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403013499

Date Received:
04/12/2022

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: Santistevan, Brittani Tel: (720) 471-1110
COGCC contact: Email: brittani.santistevan@state.co.us

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

API Number 05-123-23105-00
 Well Name: NORTHERN PROP Well Number: 23-29
 Location: QtrQtr: NESW Section: 29 Township: 7N Range: 65W 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: 40.543670 Longitude: -104.689500
 GPS Data: GPS Quality Value: 4.2 Type of GPS Quality Value: PDOP Date of Measurement: 12/13/2006

Reason for Abandonment: Dry Production Sub-economic Mechanical Problems
 Other _____

Casing to be pulled: Yes No Estimated Depth: 2500
 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
CODELL	7300	7310			

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	454	250	454	0	VISU
1ST	7+7/8	4+1/2	J55	10.5	0	7477	160	7477	6410	CBL
S.C. 1.1						7477	320	6410	3007	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7250 with 2 sacks cmt on top. CIBP #2: Depth 6932 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 100 sks cmt from 2550 ft. to 2300 ft. Plug Type: STUB PLUG Plug Tagged:
 Set 100 sks cmt from 1750 ft. to 1550 ft. Plug Type: OPEN HOLE 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 _____ 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 414 sacks half in. half out surface casing from 750 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:

Northern Prop 23-29 (05-123-23105) / Plugging Procedure (Intent)
 Producing Formation: Codell: 7300'-7310'

Upper Pierre Aquifer: 650'-1650'

Deepest Water Well: 341'
 TD: 7511' PBD: 7420.6' (4/5/2012)
 Surface Casing: 8 5/8" 24# @ 454' w/ 250 sxs cmt
 Production Casing: 4 1/2" 10.5# @ 7477' w/ 485 sxs (TOC @ 3007' - CBL)

Tubing: 2 3/8" tubing @ 7291.6' (4/6/2012)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7250'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Codell perms @ 7300')
4. TIH with CIBP. Set BP at 6932'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Niobrara @ 6982')
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 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 1750'. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing. (Pierre Coverage from 1750'-1550')
9. Pick up with tubing to 750'. Mix and pump 414 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
10. Well casing cut and capped per COGCC guidelines at a depth as not to interfere with soil cultivation.

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 Analyst Date: 4/12/2022 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: 5/2/2022

CONDITIONS OF APPROVAL, IF ANY: Expiration Date: 11/1/2022

Condition of Approval

COA Type

Description

	<p>1) Provide 2 business day notice of plugging MIRU via electronic Form 42, and provide 48 hours Notice of Plugging Operations, prior to mobilizing for plugging operations via electronic Form 42. These are 2 separate notifications, required by Rules 408.e and 408.l.</p> <p>2) After placing the shallowest hydrocarbon isolating plug (1750'), 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 750' 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 and displace. If cement is not circulated to surface, shut-in, WOC 4 hours then tag plug – must be at 404' 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>
	<p>Operator will implement measures to capture, combust, or 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.</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>

3 COAs

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403013499	FORM 6 INTENT SUBMITTED
403013503	WELLBORE DIAGRAM
403013504	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 = 341'. 2) Fox Hills Bottom- N/A, per SB5.	04/15/2022
Permit	Confirmed as-drilled well location. No other forms in process. Confirmed productive interval docnum: 1418953. Production reporting up-to-date. Reviewed WBDs. Pass.	04/13/2022

Total: 2 comment(s)