

FORM  
6Rev  
05/18

## State of Colorado

## Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

401879526

Date Received:

12/18/2018

## 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: 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: Kraich, Adam

Tel: (970) 420-0536

COGCC contact:

Email: adam.kraich@state.co.us

API Number 05-123-11483-00

Well Name: WARREN

Well Number: 10-1

Location: QtrQtr: SENE Section: 10 Township: 5N Range: 67W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 65471

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: 40.415940

Longitude: -104.872080

GPS Data:

Date of Measurement: 07/23/2007

PDOP Reading: 2.9

GPS Instrument Operator's Name: Holly L. Tracy

Reason for Abandonment:

☐ Dry☒ Production Sub-economic☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes☐ No

Estimated Depth: 1400

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	7228	7242			
NIOBRARA	6936	7066			

Total: 2 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	341	250	341	0	VISU
1ST	7+7/8	4+1/2	11.6	7,296	225	7,296	6,314	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6886 with 2 sacks cmt on top. CIBP #2: Depth \_\_\_\_\_ with \_\_\_\_\_ 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 1155 sks cmt from 1515 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 1105 ☐ Yes ☐ No \*ATTACH JOB SUMMARY

#### Technical Detail/Comments:

Warren 10-1 (05-123-11483)/Plugging Procedure (Intent)  
Producing Formation: Niobrara/Codell: 6936'-7242'  
Upper Pierre Aquifer: 336'-1280'  
TD: 7322' PBD: 7251.2'  
Surface Casing: 8 5/8" 24# @ 341' w/ 250 sxs cmt  
Production Casing: 4 1/2" 11.6# @ 7296' w/ 225 sxs cmt (TOC @ 6314' - CBL).

Tubing: 2 3/8" tubing set @ 7208.8' (5/21/2008).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6886'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with casing cutter. Cut 4 1/2" casing at 1400'. Pull cut casing.
5. TIH with tubing to 1515'. Mix and pump 1155 sxs 15.8#/gal CI G cement w/ 2% CaCl down tubing (Pierre coverage from 1515'-1100' in addition to the deepest water w/ 1 mile being 1170'). Cement should circulate to surface.
6. 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: 12/18/2018 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: JENKINS, STEVE Date: 3/19/2019

**CONDITIONS OF APPROVAL, IF ANY:**

Expiration Date: 9/18/2019

**COA Type****Description**

	<p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2) Prior to placing the 1515' 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 291' or shallower and provide 10 sx plug at the surface.</p> <p>4) Leave at least 100' of cement in the wellbore for each plug.</p> <p>5) Properly abandon flowlines 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>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 a confirmation of plugging requirements prior to placing any plugs.</p> <p>Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. The Form 17 shall be submitted within 10 days of the test.</p>

**Attachment Check List****Att Doc Num****Name**

401879526	FORM 6 INTENT SUBMITTED
401879653	WELLBORE DIAGRAM
401879654	WELLBORE DIAGRAM
401879655	GYRO SURVEY

Total Attach: 4 Files

**General Comments****User Group****Comment****Comment Date**

Engineer	<p>1) Deepest Water Well within 1 mile = 1170'.</p> <p>2) Fox Hills Bottom- N/A, per SB5.</p>	03/19/2019
Engineer	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.	03/19/2019
Well File Verification	Pass	12/20/2018
Permit	Pass	12/19/2018

Total: 4 comment(s)