

FORM  
6Rev  
05/18

## State of Colorado

## Oil and Gas Conservation Commission

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



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Document Number:

401699110

Date Received:

07/11/2018

## 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 05-123-20348-00

Well Name: HAHN

Well Number: 14-27

Location: QtrQtr: SWSW Section: 27 Township: 5N Range: 67W Meridian: 6

County: WELD

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: 40.365170

Longitude: -104.886060

GPS Data:

Date of Measurement: 03/15/2007

PDOP Reading: 2.0

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: \_\_\_\_\_

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	7046	7056	05/25/2018	B PLUG CEMENT TOP	6986

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	400	275	375	0	VISU
1ST	7+7/8	4+1/2	10.5	7,185	155	7,185	6,010	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6986 with 2 sacks cmt on top. CIBP #2: Depth 6330 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 <u>150</u> sks cmt from <u>1420</u> ft. to <u>1000</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>
Set <u>321</u> sks cmt from <u>600</u> ft. to <u>0</u> ft.	Plug Type: <u>OPEN HOLE</u>	Plug Tagged: <input type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>

Perforate and squeeze at 5110 ft. with 105 sacks. Leave at least 100 ft. in casing 4745 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: 1300 ft. of 4+1/2 inch casing Plugging Date: 05/25/2018

\*Wireline Contractor: Ranger

\*Cementing Contractor: C&J

Type of Cement and Additives Used: 15.8 PPG CL G NEAT + 2 % CaCl

Flowline/Pipeline has been abandoned per Rule 1105 ☐ Yes ☐ No

\*ATTACH JOB SUMMARY

#### Technical Detail/Comments:

Hahn 14-27 (05-123-20348)/Plugging Procedure

Producing Formation: Codell: 7046'-7056'

Upper Pierre Aquifer: 2385'-2442'

TD: 7200' PBD: 7155'

Surface Casing: 8 5/8" 24# @ 370' w/ 280 sxs

Production Casing: 4 1/2" 10.5# @ 7186' w/ 140 sxs cmt (TOC @ 6018' - CBL).

Tubing: 2 3/8" tubing set @ 7042' (11/9/2001).

Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6986'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 6330'. Top with 2 sxs 15.8#/gal CI G cement.
5. Shoot lower squeeze holes at 5110'. Shoot upper squeeze holes at 4730'.
6. Set CICR at 4745'. Sting in and pump 105 sxs 15.8#/gal CI G cement. Sting out and pump 10 sxs on top of CICR.
7. TIH with casing cutter. Cut 4 1/2" casing at 1300'. Pull cut casing.
8. TIH with tubing to 1420'. RU cementing company. Mix and pump 150 sxs 15.8#/gal CI G cement with 2% CaCl down tubing to 1000'.
9. Pick up tubing to 600'. Mix and pump 321 sxs 15.8#/gal CI G cement down tubing. Cement circulate to surface.
10. 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: 7/11/2018

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: Jacobson, Eric

Date: 1/4/2019

**CONDITIONS OF APPROVAL, IF ANY:**

<u>COA Type</u>	<u>Description</u>
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**Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
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401699110	FORM 6 SUBSEQUENT SUBMITTED
401699115	WELLBORE DIAGRAM
401699121	CEMENT JOB SUMMARY

Total Attach: 3 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
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Engineer	Requested CBL during plugging No CBL kept during plugging	12/12/2018
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Total: 1 comment(s)