

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:

402121219

Date Received:

09/03/2019

## 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: Silver, Randy

Tel: (720) 827-6688

COGCC contact:

Email: randy.silver@state.co.us

API Number 05-123-23769-00

Well Name: KIRBY

Well Number: 44-36

Location: QtrQtr: SWSE Section: 36 Township: 1N Range: 67W 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: 40.002190

Longitude: -104.836520

GPS Data:

Date of Measurement: 04/09/2009

PDOP Reading: 2.7

GPS Instrument Operator's Name: ROBERT D. THOMAS

Reason for Abandonment:

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

Estimated Depth: 2100

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
J SAND	8266	8296			

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	1,139	800	1,139	0	VISU
1ST	7+7/8	4+1/2	11.6	8,427	300	8,427	6,850	CBL
			Stage Tool	5,344	220	5,344	4,370	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8216 with 2 sacks cmt on top. CIBP #2: Depth 7755 with 2 sacks cmt on top.  
CIBP #3: Depth 7310 with 2 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>62</u> sks cmt from <u>5450</u> ft. to <u>4633</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>75</u> sks cmt from <u>2150</u> ft. to <u>2000</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>
Set <u>202</u> sks cmt from <u>660</u> ft. to <u>0</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>

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 100 sacks half in. half out surface casing from 1190 ft. to 900 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:

Kirby 44-36 (05-123-23769) Plugging Procedure (Intent)

Producing Formation: J-Sand: 8266'-8296'

Upper Pierre Aquifer: 560'-1440'

TD: 8465' PBTD: 8420' (7/19/2006)

Surface Casing: 8 5/8" 24# @ 1139' w/ 800 sxs

Production Casing: 4 1/2" 11.6# @ 8427' w/ 300 sxs cmt (Lower cement @ 6850'-8427' - CBL)

DV Tool @ 5344' w/ 220 sxs cmt (TOC @ 4370' - CBL)

Tubing: 2 3/8" tubing set @ 8245' (7/19/2006)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 8216'. Top with 2 sxs 15.8#/gal CI G cement. (Top of J-Sand perms @ 8266')
4. TIH with CIBP. Set BP at 7755'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Codell est. 7805')
5. TIH with CIBP. Set BP at 7310'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Niobrara est. 7360')
6. TIH with tubing to 5450'. RU cementing company. Mix and pump 62 sxs 15.8#/gal CI G cement down tubing (DV tool and Sussex coverage from 5450'-4633', Top of Sussex est. 4750').
7. TIH with casing cutter. Cut 4 1/2" casing at 1550'. Pull cut casing.
8. TIH with tubing to 1600'. RU cementing company. Mix and pump 139 sxs 15.8#/gal CI G cement down tubing (Pierre coverage from 1550'-1080').
9. Pick up tubing to 660'. Mix and pump 202 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface (Pierre coverage from 660'-surface). TOOH with tubing.
10. 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

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: Wolfe, Stephen

Date: 9/10/2019

**CONDITIONS OF APPROVAL, IF ANY:**

Expiration Date: 3/9/2020

**COA Type**

**Description**

	<p>Bradenhead Testing</p> <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> <p>If there is a need for sampling, contact COGCC engineering for verification of plugging procedure.</p>
	<p>Venting</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>
	<p>Plugging</p> <p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2) Properly abandon flowlines as per Rule 1105. File electronic Form 42 once abandonment 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>3) Plugs and squeezes will be placed as stated in the Plugging Procedure section of the approved NOIA unless revised by COA or prior approval from COGCC is obtained.</p> <p>4) The wellbore must be static prior to placing cement plugs which are to be a minimum of 100' in length for all but surface plugs. Mechanical isolation requires a 25' cement plug, minimum.</p> <p>5) Place a 50' plug (minimum) at the surface, both inside the inner most casing and in all annular spaces. Confirm cement to surface in all strings during cut and cap.</p> <p>6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.</p> <p>7) Contact area inspector prior to commencing plugging operations.</p> <p>8) No current Form 17 on file with COGCC. Contact COGCC area engineer and inspector with results of pre-plugging bradenhead test for confirmation of plugging procedure prior to commencing plugging operations.</p> <p>9) Move the casing cut to 2100'. Pump stub plug from 2150-2000', adjust cement volume accordingly. No tag required if circulation is maintained while pumping and displacing plug to depth.</p> <p>10) After placing the shallowest hydrocarbon isolating plug (2150-2000'), 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> <p>10) Pump shoe plug from 1190-900', adjust cement volume accordingly. Tag.</p> <p>11) Submit Nio and Cd formation tops with Form 6 SRA</p>

### Attachment Check List

**Att Doc Num****Name**

402121219	FORM 6 INTENT SUBMITTED
402121228	WELLBORE DIAGRAM
402121229	WELLBORE DIAGRAM

Total Attach: 3 Files

### General Comments

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

Engineer	SB5 "Lower Arapahoe 4655 4886 91.6 289 58 24.92 NNT Laramie-Fox Hills 3995 4287 187.9 949 657 45.10 NT (123-21610-00 KIRBY 34-36)" L-FH + 50 = 949 + 50 = 999' WW + Elev + 50 = 1000 + 4943 - 4960 + 50 = 1033' Logs 7/6/06 UPA base 2020' (123-21610-00 KIRBY 34-36)	09/10/2019
Engineer	Proposed WBD missing completion data. RTD	09/02/2019
Permit	Ready to pass form. Confirmed as drilled lat/long is accurate. Final Form 5/Drilling Completion Report on file as doc# 1945194. J Sand formation completion confirmed via Form 5A/Completed Interval Report(s): doc# 1945195. Confirmed Form 7 production reporting is not accurate. Form 7 production reporting issues sent to COGCC Production staff.	07/29/2019

Total: 3 comment(s)