

FORM 19
Rev 6/99

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



FOR OGCC USE ONLY
Document 2315752
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Spill report taken by:

FACILITY ID:

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

SPILL/RELEASE REPORT

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

OPERATOR INFORMATION

Name of Operator: <u>PDC Energy, Inc.</u> OGCC Operator No: <u>69175</u>	Phone Numbers
Address: <u>1775 Sherman Street, Suite 3000</u>	No: <u>(303) 860-5800</u>
City: <u>Denver</u> State: <u>CO</u> Zip: <u>80203</u>	Fax: <u>(303) 860-5838</u>
Contact Person: <u>Brandon Bruns</u>	Email: <u>brandon.bruns@pdce.com</u>

DESCRIPTION OF SPILL OR RELEASE

Date of Incident: <u>8/17/2012</u> Facility Name & No: <u>Cottonwood #1</u>	County: <u>Weld</u>
Type of Facility (well, tank battery, flow line, pit): <u>Tank Battery</u>	QtrQtr: <u>NESE</u> Section: <u>13</u>
Well Name and Number: <u>Cottonwood #1</u>	Township: <u>6N</u> Range: <u>66W</u>
API Number: <u>05-123-11801</u>	Meridian: <u>6th</u>
Specify volume spilled and recovered (in bbls) for the following materials:	
Oil spilled: <u>Unk</u> Oil recov'd: <u>0</u> Water spilled: <u>0</u> Water recov'd: <u>0</u> Other spilled: <u>0</u> Other recov'd: <u>0</u>	
Ground Water impacted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Surface Water impacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Contained within berm? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Area and vertical extent of spill: <u>~1,155 ft²</u> x <u>~13' bgs</u>
Current land use: <u>Oil and Gas Production Facility/Agriculture</u>	Weather conditions: <u>High 80s</u>
Soil/geology description: <u>Very fine clays to gravel</u>	
IF LESS THAN A MILE , report distance IN FEET to nearest ... Surface water: <u>~43' S</u> Wetlands: <u>NA</u> Buildings: <u>~285' SE</u>	
Livestock: <u>NA</u> Water wells: <u>~750' SW</u> Depth to shallowest ground water: <u>13' bgs</u>	
Cause of spill (e.g. equipment failure, human error, etc.): <u>Equipment failure</u>	
Detailed description of the spill/release incident: During the removal of a plastic produced water tank and dump line replacement a historical release was discovered. A topographic map of the site is included as Figure 1.	

CORRECTIVE ACTION

Describe immediate response (how stopped, contained and recovered):
Excavation of impacted soil began on August 17, 2012 and concluded on August 21, 2012. Approximately 370 cubic yards (yd3) of impacted material was removed and transported to the Waste Management Facility in Ault, Colorado. The location and extent of the excavation is illustrated on Figure 2.

Describe any emergency pits constructed: NA

How was the extent of contamination determined?
On August 20, 2012, two confirmation soil samples were collected at the northeast (SS03) and southwest (SS02) walls at approximately 11 feet bgs. One soil sample (SS01) was collected on the floor of the excavation at approximately 13 feet bgs. On August 21, 2012, two confirmation soil samples were collected on the walls of the excavation, one at the southeast (SS04) at approximately 11 feet bgs and one at the northwest (SS05) at approximately 10.5 feet bgs. Soil sample locations were determined based on elevated photoionization detector (PID) readings. Soil samples were submitted for laboratory analysis of BTEX, TPH (GRO), and naphthalene by EPA Method 8260B and TPH (DRO) by EPA Method 8015. Soil analytical results are summarized in Table 1. Groundwater was encountered during the excavation activities at approximately 13 feet bgs. On August 21, 2012, a groundwater sample (GW01) was collected at the north-central area of the excavation and the laboratory results are summarized in Table 2. There is an irrigation canal located 43 feet south of the tank battery. A confirmation surface water sample was collected on August 20, 2012 and the analytical results are summarized in Table 3. The laboratory analytical reports are included as Attachment A. The extent of the excavation and the soil, groundwater, and surface water sample locations are illustrated on Figure 2.

Further remediation activities proposed (attach separate sheet if needed):
PDC is currently evaluating in-situ remediation strategies to address residual impacts within the subsurface.

Describe measures taken to prevent problem from reoccurring:
PDC will initiate yearly production line testing once remediation activities are completed and the location is back to being operational.

OTHER NOTIFICATIONS

List the parties and agencies notified (County, BLM, EPA, DOT, Local Emergency Planning Coordinator or other).

Date	Agency	Contact	Phone	Response

Spill/Release Tracking No: 2315752