

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

Document Number:

402377137

Date Received:

04/21/2020

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: Tel:  
COGCC contact: Email:

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

API Number 05-123-27371-00  
Well Name: ROTHARMEL Well Number: 12-32  
Location: QtrQtr: SWNW Section: 32 Township: 7N Range: 66W Meridian: 6  
County: WELD Federal, Indian or State Lease Number:  
Field Name: EATON Field Number: 19350

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.532250 Longitude: -104.810420  
GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: Date of Measurement: 12/13/2006  
GPS Instrument Operator's Name: HOLLY L. TRACY  
Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems  
 Other  
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
CODELL	7339	7349	03/19/2020	B PLUG CEMENT TOP	7289

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	918	650	918	0	VISU
1ST	7+7/8	4+1/2	10.5	7,534	605	7,534	1,350	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7289 with 2 sacks cmt on top. CIBP #2: Depth 6960 with 2 sacks cmt on top.  
CIBP #3: Depth 2500 with 2 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 153 sks cmt from 1530 ft. to 818 ft. Plug Type: STUB PLUG 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 \_\_\_\_\_ 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 157 sacks half in. half out surface casing from 520 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: 1018 ft. of 4+1/2 inch casing Cut and Cap Date: 03/23/2020

\*Wireline Contractor: SureFire Wireline Services

\*Cementing Contractor: NexTier

Type of Cement and Additives Used: Type III 14.8 PPG Portland Cement

Flowline/Pipeline has been abandoned per Rule 1105  Yes  No

Technical Detail/Comments:

Rotharmel 12-32 (05-123-27371)/Plugging Procedure  
Producing Formation: Codell: 7339'-7349'  
Upper Pierre Aquifer: 400'-918'  
TD: 7542' PBD: 7506' (11/28/2006)  
Surface Casing: 8 5/8" 24# @ 918' w/ 650 sxs  
Production Casing: 4 1/2" 10.5# @ 7534' w/ 605 sx cmt (TOC @ 1350' - CBL)

Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7289'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Codell perfs @ 7339')
4. TIH with CIBP. Set BP at 6960'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Niobrara @ 7010')
5. TIH with CIBP. Set BP at 2500'. Top with 2 sxs 15.8#/gal CI G cement.
6. Run a Strip Log from 1100' to Surface for casing cut verification (log not kept).
7. TIH with casing cutter. Cut 4 1/2" casing @ 1018'. Pull cut casing.
8. TIH with tubing to 1530'. RU cementing company. Mix and pump 153 sxs 14.8#/gal Type III cement down tubing. TOC at 818'.
9. Pick up tubing to 520'. Mix and pump 157 sxs 14.8#/gal Type III cement down tubing. (Pierre coverage from 500'-surface) Cement circulate to surface.
10. 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: 4/21/2020 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:

Date: 3/10/2021

**CONDITIONS OF APPROVAL, IF ANY:**

<u>COA Type</u>	<u>Description</u>

**Attachment List**

<u>Att Doc Num</u>	<u>Name</u>
402377137	FORM 6 SUBSEQUENT SUBMITTED
402377139	CEMENT JOB SUMMARY
402377140	OPERATIONS SUMMARY
402377141	WELLBORE DIAGRAM

Total Attach: 4 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	GPS location appears accurate on satellite imagery. Ops notice given. Pre-PA BH test filed. Form 7 reporting PA status. Flowline registered. Zones and casing history are consistent with approved intent. Procedure, WBD and tickets are consistent.	03/10/2021
Engineer	Enforcement Review: Operator did not tag plug placed from 1530' - 818' as required by 6N COA.	03/10/2021

Total: 2 comment(s)