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

Location of Spill: VGEU West Battery Release **Date of Spill:** 12/26/2024

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: x

Input Data:

OIL: WATER:

If spill volumes from measurement, i.e. metering, tank volumes, etc.are known enter the volumes here: _____ BBL _____ 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

Total Surface Area	width		length		wet soil depth	oil (%)
Rectangle Area #1	20.00 ft	30	10.00 ft	X	12.00 in	55.00%
Rectangle Area #2	10.00 ft	X	10.00 ft	X	12.00 in	55.00%
Rectangle Area #3	30.00 ft	X	15.00 ft	X	12.00 in	55.00%
Rectangle Area #4	15.00 ft	X	15.00 ft	X	12.00 in	55.00%
Rectangle Area #5	5.00 ft	X	5.00 ft	X	12.00 in	55.00%
Rectangle Area #6	40.00 ft	X	10.00 ft	X	12.00 in	55.00%
Rectangle Area #7	20.00 ft	X	10.00 ft	X	12.00 in	55.00%
Rectangle Area #8	0.00 ft	X	0.00 ft	X	0.00 in	0.00%

Standing Liquid Calculations

Standing Liquid Area	width		length		liquid depth	oil (%)
Rectangle Area #1	20.00 ft	X	10.00 ft	X	0.75 in	55.00%
Rectangle Area #2	10.00 ft	X	10.00 ft	X	0.75 in	55.00%
Rectangle Area #3	30.00 ft	X	15.00 ft	X	0.75 in	55.00%
Rectangle Area #4	15.00 ft	X	15.00 ft	X	0.75 in	55.00%
Rectangle Area #5	5.00 ft	X	5.00 ft	X	0.75 in	55.00%
Rectangle Area #6	40.00 ft	X	10.00 ft	X	0.50 in	55.00%
Rectangle Area #7	15.00 ft	X	10.00 ft	X	0.50 in	55.00%
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?: [X] YES [ ] N/A *(place an "X")*

Amount of Free Liquid Recovered: 45 BBL okay

Percentage of Oil in Free Liquid Recovered: 55.00% (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:
Occures 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:

		H2O	OIL
Total Solid/Liquid Volume:	**1,600 sq. ft.**	**720 cu. ft.**	**880 cu. ft.**

Free Liquid Volume Calculations:

		H2O	OIL
Total Free Liquid Volume:	**1,550 sq. ft.**	**38 cu. ft.**	**47 cu. ft.**

Estimated Volumes Spilled

	H2O	OIL
Liquid in Soil:	18.0 BBL	21.9 BBL
Free Liquid:	6.8 BBL	8.4 BBL
Totals:	**24.8 BBL**	**30.3 BBL**
Total Spill Liquid:	**24.8 BBL**	**30.3 BBL**

Estimated Production Volumes Lost

	H2O	OIL
Estimated Production Spilled:	**0.0** BBL	**0.0** BBL

Estimated Surface Damage

Surface Area: 1,600 sq. ft.

Surface Area: .0367 acre

Recovered Volumes

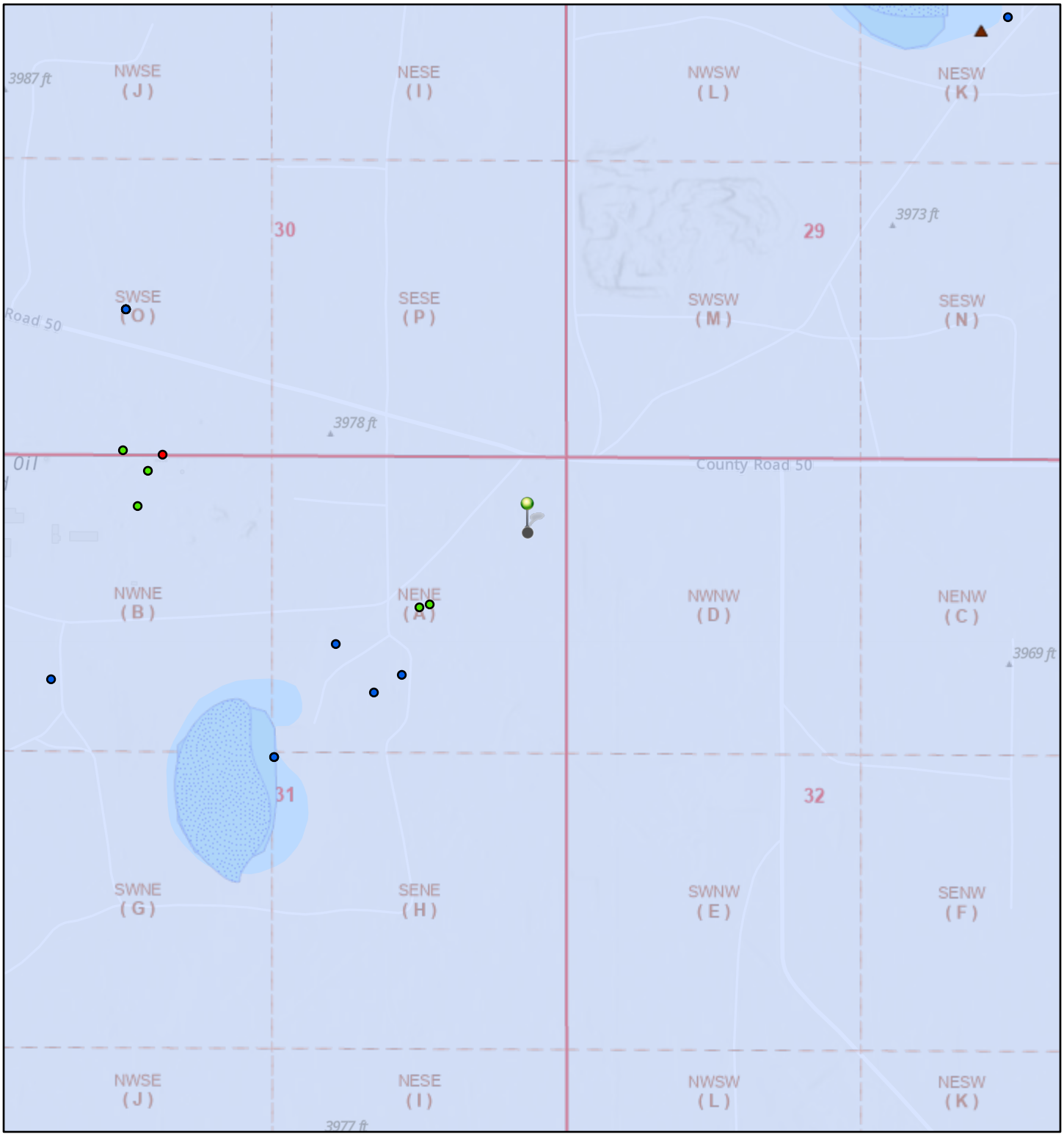
Estimated oil recovered: 24.8 **BBL** check - okay

Estimated water recovered: 20.3 **BBL** Oil recovered as released as operator was on site as leak

Estimated Weights, and Volumes

Saturated Soil =	179,200 lbs	1,600 cu.ft.	59 cu.yds.
Total Liquid =	55 BBL	2,314 gallon	19,256 lbs

OCD Well Locations



1/14/2025, 8:46:59 AM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Override 1

OSE Water PODs

- Active
- Pending
- Inactive
- Plugged

USGS Historical GW Wells

Karst Occurrence Potential

- Low
- OSW Water Bodys
- OSE Probable Playas
- PLSS Second Division
- PLSS First Division

BLM, OCD, New Mexico Tech, Esri, NASA, NGA, USGS, FEMA, USGS, OCD, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, NM OSE, BLM

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 14183 POD2		L	LE	SW	NE	NE	31	17S	35E	641304.0	3629691.0		258	227	105	122
L 14183 POD1		L	LE	SW	NE	NE	31	17S	35E	641266.4	3629667.1		301	229	106	123
L 14183 POD3		L	LE	SW	NE	NE	31	17S	35E	641213.2	3629731.0		302	227	104	123
L 03875 S2	R	L	LE			NE	31	17S	35E	641131.0	3629576.0 *		462	120	95	25
L 03875 S4		L	LE			NE	31	17S	35E	641131.0	3629576.0 *		462	120		
L 15787 POD1		L	LE	SE	SW	SE	30	17S	35E	640972.0	3629985.7		509	47		
L 03875 POD6		L	LE		SW	SE	30	17S	35E	640919.0	3630183.0 *		627	140	104	36
L 03875 POD7		L	LE		SW	SE	30	17S	35E	640919.0	3630183.0 *		627	140	104	36
L 03875 POD8		L	LE		SW	SE	30	17S	35E	640919.0	3630183.0 *		627	140	104	36
L 03875 S	R	L	LE		SW	SE	30	17S	35E	640919.0	3630183.0 *		627	120	96	24
L 03875 S3	R	L	LE		SW	SE	30	17S	35E	640919.0	3630183.0 *		627	120	95	25
L 03874		L	LE	SW	NW	NE	31	17S	35E	640823.0	3629678.0 *		682	229	90	139
L 03875		L	LE	SW	SW	SE	30	17S	35E	640818.0	3630082.0 *		682	147		
L 03876		L	LE	SW	SW	SE	30	17S	35E	640818.0	3630082.0 *		682	141		

Average Depth to Water: **100 feet**

Minimum Depth: **90 feet**

Maximum Depth: **106 feet**

Record Count: 14

Basin/County Search:
Basin: L

UTM Filters (in meters):
Easting: 641472.2
Northing: 3629887.5
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.

U.S. Fish and Wildlife Service
National Wetlands Inventory

VGEU West Battery Wetlands

January 14, 2025

Wetlands

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

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

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Flood Hazard Layer FIRMette

FEMA

103°29'39"W 32°48'7"N

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

1:6,000

103°29'2"W 32°47'37"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 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

N

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 1/14/2025 at 3:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

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 420244

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 420244
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2436239879**
Incident Name	**NAPP2436239879 VGEU WEST BATTERY TESTER RELEASE @ 0**
Incident Type	**Oil Release**
Incident Status	**Initial C-141 Received**

Location of Release Source *Please answer all the questions in this group.*	
Site Name	VGEU West Battery Tester Release
Date Release Discovered	12/26/2024
Surface Owner	State

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

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	Cause: High Line Pressure | Valve | Crude Oil | Released: 30 BBL | Recovered: 25 BBL | Lost: 5 BBL.
Produced Water Released (bbls) Details	Cause: High Line Pressure | Valve | Produced Water | Released: 25 BBL | Recovered: 20 BBL | Lost: 5 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 December 26, 2024, Maverick operations identified that the pressure safety valve on a portable tester was discharging a mixture of oil and produced water due to over pressure conditions resulting in the release of approximately 30 bbls of oil and 25 bbls of produced water onto the facility pad. Approximately 45 bbls of fluid was reported as recovered during the initial response.

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 420244
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

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

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

I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetratech.com Date: 01/14/2025

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 420244
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 500 and 1000 (ft.)
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 1 and 5 (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 300 and 500 (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	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	No
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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CONDITIONS

Action 420244

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 420244
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
scwells	Initial C-141 approved with the following condition: Under the Site Characterization section of C-141 application, minimum distance to a significant watercourse should be updated to between 1-5 miles; 2.3 miles to the northeast of site is a significant watercourse. The distance to a wetland could also change after delineation of the release is complete.	1/14/2025