

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:

402473255

Date Received:

08/23/2020

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: Serna, Abe

Tel: (720) 661-7317

COGCC contact:

Email: abe.serna@state.co.us

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

API Number 05-123-12903-00

Well Name: PAULINE

Well Number: 5

Location: QtrQtr: SENW Section: 8 Township: 5N Range: 64W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 56549

Field Name: KERSEY

Field Number: 44600

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.415025 Longitude: -104.577101

GPS Data: GPS Quality Value: 2.4 Type of GPS Quality Value: Date of Measurement: 10/11/2010

GPS Instrument Operator's Name: Jake Bell

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 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	6542	6828	02/20/2018	B PLUG CEMENT TOP	6492

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	307	210	307	0	VISU
1ST	7+7/8	4+1/2	12.6	6,916	170	6,916	5,950	CBL
S.C. 1.1				777	162	777	0	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth _____ with _____ 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 10 sks cmt from 2814 ft. to 2683 ft. Plug Type: CASING Plug Tagged: ☐
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged: ☐
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged: ☐
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged: ☐
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged: ☐

Perforate and squeeze at 3000 ft. with 90 sacks. Leave at least 100 ft. in casing 2815 CICR Depth

Perforate and squeeze at 1445 ft. with 90 sacks. Leave at least 100 ft. in casing 1260 CICR Depth

Perforate and squeeze at _____ ft. with _____ sacks. Leave at least 100 ft. in casing _____ CICR Depth

(Cast Iron Cement Retainer Depth)

Set 95 sacks half in. half out surface casing from 1259 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:

Pauline 5 (05-123-12903)/Plugging Procedure (Intent)

Producing Formation: Niobrara/Codell: 6542'-6828'

Upper Pierre Aquifer: 330'-1345'

TD: 6926' PBTD: 6520' (2/20/2018)

Surface Casing: 8 5/8" 24# @ 307' w/ 210 sxs

Production Casing: 4 1/2" 12.6# @ 6916' w/ 170 sxs cmt (TOC @ 5950' - CBL)

Annular Fill @ 777' w/ 162 sxs cmt (TOC @ surface - CBL)

Existing CIBP set @ 6492' w/ 2 sxs cmt (2/20/2018)

Tubing: 2 3/8" tubing set @ 6162' (3/6/2018)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company. TIH and tag dump bail of existing CIBP @ 6492'.
3. TIH with perf gun. Shoot lower squeeze holes at 3000' and upper squeeze holes at 2800'.
4. TIH with CICR. Set CICR at 2815'. RU cementing company. Sting in and pump 100 sxs 15.8#/gal CI G cement. Sting out and leave 10 sxs (of the 100 sxs) cement on top of CICR.
5. RU wireline company.
6. TIH with perf gun. Shoot lower squeeze holes at 1445' and upper squeeze holes at 1245'.
7. TIH with CICR. Set CICR at 1260'. RU cementing company. Sting in and pump 90 sxs 15.8#/gal CI G cement. Sting out and pump an additional 95 sxs cement on top of CICR. Cement should circulate to surface.
8. 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: 8/23/2020 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.

COGCC Approved: JENKINS, STEVE

Date: 9/1/2020

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 2/28/2021

<u>COA Type</u>	<u>Description</u>
	<p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2) Prior to placing the 1259' 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.</p> <p>3) 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 257' or shallower and provide 10 sx plug at the surface.</p> <p>4) Leave at least 100' of cement in the wellbore for each plug.</p> <p>5) Properly abandon flowlines per Rule 1105. File electronic Form 42 once abandonment of on-location flowlines 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.</p> <p>6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.</p> <p>7) After placing the shallowest hydrocarbon isolating plug (1445'), 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>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>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
402473255	FORM 6 INTENT SUBMITTED
402473256	WELLBORE DIAGRAM
402473257	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 = 103'. 2) Fox Hills Bottom- N/A, per SB5.	09/01/2020
Engineer	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 08/01/2021. This NTO does not alter the deadlines for submission of, or compliance with any other Commission rule or Form.	09/01/2020
Permit	-Confirmed as-drilled well location. -Production reporting up-to-date. -No other forms in process. -Confirmed productive interval and TA docnum: 401587651. -Reviewed WBDs. -Pass.	08/24/2020

Total: 3 comment(s)