

Document Number:  
401518944

Date Received:  
01/18/2018

**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: Kelsi Welch  
 Name of Operator: PDC ENERGY INC Phone: (303) 831-3974  
 Address: 1775 SHERMAN STREET - STE 3000 Fax: \_\_\_\_\_  
 City: DENVER State: CO Zip: 80203 Email: kelsi.welch@pdce.com

**For "Intent" 24 hour notice required,** Name: Pesicka, Conor Tel: (970) 415-0789  
 Email: conor.pesicka@state.co.us

**COGCC contact:** \_\_\_\_\_

API Number 05-123-22775-00 Well Number: 23-20  
 Well Name: WELLS RANCH  
 Location: QtrQtr: NESW Section: 20 Township: 6N 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: 40.469720 Longitude: -104.462280  
 GPS Data:  
 Date of Measurement: 07/30/2008 PDOP Reading: 1.7 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: 675  
 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	6745	6753			

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	8	24	455	320	0	
1ST	7+7/8	4+1/2	10.5	6,924	530	6,924	2,462	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6695 with 2 sacks cmt on top. CIBP #2: Depth 6410 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 15 sks cmt from 2865 ft. to 2695 ft. Plug Type: CASING Plug Tagged:   
 Set 345 sks cmt from 725 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:

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:

Wells Ranch 23-20 (05-123-22775)/Plugging Procedure (Intent)  
 Producing Formation: Codell: 6745'-6753'  
 Upper Pierre Aquifer: 2745'-2815'  
 TD: 6941' PBSD: 6909'  
 Surface Casing: 8 5/8" 24# @ 455' w/ 320 sxs  
 Production Casing: 4 1/2" 10.5# @ 6924' w/ 530 sxs cmt (TOC @ 2462' - CBL).

Tubing: 2 3/8" tubing set @ 6731' (5/5/2005).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6695'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 6410'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with tubing to 2865'. RU cementing company. Mix and pump 15 sxs 15.8#/gal CI G cement down tubing. TOOH with tubing.
6. TIH with casing cutter. Cut 4 1/2" casing at 675'. Pull cut casing.
7. TIH with tubing to 725'. Mix and pump 345 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
8. Cut surface casing 6' below ground level and weld on cap.

If there is bradenhead pressure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6695'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 6410'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with tubing to 2865'. RU cementing company. Mix and pump 15 sxs 15.8#/gal CI G cement down tubing. TOOH with tubing.
6. TIH with casing cutter. Cut 4 1/2" casing at 1500'. Pull cut casing.
7. TIH with tubing to 1550'. RU cementing company. Mix and pump 75 sxs 15.8#/gal CI G cement down tubing. Wait 8 hours or overnight. Check to see if there is any bradenhead pressure or fluid flow after stub plug is set. If there is, contact COGCC for further guidance. If there is not, move on to step 8.
8. TIH with tubing to 675'. RU cementing company. Mix and pump 475 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
9. 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: Kelsi Welch  
 Title: Production Tech Date: 1/18/2018 Email: kelsi.welch@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: 2/14/2018

**CONDITIONS OF APPROVAL, IF ANY:** Expiration Date: 8/13/2018

COA Type	Description
	1)Submit Form 42 electronically to COGCC 48 hours prior to MIRU electronically to COGCC 48 hours prior to MIRU. 2)Prior to placing the 725' 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 requirements. . 3)After isolation has been verified, pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours and tag plug – top of plug must be not deeper than 405' and provide minimum 10 sx plug at the surface. Leave at least 100' of cement in the wellbore for each plug. 4)Properly abandon all flowlines. Once flowlines are properly abandoned, file electronic form 42.
	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.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401518944	FORM 6 INTENT SUBMITTED
401518960	GYRO SURVEY
401518963	WELLBORE DIAGRAM
401518964	WELLBORE DIAGRAM

Total Attach: 4 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Bradenhead test dated 02/06/2018 shows no pressure/no flows. No additional Bradenhead test is required.	02/14/2018
Public Room	Pass	02/12/2018
Permit	Pass.	02/01/2018

Total: 3 comment(s)