

Document Number:  
401772020

Date Received:  
09/24/2018

**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: Montoya, John Tel: (970) 397-4124  
**COGCC contact:** Email: john.montoya@state.co.us

API Number 05-123-20239-00 Well Name: DUNN Well Number: 23-7  
 Location: QtrQtr: NESW Section: 7 Township: 5N Range: 64W 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: 40.411280 Longitude: -104.594690  
 GPS Data:  
 Date of Measurement: 08/21/2010 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: 1500  
 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	6886	6896			

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	412	290	412	0	VISU
1ST	7+7/8	4+1/2	10.5	7,068	350	7,068	3,054	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6836 with 2 sacks cmt on top. CIBP #2: Depth 6490 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 3200 ft. to 3050 ft. Plug Type: CASING Plug Tagged:   
 Set 255 sks cmt from 1615 ft. to 1200 ft. Plug Type: STUB PLUG Plug Tagged:   
 Set 365 sks cmt from 612 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:   
 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:

Dunn 23-7 (05-123-20239)/Plugging Procedure (Intent)  
 Producing Formation: Codell: 6886'-6896'  
 Upper Pierre Aquifer: 359'-1320'  
 TD: 7088' PBTD: 7015.4'  
 Surface Casing: 8 5/8" 24# @ 412' w/ 290 sxs cmt  
 Production Casing: 4 1/2" 10.5# @ 7068' w/ 350 sxs cmt (TOC @ 3054' - CBL).  
 Tubing: 2 3/8" tubing set @ 6872.8 (04/12/2018).  
 Proposed Procedure:  
 1. MIRU pulling unit. Pull 2 3/8" tubing.  
 2. RU wireline company.  
 3. TIH with CIBP. Set BP at 6836'. Top with 2 sxs 15.8#/gal CI G cement.  
 4. TIH with CIBP. Set BP at 6490'. Top with 2 sxs 15.8#/gal CI G cement.  
 5. TIH with casing cutter. Cut 4 1/2" casing at 1500'. Pull cut casing.  
 6. TIH with tubing to 1615'. RU cementing company. Mix and pump 255 sxs 15.8#/gal CI G cement w/ 2% CaCl down tubing (Pierre coverage from 1615'-1200').  
 7. Pickup tubing to 612'. Mix and pump 365 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.

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: 9/24/2018 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, Eric

COGCC Approved:

Date: 11/7/2018

**CONDITIONS OF APPROVAL, IF ANY:**

Expiration Date: 5/6/2019

<u>COA Type</u>	<u>Description</u>
	<p>UPDATED PLUGGING PROCEDURE</p> <p>Added Casing Plug at 3200' with 15 sacks cement. Operator in agreement and will submit updated wellbore diagram with the Form 6 Subsequent.</p>
	<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 612' 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 362' 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 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>

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401772020	FORM 6 INTENT SUBMITTED
401772036	WELLBORE DIAGRAM
401772039	WELLBORE DIAGRAM

Total Attach: 3 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Deepest Water Well within 1 Mile – 103' SB5 Base of Fox Hills - N/A	11/07/2018
Well File Verification	Pass	10/04/2018
Permit	Passed permitting.	10/04/2018

Total: 3 comment(s)