

**DRILLING COMPLETION REPORT**

This form is to be submitted within 30 days of the setting of production casing, the plugging of a dry hole, the deepening or sidetracking of a well, or any time the wellbore configuration is changed. If the well is deepened or sidetracked a new Form 5 is required. If an attempt has been made to complete/produce a well, then the operator shall submit Form 5A (Completed Interval Report.) If the well has been plugged, a form 6 (Well Abandonment Report) is required.

Document Number:  
400633103

Date Received:

Completion Type  Final completion  Preliminary completion

OGCC Operator Number: 69175 Contact Name: Ally Ota  
 Name of Operator: PDC ENERGY INC Phone: (303) 860-5800  
 Address: 1775 SHERMAN STREET - STE 3000 Fax: (303) 831-3988  
 City: DENVER State: CO Zip: 80203

API Number 05-123-38008-00 County: WELD  
 Well Name: Ram Land Well Number: 30K-243  
 Location: QtrQtr: NWSW Section: 30 Township: 4N Range: 66W Meridian: 6  
 Footage at surface: Distance: 2487 feet Direction: FSL Distance: 1211 feet Direction: FWL  
 As Drilled Latitude: 40.282169 As Drilled Longitude: -104.825460

GPS Data:  
 Date of Measurement: 09/18/2014 PDOP Reading: 1.6 GPS Instrument Operator's Name: Devin Arnold

\*\* If directional footage at Top of Prod. Zone Dist.: 1824 feet. Direction: FSL Dist.: 886 feet. Direction: FWL  
 Sec: 30 Twp: 4N Rng: 66W  
 \*\* If directional footage at Bottom Hole Dist.: 1824 feet. Direction: FSL Dist.: 886 feet. Direction: FWL  
 Sec: 30 Twp: 4N Rng: 66W

Field Name: WATTENBERG Field Number: 90750  
 Federal, Indian or State Lease Number: \_\_\_\_\_

Spud Date: (when the 1st bit hit the dirt) 05/04/2014 Date TD: 05/11/2014 Date Casing Set or D&A: 05/12/2014  
 Rig Release Date: 06/01/2014 Per Rule 308A.b.

Well Classification:  
 Dry  Oil  Gas/Coalbed  Disposal  Stratigraphic  Enhanced Recovery  Storage  Observation

Total Depth MD 7617 TVD\*\* 7130 Plug Back Total Depth MD 7617 TVD\*\* 7130  
 Elevations GR 4758 KB 4772 **Digital Copies of ALL Logs must be Attached per Rule 308A**

List Electric Logs Run:  
CBL, MWD

**CASING, LINER AND CEMENT**

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Top	Cmt Bot	Status
SURF	13+3/4	9+5/8	36	0	926	615	0	926	VISU
1ST	8+3/4	7	26	0	7,073	516	640	7,073	CBL

**STAGE/TOP OUT/REMEDIAL CEMENT**

Cement work date: 05/19/2014

Method used	String	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom
1 INCH	1ST	6,950	50	6,683	6,950
1 INCH	1ST	4,300	150	3,104	4,300
1 INCH	1ST	1,050	50	850	1,050
1 INCH	SURF	200	10	0	200

Details of work:

Plug #1: 15.8 PPG, 1.15 CUFT  
 Plug #2: 13.5 PPG, 1.71 CUFT  
 Plug #3: 15.8 PPG, 1.16 CUFT  
 Plug #4: 15.8 PPG, 1.16 CUFT  
 Motor and bit fish left in the hole at 7079'

### FORMATION LOG INTERVALS AND TEST ZONES

FORMATION NAME	Measured Depth		Check if applies		COMMENTS (All DST and Core Analysis must be submitted to COGCC)
	Top	Bottom	DST	Cored	
PARKMAN	3,725				
SUSSEX	4,200				
SHANNON	4,763				
SHARON SPRINGS	6,975				
NIOBRARA	7,104				

Comment:

During the drilling of the Ram Land 30K-243 well, API 05-123-38008, PDC encountered difficulties after running 7" casing and attempting to drill out and not have the ability to drill further into the lateral we POH with directional tools, it was noticed that the bit and bottom of the mud motor parted and stayed in the well. The decision was made to plug back the hole after multiple failed fishing attempts.

Ram Land 30K-243 well, API 05-123-38008

I: Explanation of the situation that has resulted in a lost hole and the need to plug the lost hole

a. POH with bottom of mud motor missing attempted to fish bit, motor housing and rotor with no success, it was decided to P&A well.

II: Total measured depth reached in the lost hole: 7,617'

III: Casing set – size(s) and measured depth(s): Surface Casing 9-5/8" 36#/ft J-55 set at 926', Intermediate Casing 7" 26#/ft HCP-110 set at 7073'

IV: Description of fish in the hole (if any) – including top and bottom measured depths: Bottom of fish at 7101' Top of fish 7075'. Fish drill bit, directional mud motor bearing housing, and rotor, with cross over overshot and mill around the rotor.

V: Description of proposed plugs: setting measured depths, heights, and cement volumes, type of cement to be used for all plugs, including slurry weight (ppg) and yield (cf/sk): a: Cement plug 1 set from 6950' to 6683': 50 sx (15.8ppg yield 1.15 cuft/sx)

b: Cement plug 2 set from 4300 to 3104': 150 sx (13.5ppg yield 1.71 cuft/sx)

c: Cement plug 3 set from 1050' to 850': 50 sx (15.8ppg yield 1.16 cuft/sx)

d: Cement plug 4 set 200' to surface: 10 sx (15.8ppg yield 1.16 cuft/sx)

VI. Proposed objective formation(s) for replacement well – new or same as lost hole: Niobrara

Depth on CBL PDF header is listed incorrectly at 6,930'. Log was actually run to 6,940' as shown within the log and LAS.

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

Signed: \_\_\_\_\_

Print Name: Cassie Gonzalez

Title: Regulatory Technician

Date: \_\_\_\_\_

Email: Cassie.Gonzalez@pdce.com

### Attachment Check List

Att Doc Num	Document Name	attached ?	
<b>Attachment Checklist</b>			
401934654	CMT Summary *	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Core Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
401933684	Directional Survey **	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	DST Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Logs	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Other	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<b>Other Attachments</b>			
401933592	LAS-MWD/LWD	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
401933593	PDF-MWD/LWD	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
401933595	PDF-MWD/LWD	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
401933687	DIRECTIONAL DATA	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
402015220	PDF-CBL 1ST RUN	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
402015227	LAS-CBL 1ST RUN	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	CBL.Las goes to 6948'. Pdf only goes to 3740'. 7" TOC 640' looks ok (where it crosses and stays above 50 mV). Bottom line on Stage/Top Out/Remedial Cement: 1st, 7075, 7101. Wellbore diagram from Form 6N shows these depths as fish bottom and top. This agrees with the Submit tab comments. Erase this line from the Stage/Top Out/Remedial Cement section.	04/09/2019
Permit	Returned to Draft for: CBL PDF log ends early at 3740'.	04/02/2019
Permit	Return to draft for AOC settlement.	09/07/2016
Engineer	Emailed Julie for entire CBL run, this one stops at 3750.	04/30/2015

Total: 4 comment(s)

