

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:

402061561

Date Received:

05/31/2019

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 05-123-19923-00

Well Name: NATIONAL HOG FARM

Well Number: 17-11

Location: QtrQtr: NWNW Section: 17 Township: 5N Range: 63W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 252915

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: 40.404080

Longitude: -104.467780

GPS Data:

Date of Measurement: 10/01/2007

PDOP Reading: 2.6

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:

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	6481	6746			

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	427	300	427	0	VISU
1ST	7+7/8	4+1/2	10.5	6,879	340	6,879	2,672	CBL
S.C. 1.1				2,672	600	2,672	0	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6431 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>40</u>	sks cmt from <u>2900</u>	ft. to <u>2400</u>	ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>40</u>	sks cmt from <u>1700</u>	ft. to <u>1200</u>	ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>50</u>	sks cmt from <u>627</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 _____ 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:

National Hog Farm 17-11 (05-123-19923) Plugging Procedure (Intent)

Producing Formation: Niobrara/Codell: 6481'-6746'

Upper Pierre Aquifer: 445'-1490'

TD: 6943' PBD: 6803'

Surface Casing: 8 5/8" 24# @ 427' w/ 300 sxs

Production Casing: 4 1/2" 10.5# @ 6879' w/ 340 sxs cmt (TOC @ 2672' - CBL).

Annular Fill w/ Casing Patch @ 2650' w/ 600 sxs cmt (2672'- surface - CBL).

Tubing: 2 3/8" tubing set @ 6726.8' (2/1/2016).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6431'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with tubing to 2900'. RU cementing company. Mix and pump 40 sxs 15.8#/gal CI G cement down tubing (Casing Patch coverage from 2900'-2400').
5. Pick up tubing to 1700'. RU cementing company. Mix and pump 40 sxs 15.8#/gal CI G cement down tubing (Pierre coverage from 1700'-1200').
6. Pick up tubing to 627'. Mix and pump 50 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface. TOOH with tubing.
7. 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: 5/31/2019 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: Wolfe, Stephen

Date: 8/20/2019

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 2/19/2020

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>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) 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>8) Contact area inspector prior to commencing plugging operations.</p> <p>9) After placing the shallowest hydrocarbon isolating plug (1700-1200'), 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>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>

Attachment Check List

Att Doc Num

Name

402061561	FORM 6 INTENT SUBMITTED
402061568	WELLBORE DIAGRAM
402061569	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	SB5 No results L-FH + 50 = L-FH behind pipe WW + Elev + 50 = 94 + 4685 - 4580 + 50 = 239' Logs 3/8/2000 UPA base 1490'	08/20/2019
Permit	Ready to pass form. Confirmed as drilled lat/long is accurate. Final Form 5/Drilling Completion Report on file as doc# 950221. Remedial cement on file as doc# 400313354. Niobrara-Codell formation completion confirmed via Form 5A/Completed Interval Report(s): doc# 402065796. Confirmed Form 7 production reporting is accurate.	06/10/2019
Well File Verification	Pass	06/05/2019

Total: 3 comment(s)