

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

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



Document Number:

400986692

Date Received:

02/11/2016

Spill report taken by:

ALLISON, RICK

Spill/Release Point ID:

444716

## 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) 373-6581</u>
Zip: <u>80203</u>		Email: <u>zack.liesenfeld@pdce.com</u>
Contact Person: <u>Zack Liesenfeld</u>		

### INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 400986160

Initial Report Date: 02/09/2016      Date of Discovery: 02/07/2016      Spill Type: Recent Spill

#### Spill/Release Point Location:

Location of Spill/Release: QTRQTR NWSW SEC 29 TWP 5N RNG 63W MERIDIAN 6Latitude: 40.368560 Longitude: -104.467240Municipality (if within municipal boundaries): \_\_\_\_\_ County: WELD

#### Reference Location:

Facility Type: WELL☐ Facility/Location ID No \_\_\_\_\_☐ No Existing Facility or Location ID No.☒ Well API No. (Only if the reference facility is well) 05-123-25135

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

Was one (1) barrel or more spilled outside of berms or secondary containment? Yes

*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? No

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): 0Estimated Other E&P Waste Spill Volume(bbl): >=1 and <5Estimated Drilling Fluid Spill Volume(bbl): 0Specify: Clean Water

#### Land Use:

Current Land Use: CROP LAND

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

Weather Condition: Sunny and CoolSurface Owner: FEEOther(Specify): NA

#### 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):

On Sunday February 7th 2016 PDC Energy discovered water escaping from a failed valve on the Rothe 13-29U wellhead. The Rothe 13-29U well had been shut in for wellbore integrity. A casing valve on the wellhead experienced a failure, presumably due to a freeze. The release was controlled at the wellhead and fluids contained. More than 1 bbl but less than 5 bbls of water released outside secondary containment. Current remediation efforts and sampling are mitigating impacts.

List Agencies and Other Parties Notified:

### SPILL/RELEASE DETAIL REPORTS

#1	Supplemental Report Date:	02/10/2016	
FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	0	0	<input type="checkbox"/>
CONDENSATE	0	0	<input type="checkbox"/>
PRODUCED WATER	0	0	<input type="checkbox"/>
DRILLING FLUID	0	0	<input type="checkbox"/>
FLOW BACK FLUID	0	0	<input type="checkbox"/>
OTHER E&P WASTE	3	3	<input type="checkbox"/>

specify: Water

Was spill/release completely contained within berms or secondary containment? NO Was an Emergency Pit constructed? NO

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

**A Form 15 Pit Report shall be submitted within 30 calendar days after the construction of an emergency pit**

Impacted Media (Check all that apply) ☒ Soil ☐ Groundwater ☐ Surface Water ☐ Dry Drainage Feature

Surface Area Impacted: Length of Impact (feet): 65 Width of Impact (feet): 80

Depth of Impact (feet BGS): \_\_\_\_\_ Depth of Impact (inches BGS): \_\_\_\_\_

How was extent determined?

On February 7, 2016, a water release occurred due to a failed casing valve at the Rothe 13-29U wellhead. The released volume was recovered using a vacuum truck. Approximately 10 cubic yards of soil were removed and transported to the Waste Management Facility in Ault, Colorado for disposal under PDC waste manifests. On February 8, 2016, five soil samples (SS01 – SS05) were collected from the excavation area at approximately 3 inches below ground surface (bgs). Soil samples were field screened for volatile organic compound concentrations (VOC) using a photoionization detector (PID). Samples were submitted to Summit Scientific Laboratories in Golden, Colorado for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, total petroleum hydrocarbons (TPH) – gasoline range organics (GRO) by USEPA Method 8260, TPH – diesel range organics (DRO) by USEPA Method 8015, pH and electrical conductivity (EC). Analytical results indicated organic compound concentrations and physical parameters were in compliance with COGCC Table 910-1 standards in all five soil sample locations. The excavation extent and soil sample locations are illustrated on Figure 2. Soil analytical data is summarized in Table 1 and the laboratory report is included as Attachment A. Based on the soil analytical data described herein, hydrocarbon impacts in exceedance of regulatory standards were successfully removed from site. Consequently, PDC is requesting a No Further Action (NFA) determination for this release.

Soil/Geology Description:

Dacono clay loam, 0 to 1 percent slopes

Depth to Groundwater (feet BGS) 80 Number Water Wells within 1/2 mile radius: 13

If less than 1 mile, distance in feet to nearest

Water Well	<u>42</u>	None <input type="checkbox"/>	Surface Water	<u>660</u>	None <input type="checkbox"/>
Wetlands	_____	None <input checked="" type="checkbox"/>	Springs	_____	None <input checked="" type="checkbox"/>
Livestock	<u>1200</u>	None <input type="checkbox"/>	Occupied Building	<u>1580</u>	None <input type="checkbox"/>

Additional Spill Details Not Provided Above:

## CORRECTIVE ACTIONS

#1	Supplemental Report Date: 02/10/2016
Cause of Spill (Check all that apply) <input type="checkbox"/> Human Error <input checked="" type="checkbox"/> Equipment Failure <input type="checkbox"/> Historical-Unknown	
<input type="checkbox"/> Other (specify) _____	
Describe Incident & Root Cause (include specific equipment and point of failure)	
<div>A casing valve on the wellhead failed.</div>	
Describe measures taken to prevent the problem(s) from reoccurring:	
<div>Routine wellhead inspections will be completed.</div>	
Volume of Soil Excavated (cubic yards): 10	
Disposition of Excavated Soil (attach documentation) <input checked="" type="checkbox"/> Offsite Disposal <input type="checkbox"/> Onsite Treatment	
<input type="checkbox"/> 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: Zack Liesenfeld

Title: EHS Professional Date: 02/11/2016 Email: zack.liesenfeld@pdce.com

## COA Type

## Description

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## Attachment Check List

Att Doc Num	Name
2615196	CORRESPONDENCE
400986692	FORM 19 SUBMITTED
400986706	TOPOGRAPHIC MAP
400986707	SITE MAP
400986708	ANALYTICAL RESULTS

Total Attach: 5 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	Operator provided further detail regarding the root cause of the valve failure - refer to attached Correspondence Document #2615196.	2/17/2016 9:19:25 AM
Environmental	The Operator has identified a water well to be 43 feet from the release. This water well appears to be Division of Water Resources permit #15931. According to the DWR records this water well is located on the edge of the section line, approximately 800 feet from the release.	2/17/2016 9:19:02 AM

Total: 2 comment(s)