

FORM
6

Rev
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



DE ET OE ES

Replug By Other Operator

Document Number:

402461793

Date Received:

08/06/2020

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: 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 05-123-13681-00
 Well Name: LESSER Well Number: 7-21
 Location: QtrQtr: SWNE Section: 21 Township: 5N Range: 66W 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: 40.386834 Longitude: -104.782257
 GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 07/30/2020
 GPS Instrument Operator's Name: Rob Wilson
 Reason for Abandonment: Dry Production Sub-economic Mechanical Problems
 Other Re-enter to Re-plug for PDC's Stugart and Ridge developments
 Casing 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

Total: 0 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	26	306	250	306	0	VISU
OPEN HOLE	7			7,508				

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 178 sks cmt from 6997 ft. to 6497 ft. Plug Type: OPEN HOLE Plug Tagged:

Set 178 sks cmt from 4015 ft. to 3515 ft. Plug Type: OPEN HOLE Plug Tagged:

Set 178 sks cmt from 1690 ft. to 1190 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:

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 178 sacks half in. half out surface casing from 540 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:

Lesser 7-21 (05-123-13681)/Re-Enter to Re-Plug Procedure (Intent)

Original Plug Date: 11/15/1987

Producing Formation: N/A (DA well)

Upper Pierre Aquifer: 460'-1440'

TD: 7508'

Surface Casing: 8 5/8" 26# @ 306' w/ 250 sks cmt

Open Hole: 7 7/8" @ 7508'

Existing Plugs: 310'-230' w/ 25 sk cmt and 32' to surface w/ 10 sk cmt

Proposed Procedure:

1. Dig out to find wellhead and check pressure. Cut cap off, extend surface pipe to achieve ground level.
2. MIRU WO unit, ND wellhead, NU BOP, tally all pipe to be ran in well.
3. Mill cement, cement btm is approximately 310' according to well history data.
4. Wash run down to Niobrara @ 7047' or depth that well allows.
5. PU tubing to 6997'. RU cementing company. Mix and pump 178 sks 15.8#/gal CI G cement down tubing. (Niobrara coverage from 6997'-6497') PU tubing above plug and SI well. (Top of Niobrara @ 7047')
 - a. Wait 4 hours and tag plug
6. PU tubing to 4015'. RU cementing company. Mix and pump 178 sks 15.8#/gal CI G cement down tubing. (Sussex coverage from 4015'-3515') PU tubing above plug and SI well. (Top of Sussex @ 4065')
 - a. Wait 4 hours and tag plug
7. PU tubing to 1690'. RU cementing company. Mix and pump 178 sks 15.8#/gal CI G cement down tubing (Pierre Aquifer coverage from 1690'-1190'). PU tubing above plug and SI well.
 - a. Wait 4 hours and tag plug
8. PU tubing to 540'. RU cementing company. Mix and pump 178 sks 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
 - a. Wait 4 hours and tag plug
9. RDMO WO unit. Remove extension of surface pipe. Top off if necessary.
10. Weld on cap with ID plate, inscribed with well location, and identity. Backfill, clean location. Re-Entry complete.

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: 8/6/2020 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: 8/10/2020

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 2/9/2021

COA Type	Description
	<p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) Prior to placing the 540' 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. 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 256' or shallower and provide 10 sx plug at the surface. 4) Leave at least 100' of cement in the wellbore for each plug. 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. 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 (1690'), 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>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. 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. 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

Att Doc Num	Name
402461793	FORM 6 INTENT SUBMITTED
402461795	WELLBORE DIAGRAM
402461796	WELLBORE DIAGRAM
402461798	SURFACE OWNER CONSENT
402461800	OTHER
402461801	LOCATION PHOTO

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	1) Deepest Water Well within 1 mile = 300'. 2) Fox Hills Bottom- N/A, per SB5.	08/10/2020
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 08/10/2021. This NTO does not alter the deadlines for submission of, or compliance with any other Commission rule or Form.	08/10/2020
Permit	Well was DA; never completed. Verified as-drilled GPS. Permitting review complete.	08/07/2020

Total: 3 comment(s)