

***** LIQUID SPILLS - VOLUME CALCULATIONS *****

Location of Spill: VGEU #001 Well Head Date of Spill: 11/15/2024

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank place an "X" here: ☒

Input Data:

If spill volumes from measurement, i.e. metering, tank volumes, etc.are known enter the volumes here: OIL: 2.0000 BBL WATER: 10.0000 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

Total Area Calculations					Standing Liquid Calculations				
Total Surface Area	width	length	wet soil depth	oil (%)	Standing Liquid Area	width	length	liquid depth	oil (%)
Rectangle Area #1	8.00 ft	X 80.00 ft	X 3.00 in	16.70%	Rectangle Area #1	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #2	15.00 ft	X 90.00 ft	X 3.00 in	16.70%	Rectangle Area #2	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #3	0.00 ft	X 0.00 ft	X 0.00 in	0.00%	Rectangle Area #3	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #4	0.00 ft	X 0.00 ft	X 0.00 in	0.00%	Rectangle Area #4	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #5	0.00 ft	X 0.00 ft	X 0.00 in	0.00%	Rectangle Area #5	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #6	0.00 ft	X 0.00 ft	X 0.00 in	0.00%	Rectangle Area #6	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #7	0.00 ft	X 0.00 ft	X 0.00 in	0.00%	Rectangle Area #7	0.00 ft	X 0.00 ft	X 0.00 in	0.00%
Rectangle Area #8	0.00 ft	X 0.00 ft	X 0.00 in	0.00%	Rectangle Area #8	0.00 ft	X 0.00 ft	X 0.00 in	0.00%

production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil BBL Water BBL

Did leak occur before the separator?: ☐ YES ☒ N/A (place an "X")

Amount of Free Liquid Recovered: 2 BBL okay Percentage of Oil in Free Liquid Recovered: 16.70% (percentage)

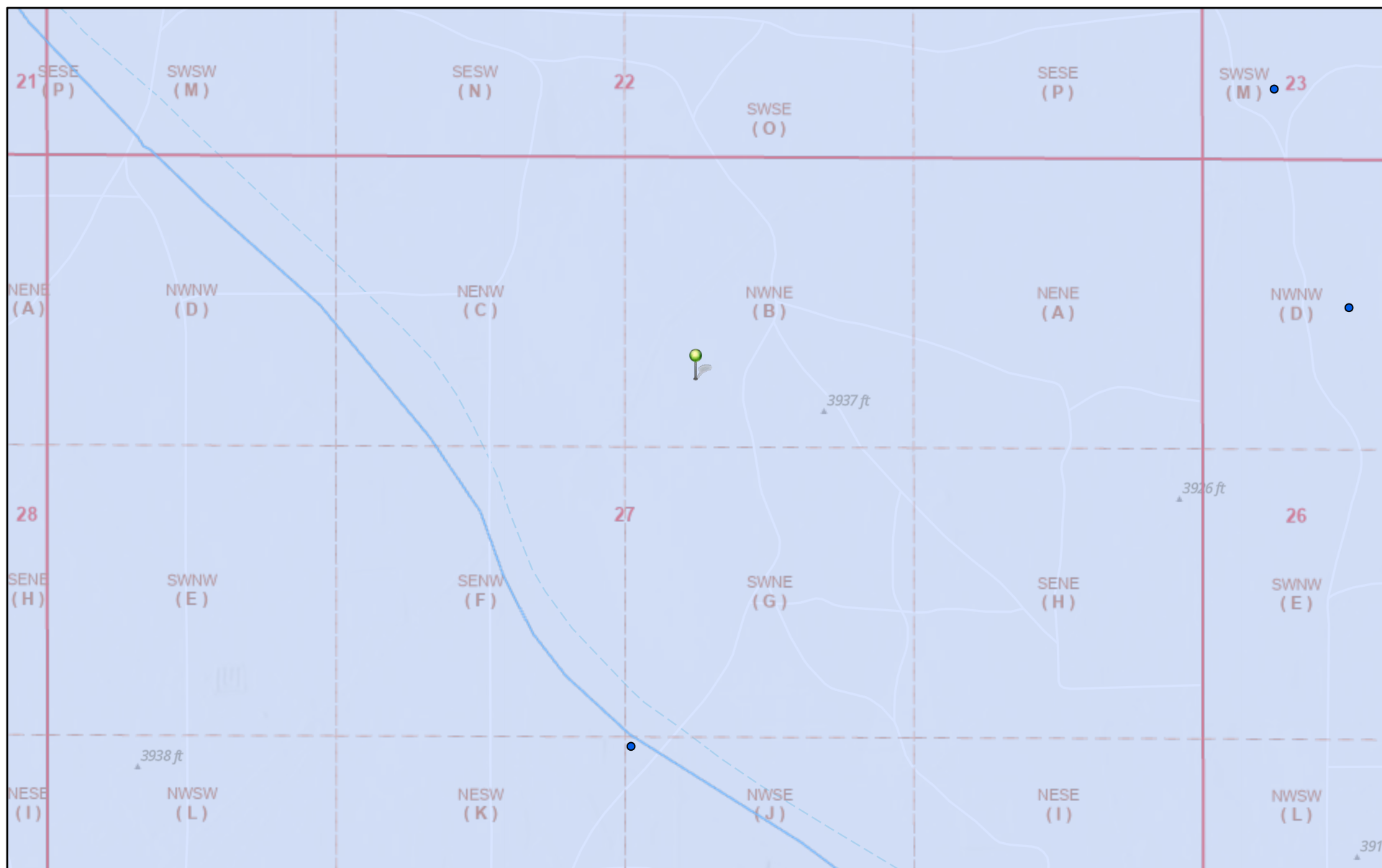
Liquid holding factor *: 0.14 gal per gal

Use the following when the spill wets the grains of the soil.
* sand = .08 gallon liquid per gallon volume of soil.
* gravelly (caliche) loam = .14 gallon liquid per gallon volume of soil.
* sandy clay loam soil = .14 gallon liquid per gallon volume of soil.
* clay loam = .16 gallon liquid per gallon volume of soil.

Use the following when the liquid completely fills the pore space of the soil:
Occurs when the spill soaked soil is contained by barriers, natural (or not).
* gravelly (caliche) loam = .25 gallon liquid per gallon volume of soil.
* sandy loam = .5 gallon liquid per gallon volume of soil.

Saturated Soil Volume Calculations:			Free Liquid Volume Calculations:		
Total Solid/Liquid Volume:	H2O 414 cu. ft.	OIL 83 cu. ft.	Total Free Liquid Volume:	H2O 10.0 BBL	OIL 2.0 BBL
Estimated Volumes Spilled			Estimated Production Volumes Lost		
Liquid in Soil:	10.3 BBL	2.1 BBL	Estimated Production Spilled:	10.0 BBL	2.0 BBL
Free Liquid:	0.0 BBL	0.0 BBL	Estimated Surface Damage		
Totals:	10.3 BBL	2.1 BBL	Surface Area:	1,990 sq. ft.	
Total Spill Liquid:	10.0 BBL	2.0 BBL	Surface Area:	.0457 acre	
Recovered Volumes			Estimated Weights, and Volumes		
Estimated oil recovered:	0.3 BBL	check - okay	Saturated Soil =	55,720 lbs	498 cu.ft.
Estimated water recovered:	1.2 BBL	check - okay	Total Liquid =	12 BBL	504 gallon
					18 cu.yds.
					4,193 lbs

VGEU #001 - OCD Mapper



11/15/2024, 3:38:25 PM



Override 1



OSE Water PODs

Karst Occurrence Potential

Low

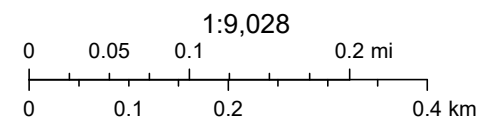
OSE Streams



PLSS Second Division



PLSS First Division



BLM, OCD, New Mexico Tech, Esri, NASA, NGA, USGS, FEMA, USGS, Esri Community Maps Contributors, New Mexico State University, Texas Parks &

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. <http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75>: New Mexico Oil Conservation Division



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
L 05207		L	LE				27	17S	35E	645552.0	3630825.0 *		514	140	60	80

Average Depth to Water: 60 feet

Minimum Depth: 60 feet

Maximum Depth: 60 feet

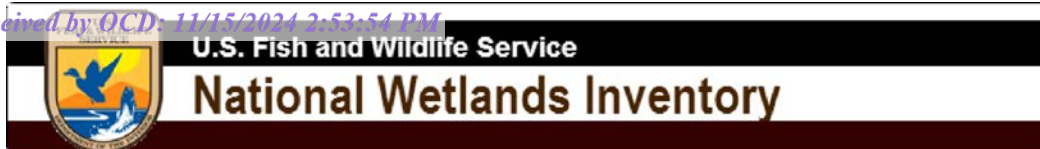
Record Count: 1

Basin/County Search:
County: LE

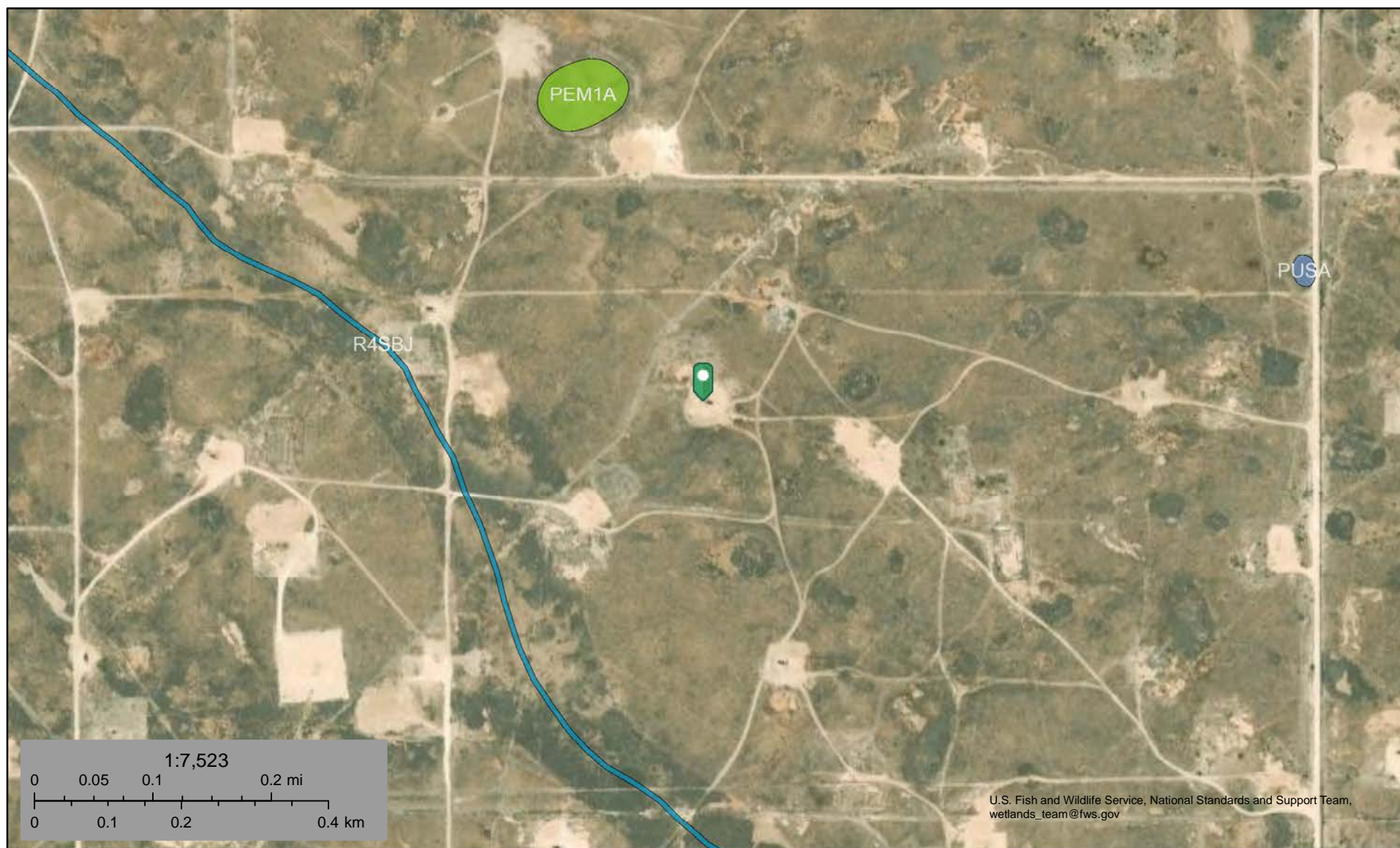
UTM Filters (in meters):
Easting: 645635.00
Northing: 3631333.00
Radius: 800

* 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.



VGEU #001 Wetlands



November 15, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

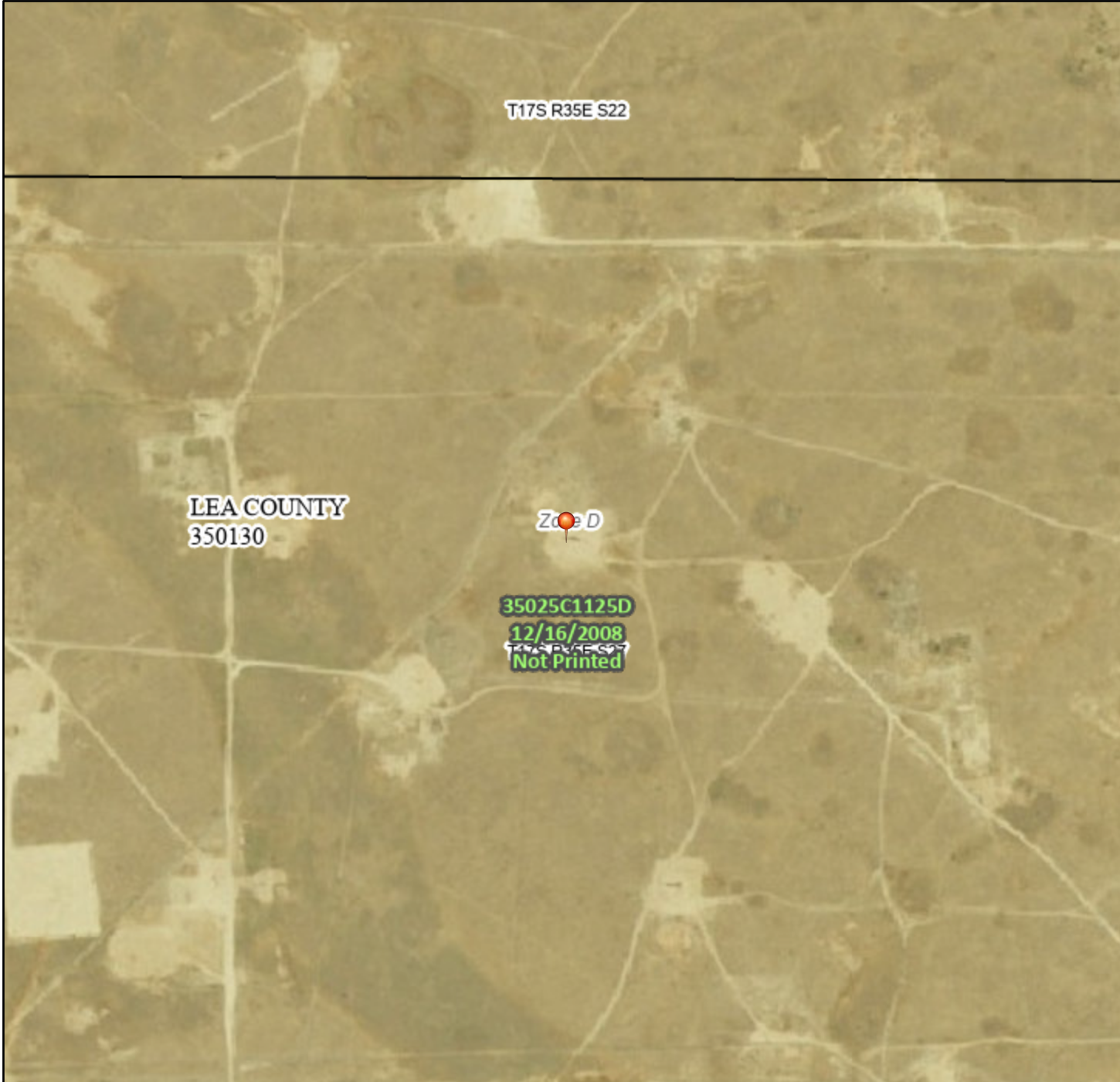
- Lake
- Other
- Riverine

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

National Flood Hazard Layer FIRMette



103°26'59"W 32°48'52"N



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

1:6,000

103°26'21"W 32°48'22"N

Released to Imaging: 11/18/2024 9:23:58 AM

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/15/2024 at 9:43 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.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 403821

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 403821
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2432051574
Incident Name	NAPP2432051574 VGEU #001 WELLHEAD RELEASE @ 30-025-20624
Incident Type	Produced Water Release
Incident Status	Initial C-141 Received
Incident Well	[30-025-20624] VACUUM GLORIETA EAST UNIT #001

Location of Release Source	
Please answer all the questions in this group.	
Site Name	VGEU #001 Wellhead Release
Date Release Discovered	11/15/2024
Surface Owner	State

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion Well Crude Oil Released: 2 BBL Recovered: 0 BBL Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion Well Produced Water Released: 10 BBL Recovered: 1 BBL Lost: 9 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)	On November 15, 2024, The operator identified a release of approximately 10 bbls of produced water and 2 bbls of oil from the VGEU #001 well head onto the pad and pasture to the south of the well pad. Approximately 2 bbls of fluids were recovered during the initial response.

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QUESTIONS, Page 2

Action 403821

QUESTIONS (continued)

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

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

Initial Response

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

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

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

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

I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetrattech.com Date: 11/15/2024
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QUESTIONS, Page 3

Action 403821

QUESTIONS (continued)

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	Action Number: 403821
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Site Characterization	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (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 ½ and 1 (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 500 and 1000 (ft.)
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	Yes

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	No
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
nvez	None	11/18/2024