

Document Number:
401383208

Date Received:
08/22/2017

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: Gomez, Jason Tel: (970) 573-1277

COGCC contact: Email: jason.gomez@state.co.us

API Number 05-123-11355-00 Well Number: 2

Well Name: HARDMAN

Location: QtrQtr: SESW 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: 40.394220 Longitude: -104.900330

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: 725

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	7245	7259			

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	489	360	489	0	VISU
1ST	7+7/8	4+1/2	11.6	7,344	250	7,344	6,400	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7195 with 2 sacks cmt on top. CIBP #2: Depth 6853 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 235 sks cmt from 775 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 2 (05-123-11355)/Plugging Procedure (Intent)
Producing Formation (Perforations): Codell: 7245'-7259'
TD: 7346' PBTD: 7310'
Surface Casing: 8 5/8" 24# @ 509' w/ 360 sxs
Production Casing: 4 1/2" 11.6# @ 7346' w/ 250 sxs cmt (TOC @ 6400' - CBL).

Tubing: 2 3/8" tubing set @ 7225' (5/9/2007).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7195'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 6853'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with casing cutter. Cut 4 1/2" casing at 725'. Pull cut casing.
6. TIH with tubing to 775'. RU cementing company. Mix and pump 235 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: 8/22/2017 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: JENKINS, STEVE

Date: 9/1/2017

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 2/28/2018

COA Type	Description
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) For the 775' plug: pump plug and displace. If surface casing plug is not circulated to surface then tag plug – must be at 439' 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

Att Doc Num	Name
401383208	FORM 6 INTENT SUBMITTED
401383226	WELLBORE DIAGRAM
401383228	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Public Room	Document verification complete 08/29/17	08/29/2017

Total: 1 comment(s)