

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

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Document Number:

401125268

Date Received:

10/17/2016

Spill report taken by:

ALLISON, RICK

Spill/Release Point ID:

447806

## SPILL/RELEASE REPORT (SUPPLEMENTAL)

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.

### OPERATOR INFORMATION

Name of Operator: <u>PDC ENERGY INC</u>	Operator No: <u>69175</u>	<b>Phone Numbers</b>
Address: <u>1775 SHERMAN STREET - STE 3000</u>		Phone: <u>(970) 506-9273</u>
City: <u>DENVER</u>	State: <u>CO</u>	Mobile: <u>(970) 373-9267</u>
Zip: <u>80203</u>		Email: <u>Jason.Thron@pdce.co</u>
Contact Person: <u>Jason Tron</u>		<u>m</u>

### INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 401112061

Initial Report Date: 09/19/2016      Date of Discovery: 09/16/2016      Spill Type: Recent Spill

#### Spill/Release Point Location:

Location of Spill/Release: QTRQTR SESE SEC 20 TWP 6N RNG 63W MERIDIAN 6Latitude: 40.470180 Longitude: -104.451300Municipality (if within municipal boundaries): \_\_\_\_\_ County: WELD

#### Reference Location:

Facility Type: TANK BATTERY ☐ Facility/Location ID No \_\_\_\_\_☒ No Existing Facility or Location ID No.☐ Well API No. (Only if the reference facility is well) 05- -

#### **Fluid(s) Spilled/Released (please answer Yes/No):**

Was one (1) barrel or more spilled outside of berms or secondary containment? No

*Secondary containment, including walls & floor regardless of construction material, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.*

Were Five (5) barrels or more spilled? Yes

Estimated Total Spill Volume: use same ranges as others for values

Estimated Oil Spill Volume(bbl): 0Estimated Condensate Spill Volume(bbl): 0Estimated Flow Back Fluid Spill Volume(bbl): 0Estimated Produced Water Spill Volume(bbl): >=5 and <100Estimated Other E&P Waste Spill Volume(bbl): 0Estimated Drilling Fluid Spill Volume(bbl): 0

Specify: \_\_\_\_\_

#### **Land Use:**

Current Land Use: CROP LAND

Other(Specify): \_\_\_\_\_

Weather Condition: Clear and sunnySurface Owner: OTHER (SPECIFY)Other(Specify): Steve Wells/Cook Farm

#### **Check if impacted or threatened by spill/Release (please answer Yes/No to all that apply):**

Waters of the State ☐ Residence/Occupied Structure ☐ Livestock ☐ Public Byway ☐ Surface Water Supply Area ☐

As defined in COGCC 100-Series Rules

Describe what is known about the spill/release event (what happened -- including how it was stopped, contained, and recovered):

A fiberglass produced water vault was raised by a heavy localized rain event which led to a crack in the fiberglass tank and a produced water release inside secondary containment. The valve to the fiberglass vault was closed immediately upon discovery and cleanup efforts were initiated.

List Agencies and Other Parties Notified:

### OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
9/16/2016	COGCC	Rick Allison	-	email response

### SPILL/RELEASE DETAIL REPORTS

#1	Supplemental Report Date: 10/11/2016		
<b>FLUIDS</b>	<b>BBL's SPILLED</b>	<b>BBL's RECOVERED</b>	<b>Unknown</b>
OIL	0	0	<input type="checkbox"/>
CONDENSATE	0	0	<input type="checkbox"/>
PRODUCED WATER	45	0	<input type="checkbox"/>
DRILLING FLUID	0	0	<input type="checkbox"/>
FLOW BACK FLUID	0	0	<input type="checkbox"/>
OTHER E&P WASTE	0	0	<input type="checkbox"/>
specify: _____			
Was spill/release completely contained within berms or secondary containment? <u>YES</u> Was an Emergency Pit constructed? <u>NO</u>			
<i>Secondary containment, including walls &amp; floor regardless of construction material, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.</i>			
<b>A Form 15 Pit Report shall be submitted within 30 calendar days after the construction of an emergency pit</b>			
Impacted Media (Check all that apply) <input type="checkbox"/> Soil <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Dry Drainage Feature			
Surface Area Impacted: Length of Impact (feet): _____		Width of Impact (feet): _____	
Depth of Impact (feet BGS): _____		Depth of Impact (inches BGS): _____	
How was extent determined?			
<p>On September 16, 2016, approximately 45 barrels of produced water were released within secondary containment as a result of a floated produced water tank. Upon discovery, the valve was closed and spill response measures were completed. On September 28, 2016, a site investigation was conducted to determine the extent of hydrocarbon impacts related to the release. During the site investigation, five boreholes (SB01 - SB05) were advanced to approximately 10 feet below ground surface (bgs) using a hand auger. Grab soil samples were collected from the soil borings in 1-foot intervals and field screened for volatile organic compound (VOC) concentrations using a photoionization detector (PID). Soil samples were collected from each soil boring at approximately 3.5 feet bgs and submitted to Summit Scientific Laboratories in Golden, Colorado for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, and total petroleum hydrocarbons (TPH) - gasoline range organics (GRO) by Environmental Protection Agency (EPA) Method 8260B, and TPH - diesel range organics (DRO) by EPA Method 8015. Analytical results indicated constituent concentrations were below COGCC Table 910-1 standards in all five soil samples collected during the site investigation. Groundwater was encountered in the soil borings at approximately 7-9 feet bgs. Temporary monitoring wells were installed and subsequently developed and sampled. Groundwater samples were submitted for laboratory analysis of BTEX. Analytical results indicated BTEX concentrations were below COGCC Table 910-1 groundwater standards in all five temporary well locations. Soil boring locations are illustrated on Figure 2. Soil analytical results are summarized in Table 1 and groundwater analytical results are summarized in Table 2. The laboratory report is included as Attachment A. Based on the analytical data described herein, PDC is requesting a No Further Action (NFA) determination for this release.</p>			
Soil/Geology Description:			
Otero sandy loam, 0 - 1 percent slopes.			
Depth to Groundwater (feet BGS) <u>7</u>		Number Water Wells within 1/2 mile radius: <u>4</u>	
If less than 1 mile, distance in feet to nearest Water Well <u>1235</u> None <input type="checkbox"/>		Surface Water <u>250</u> None <input type="checkbox"/>	

Wetlands \_\_\_\_\_ None ☒ Springs \_\_\_\_\_ None ☒  
Livestock \_\_\_\_\_ None ☒ Occupied Building 1280 None ☐

Additional Spill Details Not Provided Above:

## CORRECTIVE ACTIONS

#1 Supplemental Report Date: 10/11/2016

Cause of Spill (Check all that apply) ☐ Human Error ☒ Equipment Failure ☐ Historical-Unknown  
☐ Other (specify) \_\_\_\_\_

Describe Incident & Root Cause (include specific equipment and point of failure)

The empty produced water tank floated due to a localized heavy rain event, resulting in a produced water release within secondary containment.

Describe measures taken to prevent the problem(s) from reoccurring:

PDC has shut-in and locked out water production lines from leaking vault until scheduled equipment replacement. When the new vault is installed, the load line will be kept 12" off the vault bottom, leaving approximately 12" of water in the vault after haulers have emptied the vessel. This remaining water will add weight to the vault and keep it from floating during rain events, eliminating future produced water releases due to floating water vessels.

Volume of Soil Excavated (cubic yards): 0

Disposition of Excavated Soil (attach documentation) ☐ Offsite Disposal ☐ Onsite Treatment  
☐ Other (specify) \_\_\_\_\_

Volume of Impacted Ground Water Removed (bbls): 0

Volume of Impacted Surface Water Removed (bbls): 0

## REQUEST FOR CLOSURE

**Spill/Release Reports should be closed when impacts have been remediated or when further investigation and corrective actions will take place under an approved Form 27.**

Basis for Closure: ☒ Corrective Actions Completed (documentation attached)

☐ Work proceeding under an approved Form 27

Form 27 Remediation Project No: \_\_\_\_\_

## OPERATOR COMMENTS:

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

Signed: \_\_\_\_\_ Print Name: Jason Thron

Title: EHS Supervisor Date: 10/17/2016 Email: Jason.Thron@pdce.com

## COA Type

## Description

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401125268	FORM 19 SUBMITTED
401125348	SITE MAP
401127410	ANALYTICAL RESULTS
401127419	TOPOGRAPHIC MAP

Total Attach: 4 Files

### **General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	Operator revised the corrective action. The attached laboratory analytical data supports the closure request.	10/19/2016 8:38:22 AM
Environmental	Final review pending receipt of detailed root cause/corrective action.	10/14/2016 9:37:51 AM

Total: 2 comment(s)