

FORM
6Rev
12/05State of Colorado
Oil and Gas Conservation Commission

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



DE	ET	OE	ES
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Date Received: 01/30/2018			

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: O'Donnell, Shaun Tel: (720) 305-8280	
COGCC contact: Email: shaun.odonnell@state.co.us	

API Number 05-123-20348-00	Well Number: 14-27
Well Name: HAHN	
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: <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Production Sub-economic <input type="checkbox"/> Mechanical Problems	
<input type="checkbox"/> Other	
Casing to be pulled: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated Depth: 3000
Fish in Hole: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, explain details below
Wellbore has Uncemented Casing leaks: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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			

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	375	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 6996 with 2 sacks cmt on top. CIBP #2: Depth 6630 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>60</u> sks cmt from <u>3125</u> ft. to <u>2900</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input checked="" type="checkbox"/>
Set <u>150</u> sks cmt from <u>2550</u> ft. to <u>2275</u> ft.	Plug Type: <u>OPEN HOLE</u>	Plug Tagged: <input type="checkbox"/>
Set <u>425</u> sks cmt from <u>575</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"/>

Perforate and squeeze at 5110 ft. with 205 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: _____ 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:

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

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6996'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 6630'. 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 205 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 3000'. Pull cut casing.
8. TIH with tubing to 3125'. RU cementing company. Mix and pump 60 sxs 15.8#/gal CI G cement with 2% CaCl down tubing.
9. Pick up tubing to 2550'. Mix and pump 150 sxs 15.8#/gal CI G cement down tubing.
10. Pick up tubing to 575'. Mix and pump 425 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
11. 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: 1/30/2018 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: JENKINS, STEVE

Date: 3/1/2018

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 8/31/2018

<u>COA Type</u>	<u>Description</u>
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) Prior to placing the 575' plug: verify that all fluid migration (liquid or gas) has been eliminated. If evidence of fluid migration or pressure remains, contact COGCC Engineer for an update to plugging orders. 3) After isolation has been verified, pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours then tag plug – must be at 325' or shallower and provide 10 sx plug at the surface. Leave at least 100' of cement in the casing for each plug. 4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment is complete.
	Operator shall implement measures to control unnecessary and excessive venting, to protect the health and safety of the public, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare.
	Prior to starting plugging operations a Bradenhead test shall be performed. 1) If, before opening the Bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required. 2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required. 3) If sampling is required contact COGCC engineering for an confirmation of plugging requirements prior to placing any plugs. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. The Form 17 shall be submitted within 10 days of the test.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401529818	FORM 6 INTENT SUBMITTED
401529831	GYRO SURVEY
401529832	WELLBORE DIAGRAM
401529836	WELLBORE DIAGRAM

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	1) Deepest Water Well within 1 mile = 300'. 2) Fox Hills Bottom- N/A, per SB5.	03/01/2018
Public Room	Pass	02/15/2018
Permit	Pass	02/14/2018

Total: 3 comment(s)