

State of Colorado Oil and Gas Conservation Commission

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Document Number:

400754466

Date Received:

12/18/2014

Spill report taken by:

ALLISON, RICK

Spill/Release Point ID:

440445

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>	Phone Numbers
Address: <u>1775 SHERMAN STREET - STE 3000</u>		Phone: <u>(970) 506-9272</u>
City: <u>DENVER</u>	State: <u>CO</u>	Mobile: <u>(970) 381-2019</u>
Zip: <u>80203</u>		Email: <u>troy.swain@pdce.com</u>
Contact Person: <u>Troy Swain</u>		

INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 400751596

Initial Report Date: 12/12/2014 Date of Discovery: 12/11/2014 Spill Type: Historical Release

Spill/Release Point Location:

Location of Spill/Release: QTRQTR SWNE SEC 12 TWP 6N RNG 65W MERIDIAN 6Latitude: 40.504925 Longitude: -104.609378Municipality (if within municipal boundaries): _____ County: WELD

Reference Location:

Facility Type: PARTIALLY-BURIED VESSEL ☒ Facility/Location ID No 322935☐ 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? 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): UnknownEstimated Other E&P Waste Spill Volume(bbl): 0Estimated Drilling Fluid Spill Volume(bbl): 0

Specify: _____

Land Use:

Current Land Use: NON-CROP LAND Other(Specify): _____Weather Condition: Clear 46 deg FSurface 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):

On Thursday 12/11/2014 PDC Energy discovered a historical spill while repairing the water drain line from production tank to water vault. Impacted soils were excavated and groundwater was encountered in the excavation at 6.5 feet below ground surface. Excavation began on 12/11/2014 continued on 12/12/2014 and a total of 246 cubic yards of soil have been removed from location. Soil sampling was conducted on Thursday afternoon and Friday during excavation. A figure of the sample locations is attached. Groundwater will be evacuated and sampled and the extent of the spill evaluated.

List Agencies and Other Parties Notified:

OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
12/12/2014	COGCC	John Axelson	-	Inquiry about property owner notification, which was in process and provided in a later e-mail to COGCC.
12/12/2014	Weld OEM		-	Left voice mail and sent e-mail.
12/12/2014	Propert Owner		-	COntacted via PDC Land Dept. No specific concerns.

SPILL/RELEASE DETAIL REPORTS

#1	Supplemental Report Date: 12/18/2014		
FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	0	0	<input type="checkbox"/>
CONDENSATE	0	0	<input type="checkbox"/>
PRODUCED WATER			<input checked="" 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): 25 Width of Impact (feet): 25

Depth of Impact (feet BGS): 6 Depth of Impact (inches BGS): 6

How was extent determined?

On December 11, 2014, a historic release was discovered below the produced water tank at the Dewalt 1-12 production facility. Approximately 246 cubic yards of impacted material were removed and transported to the Waste Management Facility in Ault, Colorado for disposal under PDC waste manifests. The lateral and vertical extent of the excavation was determined in the field by using a photoionization detector (PID) to measure volatile organic compound (VOC) concentrations in soil. Soil samples were collected from the sidewalls of the excavation area at approximately 4.5 feet below ground surface (bgs). Samples were 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 USEPA Method 8260B. Samples were also analyzed for TPH - diesel range organics (DRO) by USEPA Method 8015. Analytical results indicate constituent concentrations are below COGCC Table 910-1 soil standards in the four soil samples collected from the final excavation extent. Groundwater was encountered in the excavation area at approximately 6.5 feet bgs. Following excavation activities, approximately 250 gallons of hydrogen peroxide were introduced into the excavation area to mitigate residual hydrocarbon concentrations. On December 15, 2014, a groundwater sample (GW01) was collected and submitted for laboratory analysis of BTEX. Analytical results indicate benzene concentrations are in exceedance of COGCC Table 910-1 groundwater standards. Prior to backfilling, approximately 120 barrels of groundwater were removed via vacuum truck and transported to a licensed disposal facility. In addition, approximately 175 pounds of activated carbon and a perforated remediation pipe were added to the excavation area to address remaining dissolved phase hydrocarbon impacts on site. The excavation was backfilled to match pre-existing conditions.

Soil/Geology Description:

Otero sandy loam, 1 to 3 percent slopes

Depth to Groundwater (feet BGS) 6

Number Water Wells within 1/2 mile radius: 6

If less than 1 mile, distance in feet to nearest

Water Well 860 None ☐

Surface Water 200 None ☐

Wetlands None ☒

Springs None ☒

Livestock None ☒

Occupied Building 765 None ☐

Additional Spill Details Not Provided Above:

Soil analytical results are summarized in Table 1 and groundwater analytical results are summarized in Table 2. The excavation extent and sample locations are illustrated on Figure 2.

CORRECTIVE ACTIONS

#1 Supplemental Report Date: 12/18/2014

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)

A historic release was discovered while replacing the produced water drain line. The release source and volume are unknown.

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

The battery will be rebuilt with new dump lines and annual line pressure tests will be completed.

Volume of Soil Excavated (cubic yards): 246

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

Volume of Impacted Ground Water Removed (bbls): 120

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:

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

Signed: Print Name: Troy Swain

Title: EHS Professional-Env. Date: 12/18/2014 Email: troy.swain@pdce.com

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400754797	TOPOGRAPHIC MAP
400754798	SITE MAP
400755253	ANALYTICAL RESULTS

Total Attach: 3 Files

<u>General Comments</u>		
<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)