

State of Colorado
Oil and Gas Conservation Commission

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



DE	ET	OE	ES
Document Number: 2148724			
Date Received: 04/30/2014			

SUNDRY NOTICE

Submit a signed original. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full in Comments or provide as an attachment. Identify Well by API Number; identify Oil and Gas Location by Location ID Number; identify other Facility by Facility ID Number.

OGCC Operator Number: 69175 Contact Name Brandon Bruns
 Name of Operator: PDC ENERGY INC Phone: (303) 831-3971
 Address: 1775 SHERMAN STREET - STE 3000 Fax: (303) 860-5838
 City: DENVER State: CO Zip: 80203 Email: brandon.bruns@pdce.com

Complete the Attachment
Checklist

OP OGCC

API Number : 05- 123 13483 00 OGCC Facility ID Number: 245688
 Well/Facility Name: LUNDVALL UP Well/Facility Number: 2-19
 Location QtrQtr: NWNE Section: 19 Township: 5N Range: 66W Meridian: 6
 County: WELD Field Name: WATTENBERG
 Federal, Indian or State Lease Number: 67932

Survey Plat		
Directional Survey		
Srfc Eqpmt Diagram		
Technical Info Page		
Other		

CHANGE OF LOCATION OR AS BUILT GPS REPORT

- Change of Location * As-Built GPS Location Report As-Built GPS Location Report with Survey

* Well location change requires new plat. A substantive surface location change may require new Form 2A.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude _____ PDOP Reading _____ Date of Measurement _____
 Longitude _____ GPS Instrument Operator's Name _____

LOCATION CHANGE (all measurements in Feet)

Well will be: _____ (Vertical, Directional, Horizontal)

Change of **Surface** Footage **From** Exterior Section Lines:

Change of **Surface** Footage **To** Exterior Section Lines:

Current **Surface** Location **From** QtrQtr NWNE Sec 19

New **Surface** Location **To** QtrQtr _____ Sec _____

Change of **Top of Productive Zone** Footage **From** Exterior Section Lines:

Change of **Top of Productive Zone** Footage **To** Exterior Section Lines:

Current **Top of Productive Zone** Location **From** Sec _____

New **Top of Productive Zone** Location **To** Sec _____

Change of **Bottomhole** Footage **From** Exterior Section Lines:

Change of **Bottomhole** Footage **To** Exterior Section Lines:

Current **Bottomhole** Location Sec _____ Twp _____

New **Bottomhole** Location Sec _____ Twp _____

Is location in High Density Area? _____

Distance, in feet, to nearest building _____, public road: _____, above ground utility: _____, railroad: _____,

property line: _____, lease line: _____, well in same formation: _____

Ground Elevation _____ feet Surface owner consultation date _____

FNL/FSL		FEL/FWL	
700	FNL	1810	FEL
Twp <u>5N</u>	Range <u>66W</u>	Meridian <u>6</u>	
Twp _____	Range _____	Meridian _____	
			**
Twp _____	Range _____		
Twp _____	Range _____		
			**

** attach deviated drilling plan

Comments:

ENGINEERING AND ENVIRONMENTAL WORK

NOTICE OF CONTINUED TEMPORARILY ABANDONED STATUS

Indicate why the well is temporarily abandoned and describe future plans for utilization in the COMMENTS box below or provide as an attachment, as required by Rule 319.b.(3).

Date well temporarily abandoned _____ Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required if shut in longer than 2 years. Date of last MIT _____

SPUD DATE: _____

TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

NOTICE OF INTENT Approximate Start Date _____

REPORT OF WORK DONE Date Work Completed 09/27/2013

<input type="checkbox"/> Intent to Recomplete (Form 2 also required)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Mangement Plan
<input type="checkbox"/> Change Drilling Plan	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Change	<input type="checkbox"/> Rule 502 variance requested. Must provide detailed info regarding request.	
<input checked="" type="checkbox"/> Other <u>Remediation Complete</u>	<input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases	

COMMENTS:

Between March 20, 2013 and March 22, 2013, PDC conducted excavation activities at the Lundvall 2-19 (API # 05-123-13483, COGC Spill Tracking # 2145966, COGCC Remediation # 7953) tank battery located in the NWNE Quarter of Section 19, Township 5 North, Range 66 West, as illustrated on Figure 1. Approximately 340 cubic yards of impacted soil were removed and transported to the Waste Management Facility in Ault, Colorado under PDC waste manifests. Analytical results from excavation activities indicated petroleum hydrocarbon impacts were present in soil sample SS02 collected at 12 feet below ground surface (bgs) at concentrations above COGCC Table 910-1 soil standards. Soil sample locations from excavation activities are illustrated on Figure 2. Prior to backfilling, chemical oxidant (chemox) mixing activities were conducted at the base of the excavation area (between 13-15 feet bgs) to address residual impacted material. On March 25, 2013, a subsequent soil sample (SS09) was collected adjacent to SS02 from the treated depth and exhibited elevated benzene and total petroleum hydrocarbon (TPH) concentrations. An immediate decrease in constituent concentrations was not expected as chemox persists within the soil matrix. Following a 6-month period where continued oxidation occurred of impacted soil within the treatment zone, two boreholes (BH01 and BH02) were installed on September 27, 2013 to confirm remedial activities successfully mitigated residual impacts. Soil samples were collected from each borehole at a composite depth of 13 to 15 feet bgs which coincided with previously detected soil impacts. Soil analytical results indicated constituent concentrations were below COGCC regulatory standards at both borehole locations. Soil analytical data is summarized in Table 1 and the soil boring locations relative to the excavation area are illustrated on Figure 3. Based on the soil analytical results from the confirmation soil samples collected within the treatment zone, PDC is requesting a No Further Action determination from the COGCC. Groundwater was not impacted as a result of this release.

CASING AND CEMENTING CHANGES

Casing Type	Size	Of	/	Hole	Size	Of	/	Casing	Wt/Ft	Csg/LinTop	Setting Depth	Sacks of Cement	Cement Bottom	Cement Top

H2S REPORTING

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

Gas Analysis Report must be attached.

H2S Concentration: _____ in ppm (parts per million) Date of Measurement or Sample Collection _____

Description of Sample Point:

Absolute Open Flow Potential _____ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: _____

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: _____

COMMENTS:

<u>Best Management Practices</u>	
<u>No BMP/COA Type</u>	<u>Description</u>

Operator Comments:

[Empty box for 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 Professional Email: brandon.brunsp@pdce.com Date: 12/11/2013

Based on the information provided herein, this Sundry Notice (Form 4) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: ALLISON, RICK Date: 5/15/2014

CONDITIONS OF APPROVAL, IF ANY:

COA Type

Description

	The request for No Further Action is not approved. Soil sample locations BH01 and BH02 do not coincide with the area of previously impacted areas at SS02 and SS09. A confirmation soil sample must be collected from the area of impact and remediation. Specifically, collect confirmation soil samples from the March 2013 soil sample locations SS02 and SS09.
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General Comments

User Group	Comment	Comment Date
Permit	Remediation for spill and releases.	5/7/2014 9:23:41 AM

Total: 1 comment(s)

Attachment Check List

Att Doc Num	Name
2148724	FORM 4 SUBMITTED

Total Attach: 1 Files