

Document Number:  
402237649

Date Received:  
11/12/2019

**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: Valerie Danson

Name of Operator: PDC ENERGY INC Phone: (970) 506-9272

Address: 1775 SHERMAN STREET - STE 3000 Fax: \_\_\_\_\_

City: DENVER State: CO Zip: 80203 Email: valerie.danson@pdce.com

**For "Intent" 24 hour notice required,** Name: Evins, Bret Tel: (970) 420-6699

**COGCC contact:** Email: bret.evins@state.co.us

API Number 05-123-23181-00

Well Name: WELLS RANCH Well Number: 33-2

Location: QtrQtr: NWSE Section: 2 Township: 5N Range: 63W 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: 40.426030 Longitude: -104.401080

GPS Data:  
Date of Measurement: 10/16/2006 PDOP Reading: 3.5 GPS Instrument Operator's Name: H.L. TRACY

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

Casing to be pulled:  Yes  No Estimated Depth: 2200

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    | 6637      | 6645      |                |                     |            |

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              | 403           | 290          | 403        | 0          | VISU   |
| 1ST         | 7+7/8        | 4+1/2          | 10.5            | 6,807         | 425          | 6,807      | 2,630      | CBL    |

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6587 with 2 sacks cmt on top. CIBP #2: Depth 6322 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 93 sks cmt from 2250 ft. to 1900 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 185 sacks half in. half out surface casing from 603 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. \_\_\_\_\_ inch casing Cut and Cap Date: \_\_\_\_\_  
of  
 \*Wireline Contractor: \_\_\_\_\_ \*Cementing Contractor: \_\_\_\_\_  
 Type of Cement and Additives Used: \_\_\_\_\_  
 Flowline/Pipeline has been abandoned per Rule 1105  Yes  No \*ATTACH JOB SUMMARY

Technical Detail/Comments:

Wells Ranch 33-2 (05-123-231810000) Proposed Plugging Procedure  
Existing Perforations: Codell: 6637' – 6645'

Top of Niobrara: 6372'  
Upper Pierre Aquifer: 450' – 1575'  
TD: 6820' PBTD: 6755'  
Surface Casing: 8-5/8" 24# set @ 403' w/ 290 sxs cmt  
Production Casing: 4-1/2" 10.5# set @ 6807' w/ 425 sxs cmt (CBL TOC @ 2630')

Existing Tubing: Unknown Length/Size (est. 6621' of 2-3/8")

Proposed Procedure:

1. MIRU WO equipment.
2. Load and kill well.
3. POOH w/ tbq.
4. PU CIBP.
5. RIH and set @ 6587' (50' above Codell perms).
6. PU dump bailer w/ 2 sxs cmt.
7. RIH and spot cmt on top of CIBP from 6560' – 6586'.
8. POOH w/ bailer.
9. PU CIBP.
10. RIH and set @ 6322' (50' above Nio top)
11. PU dump bailer w/ 2 sxs cmt.
12. RIH and spot cmt on top of CIBP from 6295' – 6321'
13. POOH
14. WOC.
15. Pressure test 4.5" production csg. Hunt holes if failed. Report back.
16. If pass PU csg cutter.
17. RIH and cut 4.5" csg @ 1675'.
18. POOH w/ cutter.
19. Spear into csg and pull cut section.
20. PU work string.
21. RIH and spot a 93 sx balance plug from 1725' – 1375' (50' into csg stub and across Pierre Base).
22. TOOH and spot a 185 sx balance plug from 603' – surface (covering Surface Shoe)
23. POOH and WOC.
24. Top off remaining cmt.
25. Cut, cap, and fill.
26. RDMO WO equipment.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Valerie Danson  
Title: Reg Tech Date: 11/12/2019 Email: valerie.danson@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: Wolfe, Stephen Date: 11/18/2019

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

Expiration Date: 5/17/2020

| COA Type | Description   |
|----------|---|
|          | <p>Venting<br/>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.</p>  |
|          | <p>Plugging<br/>           1) Provide 48 hour notice of plugging MIRU via electronic Form 42.<br/>           2) Properly abandon flowlines as per Rule 1105. File electronic Form 42 once abandonment complete. Within 30 days of an operator completing abandonment requirements for an off-location flowline or crude oil transfer line the operator must submit a Flowline Report, Form 44.<br/>           3) Plugs and squeezes will be placed as stated in the Plugging Procedure section of the approved NOIA unless revised by COA or prior approval from COGCC is obtained.<br/>           4) The wellbore must be static prior to placing cement plugs which are to be a minimum of 100' in length for all but surface plugs. Mechanical isolation requires a 25' cement plug, minimum.<br/>           5) Place a 50' plug (minimum) at the surface, both inside the inner most casing and in all annular spaces. Confirm cement to surface in all strings during cut and cap.<br/>           6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.<br/>           7) Contact area inspector prior to commencing plugging operations.<br/>           8) No current Form 17 on file with COGCC. Contact COGCC area engineer with results of pre-plugging bradenhead test for confirmation of plugging procedure prior to commencing plugging operations.<br/>           9) Move the casing cut to 2200'. Pump 93 sx stub plug from 2250-1900'. Tag plug if circulation is not maintained while pumping plug and displacing to depth.<br/>           10) After placing the shallowest hydrocarbon isolating plug (2250-1900'), operator must wait a sufficient time to confirm static conditions. If at any time after placing this plug there is evidence of pressure or of fluid migration, contact COGCC engineering before continuing operations.<br/>           11) Submit gyro survey with Form 6 SRA if available.</p> |
|          | <p>Bradenhead Testing<br/>           Prior to starting plugging operations a bradenhead test shall be performed if there has not been a reported bradenhead test within the 60 days immediately preceding the start of plugging operations.<br/>           1) If, before opening the bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required.<br/>           2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required.</p> <p>The Form 17 shall be submitted within 10 days of the test. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. If samples are collected, copies of all final laboratory analytical results shall be provided to the COGCC within three (3) months of collecting the samples.</p> <p>If there is a need for sampling, contact COGCC engineering for verification of plugging procedure.</p>  |

### Attachment Check List

| Att Doc Num | Name                    |
|-------------|-------------------------|
| 402237649   | FORM 6 INTENT SUBMITTED |
| 402237651   | WELLBORE DIAGRAM        |
| 402237652   | WELLBORE DIAGRAM        |

Total Attach: 3 Files

### General Comments

| <u>User Group</u> | <u>Comment</u>   | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit            | <ul style="list-style-type: none"><li>•Verified SHL lat./long</li><li>•Verified CODL perfed interval via Doc. 1516948</li><li>•Verified production reporting</li></ul> | 11/18/2019          |
| Engineer          | SB5 No results<br>L-FH + 50 = Behind pipe<br>WW + Elev + 50 = 350 + 4680 - 4660 + 50 = 420'<br>Logs 1/20/06 UPA base 1550'   | 11/18/2019          |

Total: 2 comment(s)