

MRO Spill Calculation Tool

Standing Liquid Inputs:

|                     | Length (ft.) | Width (ft.) (Area<br>for<br>Displacement) | Avg. Liquid<br>Depth (in.) | % Oil | Total Volume<br>(bbls) | Water Volume<br>(bbls) | Oil Volume<br>(bbls) |
|---------------------|--------------|-------------------------------------------|----------------------------|-------|------------------------|------------------------|----------------------|
| Rectangle Area #1   | 48           | 15                                        | 0.5                        |       | 5.34                   | 5.34                   | 0.00                 |
| Rectangle Area #2   | 15           | 60                                        | 0.5                        |       | 6.68                   | 6.68                   | 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:      |              |                                           |                            |       | 12.02                  | 12.02                  | 0.00                 |

Saturated Soil Inputs:

|                   | Length (ft.) | Width (ft.) /<br>(SQ Ft) | Soil Type: Gravel Loam<br>Avg. Saturated<br>Depth (in.) | % Oil | Total Volume<br>(bbls) | Water Volume<br>(bbls) | Oil Volume<br>(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<br>(bbls) | Water Volume<br>(bbls) | Oil Volume<br>(bbls) |
|----------------------------|------------------------|------------------------|----------------------|
| Total Spill Volume (bbls): | 12.02                  | 12.02                  | 0.00                 |
| Total Spill Volume (gals): | 504.94                 | 504.94                 | 0.00                 |

Comments:

|            |                         |                             |                            |          |
|------------|-------------------------|-----------------------------|----------------------------|----------|
| Color Key: | Required Input<br>Cells | Supplemental<br>Input Cells | No Input<br>(Calculations) | No Input |
|------------|-------------------------|-----------------------------|----------------------------|----------|

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

**District I**  
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**District IV**  
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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 356585

QUESTIONS

|                                                                                        |                                                         |
|----------------------------------------------------------------------------------------|---------------------------------------------------------|
| Operator:<br>MARATHON OIL PERMIAN LLC<br>990 Town & Country Blvd.<br>Houston, TX 77024 | OGRID:<br>372098                                        |
|                                                                                        | Action Number:<br>356585                                |
|                                                                                        | Action Type:<br>[C-141] Initial C-141 (C-141-v-Initial) |

QUESTIONS

|                      |                                          |
|----------------------|------------------------------------------|
| <b>Prerequisites</b> |                                          |
| Incident ID (n#)     | nAPP2416452944                           |
| Incident Name        | NAPP2416452944 FIDDLE FIRE CTB @ 0       |
| Incident Type        | Produced Water Release                   |
| Incident Status      | Initial C-141 Received                   |
| Incident Facility    | [fAPP2323650079] FIDDLE FIRE FED COM CTB |

|                                                       |                 |
|-------------------------------------------------------|-----------------|
| <b>Location of Release Source</b>                     |                 |
| <i>Please answer all the questions in this group.</i> |                 |
| Site Name                                             | Fiddle Fire CTB |
| Date Release Discovered                               | 06/12/2024      |
| Surface Owner                                         | Private         |

|                                                                                                      |                        |
|------------------------------------------------------------------------------------------------------|------------------------|
| <b>Incident Details</b>                                                                              |                        |
| <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                     |

|                                                                                                                                                                                             |                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <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                                                                                                                                                           | Not answered.                                                                                           |
| Produced Water Released (bbls) Details                                                                                                                                                      | Cause: Equipment Failure   Valve   Produced Water   Released: 12 BBL   Recovered: 0 BBL   Lost: 12 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)                                        | Release occurred due to clamp failure on victaulic valve near separator                                 |

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QUESTIONS, Page 2

Action 356585

**QUESTIONS (continued)**

|                                                                                        |                                                         |
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**QUESTIONS**

| <b>Nature and Volume of Release (continued)</b>                                                                                                         |                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Is this a gas only submission (i.e. only significant Mcf values reported)                                                                               | No, according to supplied volumes this does not appear to be a "gas only" report. |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC                                                                                  | 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: Isaac Castro<br>Email: icastro@marathonoil.com<br>Date: 06/21/2024 |
|----------------------------------------------------|--------------------------------------------------------------------------|

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QUESTIONS, Page 3

Action 356585

QUESTIONS (continued)

|                                                                                        |                                                         |
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QUESTIONS

|                                                                                                                                                                                                                                                      |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Site Characterization</b>                                                                                                                                                                                                                         |               |
| <i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i> |               |
| What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)                                                                                                                           | Not answered. |
| What method was used to determine the depth to ground water                                                                                                                                                                                          | Not answered. |
| Did this release impact groundwater or surface water                                                                                                                                                                                                 | Not answered. |
| <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                                                                                                                                                                              | Not answered. |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)                                                                                                                                                                    | Not answered. |
| An occupied permanent residence, school, hospital, institution, or church                                                                                                                                                                            | Not answered. |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes                                                                                                                            | Not answered. |
| Any other fresh water well or spring                                                                                                                                                                                                                 | Not answered. |
| Incorporated municipal boundaries or a defined municipal fresh water well field                                                                                                                                                                      | Not answered. |
| A wetland                                                                                                                                                                                                                                            | Not answered. |
| A subsurface mine                                                                                                                                                                                                                                    | Not answered. |
| An (non-karst) unstable area                                                                                                                                                                                                                         | Not answered. |
| Categorize the risk of this well / site being in a karst geology                                                                                                                                                                                     | Not answered. |
| A 100-year floodplain                                                                                                                                                                                                                                | Not answered. |
| Did the release impact areas not on an exploration, development, production, or storage site                                                                                                                                                         | Not answered. |

|                                                                                                                                                                                                                                                                                                                                                                                       |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Remediation Plan</b>                                                                                                                                                                                                                                                                                                                                                               |    |
| <i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>                                                                                                                                                                                      |    |
| Requesting a remediation plan approval with this submission                                                                                                                                                                                                                                                                                                                           | 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

Action 356585

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|                                                                                        |                                                         |
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CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| scwells    | None      | 6/21/2024      |