

FORM
6Rev
11/20

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:

402644763

Date Received:

03/31/2021

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

Type of Well Abandonment Report: ☒ Notice of Intent to Abandon ☐ Subsequent Report of Abandonment

API Number 05-123-20711-00

Well Name: STATE PETERSON

Well Number: 44-16

Location: QtrQtr: SESE Section: 16 Township: 5N Range: 63W Meridian: 6

County: WELD

Federal, Indian or State Lease Number:

Field Name: WATTENBERG

Field Number: 90750

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.393780

Longitude: -104.433860

GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 09/26/2007

Reason for Abandonment: ☐ Dry ☒ Production Sub-economic ☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes ☐ No Estimated Depth: 2500Fish in Hole: ☐ Yes ☒ No If yes, explain details belowWellbore 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	6515	6688			

Total: 1 zone(s)

Casing History

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top	Status
SURF	12+1/4	8+5/8	J55	24	0	407	285	407	0	VISU
1ST	7+7/8	4+1/2	J55	10.5	0	6868	360	6868	3026	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6465 with 2 sacks cmt on top. CIBP #2: Depth 4174 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 <u>100</u> sks cmt from <u>2550</u> ft. to <u>2300</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>
Set <u>100</u> sks cmt from <u>1580</u> ft. to <u>1380</u> ft.	Plug Type: <u>OPEN HOLE</u>	Plug Tagged: <input checked="" 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"/>
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 314 sacks half in. half out surface casing from 607 ft. to 0 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. of _____ inch casing Number of Days from Setting Surface Plug to Capping or Sealing the Well: _____
 Surface Plug Setting Date: _____ Cut and Cap Date: _____

*Wireline Contractor: _____ *Cementing Contractor: _____

Type of Cement and Additives Used: _____

Flowline/Pipeline has been abandoned per Rule 1105 ☐ Yes ☐ No

Technical Detail/Comments:

State Peterson 44-16 (05-123-20711)/Plugging Procedure (Intent)
 Producing Formation: Niobrara/Codell: 6515'-6688'

Upper Pierre Aquifer: 500'-1480'

Deepest Water Well: 400'

TD: 6884' PBD: 6818' (03/31/2015)

Surface Casing: 8 5/8" 24# @ 407' w/ 285 sxs cmt

Production Casing: 4 1/2" 10.5# @ 6868' w/ 360 sxs cmt (TOC @ 3026' - CBL)

Tubing: 2 3/8" tubing set @ 6670' (07/24/2015)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6465'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Nio perfs @ 6515').
4. TIH with CIBP. Set BP at 4174'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Sussex @ 4224').
5. TIH with casing cutter. Cut 4 1/2" casing @ 2500'. Pull out casing.
6. TIH with tubing to 2550'. RU cementing company. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing (Stub Plug from 2550'-2300').
7. Wait a sufficient time to confirm static conditions. If at any time after placing this plug there is evidence of pressure or fluid migration, contact engineering before continuing operations.
8. TIH with tubing to 1580'. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing (Pierre coverage from 1580'-1380').
9. Pick up tubing to 607'. Mix and pump 314 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
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

Title: Reg Tech Date: 3/31/2021 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: McFarland, Nick Date: 4/26/2021

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 10/25/2021

Condition of Approval

COA Type

Description

	In accordance with the Notice to Operators (NTO): Timing for COGCC Forms adopted on 05/01/2020, this Form 6 Notice of Intent to Abandon is valid for 12 months from the date of approval expiring on 4/26/2022. This NTO does not alter the deadlines for submission of, or compliance with any other Commission rule or Form.
	<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>1) Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2) After placing the shallowest hydrocarbon isolating plug (2550'), 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>3) Prior to placing the 1580' plug: verify that all fluid migration (liquid and gas) has been eliminated. If evidence of fluid migration or pressure remains, contact COGCC Engineer for an update to plugging orders.</p> <p>4) After isolation has been verified, pump plug at 607 and displace. If cement is not circulated to surface, shut-in, WOC 4 hours then tag plug – must be at 357' or shallower and provide 10 sx plug at the surface.</p> <p>5) Leave at least 100' of cement in the wellbore for each plug.</p> <p>6) Properly abandon flowlines as per Rule 1105. Pursuant to Rule 911.a. Closure of Oil and Gas Facilities, Operator will submit Site Investigation and Remediation Workplans via Form 27 for COGCC prior approval before cutting and capping the plugged well, conducting flowline abandonment, and removing production equipment. Pursuant to Rule 1105.f. Abandonment Verification, within 90 days of an operator completing abandonment requirements for a flowline or crude oil transfer line, an operator must submit a Field Operations Notice, Form 42-Abandonment of Flowlines for on-location flowlines, and a Flowline Report, Form 44, for off-location flowlines or crude oil transfer lines.</p> <p>7) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.</p>
	Operator will implement measures to control emissions 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 health, welfare and the environment.
	Reported "as drilled" GPS data is inaccurate. Submit accurate "as drilled" GPS data on Subsequent Report of Abandonment. GPS data must meet the requirements of Rule 216.

5 COAs

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402644763	FORM 6 INTENT SUBMITTED
402644813	WELLBORE DIAGRAM
402644818	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Most recent bradenhead test 10/29/20 - 0 psi. Producing as of February 2020. SB5 Base of Fox Hills Aquifer: Deepest water well within 1 mile: 400' # of wells: 4 Deepest water well within 1.5 miles: 400' # of wells: 14 Production within one mile: JSND, CODL, NBRR	04/26/2021
Permit	As-drilled GPS inaccurate. COA placed. Verified perf zones. Verified production reporting. Permitting review complete.	04/01/2021

Total: 2 comment(s)