

Zach Toellner  
HES Professional

**Marathon Oil Company**  
743 Horizon Court  
Suite 220  
Telephone 970.244.5723 Mobile 970.260.0772  
Fax 970.245.6287  
zjtoellner@marathonoil.com



Chris Canfield  
Colorado Oil and Gas Conservation Commission  
796 Megan Ave., Suite 201  
Rifle, CO 81650

**Re: 596-32C Pond, Facility ID 421284**  
**Marathon Oil Company, Garfield County, Colorado**

April 25, 2013

Dear Mr. Canfield:

Marathon Oil Company would like to take initial steps to report liner damage at our 596-32C pond, currently permitted under a Form 15. This report is submitted as an initial response to discovering damage to the liner at the above referenced 596-32C pond. The 596-32C pond's liner system consists of two 60-mil liners with geonet layers between and below the liners, and an outermost layer consisting of geotextile fabric laid over the prepared sub grade.

Water within the pond's leak detection system was reported to Marathon's local leadership on April 12, 2013 as a result of a monthly inspection. Marathon personnel responded to the water influx on April 12, and collected samples of the water for onsite and laboratory analysis. The water in the leak detection system was confirmed through onsite analysis to be produced water.

Marathon immediately began pumping operations from the 32C pond and from the pond's leak detection system to lower the water level in the pond and understand the recharge rate within the interstitial space between the dual-liner system.

On April 23<sup>rd</sup>, Marathon personnel located several holes in the pond's top liner, and continued pumping operations to reduce the water level below the holes observed. On the afternoon of April 24<sup>th</sup>, the water level had subsided below the holes and Marathon personnel were able to visually inspect the damage. It was noted that at least one of the nine holes identified punctured through both 60-mil liners of the liner system. Currently, Marathon is not seeing any further recharge in the pond's leak detection system, which has been pumped dry.

Over the next few weeks, Marathon intends to continue pumping from the 32C pond and monitoring the leak detection system for recharge. Once the water level allows for sufficient freeboard, we will schedule a professional liner company to perform an assessment on the integrity of the bottom liner. During the assessment a third party environmental contractor will collect soil samples from below the pond and send them for laboratory analysis.

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On April 24<sup>th</sup>, Marathon personnel worked with a contracted environmental technician to walk the surrounding area looking for seeps or springs, with the intention of sampling if any were found. None were found on the slopes below our 32C pad between Little Creek or House Log Gulch. As a precautionary measure, Marathon requested that the contract environmental technician sample Little Creek both upstream and downstream of our 32C location.

Marathon's local engineering department has begun reviews of historical water volumes in the pond, and compared those volumes to the volumes pumped and disposed of over the past few weeks. Currently, there is no indication that a significant volume of water has been released from the 32C pond.

Marathon has located nine holes in the top liner, all centralized within one area. Currently, we have only been able to verify that one hole breached the bottom liner. The largest hole is about 1" x ½" in size, and all are believed to be the result of a contractor using a tool to gain access to water through ice. The contractor is no longer working on Marathon's location.

Marathon personnel are committed to working diligently to continue to assess the liner breach, and will continue to inform the COGCC of our findings as the situation progresses. Please feel free to contact me directly with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Zach Toellner'.

Zach Toellner  
HES Professional

**Attachments:**

Form 19 Spill Report  
Form 27 Site Investigation / Remediation Plan  
Form 2a Drill Site / Access Road Reclamation Form



FORM

19

Rev 6/99

# State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



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 4/25/2013

## SPILL/RELEASE REPORT

This form is to be submitted by the party responsible for the oil and gas spill or release. Any spill or release which may impact waters of the State must be reported as soon as practicable; any spill over 20 bbls must be reported within 24 hours and all spills over five bbls must be reported within ten days. Submit a Site Investigation and Remediation Workplan (Form 27) when requested by the Director.

Spill report taken by:

FACILITY ID:

## OPERATOR INFORMATION

Name of Operator: <u>Marathon Oil</u>	OGCC Operator No: <u>53650</u>	Phone Numbers
Address: <u>743 Horizon Court, Suite 220</u>		No: <u>970-244-5723</u>
City: <u>Grand Junction</u>	State: <u>CO</u> Zip: <u>81506</u>	Fax: <u>970-245-6287</u>
Contact Person: <u>Zach Toellner</u>		E-Mail: <u>zjtoellner@marathonoil.com</u>

## DESCRIPTION OF SPILL OR RELEASE

Date of Incident: <u>4/4/13</u>	Facility Name & No.: <u>596-32C Pond, Facility No. 421284</u>	County: <u>Garfield</u>
Type of Facility (well, tank battery, flow line, pit): <u>Special purpose pit - produced water storage pond</u>		QtrQtr: <u>SESW</u> Section: <u>32</u>
Well Name and Number: <u>N/A</u>		Township: <u>5S</u> Range: <u>96W</u>
API Number: <u>N/A</u>		Meridian: <u>6th</u>

Specify volume spilled and recovered (in bbls) for the following materials:

Oil spilled: 0 Oil recov'd: N/A Water spilled: See cover letter Water recov'd: N/A Other spilled: N/A Other recov'd: N/AGround Water impacted? ☐ Yes ☒ NoSurface Water impacted? ☐ Yes ☐ NoContained within berm? ☒ Yes ☐ NoArea and vertical extent of spill: See cover letter xCurrent land use: See attached form 2A

Weather conditions: \_\_\_\_\_

Soil/geology description: See attached form 2AIF LESS THAN A MILE, report distance IN FEET to nearest.... Surface water: ~ 1320 ft wetlands: N/A buildings: N/ALivestock: None, seasonal water wells: ~ 6100 ft Depth to shallowest ground water: ~ 319 ftCause of spill (e.g., equipment failure, human error, etc.): Human error Detailed description of the spill/release incident:

Liner damage was likely caused by a contractor's use of tools to break ice in order to draw water from the pond into a frac tank for use in a water disposal system. Visual inspection by Marathon personnel has revealed 9 small holes in the top liner, and one has been verified to breach the lower liner. It is not apparent that produced water has breached the lower liner. Soil samples will be collected during an assessment of the lower liner and sent to a lab for analysis to determine if the soil has been impacted. results will be shared with the COGCC.

## CORRECTIVE ACTION

Describe immediate response (how stopped, contained and recovered):

Marathon personnel immediately began pumping water from both the pond and the leak detection system, and have been drawn down until damage was visible above the water line. Currently, all holes appear to be above the water line, and no recharge of the leak detection system or interstitial space between the liners has been observed.

Describe any emergency pits constructed:

N/A

How was the extent of contamination determined:

On 4/24, Marathon personnel and a contract environmental technician walked the area surrounding 32C looking for seeps or springs, with the intent of sampling any that were found. No active seeps or springs were noted. As a precautionary measure, Marathon personnel requested that the contractor sample Little Creek upstream and downstream of the 32C pad and submit the samples to a laboratory for analysis. In the coming weeks, Marathon will schedule a liner company to perform an assessment of the bottom liner, and an environmental contractor will collect soil samples for laboratory analysis at that time.

Further remediation activities proposed (attach separate sheet if needed):

Marathon will work with the COGCC to mitigate any impacts to the soil if laboratory analysis results indicate contamination. The area will be exposed and contaminated soil will be removed and mitigated as appropriate.

Describe measures taken to prevent problem from reoccurring:

Contractor is no longer working on Marathon's location and attempts to reach them have been unsuccessful.

## OTHER NOTIFICATIONS

List the parties and agencies notified (County, BLM, EPA, DOT, Local Emergency Planning Coordinator or other).

Date	Agency	Contact	Phone	Response
4/15/2013	COGCC	Chris Canfield	970-625-2497	Awaiting return phone call.

Spill/Release Tracking No: **2232808**

**State of Colorado**  
**Oil and Gas Conservation Commission**

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**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): Impoundment Liner Damage

OGCC Employee:

☒ Spill ☐ Complaint

☐ Inspection ☐ NOAV

Tracking No: 2232808

OGCC Operator Number: 53650	Contact Name and Telephone:
Name of Operator: <u>Marathon Oil</u>	<u>Zach Toellner</u>
Address: <u>743 Horizon Court, Suite 220</u>	No: <u>970-244-5723</u>
City: <u>Grand Junction</u> State: <u>CO</u> Zip: <u>81506</u>	Fax: <u>970-245-6287</u>
API Number: <u>NA</u>	County: <u>Garfield</u>
Facility Name: <u>596-32C Pond</u>	Facility Number: <u>421284</u>
Well Name: <u>NA</u>	Well Number: <u>NA</u>
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>SESW Sec 32, T5S, R96W, 6th P.M.</u> Latitude: <u>39.56780</u> Longitude: <u>108.19393</u>	

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced water, see cover letter.

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): See attached Form 2a

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: See attached Form 2a

Potential receptors (water wells within 1/4 mi, surface waters, etc.): See attached Form 2a

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

- ☐ Soils  
☐ Vegetation  
☐ Groundwater  
☐ Surface Water

Extent of Impact:

See cover letter

How Determined:

Soil samples will be collected in the near future concurrent with an assessment of the bottom liner

**REMEDIALATION WORKPLAN**

Describe initial action taken (if previously provided, refer to that form or document):

Marathon personnel immediately began pumping water from both the pond and the leak detection system, and both have been drawn down until damage was visible above the water line. Currently, all holes appear to be above the water line, and no recharge of the leak detection system or interstitial space between the liners has been observed. (See Form 19)

Describe how source is to be removed:

If lab results from the soil samples to be collected indicate that the soil has been impacted by produced fluid from the 596-32C Pond, Marathon will work with COGCC to determine how to assess and address the impact. Sections of liner may be pulled back or removed, and impacted soil will be removed for remediation. Inert material will be added to reduce total concentrations of Table 910-1 constituents to levels consistent with background and acceptable to COGCC.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

See above. Marathon will work with COGCC to assess and remediate impacts if sample results indicate that produced fluid was released from the 596-32C Pond.





REMEDATION WORKPLAN (Cont.)

Location ID # 335982

Tracking Number: \_\_\_\_\_  
Name of Operator: MARATHON  
OGCC Operator No: \_\_\_\_\_  
Received Date: \_\_\_\_\_  
Well Name & No: \_\_\_\_\_  
Facility Name & No: 596-32C pond / 421284 <sup>Pit Facility ID #</sup>

OGCC Employee: \_\_\_\_\_

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

While awaiting an opportunity to collect soil samples concurrent with an assessment of the lower liner to determine if produced fluid breached the lower liner and impacted the soil below, Marathon dispatched a contract environmental technician and Marathon personnel to walk the areas from the crest to Little Creek and the crest to House Log Gulch in the area of Marathon's 596-32C well pad looking for seeps or springs. No seeps or springs were noted so no samples were collected. In addition, Marathon requested that the environmental technician collect samples from Little Creek both upstream and downstream of the 32C pad and send them to a laboratory for analysis.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

N/A

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☒ Y ☐ N If yes, describe:

See cover letter. Marathon is awaiting the collection of soil samples to determine if a release occurred and impacted the soil below the liner.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Any impacted soil will be removed and mitigated as appropriate. An inert material will be added to reduce total concentrations of Table 910-1 constituents to levels consistent with background and acceptable to COGCC. The material will be sampled prior to final disposition to ensure compliance with the previously mentioned standards. Once remediation activities are complete the material will be re-used onsite.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 4/12/2013 Date Site Investigation Completed: ongoing Date Remediation Plan Submitted: \_\_\_\_\_  
Remediation Start Date: See cover letter Anticipated Completion Date: \_\_\_\_\_ Actual Completion Date: \_\_\_\_\_

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Zach Toellner

Signed: Zach Toellner

Title: HES Professional

Date: 4/25/2013

OGCC Approved: Cathy Kujawa

Title: EPS II NW Region

Date: 04/25/2013



State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax (303) 894 2109



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COGCC

**DRILL SITE/ACCESS ROAD RECLAMATION FORM**

This form shall be submitted in duplicate with the application for permit-to-drill (OGCC Form 2) unless a Federal 13-point surface plan is included. Also required are a minimum of two photographs (site and access road). Soil and plant community information is from United States Natural Resources Conservation Services (USNRCS).

1. OGCC Operator Number <u>525380</u>		4. Contact Name and Telephone <u>ANNA WALLS</u>		Complete the Attachment Checklist	
2. Name of Operator <u>MARATHON OIL COMPANY</u>		No. (713) <u>296-3468</u>			
3. Address <u>PO BOX 3128</u>		Fax (713) <u>513-4394</u>		Drill site and access photographs	<input checked="" type="checkbox"/>
City <u>HOUSTON</u>	State <u>TX</u>	Zip <u>77253</u>		COE Section 404 documentation	
5. Well Name and No. <u>596-32C-12</u>			6. County <u>GARFIELD</u>		
7. Location (QtrQtr, Sec, Twp, Rng, Meridian) <u>SESW - 32 - 05S 96W</u>					

**Pre-Drilling Information**

**Current Land Use**

8. Crop Land:	<input type="checkbox"/> Irrigated	<input type="checkbox"/> Dry Land	<input type="checkbox"/> Improved Pasture	<input type="checkbox"/> Hay Meadow	<input type="checkbox"/> CRP
9. Non-Crop Land:	<input checked="" type="checkbox"/> Rangeland	<input type="checkbox"/> Timber	<input type="checkbox"/> Recreational	<input type="checkbox"/> Other (describe) _____	
10. Subdivided:	<input type="checkbox"/> Industrial	<input type="checkbox"/> Commercial	<input type="checkbox"/> Residential		

Attach color photographs of drill site and access road; identify each photo by date, well name and location

**Soils**

11. Soil map units from USNRCS survey: Sheet No. _____		Soil Complex/Series No. <u>56</u>	
Soils Series Name <u>PARACHUTE-Irigul-Rubens association, 25-50% slopes</u>	Horizon thickness (in inches) A. <u>10-39</u>	B. <u>39-55</u>	C. <u>55-59</u>
Soils Series Name _____	Horizon thickness (in inches) A. _____	B. _____	C. _____

**Plant Community**

Complete this section only if operations are to be conducted upon non-crop land

12. Plant species from ☐ USNRCS or ☒ Field Observation Date of observation \_\_\_\_\_

List individual species \_\_\_\_\_

13. Check one predominant plant community for the drill site

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye, Thistle)  
☐ Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)  
☒ Shrub and Brush Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)  
☐ Plains Deciduous Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamansk)  
☐ Mountain Conifer Riparian (Spruce, Fir, Ponderosa Pine)  
☐ Evergreen Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon)  
☐ Aquatic (Bullrush, Sedges, Cattail, Arrowhead)  
☐ Tundra (Alpine, Willow, Currant, Raspberry)  
☐ Other (describe) \_\_\_\_\_

14. Was an Army Corps of Engineers Section 404 Permit filed? ☐ Yes ☒ No If yes, attach appropriate documentation

Comments

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road, that I am familiar with the conditions which presently exist, that the statements made in this form are, to the best of my knowledge, true, correct, and complete

Print Name ANNA WALLS

Signed Anna Walls Title ENG TECH Date 01/31/08