	
o-Terphenyl	41.0	50.1	82	70-135	

\* Surrogate outside of Laboratory QC limits  
 \*\* Surrogates outside limits; data and surrogates confirmed by reanalysis  
 \*\*\* Poor recoveries due to dilution  
 Surrogate Recovery [D] = 100 \* A / B  
 All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

**Project Name: EVGSAU 2913-006**

**Work Orders :** 370244,

**Project ID:** 150028

**Lab Batch #:** 804118

**Sample:** 370244-008 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 05:15

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.8	99.6	84	70-135	
o-Terphenyl	41.1	49.8	83	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-009 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 05:45

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.6	100	87	70-135	
o-Terphenyl	42.6	50.0	85	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-010 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 06:47

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.9	100	83	70-135	
o-Terphenyl	41.8	50.0	84	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-011 / SMP

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 07:19

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.1	100	85	70-135	
o-Terphenyl	43.0	50.2	86	70-135	

**Lab Batch #:** 804118

**Sample:** 370244-009 S / MS

**Batch:** 1 **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 07:48

**SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.3	100	90	70-135	
o-Terphenyl	38.6	50.1	77	70-135	

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

**Project Name: EVGSAU 2913-006**

**Work Orders :** 370244,

**Project ID:** 150028

**Lab Batch #:** 804118

**Sample:** 370244-009 SD / MSD

**Batch:** 1    **Matrix:** Soil

**Units:** mg/kg

**Date Analyzed:** 04/24/10 08:20

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.1	99.5	88	70-135	
o-Terphenyl	37.1	49.8	74	70-135	

\* Surrogate outside of Laboratory QC limits  
 \*\* Surrogates outside limits; data and surrogates confirmed by reanalysis  
 \*\*\* Poor recoveries due to dilution  
 Surrogate Recovery [D] = 100 \* A / B  
 All results are based on MDL and validated for QC purposes.



# Blank Spike Recovery



**Project Name: EVGSAU 2913-006**

**Work Order #:** 370244

**Project ID:**

150028

**Lab Batch #:** 804115

**Sample:** 804115-1-BKS

**Matrix:** Solid

**Date Analyzed:** 04/26/2010

**Date Prepared:** 04/26/2010

**Analyst:** LATCOR

**Reporting Units:** mg/kg

**Batch #:** 1

**BLANK /BLANK SPIKE RECOVERY STUDY**

Anions by E300  Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	100	96.0	96	75-125	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



**BS / BSD Recoveries**



**Project Name: EVGSAU 2913-006**

**Work Order #: 370244**

**Project ID: 150028**

**Analyst: BEV**

**Date Prepared: 04/23/2010**

**Date Analyzed: 04/23/2010**

**Lab Batch ID: 804118**

**Sample: 561782-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

<b>TPH By SW8015 Mod</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
C6-C12 Gasoline Range Hydrocarbons	ND	997	957	96	1000	960	96	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	997	735	74	1000	712	71	3	70-135	35	

Relative Percent Difference RPD = 200\*[(C-F)/(C+F)]

Blank Spike Recovery [D] = 100\*(C)/[B]

Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]

All results are based on MDL and Validated for QC Purposes



**Form 3 - MS Recoveries**



**Project Name: EVGSAU 2913-006**

**Work Order #:** 370244

**Project ID:** 150028

**Lab Batch #:** 804115

**Date Prepared:** 04/26/2010

**Analyst:** LATCOR

**Date Analyzed:** 04/26/2010

**Batch #:** 1

**Matrix:** Soil

**QC- Sample ID:** 370244-008 S

**Reporting Units:** mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	53.3	107	174	113	75-125	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
 Relative Percent Difference [E] = 200\*(C-A)/(C+B)  
 All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



**Form 3 - MS / MSD Recoveries**



**Project Name: EVGSAU 2913-006**

**Work Order #:** 370244

**Project ID:** 150028

**Lab Batch ID:** 804118

**QC- Sample ID:** 370244-009 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 04/24/2010

**Date Prepared:** 04/23/2010

**Analyst:** BEV

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

<b>TPH By SW8015 Mod Analytes</b>	<b>Parent Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Spiked Sample Result [C]</b>	<b>Spiked Sample %R [D]</b>	<b>Spike Added [E]</b>	<b>Duplicate Spiked Sample Result [F]</b>	<b>Spiked Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
C6-C12 Gasoline Range Hydrocarbons	ND	1070	1020	95	1070	950	89	7	70-135	35	
C12-C28 Diesel Range Hydrocarbons	50.8	1070	899	79	1070	796	70	12	70-135	35	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit



**Sample Duplicate Recovery**



**Project Name: EVGSAU 2913-006**

**Work Order #: 370244**

**Lab Batch #: 804115**

**Project ID: 150028**

**Date Analyzed: 04/26/2010**

**Date Prepared: 04/26/2010**

**Analyst: LATCOR**

**QC- Sample ID: 370244-008 D**

**Batch #: 1**

**Matrix: Soil**

**Reporting Units: mg/kg**

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	53.3	56.1	5	20	

**Lab Batch #: 804002**

**Date Analyzed: 04/23/2010**

**Date Prepared: 04/23/2010**

**Analyst: JLG**

**QC- Sample ID: 370221-001 D**

**Batch #: 1**

**Matrix: Soil**

**Reporting Units: %**

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	8.36	8.48	1	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.  
 BRL - Below Reporting Limit





**Environmental Lab of Texas**  
**Variance/ Corrective Action Report- Sample Log-In**

Client: Env. Plus Inc.  
 Date/ Time: 4.23.10 10:52  
 Lab ID #: 370244  
 Initials: AL

**Sample Receipt Checklist**

				Client Initials
#1	Temperature of container/ cooler?	<input checked="" type="radio"/> Yes	No	4.6 °C
#2	Shipping container in good condition?	<input checked="" type="radio"/> Yes	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	<del>Not Present</del>
#4	Custody Seals intact on sample bottles/ container?	Yes	No	<del>Not Present</del>
#5	Chain of Custody present?	<input checked="" type="radio"/> Yes	No	
#6	Sample instructions complete of Chain of Custody?	<input checked="" type="radio"/> Yes	No	
#7	Chain of Custody signed when relinquished/ received?	<input checked="" type="radio"/> Yes	No	
#8	Chain of Custody agrees with sample label(s)?	<input checked="" type="radio"/> Yes	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<input checked="" type="radio"/> Yes	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="radio"/> Yes	No	
#11	Containers supplied by ELOT?	<input checked="" type="radio"/> Yes	No	
#12	Samples in proper container/ bottle?	<input checked="" type="radio"/> Yes	No	See Below
#13	Samples properly preserved?	<input checked="" type="radio"/> Yes	No	See Below
#14	Sample bottles intact?	<input checked="" type="radio"/> Yes	No	
#15	Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	No	
#16	Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	No	
#17	Sufficient sample amount for indicated test(s)?	<input checked="" type="radio"/> Yes	No	See Below
#18	All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	No	See Below
#19	Subcontract of sample(s)?	Yes	No	<del>Not Applicable</del>
#20	VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	No	Not Applicable

**Variance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

**Gates, John W**

---

**From:** Brito, Leonardo  
**Sent:** Monday, May 17, 2010 5:54 AM  
**To:** Gates, John W  
**Subject:** FW: ENV-B12-EVGSAU 2913-6, REMEDIATE

As per Jeff's note...  
Have a great work week,  
Leo.

---

**From:** Mosley, Jeffrey W (Producers Assistance Corp.)  
**Sent:** Sunday, May 16, 2010 11:09 PM  
**To:** Brito, Leonardo  
**Subject:** RE: ENV-B12-EVGSAU 2913-6, REMEDIATE

This needs to be sent to John Gates

Regards,

Jeff Mosley  
Project Lead / SENM  
PAC / ConocoPhillips  
HC 60, Box 66  
Lovington NM 88260  
Fax: 575-391-3140  
Cell: 575-441-4644

---

**From:** Brito, Leonardo  
**Sent:** Wednesday, April 07, 2010 9:30 AM  
**To:** Willis, Terrell (Producers Assistance Corp.)  
**Cc:** Saenz, Danny; Brito, Leonardo; Flores Jr, Merced  
**Subject:** ENV-B12-EVGSAU 2913-6, REMEDIATE

Terrell,

This is **HIGH PRIORITY WORK** - ESTIMATED COSTS \$ **6,500.00**

The Notification was Initiated by **MERCED FLORES**

**Below is all the information that was on the Maintenance Order Description Box:**

ENV-B12-EVGSAU 2913-6, REMEDIATE

\*\*\*J.GATES CALLED IN NEEDING AN EXTRA \$5000.00.\*\*\*

\*\*\*\* TEXT FROM NOTIFICATION \*\*\*\*\*

\* 03/15/2010 11:37:37 Sara Marquez (MARQUS) Phone 1-575-391-3123

\*

\* REMEDIATE LOCATION, DUE TO FLOWLINE LEAK.

\*\*\*\* END OF NOTIFICATION TEXT \*\*\*\*\*

**Charge Code: # 6949257**

**P.O. # SJJEWEL**

**Please email me and let me know WHEN THE WORK IS COMPLETED...**

**Many Thanks**  
**LEO**

Leonardo Brito

L48 PERMIAN PPM PLANNER/SCHEDULER

✉ Address: ConocoPhillips Inc.

4001 Penbrook - Odessa, TX 79762

☎ Office: (432) 368-1451

Cell: (432) 212-4341

Fax: (432) 368-1473

# ConocoPhillips



## Permian Basin Asset

Record of Accidental Discharge of Crude Oil, Water or Hazardous Substances

Lease: <b>EVGSAU</b> Well # <b>2913-006</b>		Lease # <b>300252638500</b> (API, RRC, State, or Federal)		Field: <b>EVGSAU</b>	
Discovered By: <b>Bradley Boroughs/Merced Flores</b>			Date and Time Discovered: <b>3-14-10 @ 12:30 p.m.</b>		
Date and Time Discharge Began: <b>3-14-10 @ 12:00 p.m.</b>			Date and Time Discharge Ended: <b>3-14-10 @ 12:45 p.m.</b>		
Discharge Site: Unit Letter <b>N/A</b> Sec. <b>29</b> Blk/TWP <b>17S</b> Survey/Range <b>35E</b> County/State <b>Lea/New Mexico</b>					
Latitude <b>N/A</b> Longitude <b>N/A</b>					
Highway Map Location: <b>From ConocoPhillips main office on CR 50, 2 miles west and 1/4 mile North to location</b>					
Location Of Discharge: <b>Flowline 35'x20'x.5"</b>				<input checked="" type="checkbox"/> Flowline ----- <b>30</b> Feet to Nearest Wellhead Number <b>2913-006</b> <input type="checkbox"/> Injection Line Feet to Nearest Wellhead Number	
Specific Source of Discharge: <b>Flowline</b>					
Describe Cause of Discharge: <b>Hole in flowline</b>					
Actions taken to Prevent Reoccurrence: <b>Repaired flowline with new tubing</b>					
Describe Nature and Extent of Area Affected: <b>Spilled fluid around flowline leak and misted 200' x 50' around leak</b>					
Weather Conditions: <b>Fair</b>					
Clean-Up Action Taken: <b>Remove contaminated soil and replace with fresh caliche</b>					
Remediation Action Taken: <b>N/A</b>					
<b>Specific Source of Discharge</b>			<b>Possible Reasons For Failure</b>		
<input checked="" type="checkbox"/> Flowline	<input type="checkbox"/> Pump	<input checked="" type="checkbox"/> Corrosion	<input type="checkbox"/> Human Error		
<input type="checkbox"/> Tank Piping	<input type="checkbox"/> Vessel	<input checked="" type="checkbox"/> External	<input type="checkbox"/> Pressure		
<input type="checkbox"/> Vessel Piping	<input type="checkbox"/> Chemical Storage Container	<input checked="" type="checkbox"/> Internal	<input type="checkbox"/> Instrumentation		
<input type="checkbox"/> Line Check Valve	<input type="checkbox"/> Chemical Injection Equipment	<input type="checkbox"/> Fatigue	<input type="checkbox"/> Mechanical		
<input type="checkbox"/> Wellhead Connections	<input type="checkbox"/> Casing/Tubing Communication	<input type="checkbox"/> Age	<input type="checkbox"/> Weather		
<input type="checkbox"/> Tank	<input type="checkbox"/> Other:	Cost of Cleanup/Repair: <b>\$1,500</b>			
Pipe Size = <b>2 7/8</b> inches					
<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Buried	<input type="checkbox"/> Coated	<input type="checkbox"/> Plastic Lined		
<input type="checkbox"/> Fiberglass	<input checked="" type="checkbox"/> Surface	<input type="checkbox"/> Internal	<input type="checkbox"/> Fiberglass		
<input type="checkbox"/> Plastic	<input type="checkbox"/> Bare	<input type="checkbox"/> External	<input type="checkbox"/> Was Line Chemically Treated		
<input type="checkbox"/> Transite	<input type="checkbox"/> Cement Lined	<input type="checkbox"/> Other			
<b>Names and Volumes of Substances Spilled</b>			<b>Remedial Action Picked Up</b>		
<b>3</b> BBL Oil <b>7.3</b> BBL Produced Water		<b>3</b> BBL Oil <b>7</b> BBL Produced Water		Contained in Dike? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Gallons Chemical Spilled		Gallons Chemical		MFG/Chemical Name:	
Gas Volume Released (MCF)		<input type="checkbox"/> Gas Leak	<input type="checkbox"/> Blowdown	<input type="checkbox"/> Upset	
Other – Explain:					
<b>Federal, State, and Local Agencies Notified:</b>				Job Number	
<b>Agency</b>	<b>Person Notified</b>	<b>Date and Time Notified</b>	<b>Method Used</b>		<b>Person Notifying</b>
		@	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	
		@	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	
		@	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	
Landowner/Tenant:				Telephone No.	
<b>I Hereby Certify That The Above Information Is True To The Best Of My Knowledge.</b>					
<b>Name and Title: Merced Flores, MSO</b>					
<b>Date: 3/16/10</b>					

District I  
1625 N. French Dr., Hobbs, NM 88249  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87422  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**RECEIVED**  
MAR 18 2010  
**HOBBSUCD**

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 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 <b>ConocoPhillips Company</b>	Contact <b>John W. Gates</b>
Address <b>3300 North A St. Bldg 6, Midland, TX 79705-5406</b>	Telephone No. <b>505.391.3158</b>
Facility Name <b>EVGSAU Well# 2913-006</b>	Facility Type <b>Oil and Gas</b>
Surface Owner <b>State Of New Mexico</b>	Mineral Owner <b>State Of New Mexico</b>
Lease No <b>300252638500</b>	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	<b>29</b>	<b>17S</b>	<b>35E</b>					

Latitude **32° 48.127** Longitude **103° 28.544**

**NATURE OF RELEASE**

Type of Release <b>Crude Oil &amp; Produced Water</b>	Volume of Release <b>10.3bbl (3oil, 7.3water)</b>	Volume Recovered <b>(3oil, 7water)</b>
Source of Release <b>Hole in a 2 7/8" steel surface flow line</b>	Date and Hour of Occurrence <b>3/14/10 12:00 pm</b>	Date and Hour of Discovery <b>3/14/10 12:30 pm</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.\*

**Release originated from a hole in a 2 7/8" steele surface flow line due to suspected internal/external corrosion. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water. The spill site will be remediated in accordance with an agreement with NMOCD.**

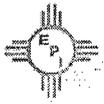
Describe Area Affected and Cleanup Action Taken.\*

**Affected area is a 35' X 20' X .5" area od dry, hard, caliche road and pad. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water.**

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>John W. Gates</b>	Approved by District Supervisor:	
Title: <b>HSER Lead</b>	Approval Date:	Expiration Date:
E-mail Address: <b>John.W.Gates@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>3/16/10</b> Phone: <b>505.391.3158</b>		

- Attach Additional Sheets If Necessary



**ENVIRONMENTAL PLUS, INC.**  
CONSULTING AND REMEDIAL CONSTRUCTION

06 April 2010

Mr. John Gates  
HSER Lead  
ConocoPhillips Company  
1410 N. W. County Road  
Hobbs, New Mexico 88240

RE: Proposed Delineation of Release Area via Advancement of Soil Borings  
Located near EVGSAU 2913-006  
UL-P (SE1/4 of the SE1/4), Section 29, T17S, R35E  
Lea County, New Mexico  
EPI Ref. #150028

Dear Mr. Gates:

Environmental Plus, Inc., (EPI) respectfully submits the following Cost Estimate for advancement of four (4) proposed soil borings to delineate the above referenced Release Area:

A.) Delineation Cost Estimate:

1. Construction Cost Sub-Total (i.e., advancement of soil borings, plugging soil borings, collection of soil samples, transportation of soil samples to XENCO Lab, etc.)	\$9,140.00
2. Material Fees (i.e., disposal fee for impacted soil at Controlled Recovery, Inc., etc.)	\$76.00
3. Analytical and Technical Support (i.e., project management and reporting, fees for field and laboratory analyses of soil samples, etc.)	\$3,950.00
<u>Estimated Total</u>	\$13,166.00

Cost Estimate is based on the following assumptions:

- A.) Advancement of four (4) soil borings to a maximum depth of forty-five (45) feet below ground surface (bgs) (Ref. *Figure #4* for proposed locations). This is an arbitrary depth allowing a buffer zone between projected groundwater elevation of seventy-five (75) feet bgs. However, soil borings will be advanced to a depth whenever two (2) consecutive soil samples are below NMOCD Guidelines of BTEX – 50 mg/kg, TPH – 100 mg/Kg and Chlorides – 250 mg/Kg or total depth of forty-five

ENVIRONMENTAL PLUS, INC.



---

(45) feet bgs is achieved whichever comes first. Soil borings will be plugged in accordance with State of New Mexico Engineers Standards

- B.) During advancement of soil borings, soil samples will be collected/field analyzed at 2- and 5-foot bgs intervals initially, then a 5-foot increments thereafter until one of the two criteria explained in Item A above is met. Soil samples will be analyzed in the field using a MiniRae® Photoionization Detector (PID) for TPH and LaMotte Chloride Test Kit (titration method) for chloride concentrations. BTEX concentrations, if required, will be analyzed in the laboratory. In congruence with field analyses, soil samples will be immediately placed in laboratory provided glass containers, labeled and inserted into a cooler containing ice with transportation to XENCO Lab in Odessa, Texas under Chain-of-Custody protocol.
- C.) Fees associated with laboratory analyses of soil samples (XENCO) and disposal of impacted soil bore tailings (Controlled Recovery, Inc.) will be reimbursed by ConocoPhillips to each entity.
- D.) Upon completion of project. EPI will furnish ConocoPhillips an abbreviated *Remediation Proposal* inclusive of all field/laboratory analytical data and recommendations for remediation of Release Area.

Should you have questions, concerns or need additional information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at [dduncanepi@gmail.com](mailto:dduncanepi@gmail.com).

Sincerely,

ENVIRONMENTAL PLUS, INC.,

David P. Duncan  
Civil Engineer

Cc: Cody Miller – Vice President, EPI  
Roger Boone – Operations Manager, EPI  
Junior Hernandez – Sales Consultant, EPI

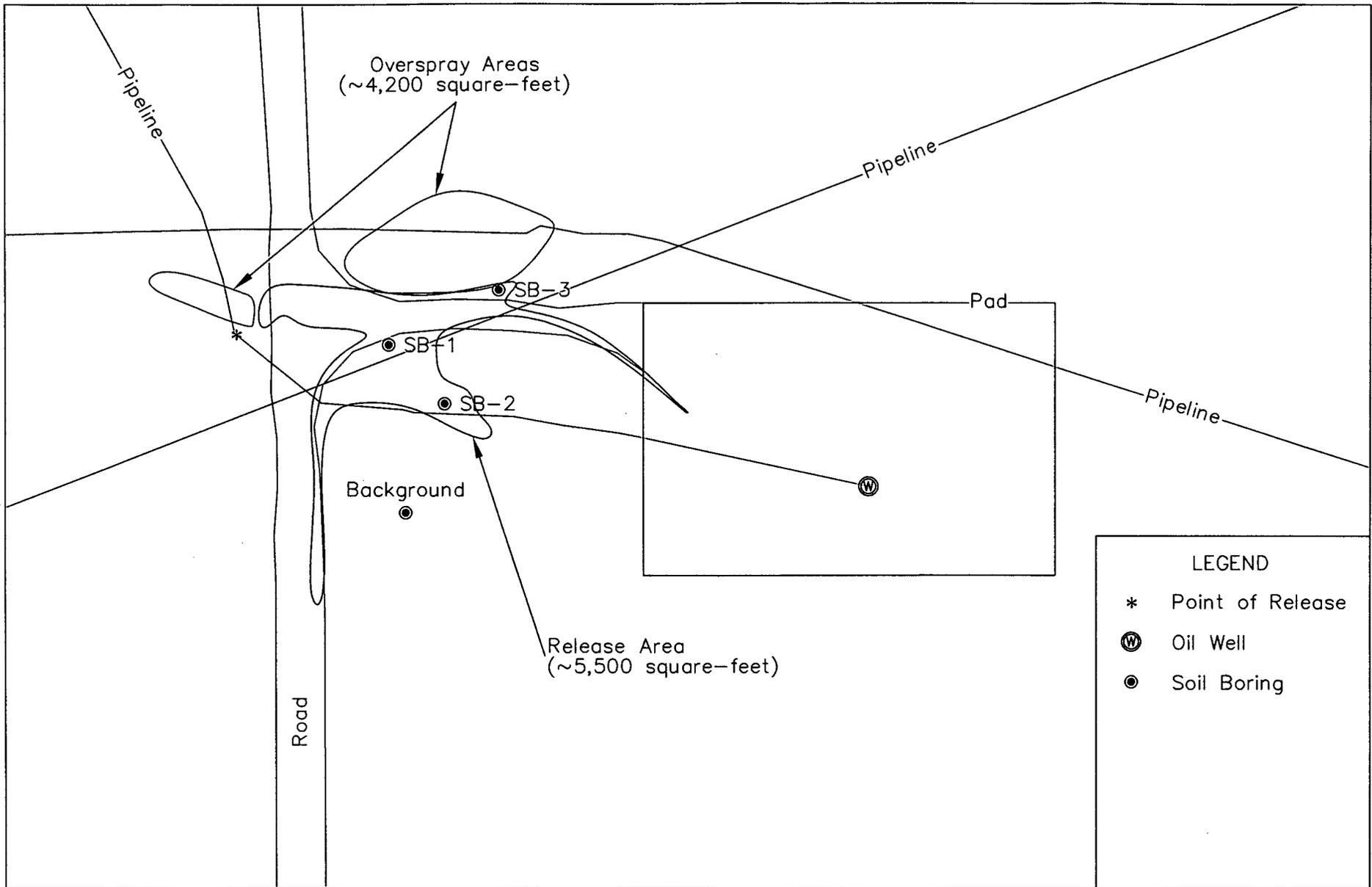


Figure 4  
 Proposed Soil Boring Map  
 ConocoPhillips  
 EVGSAU 2913-006

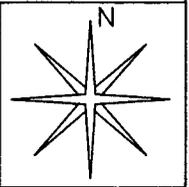
Lea County, New Mexico  
 SE 1/4 of the SE 1/4, Sec. 29, T17S, R35E  
 N 32° 48' 07.46" W 103° 28' 33.70"  
 Elevation: 3,964 feet amsl

DWG By: D Dominguez  
 March 2010

0 60 120  
 Feet

REVISED:

SHEET  
 1 of 1



**Gates, John W**

---

**From:** Brito, Leonardo  
**Sent:** Monday, April 19, 2010 1:07 PM  
**To:** Gates, John W  
**Subject:** FW: Delineation process on EVGSAU Well #2913-006

FYI....  
They are ready to go for Thursday, they have made the one call, etc. for this task.

---

**From:** Brito, Leonardo  
**Sent:** Monday, April 19, 2010 2:05 PM  
**To:** 'Junior Hernandez'  
**Subject:** RE: Delineation process on EVGSAU Well #2913-006

Junior for invoice purposes use:

**WELL NAME: EVGSAU 2913-006**  
**CHARGE CODE: 6949257**  
**P.O. SJJEWEL**

Regards,  
Leo.

---

**From:** Brito, Leonardo  
**Sent:** Monday, April 19, 2010 1:59 PM  
**To:** 'Junior Hernandez'  
**Cc:** Mosley, Jeffrey W (Producers Assistance Corp.)  
**Subject:** RE: Delineation process on EVGSAU Well #2913-006

Junior,  
Please Coordinate with Jeff Mosley, Project Lead, so you can be on location Thursday April 22nd. early morning. You need to **MAKE SURE** all your personnel working on this task have had ConocoPhillips Orientation and SLS training, otherwise they will be send back home.

Jeff Cell is : 575-441-4644

Best regards,

**Leonardo Brito**

**L48 PERMIAN PPM PLANNER/SCHEDULER**

✉ Address: ConocoPhillips Inc.

4001 Penbrook - Odessa, TX 79762

☎ Office: (432) 368-1451

Cell: (432) 212-4341

Fax: (432) 368-1473

---

**From:** Junior Hernandez [mailto:jhernandez.epi@gmail.com]  
**Sent:** Monday, April 19, 2010 12:26 PM  
**To:** Brito, Leonardo  
**Subject:** Delineation process on EVGSAU Well #2913-006

Mr. Brito:

This is JR Hernandez with Environmental Plus Inc. in Eunice, NM. I received an email from John Gates saying for me to move forward with the delineation process on the EVGSAU Well #2913-006 in Buckeye. Mr. Gates also informed me that I need to get with you as far as for planning and scheduling. I wanted to contact you and see about setting up a date for the delineation to begin. My cell phone number is 575-441-4974.

Thank you,  
JR Hernandez  
Environmental Plus Inc.



Environmental Plus, Inc.  
 P.O. Box 1558  
 2100 Avenue O  
 Eunice, NM 88231  
 (575) 394-3481  
 (575) 394-2601 (fax)

**FIELD MEASUREMENT/OBSERVATION LOG**

COMPANY:

Conoco Phillips

PROJECT NAME:

EUGSAU 2913-0016

PROJECT NUMBER:

PROJECT MANAGER:

FIELD TECHNICIAN:

W. J. Free

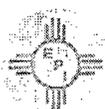
DATE: 4-22-10

SAMPLE ID	SAMPLE DEPTH (FT)	COLLECTION TIME	PID ANALYSIS TIME	PID READING (PPM)	CHLORIDE ANALYSIS				SOIL DESCRIPTION
							Titration Tube Reading	mg/Kg	
BG 2	2'	10:12	10:18	0.9	2 gms of soil	40 ml H2O	4	x 20 = 80	
BG	5'	10:13	10:20	1.7	2 gms of soil	40 ml H2O	4	x 20 = 80	
BG	10'	10:16	10:22	1.3	2 gms of soil	40 ml H2O	4	x 20 = 80	
BG	15'	10:20	10:28	0.7	2 gms of soil	40 ml H2O	4	x 20 = 80	
BG	20'	10:22	10:30	0.9	2 gms of soil	40 ml H2O	4	x 20 = 80	
SB 3	2'	10:45	10:50	157.0	2 gms of soil	40 ml H2O	88	x 20 = 1760	
SB 3	5'	10:51	10:59	3.6	2 gms of soil	40 ml H2O	12	x 20 = 240	
SB 2	2'	11:40	11:50	535.0	2 gms of soil	40 ml H2O	8	x 20 = 160	
SB 2	5'	11:45	11:55	27.3	2 gms of soil	40 ml H2O	8	x 20 = 160	
SB 1	2'	12:15	12:20	106.0	2 gms of soil	40 ml H2O	24	x 20 = 480	
SB 1	5'	12:19	12:28	13.8	2 gms of soil	40 ml H2O	8	x 20 = 160	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	
					2 gms of soil	40 ml H2O		x 20 =	

**PID CALIBRATION**

**WEATHER**

Time	Fresh Air	Span Gas	Time	Fresh Air	Span Gas	Time	Temp.	Misc
9:00 AM	0.0	99.7						



**ENVIRONMENTAL PLUS, INC.**  
CONSULTING AND REMEDIAL CONSTRUCTION

06 April 2010

Mr. John Gates  
HSER Lead  
ConocoPhillips Company  
1410 N. W. County Road  
Hobbs, New Mexico 88240

**RECEIVED**

JUL 16 2010

**HOBBSOCD**

RE: Proposed Delineation of Release Area via Advancement of Soil Borings  
Located near EVGSAU 2913-006  
UL-P (SE1/4 of the SE1/4), Section 29, T17S, R35E  
Lea County, New Mexico  
EPI Ref. #150028

Dear Mr. Gates:

Environmental Plus, Inc., (EPI) respectfully submits the following Cost Estimate for advancement of four (4) proposed soil borings to delineate the above referenced Release Area:

A.) Delineation Cost Estimate:

- 1. Construction Cost Sub-Total  
(i.e., advancement of soil borings, plugging soil borings, collection of soil samples, transportation of soil samples to XENCO Lab, etc.)  
\$9,140.00
  - 2. Material Fees  
(i.e., disposal fee for impacted soil at Controlled Recovery, Inc., etc.)  
\$76.00
  - 3. Analytical and Technical Support  
(i.e., project management and reporting, fees for field and laboratory analyses of soil samples, etc.)  
\$3,950.00
- Estimated Total      \$13,166.00

Cost Estimate is based on the following assumptions:

- A.) Advancement of four (4) soil borings to a maximum depth of forty-five (45) feet below ground surface (bgs) (Ref. *Figure #4* for proposed locations). This is an arbitrary depth allowing a buffer zone between projected groundwater elevation of seventy-five (75) feet bgs. However, soil borings will be advanced to a depth whenever two (2) consecutive soil samples are below NMOC Guidelines of BTEX – 50 mg/kg, TPH – 100 mg/Kg and Chlorides – 250 mg/Kg or total depth of forty-five

ENVIRONMENTAL PLUS, INC.



---

(45) feet bgs is achieved whichever comes first. Soil borings will be plugged in accordance with State of New Mexico Engineers Standards

- B.) During advancement of soil borings, soil samples will be collected/field analyzed at 2- and 5-foot bgs intervals initially, then a 5-foot increments thereafter until one of the two criteria explained in Item A above is met. Soil samples will be analyzed in the field using a MiniRae® Photoionization Detector (PID) for TPH and LaMotte Chloride Test Kit (titration method) for chloride concentrations. BTEX concentrations, if required, will be analyzed in the laboratory. In congruence with field analyses, soil samples will be immediately placed in laboratory provided glass containers, labeled and inserted into a cooler containing ice with transportation to XENCO Lab in Odessa, Texas under Chain-of-Custody protocol.
- C.) Fees associated with laboratory analyses of soil samples (XENCO) and disposal of impacted soil bore tailings (Controlled Recovery, Inc.) will be reimbursed by ConocoPhillips to each entity.
- D.) Upon completion of project. EPI will furnish ConocoPhillips an abbreviated *Remediation Proposal* inclusive of all field/laboratory analytical data and recommendations for remediation of Release Area.

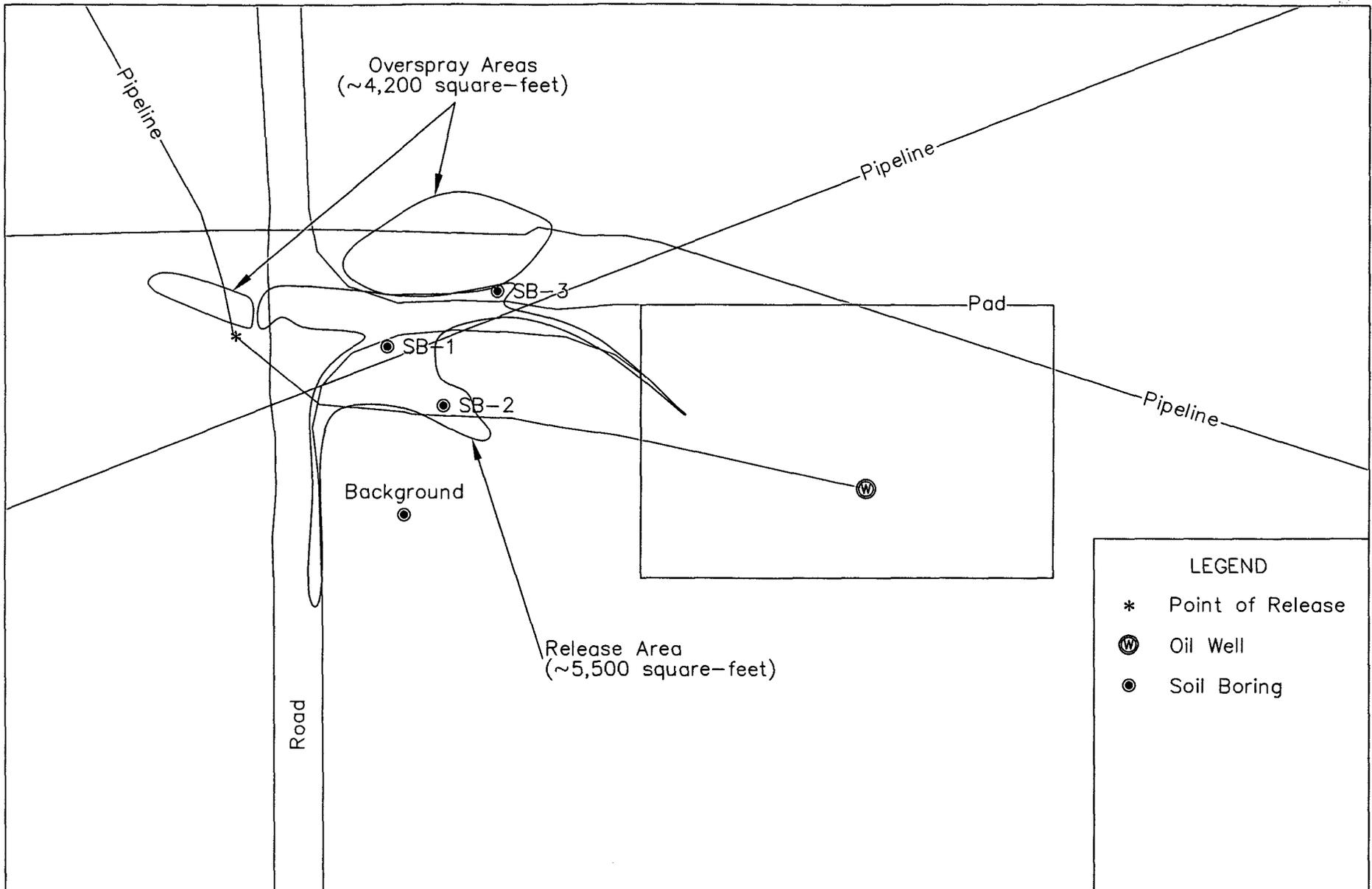
Should you have questions, concerns or need additional information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at [dduncanepi@gmail.com](mailto:dduncanepi@gmail.com).

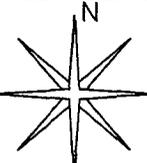
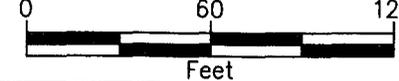
Sincerely,

ENVIRONMENTAL PLUS, INC.,

David P. Duncan  
Civil Engineer

Cc: Cody Miller – Vice President, EPI  
Roger Boone – Operations Manager, EPI  
Junior Hernandez – Sales Consultant, EPI



<p>Figure 4 Proposed Soil Boring Map ConocoPhillips EVGSAU 2913-006</p>	<p>Lea County, New Mexico SE 1/4 of the SE 1/4, Sec. 29, T17S, R35E N 32° 48' 07.46" W 103° 28' 33.70" Elevation: 3,964 feet amsl</p>	<p>DWG By: D Dominguez March 2010</p>	<p>REVISED:</p>	
			<p>SHEET 1 of 1</p>	

**Gates, John W**

---

**From:** David Duncan [dduncanepi@gmail.com]  
**Sent:** Tuesday, May 04, 2010 8:10 AM  
**To:** Mosley, Jeffrey W (Producers Assistance Corp.)  
**Cc:** Gates, John W  
**Subject:** ConocoPhillips - EVGSAU #2913-006 (EPI Ref. #150028)  
**Attachments:** Table 2 - Soil Boring Analytical Data.pdf

Mr. Mosley:

Attached for review and records is Table #2, Summary of Soil Boring Soil Sample Analytical Results, for the above referenced project. As noted most area impacts are surficial requiring excavation to clean up contaminated material plus one (1) foot of clean area as required by the NMOCD. Per your approval, EPI will prepare a Remediation Proposal for cleanup of the site and present to you for comments. After insertion of comments into the document, EPI will deliver a bound copy to the NMOCD for approval. During the interim, EPI will prepare a Cost Estimate for remediation of the release area.

Should you have concerns, questions or need additional information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at [dduncanepi@gmail.com](mailto:dduncanepi@gmail.com).

Sincerely,

ENVIRONMENTAL PLUS, INC.,

David P. Duncan  
Civil Engineer  
EPI Project Manager



October 19, 2020

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

**Subject: Closure Letter Report  
ConocoPhillips  
1RP-2522  
EVGSAU Well #2913-006 Flowline Release  
PLSS Unit Letter P, Section 29, Township 17 South, and Range 35 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 East Vacuum Grayburg-San Andres (EVGSAU) Well #2913-006 (API No. 30-025-26385) is located approximately 1.75 miles east of Buckeye in Lea County, New Mexico (Figure 1). The well is located in the Public Land Survey System (PLSS) Unit Letter P, Section 29, Township 17 South, and Range 35 East. The coordinates of the release area (Site) are 32.801501°, -103.475228°.

## BACKGROUND

According to the State of New Mexico C-141 Initial Report (Attachment A), on March 14, 2010 a release occurred from a hole in a 2 7/8-inch (in) steel surface flow line due to suspected corrosion. The release consisted of 3 barrels (bbls) of crude oil and 7.3 bbls of produced water and affected a 35-foot (ft) by 20-ft by 1/2-in-deep area of dry, hard, caliche road and pad. During initial response activities, a vacuum truck recovered 3 bbls of crude oil and 7 bbls of produced water. The initial C-141 was submitted to the New Mexico Oil Conservation Division (NMOCD) on March 16, 2010, and the release was subsequently assigned the Remediation Permit (RP) number 1RP-2522.

## 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 is one (1) water well located within an 800-meter (approximately 1/2-mile) radius of the Site. The average depth to groundwater is 90 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 petroleum hydrocarbons (TPH), and chlorides in soil.

**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 19, 2020

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): 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 June 8, 2020 at the release area evaluate to 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 assessment 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 caliche road and pad.
- The area just south of the well pad was barren and unvegetated in historical aerial imagery prior to the date of the release.
- No surficial staining was noted in the reported release area footprint during the June 2020 visual Site inspection.
- No staining was observed in the pasture areas near the Site.
- Per the C-141, the formerly impacted release footprint was restricted to active oil and gas production areas on the caliche well pad.

### CONCLUSION

Based on a review of available historical aerial imagery and the June 2020 visual Site inspection, no existing evidence of impact was observed in the vicinity of the release point. 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@tetrattech.com](mailto:christian.llull@tetrattech.com).

Sincerely,



Christian M. Llull  
Project Manager  
Tetra Tech, Inc.

## **FIGURES**



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\FIGURE 1 SITE LOCATION\_1RP-2522.MXD

Source: Google Earth Pro, May 2019.



www.tetrattech.com  
 901 West Wall Street, Suite 100  
 Midland, Texas 79701  
 Phone: (432) 682-4559  
 Fax: (432) 682-3946

**CONOCOPHILLIPS**

1RP-2522  
 (32.8018875°, -103.4751434°)  
 LEA COUNTY, NEW MEXICO

**EVGSAU WELL #2913-006 FLOWLINE RELEASE  
 SITE LOCATION MAP**

PROJECT NO.: 212C-MD-02152

DATE: JUNE 15, 2020

DESIGNED BY: AAM

Figure No.

**1**

**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

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 <b>ConocoPhillips Company</b>	Contact <b>John W. Gates</b>
Address <b>3300 North A St. Bldg 6, Midland, TX 79705-5406</b>	Telephone No. <b>505.391.3158</b>
Facility Name <b>EVGSAU Well# 2913-006</b>	Facility Type <b>Oil and Gas</b>
Surface Owner <b>State Of New Mexico</b>	Mineral Owner <b>State Of New Mexico</b>
Lease No <b>300252638500</b>	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	29	17S	35E					

Latitude Longitude

#### NATURE OF RELEASE

Type of Release <b>Crude Oil &amp; Produced Water</b>	Volume of Release <b>10.3bbl (3oil, 7.3water)</b>	Volume Recovered <b>(3oil, 7water)</b>
Source of Release <b>Hole in a 2 7/8" steel surface flow line</b>	Date and Hour of Occurrence <b>3/14/10 12:00 pm</b>	Date and Hour of Discovery <b>3/14/10 12:30 pm</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.\*

WATER @ 65'

Describe Cause of Problem and Remedial Action Taken.\*

**Release originated from a hole in a 2 7/8" steele surface flow line due to suspected internal/external corrosion. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water. The spill site will be remediated in accordance with an agreement with NMOCD.**

Describe Area Affected and Cleanup Action Taken.\*

**Affected area is a 35' X 20' X .5" area od dry, hard, caliche road and pad. A vacuum truck picked up 3 bbls of crude oil and 7 bbls of produced water.**

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:		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>John W. Gates</b>		Approved by ENV ENGINEER: District Supervisor: <i>Jeffrey Solking</i>	
Title: <b>HSER Lead</b>		Approval Date: <b>05/12/10</b>	Expiration Date: <b>07/12/10</b>
E-mail Address: <b>John.W.Gates@conocophillips.com</b>		Conditions of Approval: <b>SUBMIT FINAL</b>	
Date: <b>3/16/10</b>	Phone: <b>505.391.3158</b>	C-141 BY <b>07/12/10</b>	
		Attached <input type="checkbox"/> <b>IRP-10-5-2522</b>	

- Attach Additional Sheets If Necessary

Incident ID	
District RP	1RP-2522
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 Beauvais Title: Environmental Coordinator  
 Signature: Charles R. Beauvais 99 Date: 10/15/2020  
 email: charles.r.beauvais@conocophillips.com Telephone: 575-988-2043

**OCD Only**

Received by: Jocelyn Harimon Date: 04/14/2023

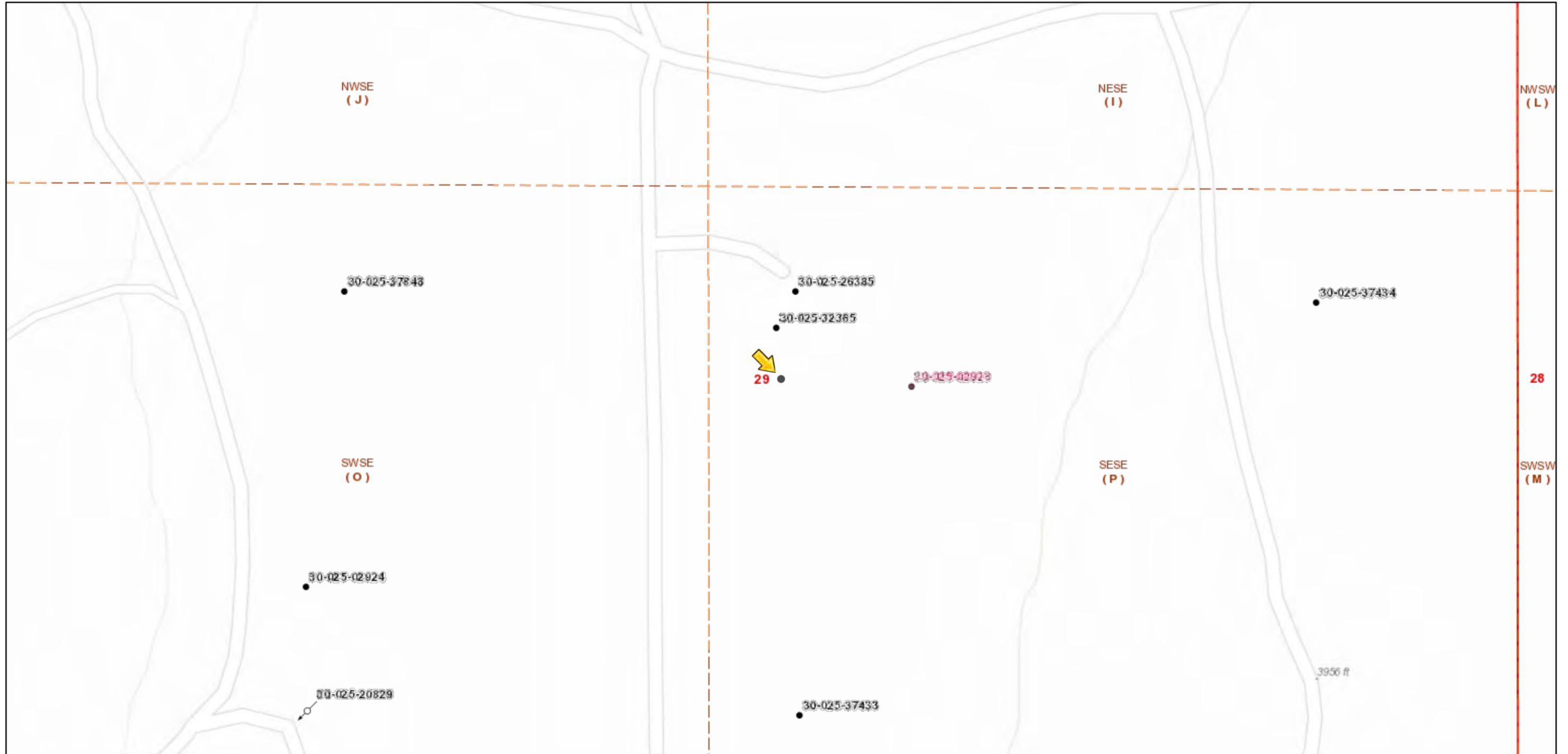
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: closure not approved Date: 04/14/2023

Printed Name: Jocelyn Harimon Title: Environmental Specialist

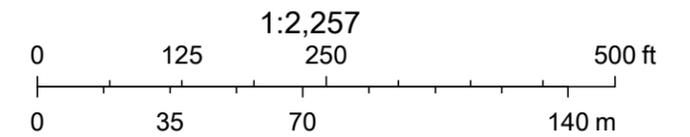
**ATTACHMENT B**  
**Site Characterization Data**

# 1RP-2522



7/27/2020, 4:42:52 PM

- |                     |                            |                      |                            |                                  |   |
|---------------------|----------------------------|----------------------|----------------------------|----------------------------------|---|
| Override 1          | CO2, New                   | Gas, Plugged         | Gas, Temporarily Abandoned | Injection, Temporarily Abandoned | Salt Water Injection, Active                |
| Wells - Large Scale | CO2, Plugged               | Oil, Active          | Oil, Cancelled             | Salt Water Injection, Cancelled  | Salt Water Injection, New                   |
| undefined           | CO2, Temporarily Abandoned | Injection, Active    | Oil, New                   | Salt Water Injection, Plugged    | Salt Water Injection, Temporarily Abandoned |
| Miscellaneous       | Gas, Active                | Injection, Cancelled | Oil, Plugged               | Water, Active                    |   |
| CO2, Active         | Gas, Cancelled             | Injection, New       | Oil, Temporarily Abandoned |                                  |   |
| CO2, Cancelled      | Gas, New                   | Injection, Plugged   |                            |                                  |   |



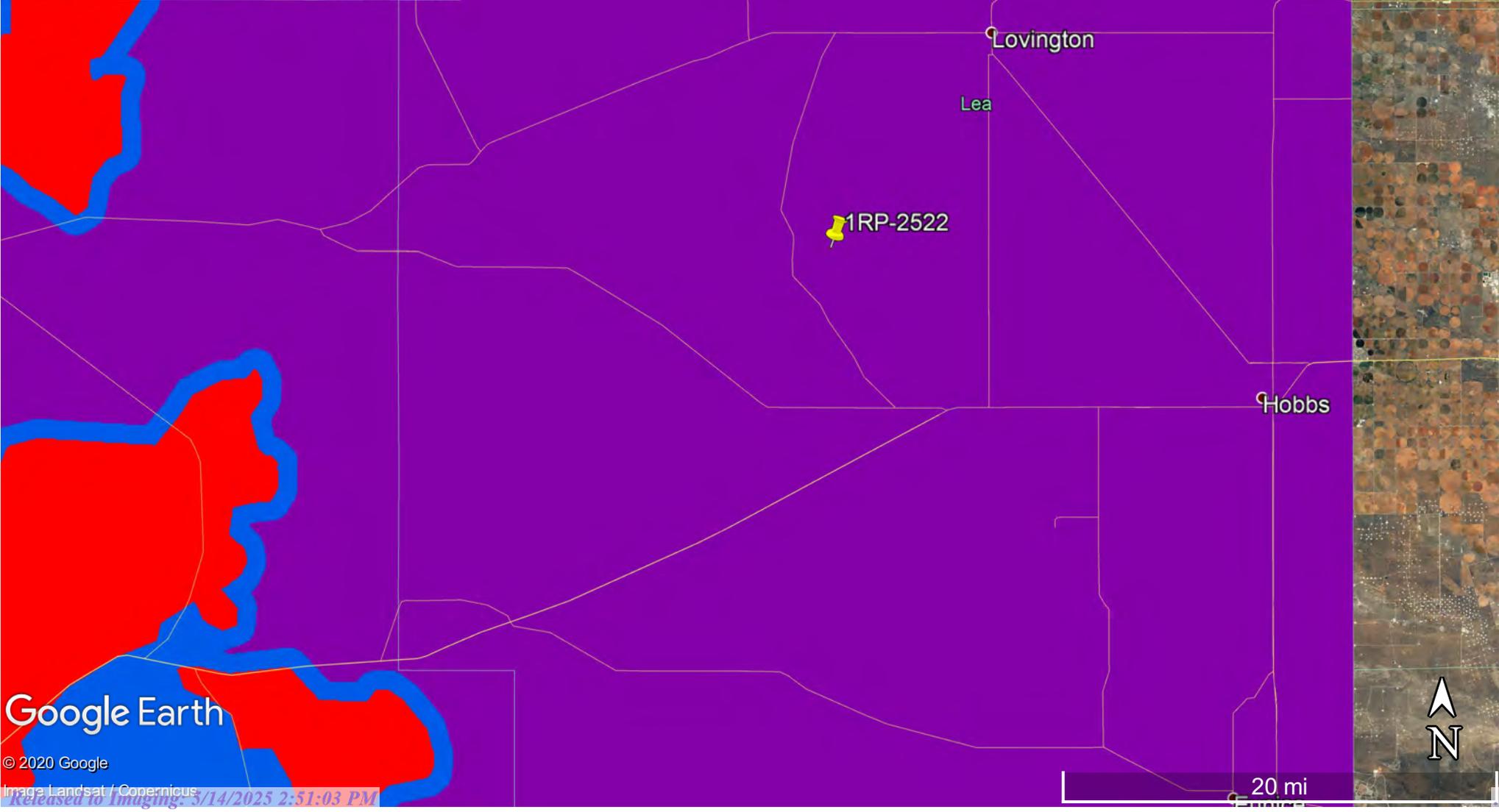
Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,

# KARST POTENTIAL MAP

1RP-2522

**Legend**

-  1RP-2522
-  High
-  Low
-  Medium



Google Earth

© 2020 Google

Image Landsat / Copernicus

20 mi





# 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 04829 S4</a>	L	LE		2	3	29	17S	35E		642121	3630598*	703	200	90	110

Average Depth to Water: **90 feet**

Minimum Depth: **90 feet**

Maximum Depth: **90 feet**

**Record Count: 1**

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 642763

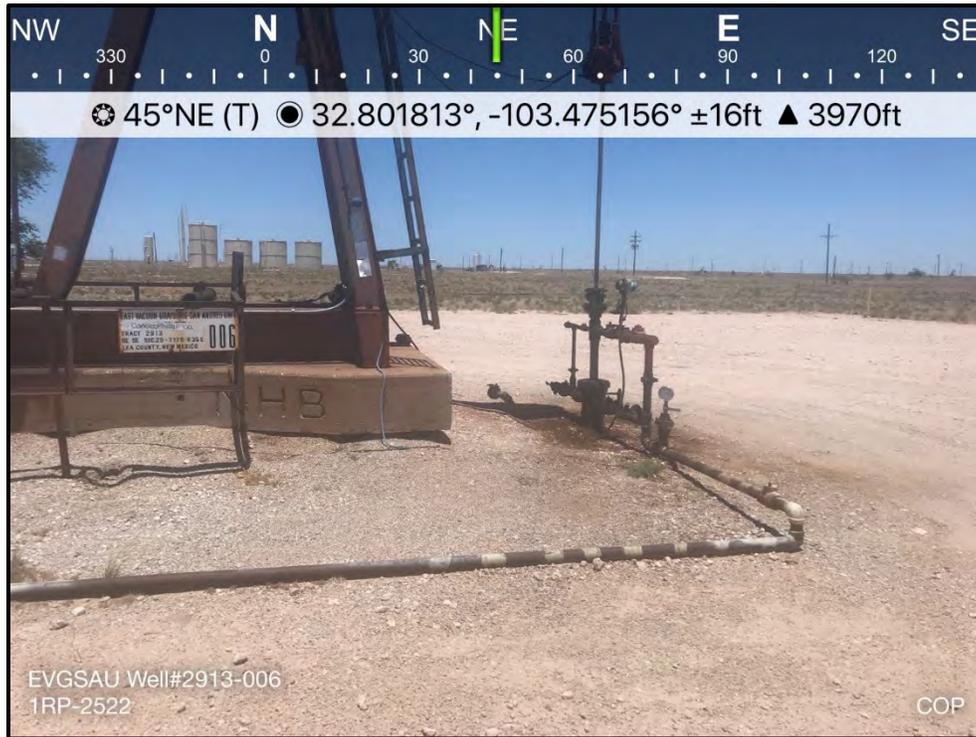
**Northing (Y):** 3630310

**Radius:** 800

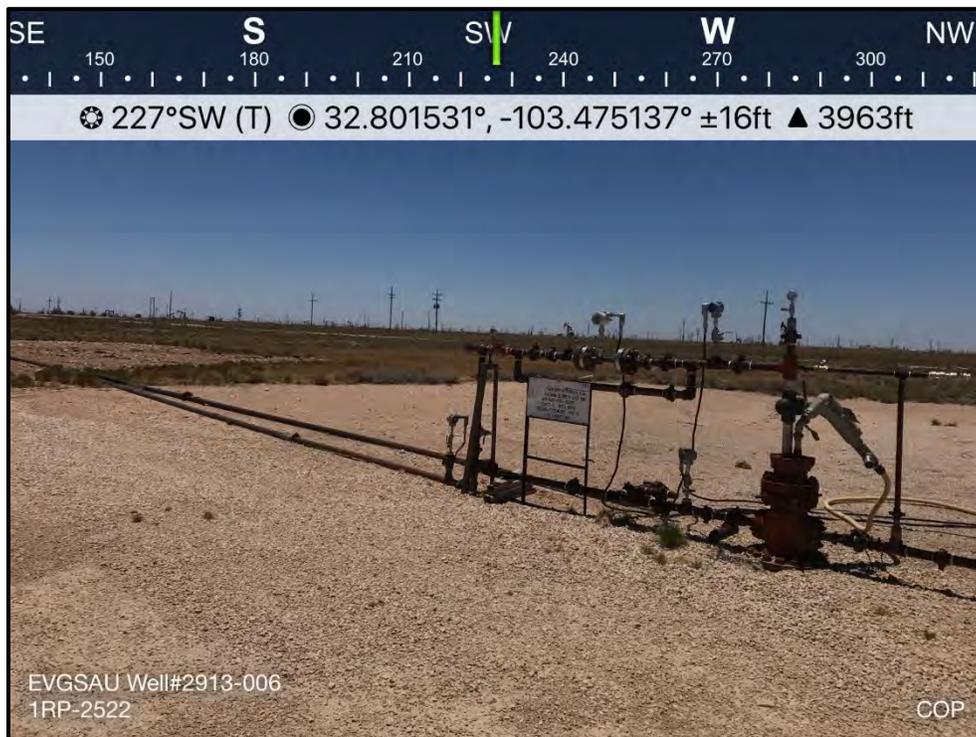
\*UTM location was derived from PLSS - see Help

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.

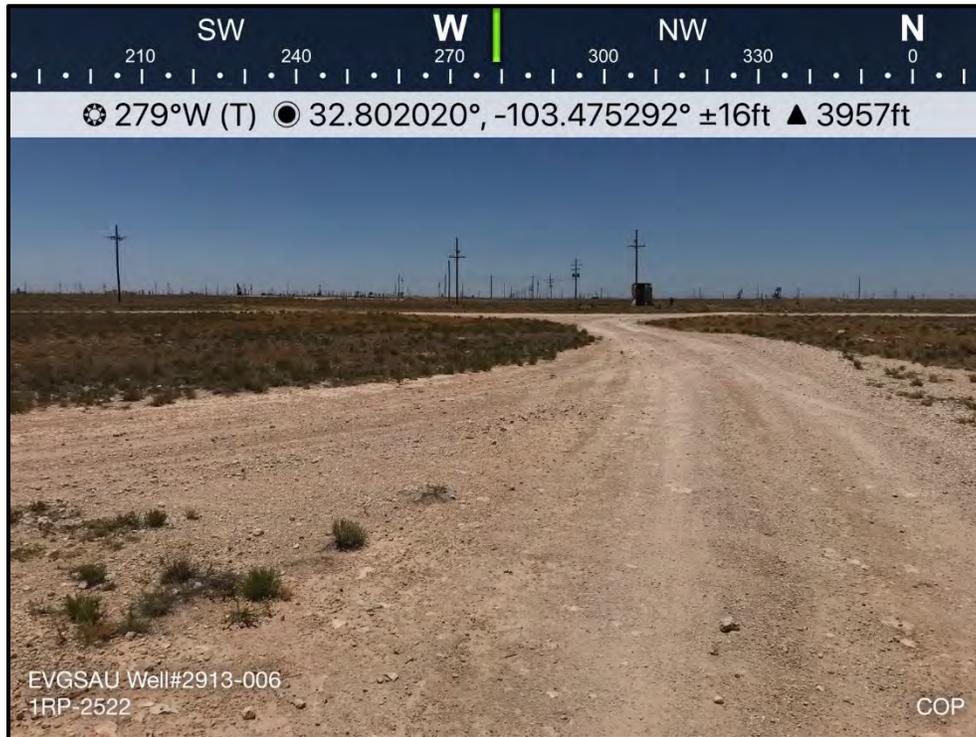
**ATTACHMENT C**  
**Photographic Documentation**



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of well head.	1
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southwest of release area.	2
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



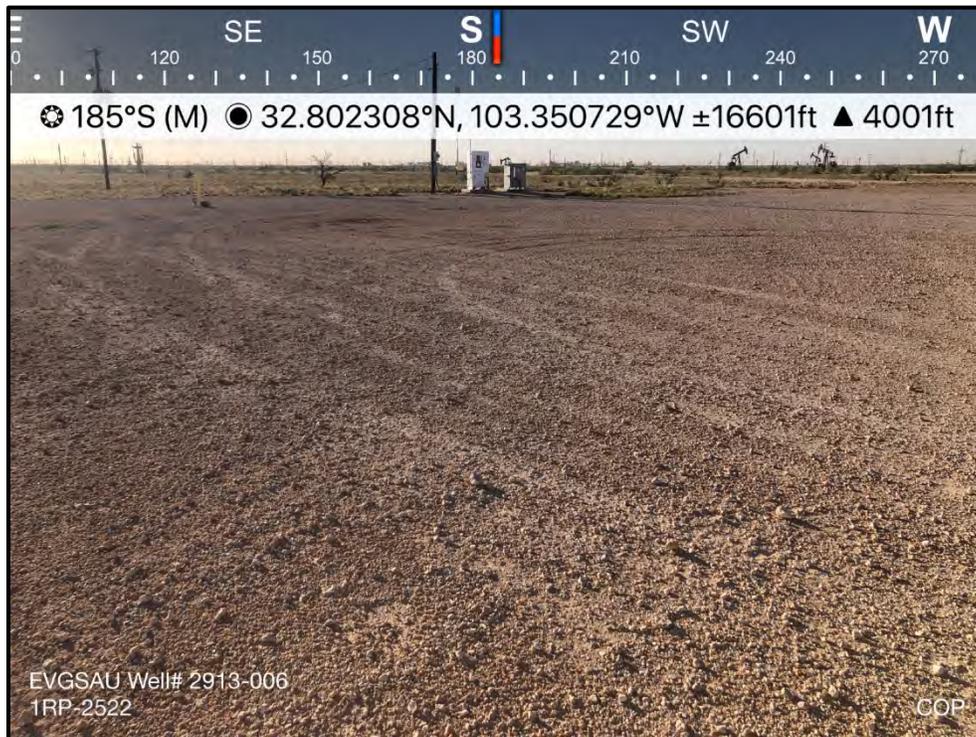
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of release area.	3
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southeast of release area.	4
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of well head.	5
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing south of well pad area.	6
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of well pad area.	7
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast on well pad area.	8
	SITE NAME	EVGSAU Well #2913-006 Flowline Release	6/8/2020

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

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

QUESTIONS

Action 457296

**QUESTIONS**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nGRL1013255165
Incident Name	NGRL1013255165 EAST VACUUM (GSA) UNIT #006 @ 30-025-26385
Incident Type	Oil Release
Incident Status	Remediation Plan Received
Incident Well	[30-025-26385] EAST VACUUM (GSA) UNIT #006

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	EAST VACUUM (GSA) UNIT #006
Date Release Discovered	03/14/2010
Surface Owner	State

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
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

<b>Nature and Volume of Release</b>	
<i>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.</i>	
Crude Oil Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Crude Oil   Released: 3 BBL   Recovered: 3 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Produced Water   Released: 7 BBL   Recovered: 7 BBL   Lost: 0 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 457296

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	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)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>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.</i>	

**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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*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: 07/16/2024
--	--

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QUESTIONS, Page 3

Action 457296

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

**Site Characterization**  
*Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (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 ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (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 ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

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

Requesting a remediation plan approval with this submission	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

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	1560
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	953
GRO+DRO (EPA SW-846 Method 8015M)	927
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

*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.*

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	8894
What is the estimated volume (in cubic yards) that will be remediated	1318

*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. 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.*

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QUESTIONS, Page 4

Action 457296

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

**Remediation Plan (continued)**

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.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(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.

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 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: 04/30/2025
--	--

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.

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QUESTIONS, Page 5

Action 457296

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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**State of New Mexico**  
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QUESTIONS, Page 6

Action 457296

**QUESTIONS (continued)**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>354433</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>06/18/2024</b>
What was the (estimated) number of samples that were to be gathered	<b>4</b>
What was the sampling surface area in square feet	<b>800</b>

**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	<b>No</b>
--	-----------

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

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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 457296

**CONDITIONS**

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 457296
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
scwells	Remediation plan approved. Delineation samples may be used as confirmation samples in the event that results are below reclamation limits. A C-141N should still be submitted two business days prior to sample collection. Submit remediation closure report to the OCD by 8/12/25.	5/14/2025