

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:

402216229

Date Received:

10/21/2019

## 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 05-123-22789-00

Well Name: WELLS RANCH

Well Number: 23-2

Location: QtrQtr: NESW 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: 40.426560

Longitude: -104.406500

GPS Data:

Date of Measurement: 10/16/2006

PDOP Reading: 4.3

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: 1750

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	6631	6639			

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	410	230	410	0	VISU
1ST	7+7/8	4+1/2	10.5	6,801	140	6,801	6,002	CBL
S.C. 1.1				6,002	290	6,002	2,712	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6581 with 2 sacks cmt on top. CIBP #2: Depth 6298 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 1800 ft. to 1450 ft. Plug Type: STUB PLUG Plug Tagged: ☐  
Set 187 sks cmt from 610 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 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 23-2 (05-123-227890000) Proposed Plugging Procedure  
Existing Perforations: Codell: 6631' – 6639'

Top of Niobrara: 6348'  
Upper Pierre Aquifer: 850' – 1650'  
TD: 6818' PBTD: 6787'  
Surface Casing: 8-5/8" 24# set @ 410' w/ 230 sxs cmt  
Production Casing: 4-1/2" 10.5# set @ 6801' w/ 465 sxs cmt (CBL TOC @ 2712')

Existing Tubing: Unknown Tubing Information

Proposed Procedure:

1. MIRU WO equipment.
2. Load and kill well.
3. POOH w/ tbq.
4. PU CIBP.
5. RIH and set @ 6581' (50' above Codell perms).
6. PU dump bailer w/ 2 sxs cmt.
7. RIH and spot cmt on top of CIBP from 6554' – 6580'.
8. POOH w/ bailer.
9. PU CIBP.
10. RIH and set @ 6298' (50' above Nio top)
11. PU dump bailer w/ 2 sxs cmt.
12. RIH and spot cmt on top of CIBP from 6271' – 6297'
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 @ 1750'.
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 1800' – 1450' (50' into csg stub and across Pierre Base).
22. TOOH and spot a 187 sx balance plug from 610' – 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: 10/21/2019 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: JENKINS, STEVE Date: 11/7/2019

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

Expiration Date: 5/6/2020

<b>COA Type</b>	<b>Description</b>
	<p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2) Prior to placing the 610' 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 360' 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 of on-location flowlines 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>6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.</p> <p>7) After placing the shallowest hydrocarbon isolating plug (1800'), 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.</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>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.</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>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>

### **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
402216229	FORM 6 INTENT SUBMITTED
402216264	WELLBORE DIAGRAM
402216266	WELLBORE DIAGRAM
402216267	CEMENT BOND LOG

Total Attach: 4 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Engineer	"Well file verification not completed prior to approval of NOIA".	11/07/2019
Engineer	<p>1) Deepest Water Well within 1 mile = 50'.</p> <p>2) Fox Hills Bottom- N/A, per SB5</p>	11/07/2019
Permit	<ul style="list-style-type: none"> <li>• Verified SHL lat./long</li> <li>• Verified CODL perfed interval via Doc. 1525971</li> <li>• Verified production reporting</li> </ul>	10/28/2019

Total: 3 comment(s)