

Document Number:  
401807240

Date Received:  
10/29/2018

**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: 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 05-123-23177-00 Well Name: WELLS RANCH Well Number: 22-2  
 Location: QtrQtr: SENW 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: 40.430750 Longitude: -104.405810  
 GPS Data:  
 Date of Measurement: 10/16/2006 PDOP Reading: 1.7 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: 1700  
 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	6647	6653			

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	406	225	406	0	VISU
1ST	7+7/8	4+1/2	10.5	6,841	415	6,841	2,724	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6597 with 2 sacks cmt on top. CIBP #2: Depth 6329 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 255 sks cmt from 1815 ft. to 1400 ft. Plug Type: STUB PLUG Plug Tagged:   
 Set 360 sks cmt from 606 ft. to 0 ft. Plug Type: OPEN HOLE 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 1105  Yes  No \*ATTACH JOB SUMMARY

Technical Detail/Comments:

Wells Ranch 22-2 (05-123-23177)/Plugging Procedure (Intent)  
 Producing Formation: Codell: 6647'-6653'  
 Upper Pierre Aquifer: 500'-1560'  
 TD: 6854' PBTD: 6826'  
 Surface Casing: 8 5/8" 24# @ 406' w/ 225 sxs  
 Production Casing: 4 1/2" 10.5# @ 6841' w/ 415 sxs cmt (TOC @ 2724' - CBL).

Tubing: Unknown tubing depth.  
 Proposed Procedure:  
 1. MIRU pulling unit. Pull tubing string.  
 2. RU wireline company.  
 3. TIH with CIBP. Set BP at 6597'. Top with 2 sxs cmt.  
 4. TIH with CIBP. Set BP at 6329'. Top with 2 sxs cmt.  
 5. TIH with casing cutter. Cut 4 1/2" casing at 1700'. Pull cut casing.  
 6. TIH with tubing to 1815'. RU cementing company. Mix and pump 255 sxs 15.8#/gal CI G cement w/ 2% CaCl down tubing (Pierre coverage from 1815'-1400').  
 7. Pick up tubing to 606'. RU cementing company. Mix and pump 360 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface. TOOH with tubing.  
 8. 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: Valerie Danson  
 Title: Reg Tech Date: 10/29/2018 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: Jacobson, Eric

Date: 1/4/2019

**CONDITIONS OF APPROVAL, IF ANY:**

Expiration Date: 7/3/2019

<b>COA Type</b>	<b>Description</b>
	<p>If there has not been a reported Bradenhead test within 60 days of plugging this well, prior to starting plugging operations, a Bradenhead test shall be performed.</p> <p>1) If, before opening the Bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required.</p> <p>2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required.</p> <p>3) If sampling is required contact COGCC engineering for an confirmation of plugging requirements prior to placing any plugs.</p> <p>Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions.</p> <p>The Form 17 shall be submitted within 10 days of the test.</p>
	<p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2) Prior to placing the 606' 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.</p> <p>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 356' or shallower and provide 10 sack plug at surface.</p> <p>4) Leave at least 100' of cement in the wellbore for each plug.</p> <p>5) Properly abandon on-location flowlines as per Rule 1105. File electronic Form 42 once abandonment is 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.</p>
	<p>Operator shall implement measures to control venting, to protect health and safety, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare.</p>

### **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
401807240	FORM 6 INTENT SUBMITTED
401807245	GYRO SURVEY
401807247	WELLBORE DIAGRAM
401807248	WELLBORE DIAGRAM

Total Attach: 4 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Engineer	Deepest Water Well within 2 Miles – 400' SB5 Base of Fox Hills - N/A	01/04/2019
Well File Verification	Pass	11/05/2018
Permit	Requested updated formation tops, all else good.	10/31/2018

Total: 3 comment(s)