

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:

402407351

Date Received:

05/27/2020

## 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 05-123-07326-00  
Well Name: LESSER Well Number: 1  
Location: QtrQtr: NENE 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: 40.390390 Longitude: -104.778620  
GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 05/05/2020  
GPS Instrument Operator's Name: Scott Sherard

Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems

Other Re-enter to Re-plug for PDC's Ridge development

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	24	165	160	165	0	VISU
OPEN HOLE	7+7/8			7,846				

## 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 6950 ft. to 6450 ft. Plug Type: OPEN HOLE Plug Tagged:   
Set 178 sks cmt from 4120 ft. to 3620 ft. Plug Type: OPEN HOLE Plug Tagged:   
Set 178 sks cmt from 1720 ft. to 1220 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 195 sacks half in. half out surface casing from 570 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 1 (05-123-07326)/Re-Enter to Re-Plug Procedure (Intent)  
Original Plug Date: 6/8/1971  
Producing Formation: N/A (DA well)  
Upper Pierre Aquifer: 470'-1470'  
TD: 7846'  
Surface Casing: 8 5/8" 24# @ 165' w/ 160 sxs cmt  
Open Hole: 7 7/8" @ 7846'  
Existing Plugs: 390'-116' (95 sx cmt), 20' to Surface (10 sx cmt)  
Proposed Procedure:  
1. Dig out to find wellhead and check pressure.  
2. Cut cap off, extend surface pipe to achieve ground level.  
3. MIRU WO unit, ND wellhead, NU BOP, tally all pipe to be ran in well.  
4. Mill cement, cement btm is approximately 390' according to well history data.  
5. Wash run down to top of Niobrara @ 7000' or depth that well allows.  
6. PU tubing to 6950'. RU cementing company. Mix and pump 178 sxs 15.8#/gal CI G cement down tubing (Nio coverage 6950'-6450'). PU tubing above plug and SI well. (Top of Niobrara @ 7000')  
a. Wait 4 hours and tag plug  
7. PU tubing to 4120'. RU cementing company. Mix and pump 178 sxs 15.8#/gal CI G cement down tubing (Sussex coverage 4120'-3620'). PU tubing above plug and SI well. (Top of Sussex @ 4170')  
a. Wait 4 hours and tag plug  
8. PU tubing to 1720'. RU cementing company. Mix and pump 178 sxs 15.8#/gal CI G cement down tubing (Pierre Aquifer coverage 1720'-1220'). PU tubing above plug and SI well.  
a. Wait 4 hours and tag plug  
9. PU tubing to 570'. RU cementing company. Mix and pump 195 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface. LD tubing.  
a. Wait 4 hours and tag plug  
10. RDMO WO unit. Remove extension of surface pipe. Top off if necessary.  
11. 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: 5/27/2020 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: 6/1/2020

**CONDITIONS OF APPROVAL, IF ANY:** Expiration Date: 11/30/2020

COA Type	Description
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) Prior to placing the 570' 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 661' or shallower and provide 10 sx plug at the surface. 4) Leave at least 100' of cement in the wellbore for each plug. 5) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed. 6) After placing the shallowest hydrocarbon isolating plug (1720'), 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.
	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.

**Attachment Check List**

Att Doc Num	Name
402407351	FORM 6 INTENT SUBMITTED
402407355	WELLBORE DIAGRAM
402407356	WELLBORE DIAGRAM
402407357	LOCATION PHOTO
402407358	SURFACE OWNER CONSENT

Total Attach: 5 Files

**General Comments**

User Group	Comment	Comment Date
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 06/01/2021. This NTO does not alter the deadlines for submission of, or compliance with any other Commission rule or Form.	06/01/2020
Engineer	1) Deepest Water Well within 1 mile = 300'. 2) Fox Hills Bottom- N/A, per SB5.	06/01/2020
Permit	As-drilled well location obtained. Pass.	06/01/2020

Total: 3 comment(s)