

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:

401292702

Date Received:

06/01/2017

Spill report taken by:

ALLISON, RICK

Spill/Release Point ID:

449979

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: PDC ENERGY INC	Operator No: 69175	Phone Numbers
Address: 1775 SHERMAN STREET - STE 3000		Phone: (970) 506-9272
City: DENVER	State: CO	Zip: 80203
Contact Person: Zack Liesenfeld		Mobile: (970) 373-6581
		Email: Zack.Liesenfeld@pdce.com

INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 401254495

Initial Report Date: 04/10/2017 Date of Discovery: 04/07/2017 Spill Type: Recent Spill

Spill/Release Point Location:

Location of Spill/Release: QTRQTR NWNW SEC 1 TWP 5N RNG 65W MERIDIAN 6

Latitude: 40.434280 Longitude: -104.620250

Municipality (if within municipal boundaries): County: WELD

Reference Location:

Facility Type: TANK BATTERY ☒ Facility/Location ID No 323733

☐ 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): >=5 and <100

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): 0

Estimated Drilling Fluid Spill Volume(bbl): 0

Specify:

Land Use:

Current Land Use: CROP LAND Other(Specify):

Weather Condition: Sunny and warm

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):

A reportable release was discovered at the Gatewood 4-1 production facility while replacing production lines. Current recovery efforts are mitigating impacts. Appropriate repairs will be made.

List Agencies and Other Parties Notified:

OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
4/8/2017	COGCC	Rick Allison	-	Via Email
4/8/2017	Weld County	Roy Rudisill	-	Via Email
4/7/2017	Land Owner	NA	-	Via Phone Call

SPILL/RELEASE DETAIL REPORTS

#1	Supplemental Report Date: 05/25/2017		
FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL			<input checked="" 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	0	0	<input 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): 19 Width of Impact (feet): 17

Depth of Impact (feet BGS): 25 Depth of Impact (inches BGS): _____

How was extent determined?

On April 7, 2017, a historic release was discovered during production line replacement activities at the Gatewood 4-1 & 5 production facility. Between April 7 and April 28, 2017, approximately 230 cubic yards of impacted material were removed and transported to the North Weld Waste Management Facility in Ault, Colorado for disposal under PDC waste manifests. Five (5) soil samples were collected from the base and sidewalls of the excavation at depths ranging between 21.5 feet and 24 feet below ground surface (bgs). Soil samples were submitted to Summit Scientific Laboratories (Summit) for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, total petroleum hydrocarbons (TPH) – gasoline range organics (GRO) by United States Environmental Protection Agency (USEPA) Method 8260, and TPH – diesel range organics (DRO) by USEPA Method 8015. Analytical results indicated constituent concentrations were below applicable COGCC Table 910-1 standards in the four (4) soil samples (SS02 – SS05) collected from the sidewalls of the final extent of the excavation. TPH concentrations were in exceedance of applicable COGCC Table 910-1 soil standards in the soil sample (SS01) collected from the base of excavation. Impacted soil removal subsequently continued within the excavation and groundwater was encountered at approximately 24 feet bgs. Between May 2 and May 18, 2017, approximately 170 barrels of groundwater were recovered from the excavation using a vacuum truck and transported to a licensed disposal facility. During this time, additional benching and sloping were conducted in order to safely access and recover excavation groundwater. Additionally, groundwater infiltration rates within the excavation were slow, which resulted in a prolonged duration of vacuum recovery events.

Soil/Geology Description:

Otero sandy loam, 1 to 3 percent slopes.

Depth to Groundwater (feet BGS) <u>24</u>		Number Water Wells within 1/2 mile radius: <u>10</u>	
If less than 1 mile, distance in feet to nearest	Water Well <u>240</u>	None <input type="checkbox"/>	Surface Water <u>3140</u>
	Wetlands <u></u>	None <input checked="" type="checkbox"/>	Springs <u></u>
	Livestock <u></u>	None <input checked="" type="checkbox"/>	Occupied Building <u>290</u>

On May 24, 2017, one groundwater sample (GW01) was collected from the excavation area and submitted to Summit for laboratory analysis of BTEX by USEPA Method 8260. Analytical results indicated dissolved phase BTEX concentrations were below applicable COGCC Table 910-1 groundwater standards. Based on this information, PDC feels that final soil and groundwater data collected from the excavation area confirm hydrocarbon impacts were successfully addressed in accordance with COGCC 900 Series regulations and is requesting a No Further Action (NFA) determination for this location. The excavation extent and soil and groundwater sample locations area illustrated on Figure 2. Soil analytical data is summarized in Table 1 and groundwater analytical data is summarized in the Table 2. Laboratory reports are provided in Attachment A.

#1	Supplemental Report Date:	05/25/2017
Cause of Spill (Check all that apply) <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Human Error <input type="checkbox"/> Equipment Failure <input checked="" type="checkbox"/> Historical-Unknown </div> <div style="margin-top: 5px;"> <input type="checkbox"/> Other (specify) _____ </div>		
Describe Incident & Root Cause (include specific equipment and point of failure) <div style="border: 1px solid black; padding: 10px; min-height: 80px; margin-top: 5px;"> A historic release was discovered beneath the separator during tank battery construction activities. </div>		
Describe measures taken to prevent the problem(s) from reoccurring: <div style="border: 1px solid black; padding: 10px; min-height: 80px; margin-top: 5px;"> The production line was replaced with an epoxy coated pipe protected with anodes. Routine pressure and integrity tests will continue. </div>		
Volume of Soil Excavated (cubic yards): _____ 230		
Disposition of Excavated Soil (attach documentation) <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input checked="" type="checkbox"/> Offsite Disposal <input type="checkbox"/> Onsite Treatment </div> <div style="margin-top: 5px;"> <input type="checkbox"/> Other (specify) _____ </div>		
Volume of Impacted Ground Water Removed (bbls): _____ 170		
Volume of Impacted Surface Water Removed (bbls): _____ 0		

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.

<u>COA Type</u>	<u>Description</u>

<u>Att Doc Num</u>	<u>Name</u>
401292758	TOPOGRAPHIC MAP
401292760	SITE MAP
401292762	ANALYTICAL RESULTS

Total Attach: 3 Files

General Comments

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

Total: 0 comment(s)