District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
JUL 10 2017
RECEIVED

Form C-141
Revised April 3, 2017
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1719856B12

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Marathon Oil Company 372098	Contact Wendy Gram
Address 5555 San Felipe Street, Houston, Texas 77056	Telephone No. 701-690-6519 (cell) 713-296-2862 (office)
Facility Name Macho Grande State #2H	Facility Type Oil well

Surface Owner John Draper Brantley, Jr., Bettie-Anne Brantley, and Henry McDonald	Mineral Owner The State of New Mexico	API No.30-015-42659

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Lin	Feet from the	East/West Line	County
A	32	23S	29E	200	North	700	East	Eddy

Latitude 32.2680393811873, **Longitude** -104.00066437803 NAD83

NATURE OF RELEASE 30 barrel Oil

Type of Release Oil and produced water	Volume of Release 1200 barrels PW	Volume Recovered Unknown at this time
Source of Release Oil Storage tank	Date and Hour of Occurrence 6/25/2017	Date and Hour of Discovery 6/25/2017 4:00 PM MDST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Crystal Weaver	
By Whom? Wendy Gram	Date and Hour 6/26/2017 10:15 a.m. 9:15am per email	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
Not applicable.

Describe Cause of Problem and Remedial Action Taken.*
Operator discovered the level controller on the separator was stuck open, which allowed too much gas to the water knockout (blew out a gasket) and the gun barrel (broke the fiberglass 8" water leg off the tank). Approximately 1,200 bbl of produced fluids was spilled into the secondary containment. The secondary containment failed and the fluids migrated across well pad but stayed on location.

Describe Area Affected and Cleanup Action Taken.*
Produced fluids in the containment area were removed with a vacuum truck and trucked for offsite disposal. The well was shut in until the equipment could be repaired.

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

Signature: Wendy Gram	OIL CONSERVATION DIVISION
Printed Name: Wendy Gram	Approved by Environmental Specialist: Crystal Weaver
Title: Sr. HES Professional	Approval Date: 7/11/17 Expiration Date:
E-mail Address: wwgram@marathonoil.com	Conditions of Approval: see attached Attached ☒
Date: July 10, 2017 Phone: 701-690-6519 (cell) 713-296-2862 (office)	

* Attach Additional Sheets If Necessary

Please refer to the New Mexico Oil Conservation Division Website for updated form(s) at: http://www.emnrd.state.nm.us/OCD/forms.html Thank you

2RP-4291

7/14/17 AB

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **7/10/17** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4291 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 8/10/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Gram, Wendy W. (MRO) <wwgram@marathonoil.com>
Sent: Monday, July 10, 2017 1:39 PM
To: Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD
Subject: C-141 form for Marathon Oil Company 6-25-2016 spill at the Macho Grande State #2H
Attachments: [Untitled].pdf

Good afternoon. Attached please find the subject form.

-----Original Message-----
From: HP CM6040 @ 3980 [mailto:MFP@mail.moc.com]
Sent: Monday, July 10, 2017 2:00 PM
To: Gram, Wendy W. (MRO) <wwgram@marathonoil.com>
Subject: A scan from the CM6040 @ 3980

Please open the attached document. This document was digitally sent to you using an HP Digital Sending device.

Weaver, Crystal, EMNRD

From: Gram, Wendy W. (MRO) <wwgram@marathonoil.com>
Sent: Monday, June 26, 2017 12:37 PM
To: Weaver, Crystal, EMNRD
Cc: Bratcher, Mike, EMNRD; Wardell, Jason L. (MRO)
Subject: Immediate notification for spill at Marathon operated Macho Grande State #2H

Hi Crystal – got your voicemail on my office phone. This is Marathon's first time for immediate notification in Eddy County, so I appreciate the assistance on how to make these reports. I reported two incidents but am going to give you the information in two separate emails.

Here is the well information:
Macho Grande State #2H
Section 32, Township 23 S, Range 29E
Well is 200' FNL and 700' FEL
API No. 30-015-42659
Latitude 32.26803938, Longitude -104.00066437 NAD83

I've actually been to this well and know it is northeast of Malaga. According to Operations personnel, the water leg on the gun barrel tank broke sometime on Sunday, June 25th and was discovered by the operator at approximately 3:30 p.m. Mountain DST. An estimated 1,200 barrels of produced water and 30 barrels of oil were spilled within the bermed area. Operations has been recovering the fluid via a vacuum truck. Completion of the C-141 form is in progress. Notification was made to Crystal Weaver with the NMOCD by telephone at 9:15 a.m. Mountain DST on June 26 and again via this email as requested.

I apologize for not notifying this incident sooner – I waited until your office opened and tried to reach somebody by telephone to make sure I was reporting it to the correct person. Now that I know that you accept these reports via email we will endeavor to provide this notification in a more timely manner. If you have any questions, please contact me via this email address, at my office phone 713-296-2862, or at my cell phone 701-690-6519.

Jason, FYI. I will update the spill reporting guideline later this week.