

State of Colorado  
Oil and Gas Conservation Commission

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Document Number:

401831675

Date Received:

11/09/2018

Spill report taken by:

Graber, Candice  
(Nikki)

Spill/Release Point ID:

458525

## 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.

### 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>		
City: <u>DENVER</u>	State: <u>CO</u> Zip: <u>80203</u>	
Contact Person: <u>Zack Liesenfeld</u>		
		Phone: <u>(970) 506-9272</u>
		Mobile: <u>(970) 373-6581</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): 0

Estimated Condensate Spill Volume(bbl): 0

Estimated Flow Back Fluid Spill Volume(bbl): 0

Estimated Produced Water Spill Volume(bbl): 0

Estimated Other E&P Waste Spill Volume(bbl): >=1 and <5

Estimated Drilling Fluid Spill Volume(bbl): 0

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: 11/08/2018		
<b>FLUIDS</b>	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): \_\_\_\_\_

How was extent determined?

On October 29, 2018, a reportable quantity of water-based drill cuttings were was discovered outside the 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. The road was subsequently re-graded to match pre-existing conditions. On November 6, 2018, thirteen (13) soil samples (SS01 - SS13) were collected from the affected area. Each composite soil sample was composited using four discrete soil samples collected every 80 feet at approximately 3 inches below ground surface (bgs). In addition, two (2) background soil samples (BG01 and BG02) were collected from native soil outside the spreadfield at approximately 3 inches bgs. The soil 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 8260B, TPH - diesel range organics (DRO) by USEPA 8015, pH, electrical conductivity (EC), and sodium adsorption ratio (SAR). Analytical results indicated that pH levels were above the applicable COGCC Table 910-1 standards in six (6) sample locations. The remaining ten (10) soil samples exhibited organic and inorganic concentrations below regulatory standards. A topographic map is attached as Figure 1. Soil analytical results are summarized in Table 1 and sample locations are illustrated on Figure 2. The laboratory report is included in Attachment A.

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

Number Water Wells within 1/2 mile radius: 2

None ☐None ☒None ☐

On November 5, 2018, PDC elected to close the Ludwig #3 spreadfield. Following the closure of the spreadfield, the lease road will be scraped to native soil and the material will be transported to the spreadfield for re-incorporation. Composite soil samples will be collected from the sections of lease road that previously exhibited pH levels above regulatory standards to confirm that remaining impacted soils were removed. Mitigation activities and confirmation soil sampling will be conducted within 14 calendar days of this submittal. A summary of the confirmation sampling will be submitted in a forthcoming report.

#1	Supplemental Report Date:	11/08/2018
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☒ Other (specify) BMP

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

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

☐ Other (specify) \_\_\_\_\_

Volume of Impacted Surface Water Removed (bbbs):

## Form 27 Remediation Project No:

Title: EHS Professional      Date: 11/09/2018      Email: Zack.Liesenfeld@pdce.com

**COA Type****Description**

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**Attachment Check List****Att Doc Num****Name**

401831675	SPILL/RELEASE REPORT(SUPPLEMENTAL)
401831964	TOPOGRAPHIC MAP
401831968	ANALYTICAL RESULTS
401832721	SITE MAP
401835124	FORM 19 SUBMITTED

Total Attach: 5 Files

**General Comments****User Group****Comment****Comment Date**

Environmental	For areas where road is not to be reclaimed, Operator may use pH of undisturbed road base as a background sample.	11/09/2018
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Total: 1 comment(s)