

**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:

400603164

Date Received:

05/06/2014

Spill report taken by:

CANFIELD, CHRIS

Spill/Release Point ID:

437089

## 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>	OGCC 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>
Contact Person: <u>Brandon Bruns</u>		Mobile: <u>( )</u>
		Email: <u>brandon.bruns@pdce.com</u>

### INITIAL SPILL/RELEASE REPORT

Initial Report Date: 05/06/2014 Date of Discovery: 02/20/2014 Spill Type: Historical Release

#### Spill/Release Point Location:

Location of Spill/Release: QTRQTR NWSW SEC 24 TWP 4N RNG 67W MERIDIAN 6

Latitude: 40.294916 Longitude: -104.848228

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

#### Reference Location:

Facility Type: TANK BATTERY ☐ Well API No. (if the reference facility is well) 05-123-

☒ Facility ID (if not a well) 331001

☐ No Existing Facility ID

#### Fluid(s) Spilled/Released (please answer Yes/No):

Was one (1) barrel or more spilled outside of berms or secondary containment? No

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): Unknown

Estimated Flow Back Fluid Spill Volume(bbl): 0

Estimated Produced Water Spill Volume(bbl): Unknown

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, 20 degrees

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 ☐

Describe what is known about the spill/release event (what happened -- including how it was stopped, contained, and recovered):

On February 20, 2014, a historic release was discovered below the production tanks during the plug and abandonment of the Matt #1 facility (API # 05-123-20011). A topographic map of the site is included as Figure 1.

COGCC Comment Only:

List Agencies and Other Parties Notified:

### SPILL/RELEASE DETAIL REPORTS

#1	Supplemental Report Date: 05/06/2014		
FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	0	0	<input type="checkbox"/>
CONDENSATE			<input checked="" 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? YES Was an Emergency Pit constructed? NO

**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): 7 Depth of Impact (inches BGS): \_\_\_\_\_

How was extent determined?

Excavation of impacted soil occurred between February 20, 2014 to February 24, 2014. Approximately 180 cubic yards (yd3) of impacted material was removed and transported to the Waste Management Facility in Ault, Colorado under PDC waste manifests. In addition, 350 barrels of groundwater were removed and disposed of at a licensed water disposal facility. The location and extent of the excavation are illustrated on Figure 2. On February 21, 2014, four soil samples (SS01 - SS04) were collected from the excavation side walls at 4 feet below ground surface (bgs). Soil samples were submitted to Summit Scientific Laboratories in Golden, Colorado for laboratory analysis of benzene, toluene, ethylbenzene, and 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. Analytical results indicated constituent concentrations were below COGCC Table 910-1 soil standards at three of the four sample locations (SS01 - SS03). TPH concentrations were in exceedance of regulatory standards in the sample (SS04) collected from the west wall of the excavation. Additional excavation of impacted soil on the west wall was conducted on February 24, 2014, and a subsequent soil sample (SS05) was collected at 4 feet bgs and submitted for analysis. Laboratory analytical results indicated constituent concentrations were below laboratory detection limits, demonstrating excavation activities were successful in mitigating residual petroleum hydrocarbon impacts in soil.

Soil/Geology Description:

bankard sandy loam, 0 to 3 % slopes

Depth to Groundwater (feet BGS) 6 Number Water Wells within 1/2 mile radius: 1

If less than 1 mile, distance in feet to nearest	Water Well	550	None	<input type="checkbox"/>	Surface Water	1775	None	<input type="checkbox"/>
	Wetlands		None	<input checked="" type="checkbox"/>	Springs		None	<input checked="" type="checkbox"/>
	Livestock		None	<input checked="" type="checkbox"/>	Occupied Building	1065	None	<input type="checkbox"/>

Additional Spill Details Not Provided Above:

Groundwater was encountered at approximately 6 feet bgs and on February 21, 2014, a groundwater sample (GW01) was collected immediately following excavation activities and was submitted for laboratory analysis of BTEX constituents. Analytical results indicated total xylenes concentrations were in exceedance of Table 910-1 groundwater standards. Approximately 350 barrels of groundwater were subsequently removed and disposed of at a licensed disposal facility. On February 26, 2014, a second groundwater sample (GW02) was collected adjacent to GW01 and analytical results indicated BTEX concentrations were below regulatory standards. A summary of soil analytical data is presented in Table 1 and groundwater analytical data is presented in Table 2. Laboratory analytical reports are included as Attachment A. The extent of the excavation and soil and groundwater sample locations are illustrated on Figure 2.

## CORRECTIVE ACTIONS

#1	Supplemental Report Date:	05/06/2014
----	---------------------------	------------

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)

subsurface impacts were encountered during plugging and abandonment activities. Impacts likely came from production equipment that failed over time.

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

production equipment was removed from the facility.

Volume of Soil Excavated (cubic yards): 180

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

Volume of Impacted Ground Water Removed (bbls): 350

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 Number: \_\_\_\_\_

COGCC Comment:

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

Signed: \_\_\_\_\_ Print Name: Brandon Brunns  
Title: EHS Supervisor Date: 05/06/2014 Email: brandon.brunns@pdce.com

## Attachment Check List

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400603164	FORM 19 SUBMITTED
400603193	ANALYTICAL RESULTS
400603197	SITE MAP

Total Attach: 3 Files