

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:

400642787

Date Received:

07/10/2014

Spill report taken by:

CHESSON, BOB

Spill/Release Point ID:

438067

### SPILL/RELEASE REPORT (INITIAL /w 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>	<b>Phone Numbers</b>
Address: <u>1775 SHERMAN STREET - STE 3000</u>		Phone: <u>(303) 831-3971</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80203</u>		Mobile: <u>( )</u>
Contact Person: <u>Brandon Brun</u>		Email: <u>brandon.brunsp@pdce.com</u>

### INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 400642787

Initial Report Date: 07/10/2014 Date of Discovery: 04/08/2014 Spill Type: Historical Release

#### Spill/Release Point Location:

Location of Spill/Release: QTRQTR SWSW SEC 6 TWP 4N RNG 66W MERIDIAN 6

Latitude: 40.336870 Longitude: -104.824620

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

#### Reference Location:

Facility Type: TANK BATTERY  Facility/Location ID No 323563

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? No

Estimated Total Spill Volume: use same ranges as others for values

Estimated Oil Spill Volume(bbl): <u>Unknown</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>0</u>	Estimated Drilling Fluid Spill Volume(bbl): <u>0</u>

Specify: \_\_\_\_\_

#### Land Use:

Current Land Use: CROP LAND Other(Specify): \_\_\_\_\_

Weather Condition: sunny, 40s

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 historic release was discovered on April 8, 2014 during the abandonment of buried production lines at the Bernhardt 13-6 (API # 05-123-13203, Facility # 323563) tank battery. The well was previously plugged and the production facility was decommissioned. Excavation activities were conducted between April 8, 2014 and April 11, 2014, and approximately 500 cubic yards of impacted material was removed and disposed of at the Waste Management Landfill in Ault, Colorado under PDC manifests. Groundwater was encountered during excavation activities at approximately 5 feet below ground surface (bgs). Approximately 1,872 barrels of groundwater were removed using a vacuum truck and disposed of at a licensed disposal facility. A topographic map of the site is included as Figure 1.

**List Agencies and Other Parties Notified:**

**OTHER NOTIFICATIONS**

Date	Agency/Party	Contact	Phone	Response
	Landowner		-	left message for notice of gw impacts and remediation plans

**SPILL/RELEASE DETAIL REPORTS**

#1 Supplemental Report Date: 07/10/2014

<b>FLUIDS</b>	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	_____	_____	<input checked="" type="checkbox"/>
CONDENSATE	<u>0</u>	<u>0</u>	<input type="checkbox"/>
PRODUCED WATER	<u>0</u>	<u>0</u>	<input type="checkbox"/>
DRILLING FLUID	<u>0</u>	<u>0</u>	<input type="checkbox"/>
FLOW BACK FLUID	<u>0</u>	<u>0</u>	<input type="checkbox"/>
OTHER E&P WASTE	<u>0</u>	<u>0</u>	<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): 235 Width of Impact (feet): 100

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

How was extent determined?

Between April 8 and April 11, 2014, excavation activities were conducted following the discovery of a historic release during the removal of abandoned production lines at the Bernhardt 13-6 tank battery. Approximately 500 cubic yards of soil were removed and disposed of at the Waste Management Landfill in Ault, Colorado under PDC manifests. The vertical and lateral extent of the excavation was determined in the field using a photoionization detector (PID) to measure volatile organic compound (VOC) concentrations in soil. Twenty-one soil samples (SS01-SS21) were collected from the excavation sidewalls at depths ranging from 3.5 feet and 4 feet below ground surface (bgs). Soil samples were submitted to Summit Scientific Laboratories in Golden, Colorado for laboratory analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), and naphthalene by EPA Method 8260B, and TPH-diesel range organics (DRO) by EPA Method 8015. Soil samples collected from the final excavation extent exhibited constituent concentrations below COGCC Table 910-1 standards. Groundwater was encountered at approximately 5 feet bgs and on April 11, 2014, three groundwater samples (GW01-GW03) were collected and submitted for analysis of BTEX. Analytical results indicated benzene concentrations in GW01 - GW03 were in exceedance of COGCC Table 910-1 groundwater standards. Approximately 1,872 barrels of groundwater were subsequently removed and disposed of at a licensed disposal facility. On April 14, 2014, three additional groundwater samples (GW04-GW06) were collected and submitted for analysis of BTEX. Analytical results indicated BTEX concentrations in GW04 - GW06 were in exceedance of regulatory standards. Soil and groundwater analytical data are summarized in Table 1 and Table 2, respectively. The laboratory analytical reports are included as Attachment A. The excavation extent and sample locations are illustrated on Figure 2.

Soil/Geology Description:

Aquolls and Aquents, gravelly substratum

Depth to Groundwater (feet BGS) 5 Number Water Wells within 1/2 mile radius: 21

If less than 1 mile, distance in feet to nearest Water Well 575 None  Surface Water \_\_\_\_\_ None

Wetlands \_\_\_\_\_ None  Springs \_\_\_\_\_ None   
Livestock \_\_\_\_\_ 475 None  Occupied Building \_\_\_\_\_ 570 None

Additional Spill Details Not Provided Above:

### CORRECTIVE ACTIONS

#1	Supplemental Report Date:	07/10/2014		
Cause of Spill (Check all that apply)				
<input type="checkbox"/> Human Error <input checked="" type="checkbox"/> Equipment Failure <input type="checkbox"/> Historical-Unknown				
<input type="checkbox"/> Other (specify) _____				
Describe Incident & Root Cause (include specific equipment and point of failure)				
Historic impacts were discovered during the removal of abandoned production facility equipment. It is estimated that the impacts were caused by a production line that failed over time.				
Describe measures taken to prevent the problem(s) from reoccurring:				
The production facility and associated equipment was decommissioned following excavation activities.				
Volume of Soil Excavated (cubic yards):      500				
Disposition of Excavated Soil (attach documentation)				
<input checked="" type="checkbox"/> Offsite Disposal <input type="checkbox"/> Onsite Treatment				
<input type="checkbox"/> Other (specify) _____				
Volume of Impacted Ground Water Removed (bbls):      1872				
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:

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

Signed: \_\_\_\_\_ Print Name: Brandon Bruns  
Title: EHS Supervisor Date: 07/10/2014 Email: brandon.bruns@pdce.com

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

### Attachment Check List

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400642787	SPILL/RELEASE REPORT(I/S)
400642822	SITE MAP
400642839	ANALYTICAL RESULTS
400642920	FORM 19 SUBMITTED

Total Attach: 4 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>

Total: 0 comment(s)