

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:

401847747

Date Received:

11/23/2018

SPILL/RELEASE REPORT (SUPPLEMENTAL)

This form is to be submitted by the party responsible for the oil and gas spill or release. Refer to COGCC Rule 906.b. for reporting requirements of spills or releases of E&P Waste or produced fluids. Submit a Site Investigation and Remediation Workplan (Form 27) when requested by the Director.

Spill report taken by:

Graber, Candice  
(Nikki)

Spill/Release Point ID:

458525

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) 506-9272</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80203</u>		Mobile: <u>(970) 373-6581</u>
Contact Person: <u>Zack Liesenfeld</u>		Email: <u>Zack.Liesenfeld@pdce.com</u>

INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 401815465

Initial Report Date: 10/30/2018 Date of Discovery: 10/29/2018 Spill Type: Recent Spill

Spill/Release Point Location:

Location of Spill/Release: QTRQTR SWNE SEC 6 TWP 3N RNG 65W MERIDIAN 6

Latitude: 40.254510 Longitude: -104.705590

Municipality (if within municipal boundaries): \_\_\_\_\_ County: WELD

Reference Location:

Facility Type: OTHER  Facility/Location ID No 444255  
 Spill/Release Point Name: Ludwig  No Existing Facility or Location ID No.  
 Number: #3  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? 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): <u>0</u>	Estimated Condensate Spill Volume(bbl): <u>0</u>
Estimated Flow Back Fluid Spill Volume(bbl): <u>0</u>	Estimated Produced Water Spill Volume(bbl): <u>0</u>
Estimated Other E&P Waste Spill Volume(bbl): <u>&gt;=1 and &lt;5</u>	Estimated Drilling Fluid Spill Volume(bbl): <u>0</u>

Specify: Water Based Drill Cuttings

Land Use:

Current Land Use: NON-CROP LAND Other(Specify): \_\_\_\_\_  
 Weather Condition: Sunny and Cool  
 Surface Owner: FEE Other(Specify): \_\_\_\_\_

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):

PDC discovered a reportable quantity of water based drill cuttings outside secondary containment at the Ludwig #3 spread field due to offsite tracking. Equipment is on sight conducting recovery efforts.

List Agencies and Other Parties Notified:

### OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
10/30/2018	COGCC	Candice Graber	-	Via Email
10/30/2018	Weld County	Roy Rudisill	-	Via Email
10/30/2018	Land Owners	NA	-	Via Phone Call

Was there a Grade 1 Gas Leak associated with this E & P waste spill or release? Yes  No

If YES, enter the Document Number of the Initial Grade 1 Gas Leak Report Form 44: \_\_\_\_\_

Was there a reportable accident associated with this E & P waste spill or release? Yes  No

If YES, enter the Document Number of the Initial Accident Report, Form 22: \_\_\_\_\_

### SPILL/RELEASE DETAIL REPORTS

#1 Supplemental Report Date: 11/21/2018

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			<input checked="" type="checkbox"/>

specify: \_\_\_\_\_

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): 3170 Width of Impact (feet): 15

Depth of Impact (feet BGS): \_\_\_\_\_ Depth of Impact (inches BGS): 3

How was extent determined?

On October 29, 2018, a reportable quantity of water-based drill cuttings was discovered outside the Ludwig #3 spreadfield due to off-site tracking. Following the discovery, the lease road was scraped, and impacted material was removed and transported back to the spreadfield to be re-claimed. The road was subsequently re-graded to match pre-existing conditions. Analytical results for the confirmation soil samples collected on November 6, 2018, indicated that pH was in exceedance of regulatory standards in six (6) sample locations (SS05 through SS08, SS12, and SS13). Following the receipt of analytical results, additional road scraping was conducted in the areas that exhibited pH levels in exceedance of regulatory standards. On November 21, 2018, confirmation soil samples (SS05-R - SS08-R, SS12-R, and SS13-R) were collected from former sample locations which exhibited elevated pH levels at approximately 3 inches below ground surface (bgs). Each composite soil sample was composited using four discrete soil samples collected every 80 feet. In addition, one (1) background soil sample (BG03) was collected from the lease road outside the release area. The soil samples were submitted to Summit Scientific Laboratory in Golden, Colorado for analysis of pH, electrical conductivity (EC), and sodium adsorption ratio (SAR). Analytical results indicated that geochemical parameters were in compliance with the applicable COGCC Table 910-1 standards in all sample locations. Based on the analytical results described herein, PDC is requesting a No Further Action (NFA) determination for this release. Soil analytical results are summarized in Table 1 and the sample locations are illustrated on Figure 2. The laboratory reports are included in Attachment A.

Soil/Geology Description:

Valent sand to valent loamy sand, 0 to 9 percent slopes.

Depth to Groundwater (feet BGS) 202

Number Water Wells within 1/2 mile radius: 2

If less than 1 mile, distance in feet to nearest

Water Well 352 None

Surface Water 362 None

Wetlands \_\_\_\_\_ None

Springs \_\_\_\_\_ None

Livestock 384 None

Occupied Building 275 None

Additional Spill Details Not Provided Above:

### CORRECTIVE ACTIONS

#1 Supplemental Report Date: 11/21/2018

Cause of Spill (Check all that apply)  Human Error  Equipment Failure  Historical-Unknown  
 Other (specify) BMP

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

During routine spreadfield activities, water-based drill cuttings were tracked off location.

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

The spreadfield is closed, all impacted material tracked off-site was scraped and transported to the spreadfield for re-incorporation.

Volume of Soil Excavated (cubic yards): 150

Disposition of Excavated Soil (attach documentation)  Offsite Disposal  Onsite Treatment

Other (specify) \_\_\_\_\_

Volume of Impacted Ground Water Removed (bbls): \_\_\_\_\_

Volume of Impacted Surface Water Removed (bbls): \_\_\_\_\_

### 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:**

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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: 11/23/2018 Email: Zack.Liesenfeld@pdce.com

**COA Type**                      **Description**

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**Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
401847762	SITE MAP
401847763	TOPOGRAPHIC MAP
401848455	ANALYTICAL RESULTS

Total Attach: 3 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
		Stamp Upon Approval

Total: 0 comment(s)