

FORM
6Rev
02/20

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:

402396081

Date Received:

05/12/2020

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

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

API Number 05-123-22367-00

Well Name: STROH

Well Number: 24-12

Location: QtrQtr: SWNW Section: 24 Township: 4N Range: 67W 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: 40.298670 Longitude: -104.846690

GPS Data: GPS Quality Value: 2.0 Type of GPS Quality Value: Date of Measurement: 07/15/2010

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: 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	7010	7330			

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	371	265	371	0	VISU
1ST	7+7/8	4+1/2	11.6	7,479	485	7,479	3,303	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6960 with 2 sacks cmt on top. CIBP #2: Depth 4680 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>40</u> sks cmt from <u>2550</u> ft. to <u>2400</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>
Set <u>80</u> sks cmt from <u>1430</u> ft. to <u>1230</u> ft.	Plug Type: <u>OPEN HOLE</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"/>
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 189 sacks half in. half out surface casing from 571 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. _____ 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

Technical Detail/Comments:

Stroh 24-12 (05-123-22367)/Plugging Procedure (Intent)
Producing Formation: Niobrara/Codell: 7010'-7330'
Upper Pierre Aquifer: 360'-1330'
TD: 7498' PBTD: 7400' (10/7/2015)
Surface Casing: 8 5/8" 24# @ 371' w/ 265 sx cmt
Production Casing: 4 1/2" 11.6# @ 7479' w/ 485 sx cmt (TOC @ 3303' - CBL)

Tubing: 2 3/8" tubing set @ 7296' (10/8/2015)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6960'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Nio perms @ 7010')
4. TIH with CIBP. Set BP at 4680'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Shannon @ 4730')
5. TIH with casing cutter. Cut 4 1/2" casing @ 2500'. Pull cut casing.
6. TIH with tubing to 2550'. RU cementing company. Mix and pump 40 sxs 15.8#/gal CI G cement down tubing. (Stub plug from 2500'-2400')
7. TIH with tubing to 1430'. Mix and pump 80 sxs 15.8#/gal CI G cement down tubing. (Pierre coverage from 1430'-1230')
8. Pick up tubing to 571'. Mix and pump 189 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
9. 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: 5/12/2020 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. JEFFREY S. STEVE

COGCC Approved:

Date: 5/15/2020

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 11/14/2020

COA Type

Description

	<p>For Wells with known Bradenhead pressures:</p> <ol style="list-style-type: none">1) Provide 48-hour notice of plugging MIRU via electronic Form 42.2) The plug at 2550' needs to be placed and have an 8-hour WOC to assure that all fluid migration has been stopped. If that doesn't isolate the flow, additional attempts in front of the surface shoe plug will need to be attempted. Other downhole potential squeeze opportunities may need to be looked at before the 571' plug.3) Prior to placing the 571' 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.4) 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 321' or shallower and provide 10 sx plug at the surface. Leave at least 100' of cement in the casing for each plug.5) Properly abandon flowlines as per Rule 1105. File electronic Form 42 once abandonment 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 44.6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.7) 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>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>
	<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> <ol style="list-style-type: none">1) If, before opening the Bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required.2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required. <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

<u>Att Doc Num</u>	<u>Name</u>
402396081	FORM 6 INTENT SUBMITTED
402396152	WELLBORE DIAGRAM
402396153	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	1) Deepest Water Well within 1 mile = 45'. 2) Fox Hills Bottom- 196', per SB5.	05/15/2020
Permit	-Confirmed as-drilled well location. -No other forms in process. -Production reporting up-to-date. -Confirmed productive intervals 1985613. -Reviewed WBDs. -Pass.	05/14/2020

Total: 2 comment(s)