

**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: Gomez, Jason Tel: (970) 573-1277  
 COGCC contact: Email: jason.gomez@state.co.us

API Number 05-123-10975-00 Well Number: 1  
 Well Name: HARDMAN  
 Location: QtrQtr: SWSW Section: 16 Township: 5N Range: 67W Meridian: 6  
 County: WELD Federal, Indian or State Lease Number: 65487  
 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: 40.394170 Longitude: -104.905360  
 GPS Data:  
 Date of Measurement: 06/04/2007 PDOP Reading: 2.6 GPS Instrument Operator's Name: Holly L. Tracy  
 Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems  
 Other \_\_\_\_\_  
 Casing to be pulled:  Yes  No Estimated Depth: 715  
 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
CODELL	7214	7233			

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	515	415	515	0	VISU
1ST	7+7/8	4+1/2	11.6	7,360	275	7,360	6,170	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7164 with 2 sacks cmt on top. CIBP #2: Depth 6821 with 2 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 230 sks cmt from 765 ft. to 0 ft. Plug Type: STUB PLUG Plug Tagged:   
 Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
 Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
 Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
 Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
 Perforate and squeeze at \_\_\_\_\_ ft. with \_\_\_\_\_ sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth  
 Perforate and squeeze at \_\_\_\_\_ ft. with \_\_\_\_\_ sacks. Leave at least 100 ft. in casing \_\_\_\_\_ 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: \_\_\_\_\_ ft. \_\_\_\_\_ inch casing Plugging Date: \_\_\_\_\_  
 of \_\_\_\_\_  
 \*Wireline Contractor: \_\_\_\_\_ \*Cementing Contractor: \_\_\_\_\_  
 Type of Cement and Additives Used: \_\_\_\_\_  
 Flowline/Pipeline has been abandoned per Rule 1103  Yes  No \*ATTACH JOB SUMMARY

Technical Detail/Comments:

Hardman 1 (05-123-10975)/Plugging Procedure (Intent)  
 Producing Formation (Perforations): Codell: 7214'-7233'  
 TD: 7360' PBTD: 7337'  
 Surface Casing: 8 5/8" 24# @ 515' w/ 415 sxs  
 Production Casing: 4 1/2" 11.6# @ 7360' w/ 275 sxs cmt (TOC @ 6200' - CBL).  
 Tubing: 2 3/8" tubing set @ 7199' (5/8/2007).  
 Proposed Procedure:  
 1. MIRU pulling unit. Pull 2 3/8" tubing.  
 2. RU wireline company.  
 3. TIH with CIBP. Set BP at 7164'. Top with 2 sxs 15.8#/gal CI G cement.  
 4. TIH with CIBP. Set BP at 6821'. Top with 2 sxs 15.8#/gal CI G cement.  
 5. TIH with casing cutter. Cut 4 1/2" casing at 715'. Pull cut casing.  
 6. TIH with tubing to 765'. RU cementing company. Mix and pump 230 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.  
 7. 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: 8/17/2017 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.

**CONDITIONS OF APPROVAL, IF ANY:**

Expiration Date: 2/28/2018

<u>COA Type</u>	<u>Description</u>
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) For the 765' plug: pump plug and displace. If surface casing plug is not circulated to surface then tag plug – must be at 465' or shallower and provide 10 sx plug at the surface. Leave at least 100' of cement in the casing for each plug. 3) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.
	1) Prior to starting plugging operations a Bradenhead test shall be performed. If the beginning pressure is greater than 25 psi, or if pressure remains at the conclusion of the test, or if any liquids were present contact COGCC Engineering for sampling requirements. The Form 17 shall be submitted within 10 days of the test.

**Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
401378828	FORM 6 INTENT SUBMITTED
401378858	WELLBORE DIAGRAM
401378866	WELLBORE DIAGRAM

Total Attach: 3 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Public Room	Document verification complete 08/25/17	08/25/2017

Total: 1 comment(s)