

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



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Document Number:

402189352

Date Received:

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: Peterson, Tom

Tel: (970) 370-1281

COGCC contact:

Email: tom.peterson@state.co.us

API Number 05-123-12164-00

Well Name: BRUCE

Well Number: 1

Location: QtrQtr: NENW Section: 31 Township: 4N Range: 66W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 68900

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: 40.274167

Longitude: -104.822500

GPS Data:

Date of Measurement: 02/10/2010

PDOP Reading: 2.1

GPS Instrument Operator's Name: Brandon Lucason

Reason for Abandonment:

☐ Dry☒ Production Sub-economic☐ Mechanical Problems☐ Other

Casing to be pulled:

☒ Yes☐ No

Estimated Depth: 2500

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
NIOBRARA-CODELL	6984	7282			

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	267	330	267	0	VISU
1ST	7+7/8	4+1/2	11.6	7,387	250	7,387	6,415	CBL
S.C. 1.1				5,050	125	5,050	4,778	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6934 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 <u>25</u> sks cmt from <u>5165</u> ft. to <u>4935</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>10</u> sks cmt from <u>4669</u> ft. to <u>4538</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>40</u> sks cmt from <u>2550</u> ft. to <u>2375</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>
Set <u>59</u> sks cmt from <u>1460</u> ft. to <u>1260</u> ft.	Plug Type: <u>OPEN HOLE</u>	Plug Tagged: <input type="checkbox"/>
Set <u>180</u> sks cmt from <u>600</u> ft. to <u>0</u> ft.	Plug Type: <u>OPEN HOLE</u>	Plug Tagged: <input type="checkbox"/>

Perforate and squeeze at 4770 ft. with 30 sacks. Leave at least 100 ft. in casing 4670 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:

Bruce 1 (05-123-12164)/Plugging Procedure (Intent)

Producing Formation: Niobrara/Codell: 6984'-7282'

Upper Pierre Aquifer: 440'-1360'

TD: 7390' PBTD: 7343' (8/12/2014)

Surface Casing: 8 5/8" 24# @ 267' w/ 330 sxs

Production Casing: 4 1/2" 11.6# @ 7387' w/ 250 sxs cmt (TOC @ 6415' - CBL).

Remedial Squeeze @ 5050' w/ 125 sxs cmt (TOC @ 4778' - CBL)

Casing Patch @ 2409'

Tubing: 2 3/8" tubing set @ 7261' (10/10/2014).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6934'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Niobrara perms @ 6984')
4. TIH with tubing to 5165'. RU cementing company. Mix and pump 25 sxs 15.8#/gal CI G cement down tubing (Remedial Squeeze coverage 5050'-4935').
5. TIH with perf gun. Shoot lower squeeze holes at 4770' and upper squeeze holes at 4655'.
6. TIH with CICR. Set CICR at 4670'. RU cementing company. Sting in and pump 40 sxs 15.8#/gal CI G cement. Sting out and pump 10 sxs cement on top of CICR.
7. TIH with casing cutter. Cut 4 1/2" casing at 2500' (below casing patch @ 2409'). Pull cut casing and casing patch.
8. TIH with tubing to 2550'. RU cementing company. Mix and pump 40 sxs 15.8#/gal CI G cement down tubing.
9. Pick up tubing to 1460'. Mix and pump 59 sxs 15.8#/gal CI G cement down tubing (Pierre coverage from 1460'-1260').
10. Pick up tubing to 600'. Mix and pump 180 sxs 15.8#/gal CI G cement down tubing (Pierre coverage from 600'-surface). Cement should circulate to surface.
11. 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: _____ 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: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: _____

COA Type **Description**

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Attachment Check List

Att Doc Num **Name**

402189382	WELLBORE DIAGRAM
402189383	WELLBORE DIAGRAM
402189384	GYRO SURVEY

Total Attach: 3 Files

General Comments

User Group **Comment** **Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)