



SITE INFORMATION

Closure Report
Cass 16 State 234 TB
Incident ID: nAPP2503421375
Unit E Sec 16 T23S R27E
32.307082 °, -104.204353°
Eddy County, New Mexico

Produced Water Release
Point of Release: Equipment Failure
Release Date: 02.02.2025
Volume Released: 5 Barrels of Produced Water
Volume Recovered: 5 Barrels of Produced Water

CARMONA RESOURCES



Prepared for:
Marathon Oil Corporation
990 Town and Country Blvd,
Houston, Texas 77024

Prepared by:
Carmona Resources, LLC
310 West Wall Street
Suite 500
Midland, Texas 79701



TABLE OF CONTENTS

1.0 SITE INFORMATION AND BACKGROUND

2.0 SITE CHARACTERIZATION AND GROUNDWATER

3.0 NMAC REGULATORY CRITERIA

4.0 LINER INSPECTION ACTIVITIES

5.0 CONCLUSIONS

FIGURES

FIGURE 1 OVERVIEW FIGURE 2 TOPOGRAPHIC

FIGURE 3 SECONDARY CONTAINMENT MAP

APPENDICES

APPENDIX A PHOTOS

APPENDIX B NOR / INITIAL C-141 / C141 – LINER NOTIFICATIONS /
NMOCD CORRESPONDENCE

APPENDIX C SITE CHARACTERIZATION AND GROUNDWATER



February 26, 2025

Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Closure Report
Cass 16 State 234 TB
Marathon Oil Corporation
Incident ID: nAPP2503421375
Site Location: Unit E, S16, T23S, R27E
(Lat 32.307082°, Long -104.204353°)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Marathon Oil Corporation, Carmona Resources, LLC has prepared this letter to document the Cass 16 State 234 TB site activities. The site is located at 32.307082°, -104.204353° within Unit E, S16, T23S, R27E, in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site Information and Background

Based on the Notice of Release obtained from the New Mexico Oil Conservation Division (NMOCD), the incident was discovered on February 2, 2025, due to equipment failure from a loose packing. This equipment failure resulted in produced water being released inside the secondary containment. The incident released approximately five (5) barrels of produced water, with five (5) barrels of produced water recovered. All fluids were contained within the lined facility. See Figure 3. The Notice of Release form is attached in Appendix B.

2.0 Site Characterization and Groundwater

The site is located within a high karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there are no known water sources within a 0.50-mile radius of the location. The nearest well is located approximately 0.80 miles North of the site in S09, T23S, R37E and was drilled in 2017. The well has a reported groundwater depth of 150' feet below the ground surface (ft bgs). A copy of the associated point of diversion is attached in Appendix C.

3.0 NMAC Regulatory Criteria

Per the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria were utilized in assessing the site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg.

4.0 Liner Inspection Activities

Prior to the liner inspection, the NMOCD division office was notified via web portal on February 5, 2025, per Subsection D of 19.15.29.12 NMAC. The NMSLO was notified via email. The correspondence with



both state agencies can be found in Appendix B. After thoroughly cleaning the plastic liner, Carmona Resources personnel inspected it to assess its structural integrity. On February 7, 2025, Carmona Resources, LLC conducted the liner inspection activities and confirmed that the liner was intact with no integrity issues. Refer to the Photolog for details.

5.0 Conclusions

Based on the liner inspection throughout the facility, no further actions are required at the site. The final C-141 is attached, and Marathon formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

Carmona Resources, LLC

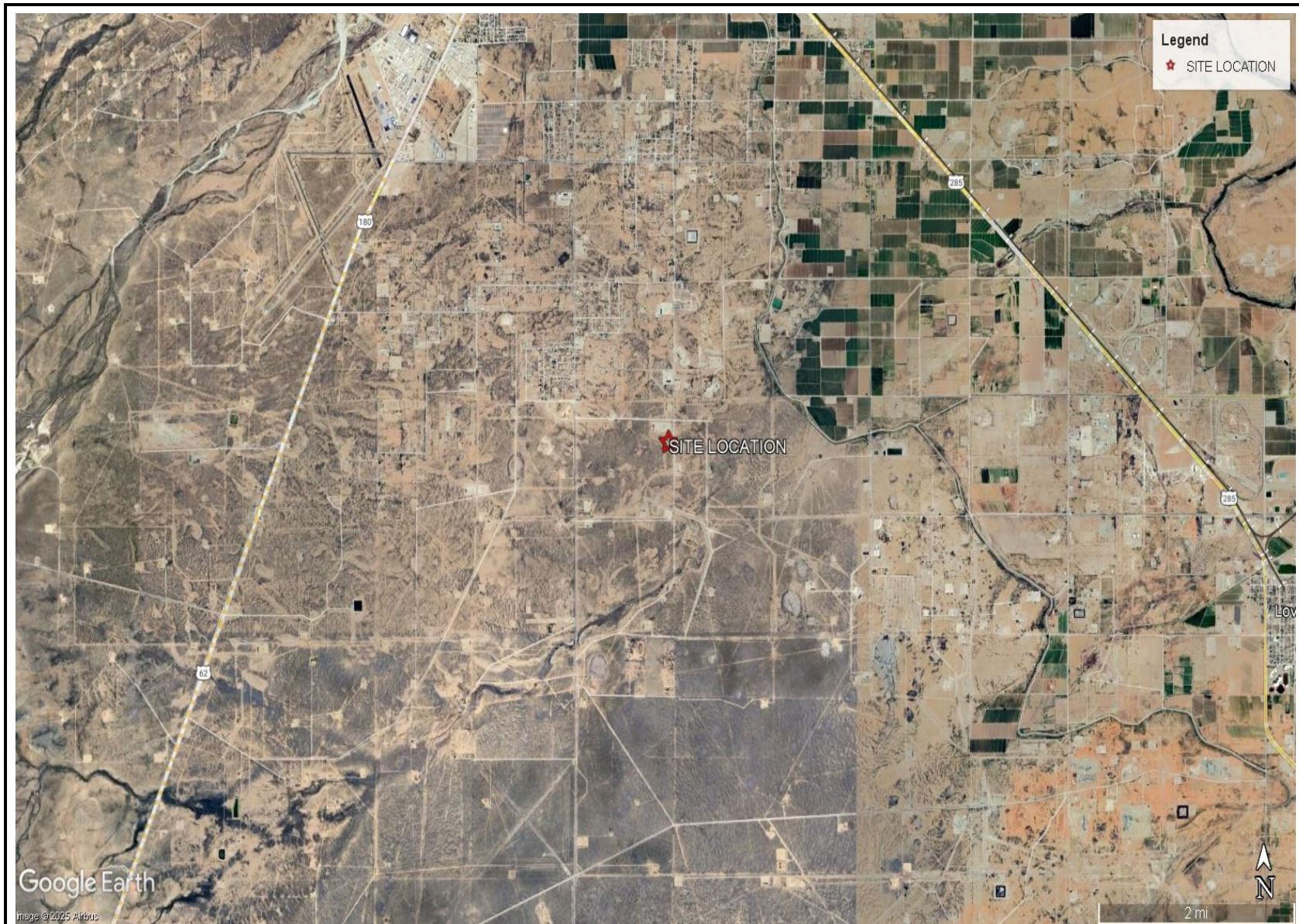
Conner Moehring
Environmental Manager

Ashton Thielke
Sr. Project Manager

FIGURES

CARMONA RESOURCES

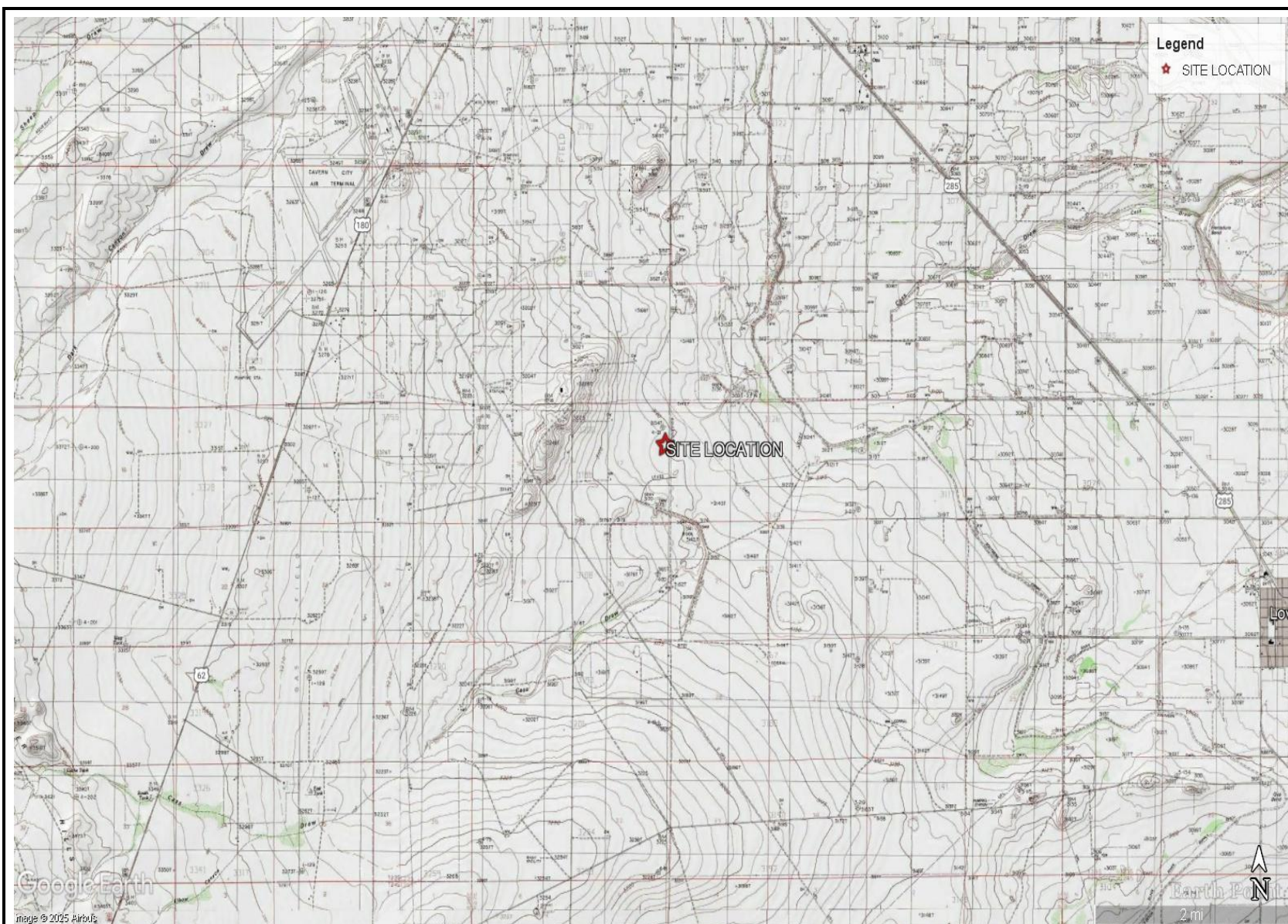




OVERVIEW MAP
MARATHON OIL CORPORATION
CASS 16 STATE 234 TB
EDDY COUNTY, NEW MEXICO
32.307082°, -104.204353°



FIGURE 1



TOPOGRAPHIC MAP
 MARATHON OIL CORPORATION
 CASS 16 STATE 234 TB
 EDDY COUNTY, NEW MEXICO
 32.307082°, -104.204353°



FIGURE 2



SECONDARY CONTAINMENT MAP
MARATHON OIL CORPORATION
CASS 16 STATE 234 TB
EDDY COUNTY, NEW MEXICO
32.307082°, -104.204353°



FIGURE 3

APPENDIX A

CARMONA RESOURCES

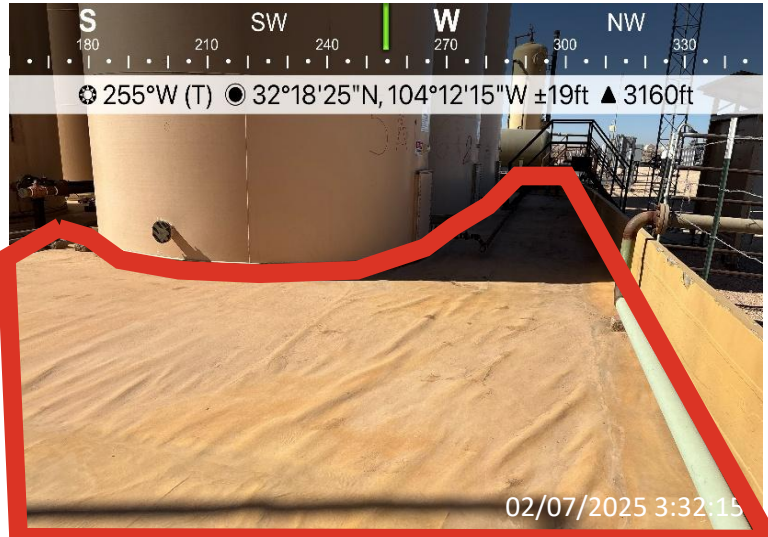


PHOTOGRAPHIC LOG**Marathon Oil Corporation****Photograph No. 1****Facility:** Cass 16 State 234 TB**County:** Eddy County, New Mexico**Description:**

View Southwest of the intact liner. Red outline is the area of the liner inspection.

**Photograph No. 2****Facility:** Cass 16 State 234 TB**County:** Eddy County, New Mexico**Description:**

View Southwest of the intact liner. Red outline is the area of the liner inspection.

**Photograph No. 3****Facility:** Cass 16 State 234 TB**County:** Eddy County, New Mexico**Description:**

View Southwest of the intact liner. Red outline is the area of the liner inspection.



APPENDIX B

CARMONA RESOURCES



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 427371

QUESTIONS

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 427371 |
| | Action Type: [NOTIFY] Notification Of Release (NOR) |

QUESTIONS

| | |
|--|----------------------|
| Location of Release Source <i>Please answer all the questions in this group.</i> | |
| Site Name | CASS 16 STATE 234 TB |
| Date Release Discovered | 02/02/2025 |
| Surface Owner | State |

| | |
|--|------------------------|
| Incident Details <i>Please answer all the questions in this group.</i> | |
| 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 <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 | Not answered. |
| Produced Water Released (bbls) Details | Cause: Equipment Failure Pump Produced Water Released: 5 BBL Recovered: 5 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) | The recycle pump packing became loose resulting in a produced water release. All fluids were contained in lined secondary containment. |

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 427371

QUESTIONS (continued)

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 427371 |
| | Action Type: [NOTIFY] Notification Of Release (NOR) |

QUESTIONS

| Nature and Volume of Release (continued) | |
|---|---|
| Is this a gas only submission (i.e. only significant Mcf values reported) | More volume information must be supplied to determine if this will be treated as 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 19.15.29.11(A)(5)(a) NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

ACKNOWLEDGMENTS

Action 427371

ACKNOWLEDGMENTS

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 427371 |
| | Action Type: [NOTIFY] Notification Of Release (NOR) |

ACKNOWLEDGMENTS

| | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | I acknowledge that I am authorized to submit notification of a release on behalf of my operator. |
| <input checked="" type="checkbox"/> | I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29. |
| <input checked="" type="checkbox"/> | I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29. |
| <input checked="" type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | I acknowledge the fact that 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. |
| <input checked="" type="checkbox"/> | I acknowledge the fact that, 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. |

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 427371

CONDITIONS

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 427371 |
| | Action Type: [NOTIFY] Notification Of Release (NOR) |

CONDITIONS

| Created By | Condition | Condition Date |
|----------------|---|----------------|
| cswansonsteege | When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141. | 2/3/2025 |

MRO Spill Calculation Tool

Standing Liquid Inputs:

| | Length (ft.) | Width (ft.) (Area for Displacement) | Avg. Liquid Depth (in.) | % Oil | Total Volume (bbls) | Water Volume (bbls) | Oil Volume (bbls) |
|---------------------|--------------|---|----------------------------|-------|------------------------|------------------------|----------------------|
| Rectangle Area #1 | 30 | 45 | 0.25 | | 5.01 | 5.01 | 0.00 |
| Rectangle Area #2 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #3 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #4 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #5 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #6 | | | | | 0.00 | 0.00 | 0.00 |
| Vessel Displacement | | | | | 0.00 | 0.00 | 0.00 |
| Vessel Displacement | | | | | 0.00 | 0.00 | 0.00 |
| Liquid Volume: | | | | | 5.01 | 5.01 | 0.00 |

Saturated Soil Inputs:

| | Length (ft.) | Width (ft.) / (SQ Ft) | Soil Type: Gravel Loam Avg. Saturated Depth (in.) | % Oil | Total Volume (bbls) | Water Volume (bbls) | Oil Volume (bbls) |
|-------------------|--------------|--------------------------|---|-------|------------------------|------------------------|----------------------|
| Rectangle Area #1 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #2 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #3 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #4 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #5 | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #6 | | | | | 0.00 | 0.00 | 0.00 |
| SQ FT Calc | | | | | 0.00 | 0.00 | 0.00 |
| Rectangle Area #8 | | | | | 0.00 | 0.00 | 0.00 |
| Saturated Volume | | | | | 0.00 | 0.00 | 0.00 |

| | Total Volume (bbls) | Water Volume (bbls) | Oil Volume (bbls) |
|----------------------------|------------------------|------------------------|----------------------|
| Total Spill Volume (bbls): | 5.01 | 5.01 | 0.00 |
| Total Spill Volume (gals): | 210.39 | 210.39 | 0.00 |

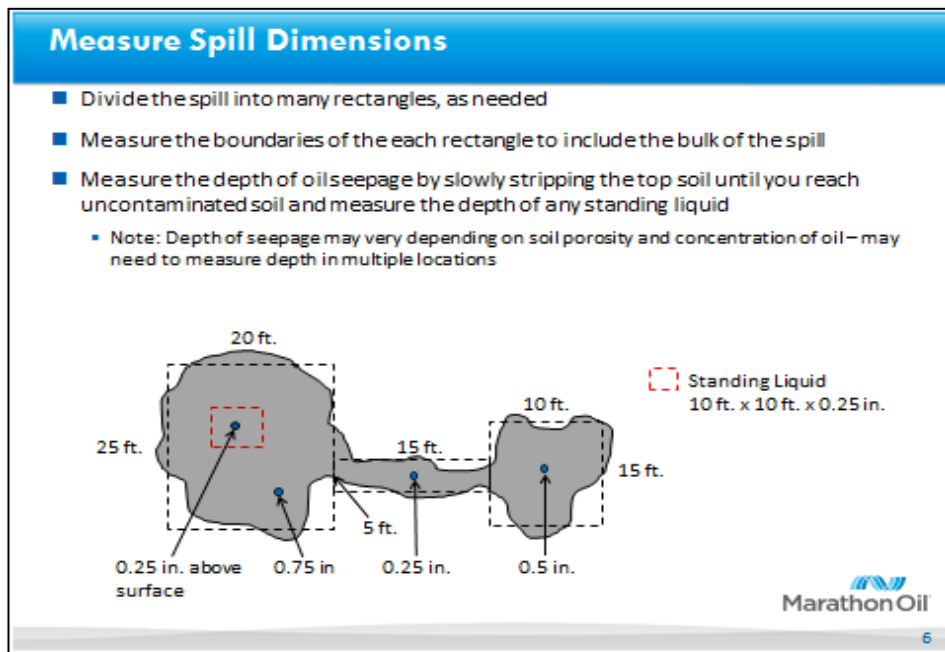
Comments:

Color Key:

| | | | |
|-------------------------|-----------------------------|----------------------------|----------|
| Required Input Cells | Supplemental Input Cells | No Input (Calculations) | No Input |
|-------------------------|-----------------------------|----------------------------|----------|

Ground/Vegetation Overspray

| Cover Type | Microns | Approximate Depth (in) |
|------------|---------|------------------------|
| Ground | | |
| Dull Color | 10 | 0.00003281 |
| Dark Color | 50 | 0.00016404 |



1/8"
1/4"
1/2"
3/4"

| Number of Tanks | Area of Displacement (Ft ²) |
|-----------------|---|
| 12 | 2256 |

0.125
0.25
0.5
0.75

| | |
|-----------------|------|
| Clay Loam | 0.16 |
| Gravel or Sand | 0.08 |
| Gravel Loam | 0.14 |
| Sandy Clay Loam | 0.14 |

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 428535

QUESTIONS

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 428535 |
| | Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L) |

QUESTIONS

| Prerequisites | |
|-------------------|---|
| Incident ID (n#) | nAPP2503421375 |
| Incident Name | NAPP2503421375 CASS 16 STATE 234 TB @ 0 |
| Incident Type | Produced Water Release |
| Incident Status | Initial C-141 Approved |
| Incident Facility | [fAPP2125249869] CASS 16 STATE 234 TB |

| Location of Release Source | |
|----------------------------|----------------------|
| Site Name | CASS 16 STATE 234 TB |
| Date Release Discovered | 02/02/2025 |
| Surface Owner | State |

| Liner Inspection Event Information | |
|---|--------------------------------|
| <i>Please answer all the questions in this group.</i> | |
| What is the liner inspection surface area in square feet | 1,350 |
| Have all the impacted materials been removed from the liner | Yes |
| Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC | 02/07/2025 |
| Time liner inspection will commence | 03:30 PM |
| Please provide any information necessary for observers to liner inspection | Conner Moehring - 432.813.6823 |
| Please provide any information necessary for navigation to liner inspection site | 32.3065857 -104.2022462 |

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/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 428535

CONDITIONS

| | |
|--|--|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 428535 |
| | Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| cmoehring | Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted. | 2/5/2025 |

Conner Moehring

From: Conner Moehring
Sent: Wednesday, February 5, 2025 11:20 AM
To: eco@nmslo.gov
Cc: swansonste@marathonoil.com; Mike Carmona; Stephen Reyes; Ivan Ramos; PaulB
Subject: Liner Inspection Notification - Marathon - Cass 16 State 234 TB - nAPP2503421375 - 02/02/2025

Good Morning,

We wanted to inform the NMSLO that we will be conducting a liner inspection at the Cass 16 State 234 TB. The liner inspection will be cleaned, and all impacted material has been removed from the falcon-lined facility prior to the inspection. The inspection will occur on Friday, February 7, 2025, at approximately 3:30 pm (MT). The site location GPS is 32.3065857 -104.2022462, and the approximate area of concern is 1,350 square feet.

Please call me if you have any questions or need any additional information.

Conner R. Moehring
310 West Wall Street, Suite 500
Midland TX, 79701
M: 432-813-6823
cmoehring@carmonaresources.com

APPENDIX C

CARMONA RESOURCES

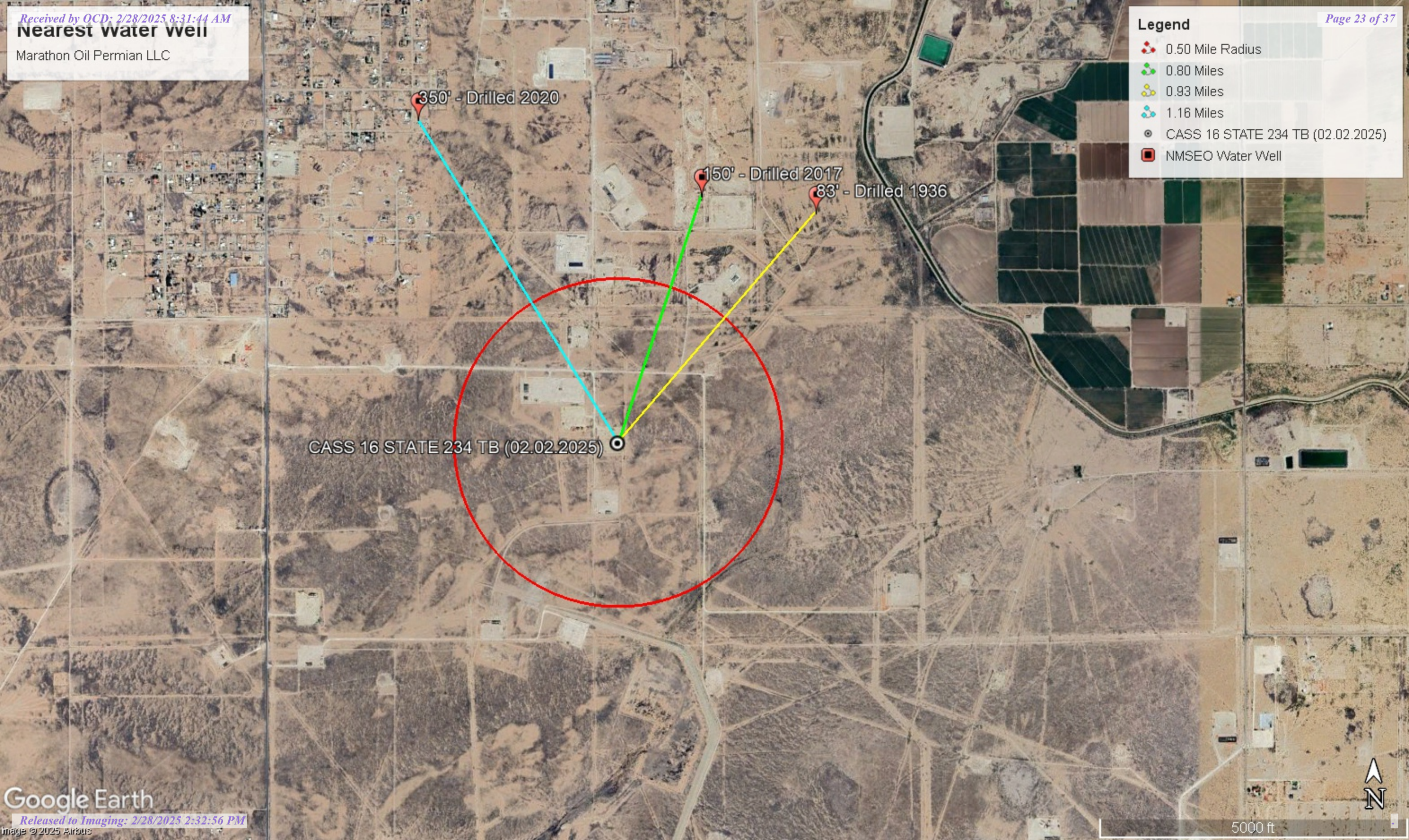


Nearest water well

Marathon Oil Permian LLC




Legend

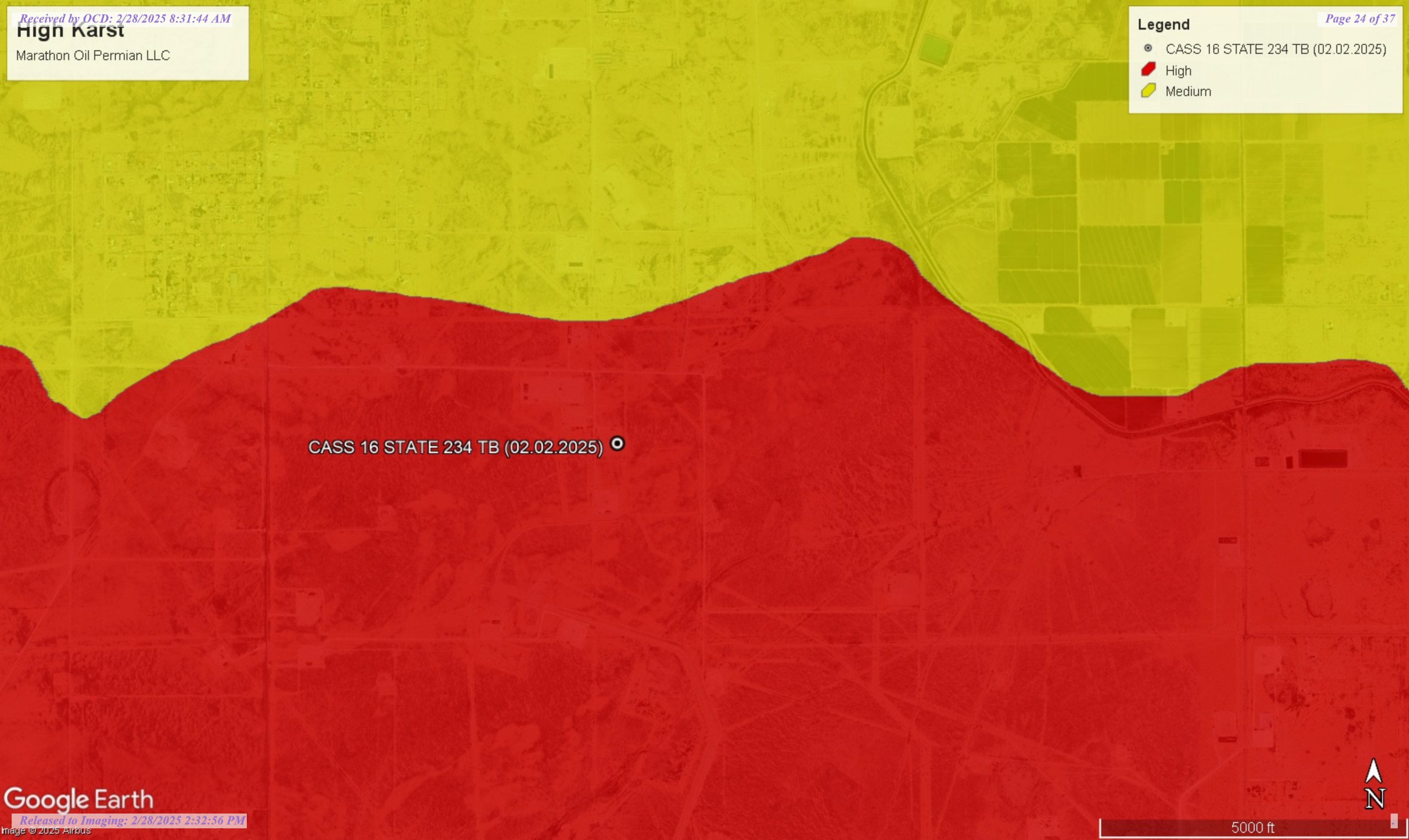
- 0.50 Mile Radius
- 0.80 Miles
- 0.93 Miles
- 1.16 Miles
- CASS 16 STATE 234 TB (02.02.2025)
- NMSEO Water Well




High karst
Marathon Oil Permian LLC

Legend

-  CASS 16 STATE 234 TB (02.02.2025)
-  High
-  Medium



CASS 16 STATE 234 TB (02.02.2025) 





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 |
|-----------------------------------|--------------|-------|--------|------|------|-----|-----|-----|-----|--------|----------|----------|------------|-------------|--------------|
| C 04044 POD1 | CUB | ED | | 3 | 2 | 3 | 09 | 23S | 27E | 575504 | 3575907 | 1274 | 290 | 150 | 140 |
| C 00195 | CUB | ED | | 4 | 1 | 4 | 09 | 23S | 27E | 576069 | 3575827* | 1487 | 128 | 83 | 45 |
| C 04429 POD1 | C | ED | | 4 | 4 | 1 | 08 | 23S | 27E | 574102 | 3576270 | 1863 | 400 | 350 | 50 |
| C 04581 POD1 | C | ED | | 3 | 1 | 1 | 09 | 23S | 27E | 575167 | 3576589 | 1892 | 165 | 109 | 56 |
| C 01261 | CUB | ED | | | | | 21 | 23S | 27E | 575780 | 3572889* | 1932 | 250 | | |
| C 01618 | C | ED | | 4 | 4 | 4 | 07 | 23S | 27E | 573252 | 3575384* | 1972 | 250 | | |
| C 00420 | C | CUB | ED | | 4 | 2 | 09 | 23S | 27E | 576370 | 3576337* | 2072 | 2151 | | |
| C 00508 CLW225089 | O | CUB | ED | 4 | 1 | 3 | 10 | 23S | 27E | 576877 | 3575839* | 2110 | 234 | 28 | 206 |
| C 00623 | C | ED | | | 2 | 1 | 15 | 23S | 27E | 577189 | 3575142* | 2134 | 200 | | |
| C 03005 | C | ED | | 3 | 4 | 4 | 07 | 23S | 27E | 573052 | 3575384* | 2160 | 140 | 100 | 40 |
| C 00068 CLW193190 | O | CUB | ED | 3 | 3 | 1 | 10 | 23S | 27E | 576673 | 3576241* | 2202 | 175 | | |
| C 00508 S | CUB | ED | | 2 | 1 | 3 | 10 | 23S | 27E | 576877 | 3576039* | 2225 | 234 | 28 | 206 |
| C 01071 | C | ED | | | | 1 | 08 | 23S | 27E | 573751 | 3576499* | 2250 | 279 | 95 | 184 |
| C 02191 | C | ED | | | | 1 | 08 | 23S | 27E | 573751 | 3576499* | 2250 | 252 | 75 | 177 |
| C 00187 | C | ED | | 1 | 1 | 4 | 15 | 23S | 27E | 577380 | 3574509 | 2287 | 210 | 125 | 85 |
| C 01632 | C | ED | | 3 | 2 | 4 | 07 | 23S | 27E | 573050 | 3575789* | 2323 | 162 | 100 | 62 |
| C 01632 CLW197648 | O | C | ED | 3 | 2 | 4 | 07 | 23S | 27E | 573050 | 3575789* | 2323 | 162 | 100 | 62 |
| C 01632 POD2 | C | ED | | 3 | 2 | 4 | 07 | 23S | 27E | 573050 | 3575789* | 2323 | 173 | 100 | 73 |
| C 00068 | CUB | ED | | 1 | 3 | 1 | 10 | 23S | 27E | 576673 | 3576441* | 2347 | 175 | | |
| C 03892 POD1 | C | ED | | 1 | 2 | 1 | 08 | 23S | 27E | 573846 | 3576764 | 2417 | 148 | 54 | 94 |
| C 00323 | C | ED | | | 4 | 4 | 05 | 23S | 27E | 574750 | 3577122* | 2449 | 200 | | |
| C 02711 | C | ED | | | 4 | 4 | 05 | 23S | 27E | 574750 | 3577122* | 2449 | 170 | 75 | 95 |
| C 03020 | C | ED | | | 4 | 4 | 05 | 23S | 27E | 574750 | 3577122* | 2449 | 176 | 135 | 41 |
| C 02510 | C | ED | | 1 | 2 | 1 | 08 | 23S | 27E | 573848 | 3576806* | 2452 | 350 | 350 | 0 |
| C 03799 POD1 | C | ED | | 1 | 3 | 3 | 04 | 23S | 27E | 574981 | 3577170 | 2475 | 200 | 51 | 149 |

*UTM location was derived from PLSS - see Help

(In feet)

Maximum Depth: **350 feet**

Radius: 2500

Released to Imaging: 2/28/2025 2:32:56 PM



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

| | | | | | | | | | |
|-----------------|-------------------|------------|------------|-----------|------------|------------|------------|----------|----------|
| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y |
| C | 04044 POD1 | 3 | 2 | 3 | 09 | 23S | 27E | 575504 | 3575907 |

Driller License: 331 **Driller Company:** SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.
Driller Name:

Drill Start Date: 04/21/2017 **Drill Finish Date:** 04/22/2017 **Plug Date:**
Log File Date: 05/16/2017 **PCW Rcv Date:** **Source:** Shallow
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: 8.60 **Depth Well:** 290 feet **Depth Water:** 150 feet

| Water Bearing Stratifications: | Top | Bottom | Description |
|--------------------------------|-----|--------|-------------------------------|
| | 100 | 290 | Sandstone/Gravel/Conglomerate |

| Casing Perforations: | Top | Bottom |
|----------------------|-----|--------|
| | 150 | 290 |

| | | | |
|-----------------------------|-------------|-----------------------------|-----------|
| Meter Number: | 18408 | Meter Make: | OCTAVE |
| Meter Serial Number: | 16-3-026520 | Meter Multiplier: | 100.0000 |
| Number of Dials: | 9 | Meter Type: | Diversion |
| Unit of Measure: | Gallons | Return Flow Percent: | |
| Usage Multiplier: | | Reading Frequency: | Monthly |

Meter Readings (in Acre-Feet)

| Read Date | Year | Mtr Reading | Flag | Rdr | Comment | Mtr Amount Online |
|------------|------|-------------|------|-----|---------|-------------------|
| 11/29/2019 | 2019 | 3057884 | A | RPT | | 0 |

| | | |
|-----------------------------|-------------|---------------|
| **YTD Meter Amounts: | Year | Amount |
| | 2019 | 0 |

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.


11/20/23 7:02 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

| | | (quarters are 1=NW 2=NE 3=SW 4=SE) | | | | (quarters are smallest to largest) | | (NAD83 UTM in meters) | |
|--------------------------|------------|------------------------------------|-----|--------------------|-----|------------------------------------|-----|-----------------------|--|
| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y |
| | C 00195 | 4 | 1 | 4 | 09 | 23S | 27E | 576069 | 3575827*  |
| <hr/> | | | | | | | | | |
| Driller License: | | Driller Company: | | | | | | | |
| Driller Name: | | FRANK GENTRY | | | | | | | |
| Drill Start Date: | | Drill Finish Date: | | 12/31/1936 | | Plug Date: | | | |
| Log File Date: | | PCW Rcv Date: | | 10/16/1950 | | Source: | | Shallow | |
| Pump Type: | | Pipe Discharge Size: | | | | Estimated Yield: | | 1500 GPM | |
| Casing Size: | | 10.00 | | Depth Well: | | 128 feet | | Depth Water: | |
| | | | | | | 83 feet | | | |

*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.


11/20/23 7:04 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

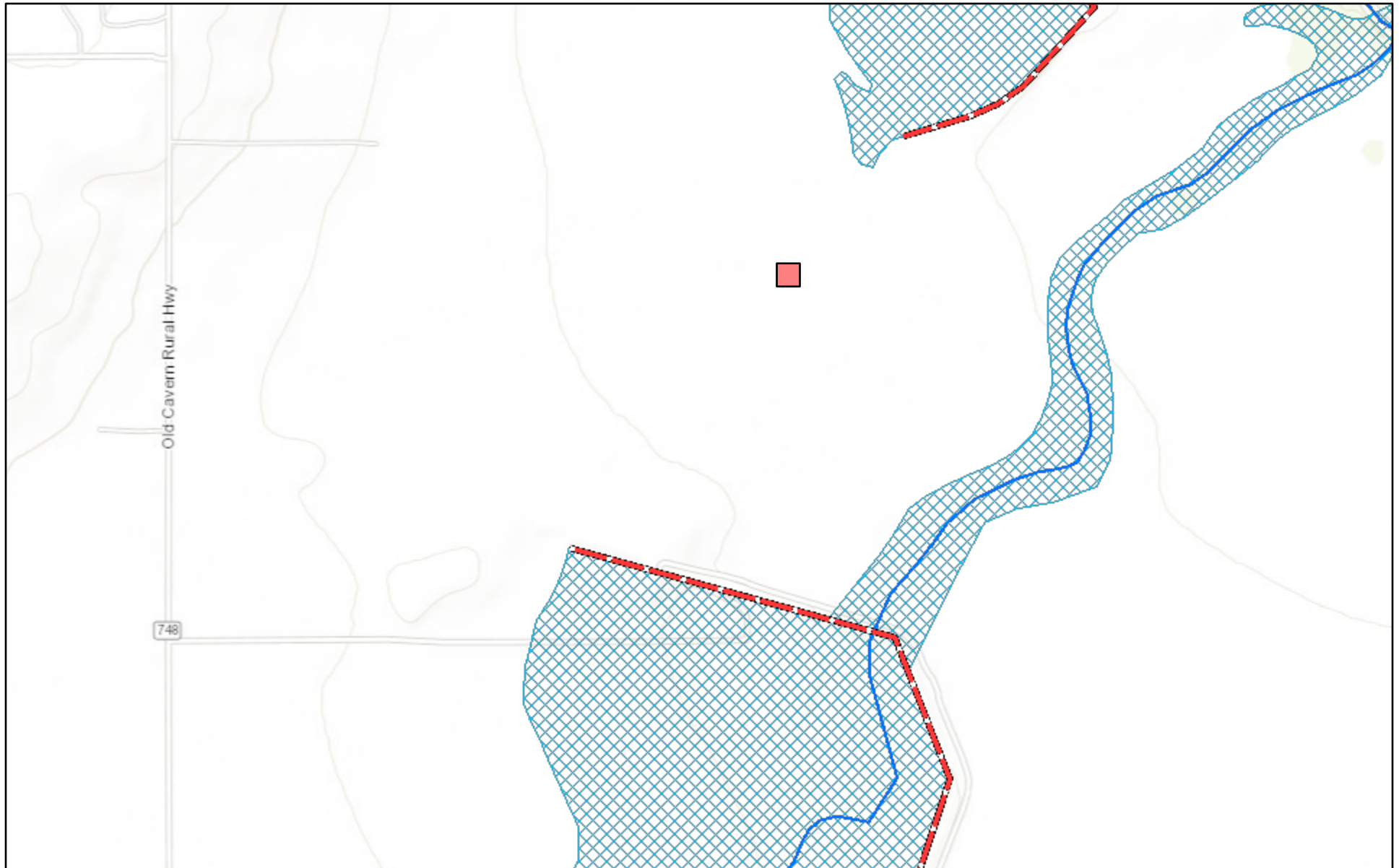
| | | | | | | | | | | | | |
|----------------------|--------------|------------------------------------|-----|--------------------|----------------------|------------------------------------|------------------------------|--------|--------------|---|------------------|--|
| | | (quarters are 1=NW 2=NE 3=SW 4=SE) | | | | (quarters are smallest to largest) | | | | (NAD83 UTM in meters) | | |
| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y | | | |
| 2242D | C 04429 POD1 | 4 | 4 | 1 | 08 | 23S | 27E | 574102 | 3576270 |  | | |
| <hr/> | | | | | | | | | | | | |
| Driller License: | | 1753 | | Driller Company: | | | VANGUARD WELL RESOURCES, LLC | | | | | |
| Driller Name: | | FRIESSEN, JACOBONTEE.NER | | | | | | | | | | |
| Drill Start Date: | | 04/27/2020 | | Drill Finish Date: | | | 05/04/2020 | | Plug Date: | | | |
| Log File Date: | | 08/24/2020 | | PCW Rcv Date: | | | | | | Source: Shallow | | |
| Pump Type: | | | | | Pipe Discharge Size: | | | | | | Estimated Yield: | |
| Casing Size: | | 5.00 | | Depth Well: | | | 400 feet | | Depth Water: | | 350 feet | |
| <hr/> | | | | | | | | | | | | |
| Casing Perforations: | | | | Top | | Bottom | | | | | | |
| | | | | 320 | | 400 | | | | | | |

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.

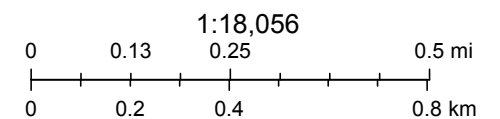
11/20/23 7:05 AM

POINT OF DIVERSION SUMMARY

New Mexico NFHL Data



November 20, 2023

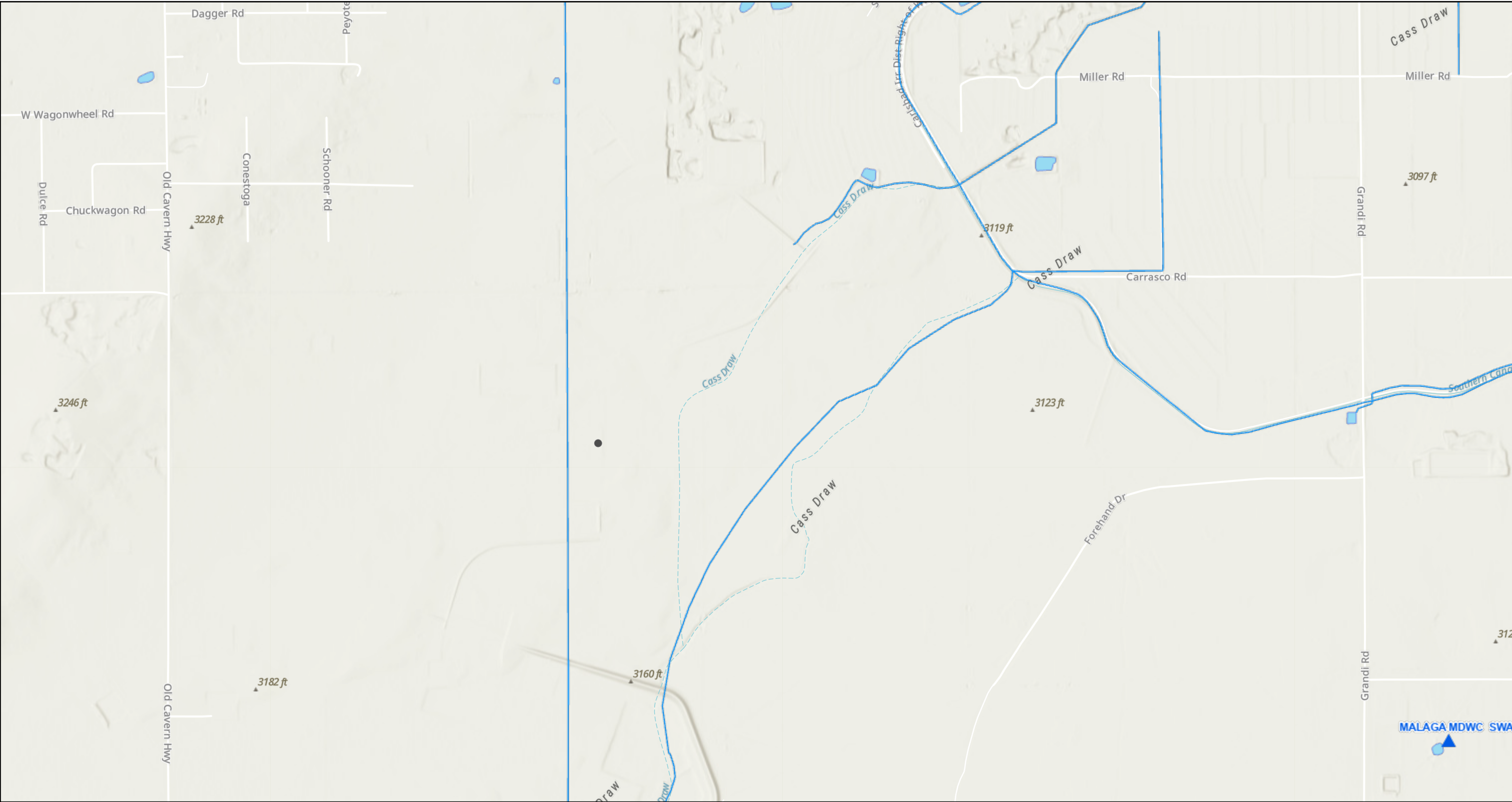


FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

nmflood.org is made possible through a collaboration with NMDHSEM,

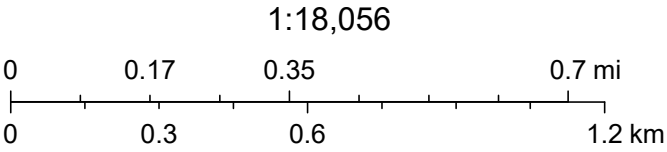
This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information.

CASS 16 STATE 234 TB (07.30.2024)



8/5/2024, 8:50:04 AM

- OSW Water Bodys
- OSE Streams
- NMED Drinking Water Systems



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

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 436982

QUESTIONS

| | |
|--|---|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 436982 |
| | Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

QUESTIONS

| | |
|----------------------|---|
| Prerequisites | |
| Incident ID (n#) | nAPP2503421375 |
| Incident Name | NAPP2503421375 CASS 16 STATE 234 TB @ 0 |
| Incident Type | Produced Water Release |
| Incident Status | Remediation Closure Report Received |
| Incident Facility | [fAPP2125249869] CASS 16 STATE 234 TB |

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

| | |
|-------------------------|----------------------|
| Site Name | CASS 16 STATE 234 TB |
| Date Release Discovered | 02/02/2025 |
| 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 | Not answered. |
| Produced Water Released (bbls) Details | Cause: Equipment Failure Pump Produced Water Released: 5 BBL Recovered: 5 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) | The recycle pump packing became loose resulting in a produced water release. All fluids were contained in lined secondary containment. |

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 436982

QUESTIONS (continued)

| | |
|--|---|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 436982 |
| | Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

QUESTIONS

| Nature and Volume of Release (continued) | |
|--|--|
| Is this a gas only submission (i.e. only significant Mcf values reported) | More info needed to determine if this will be treated as 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 | <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 | 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 | <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: Cody Swanson Steege Title: Compliance Supervisor Email: swansonste@marathonoil.com Date: 02/03/2025 |
|--|--|

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 3

Action 436982

QUESTIONS (continued)

| | |
|--|---|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 436982 |
| | Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

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 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 | Between 1000 (ft.) and ½ (mi.) |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | Between 1000 (ft.) and ½ (mi.) |
| An occupied permanent residence, school, hospital, institution, or church | Between 1000 (ft.) and ½ (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 | Between 1000 (ft.) and ½ (mi.) |
| A wetland | Between 1000 (ft.) and ½ (mi.) |
| A subsurface mine | Greater than 5 (mi.) |
| An (non-karst) unstable area | Zero feet, overlying, or within area |
| Categorize the risk of this well / site being in a karst geology | High |
| A 100-year floodplain | Between 1000 (ft.) and ½ (mi.) |
| Did the release impact areas not on an exploration, development, production, or storage site | No |

| | |
|---|------------|
| 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 | 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 | Yes |
| <i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i> | |
| On what estimated date will the remediation commence | 02/07/2025 |
| On what date will (or did) the final sampling or liner inspection occur | 02/07/2025 |
| On what date will (or was) the remediation complete(d) | 02/07/2025 |
| What is the estimated surface area (in square feet) that will be remediated | 1350 |
| What is the estimated volume (in cubic yards) that will be remediated | 0 |
| <i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i> | |
| <i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i> | |

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 436982

QUESTIONS (continued)

| | |
|--|---|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 436982 |
| | Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

QUESTIONS

| | |
|--|--|
| Remediation Plan (continued) | |
| <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> | |
| This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants: | |
| <i>(Select all answers below that apply.)</i> | |
| Is (or was) there affected material present needing to be removed | Yes |
| Is (or was) there a power wash of the lined containment area (to be) performed | Yes |
| OTHER (Non-listed remedial process) | No |
| <i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i> | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | |
| I hereby agree and sign off to the above statement | Name: Cody Swanson Steege Title: Compliance Supervisor Email: swansonste@marathonoil.com Date: 02/28/2025 |
| <i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i> | |

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 6

Action 436982

QUESTIONS (continued)

| | |
|--|---|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 436982 |
| | Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

QUESTIONS

| Liner Inspection Information | |
|---|-------------------|
| Last liner inspection notification (C-141L) recorded | 428535 |
| Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC | 02/07/2025 |
| Was all the impacted materials removed from the liner | Yes |
| What was the liner inspection surface area in square feet | 1350 |

| Remediation Closure Request | |
|--|--|
| <i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i> | |
| Requesting a remediation closure approval with this submission | Yes |
| Have the lateral and vertical extents of contamination been fully delineated | Yes |
| Was this release entirely contained within a lined containment area | Yes |
| What was the total surface area (in square feet) remediated | 1350 |
| What was the total volume (cubic yards) remediated | 0 |
| Summarize any additional remediation activities not included by answers (above) | none |
| <i>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 (in .pdf format) 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.</i> | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. 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. | |
| I hereby agree and sign off to the above statement | Name: Cody Swanson Steege Title: Compliance Supervisor Email: swansonste@marathonoil.com Date: 02/28/2025 |

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 436982

CONDITIONS

| | |
|--|---|
| Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024 | OGRID: 372098 |
| | Action Number: 436982 |
| | Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

CONDITIONS

| | | |
|------------|--|----------------|
| Created By | Condition | Condition Date |
| nvez | Liner inspection approved, release resolved. | 2/28/2025 |