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401054592

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09/05/2017

**WELL ABANDONMENT REPORT**

This form is to be submitted as an Intent to Abandon whenever an abandonment is planned on a borehole. After the abandonment is complete, this form shall again be submitted as a Subsequent Report of the actual work completed. The approved intent shall be valid for six months after the approval date, after that period, a new intent will be required. Attachments required with the Intent to Abandon are wellbore diagrams of the current configuration and the proposed configuration with plugs set.

A Subsequent Report of Abandonment shall indicate the actual work completed. Attachments required with a Subsequent Report are a wellbore diagram showing plugs that were set and casing remaining in the hole, the job summaries from all plugging contractors used, including wireline and cementing (third party verification) and any logs that may have been run during abandonment.

OGCC Operator Number: 69175 Contact Name: Jenifer Hakkarinen

Name of Operator: PDC ENERGY INC Phone: (303) 8605800

Address: 1775 SHERMAN STREET - STE 3000 Fax: \_\_\_\_\_

City: DENVER State: CO Zip: 80203 Email: Jenifer.Hakkarinen@pdce.com

**For "Intent" 24 hour notice required,** Name: \_\_\_\_\_ Tel: \_\_\_\_\_

**COGCC contact:** Email: \_\_\_\_\_

API Number 05-001-06185-00

Well Name: ZARLENGO Well Number: 1

Location: QtrQtr: NESW Section: 4 Township: 1S Range: 67W Meridian: 6

County: ADAMS Federal, Indian or State Lease Number: \_\_\_\_\_

Field Name: WATTENBERG Field Number: 90750

Notice of Intent to Abandon  Subsequent Report of Abandonment

*Only Complete the Following Background Information for Intent to Abandon*

Latitude: 39.993274 Longitude: -104.897949

GPS Data:  
Date of Measurement: 08/06/2010 PDOP Reading: 2.0 GPS Instrument Operator's Name: Shantell Kling

Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems  
 Other \_\_\_\_\_

Casing to be pulled:  Yes  No Estimated Depth: \_\_\_\_\_

Fish in Hole:  Yes  No If yes, explain details below

Wellbore has Uncemented Casing leaks:  Yes  No If yes, explain details below

Details: \_\_\_\_\_

**Current and Previously Abandoned Zones**

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
J SAND	8363	8380	04/20/2015	B PLUG CEMENT TOP	8315

Total: 1 zone(s)

**Casing History**

Casing Type	Size of Hole	Size of Casing	Weight Per Foot	Setting Depth	Sacks Cement	Cement Bot	Cement Top	Status
SURF	12+1/4	8+5/8	24	131	125	131	0	VISU
1ST	7+7/8	4+1/2	10.5	8,424	150	8,424	7,510	CBL
S.C. 1.1				1,990	125	2,130	1,915	CBL
S.C. 1.2				1,150	150	1,155	981	CBL
S.C. 1.3				600	100	635	570	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8272 with 2 sacks cmt on top. CIBP #2: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.  
 CIBP #3: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top. CIBP #4: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.  
 CIBP #5: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.

NOTE: Two(2) sacks cement required on all CIBPs.

Set 10 sks cmt from 6987 ft. to 6858 ft. Plug Type: CASING Plug Tagged:   
 Set 11 sks cmt from 2131 ft. to 1990 ft. Plug Type: CASING Plug Tagged:   
 Set 11 sks cmt from 1119 ft. to 978 ft. Plug Type: CASING Plug Tagged:   
 Set 10 sks cmt from 502 ft. to 374 ft. Plug Type: CASING Plug Tagged:   
 Set 117 sks cmt from 352 ft. to 7 ft. Plug Type: STUB PLUG Plug Tagged:

Perforate and squeeze at 7506 ft. with 240 sacks. Leave at least 100 ft. in casing 6987 CICR Depth  
 Perforate and squeeze at 539 ft. with 50 sacks. Leave at least 100 ft. in casing 502 CICR Depth  
 Perforate and squeeze at \_\_\_\_\_ ft. with \_\_\_\_\_ sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth  
 (Cast Iron Cement Retainer Depth)

Set \_\_\_\_\_ sacks half in. half out surface casing from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Tagged:   
 Set \_\_\_\_\_ sacks at surface  
 Cut four feet below ground level, weld on plate Above Ground Dry-Hole Marker:  Yes  No  
 Set \_\_\_\_\_ sacks in rat hole Set \_\_\_\_\_ sacks in mouse hole

### Additional Plugging Information for Subsequent Report Only

Casing Recovered: 241 ft. 4+1/2 inch casing Plugging Date: 03/02/2016  
 of \_\_\_\_\_  
 \*Wireline Contractor: Magna \*Cementing Contractor: Magna  
 Type of Cement and Additives Used: Class G 15.8 PPG  
 Flowline/Pipeline has been abandoned per Rule 1105  Yes  No \*ATTACH JOB SUMMARY

#### Technical Detail/Comments:

Zarlengo #1 (05-011-06185)/Plugging Procedure  
 Producing formation: J Sand  
 Existing Perforations: J Sandl 8363'-8380'  
 TD: 8425' PBTD: 8381'  
 Surface Casing: 8 5/8" 24# @ 131' w/ 125 sks cmt.  
 Production Casing: 4 1/2" @ 8424' w/ 525 sks cmt (TOC 573').

Existing CIBP: at 8280' with 2 sxs sand.  
 Procedure:  
 1. MIRU pulling unit. PU tubing. TIH with tubing to 8315'. Circulate sand off of CIBP at 8315'.  
 2. TOOH with tubing. Rig up wireline company. TIH with dump bailer and dump 2 sxs of 15.8#/gal CI G cement on top of CIBP at 8315'.  
 3. TIH with CIBP. Set CIBP at 8272'. TIH with dump bailer. Spot 2 sxs of 15.8#/gal CI G cement on top of CIBP.  
 4. Perforate from 7500'-7506' and from 6964'-6972', set CICR@6987. Pump 250 SX g 15.8ppg, 240 sx below, 10 sx above CICR  
 5. Mix and pump 11 sx Class G 15.8ppg from 2131'-1990'  
 6. Attempt to cut casing @ 539', could not pull casing. Set CICR @ 502', TIH and pump through casing set 60 sx Class G 15.8ppg, 50 sx below 10 sx above CICR  
 7. TIH with casing cutter. Cut off 4 1/2" casing at 241'. Pull 4 1/2" casing.  
 8. TIH with tubing to 352'. RU cementers. Mix and pump 117 sxs of 15.8#/gal CI G cement. Cement circulate to surface.  
 9. Cut surface casing 6' below ground level and weld on cap.

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

Signed: \_\_\_\_\_ Print Name: Jenifer Hakkarinen  
 Title: Reg Tech Date: 9/5/2017 Email: Jenifer.Hakkarinen@pdce.com

Based on the information provided herein, this Well Abandonment Report (Form 6) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Bouzek, Jared

Date: 9/20/2018

**CONDITIONS OF APPROVAL, IF ANY:**

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

**Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
2302970	WELLBORE DIAGRAM
2302971	CEMENT BOND LOG
401054592	FORM 6 SUBSEQUENT SUBMITTED
401054598	WELLBORE DIAGRAM
401054599	CEMENT JOB SUMMARY
401394471	WELLBORE DIAGRAM

Total Attach: 6 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Received corrected WBD and CBL.	09/20/2018
Engineer	Need copy of CBL. Update WBD to show missing plug @ 1119'.	09/13/2018
Engineer	returning to DRAFT - WBD will not open and requirement (COA) on NOIA was casing/cement in Casing History and WBD accurately reflect wellbore - unchanged from NOIA - also Form 5A acknowledged there were holes in casing as of April 2015 - NOIA from 8/15 indicated no uncemented leaks	06/25/2017

Total: 3 comment(s)