

Document Number:  
401052743

Date Received:  
05/24/2016

**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 05-123-14245-00

Well Name: HUNGENBERG Well Number: 5-20

Location: QtrQtr: SWNW Section: 20 Township: 6N Range: 65W Meridian: 6

County: WELD Federal, Indian or State Lease Number: 56219

Field Name: GREELEY Field Number: 32760

Notice of Intent to Abandon       Subsequent Report of Abandonment

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

Latitude: 40.474722 Longitude: -104.694722

GPS Data:  
Date of Measurement: 01/18/2010 PDOP Reading: 2.1 GPS Instrument Operator's Name: Brandon Lucason

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

Casing to be pulled:  Yes  No Estimated Depth: 6155

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
NIOBRARA	6868	7108			
CODELL	7184	7194	11/13/2008	B PLUG CEMENT TOP	7150

Total: 2 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	226	50	226	0	VISU
1ST	7+7/8	3+1/2	9.3	7,296	305	7,296	6,205	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6818 with 1 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 16 sks cmt from 6205 ft. to 6105 ft. Plug Type: STUB PLUG Plug Tagged:   
Set 252 sks cmt from 4425 ft. to 3530 ft. Plug Type: OPEN HOLE 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 170 sacks half in. half out surface casing from 600 ft. to 0 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. of \_\_\_\_\_ inch casing Plugging Date: \_\_\_\_\_

\*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:

Proposed Plugging Procedure  
Hungenberg 5-20 (05123142450000)

Existing Perforations:

Niobrara: 6,868' – 7,108'

Codell: 7,184' – 7,194'

Current PBTD: 7,126'

Surface Csg: 8-5/8" 24# @ 226' w/ 50 sxs cmt (TOC @ surface)

Production Csg: 3-1/2" 9.3# @ 7,296' w/ 305 sxs cmt (TOC @ 6,205')

Procedure:

1. MIRU WO rig.
2. Load and kill well.
3. POOH w/ 213 jts of 2-1/16 tbg.
4. Load well.
5. PU CIBP.
6. RIH w/ CIBP and set @ 6,818' in 3.5" csg.
7. MIRU cmt services.
8. PU dump bailer and 1 sx cmt.
9. Spot cmt on CIBP from 6,793' to 6,818'.
10. POOH w/ bailer.
11. MIRU WL unit.
12. PU csg cutter.
13. RIH w/ csg cutter to 6,155' and cut 3.5" csg.
14. POOH w/ WL.
15. POOH w/ 6,143' of 3.5" csg.
16. RIH w/ work string.
17. Spot a 2 sx balance plug from 6,205' to 6,155' in 3.5" csg stub.
18. TOOH and spot a 14 sx balance plug on top of stub from 6,155' to 6,105'.
19. TOOH and spot a 252 sx balance plug from 4,425' to 3,530' to cover Sussex/Parkman.
20. TOOH and spot a 170 sx balance plug from 600' to surface.
21. POOH w/ work string.
22. WOC.
23. RIH and tag.
24. Top off remaining volume.
25. RDMO units.
26. Cut and weld 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: 5/24/2016 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: HICKEY, MIKE Date: 6/8/2016

**CONDITIONS OF APPROVAL, IF ANY:**

Expiration Date: 12/7/2016

**COA Type**

**Description**

	1)Prior to initiation of plugging operations, a bradenhead test shall be performed. If any pressure remains at the conclusion of the test or any liquids were present call COGCC Engineer for sampling requirements. Form 17 shall be submitted within 10 days of the test. 2)Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 3)Properly abandon flowlines. Once flowlines are properly abandoned, file electronic form 42. 4)For 600' plug: pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours and tag plug – must be 176' or shallower and provide minimum 10 sx plug at the surface. Leave at least 100' of cement in the wellbore for each plug.
	Additional cement is required. Please verify CIBP set 11/13/08 and dump bail at least one additional sack of cement on top.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401052743	FORM 6 INTENT SUBMITTED
401052770	WELLBORE DIAGRAM
401052771	WELLBORE DIAGRAM

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Added previous Codell TA to zone tab. Codell needs to be TA instead of SI on form 7. Will work with production.	6/7/2016 11:01:08 AM
Public Room	Document verification complete 05/25/16	5/25/2016 3:54:04 PM

Total: 2 comment(s)