

**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



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**Replug By Other Operator**

Document Number:

402446949

Date Received:

07/22/2020

**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: \_\_\_\_\_  
 Email: \_\_\_\_\_  
**COGCC contact:** \_\_\_\_\_

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

API Number 05-123-05178-00  
 Well Name: HAYES Well Number: 1  
 Location: QtrQtr: SENE Section: 20 Township: 5N Range: 66W Meridian: 6  
 County: WELD Federal, Indian or State Lease Number: \_\_\_\_\_  
 Field Name: WILDCAT Field Number: 99999

*Only Complete the Following Background Information for Intent to Abandon*

Latitude: 40.386880 Longitude: -104.796500  
 GPS Data: GPS Quality Value: 1.7 Type of GPS Quality Value: \_\_\_\_\_ Date of Measurement: 05/13/2020  
 GPS Instrument Operator's Name: Scott Sherard  
 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

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	10+3/4	40.5	711	575	711	0	VISU
1ST	9+5/8	4+1/2		5,895	4,010	5,895	0	CBL
OPEN HOLE	9+5/8			9,502				

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 5895 with 2 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 40 sks cmt from 4446 ft. to 3917 ft. Plug Type: CASING Plug Tagged:   
Set 98 sks cmt from 318 ft. to 94 ft. Plug Type: CASING Plug Tagged:   
Set 48 sks cmt from 94 ft. to 0 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:   
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 341 sacks half in. half out surface casing from 2007 ft. to 318 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: 06/20/2020  
\*Wireline Contractor: Ranger Energy Services \*Cementing Contractor: NexTier  
Type of Cement and Additives Used: Class G 15.8 PPG Cement  
Flowline/Pipeline has been abandoned per Rule 1105  Yes  No

Technical Detail/Comments:

Hayes 1 (05-123-05178)/Re-Enter to Re-Plug Procedure  
 Original Plug Date: 9/3/1957  
 Producing Formation: N/A (DA well)  
 Upper Pierre Aquifer: 520'-1480'  
 TD: 9502'  
 Surface Casing: 10.75" 40.5# @ 711' w/ 575 sxs cmt  
 Open Hole: 9.625" @ 9502' (Open Hole Size estimated based on SC drift)  
 Existing Plugs: 9502'-9316' (75 sx cmt), 9173'-8987' (75 sx cmt), 817'-606' (100 sx cmt),  
 62' to Surface (25 sx cmt)

**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, found very hard cement from 684' all the way down to 5895' inside 4 1/2" casing that had no record of being in the hole. We drilled for 8 days to achieve this depth before drilling had stalled to an average of 25' per hour.
5. RU wireline company. Ran a CBL from 5895' to Surface. Contacted the state, and moved forward with the approved procedure change.
6. TIH with CIBP. Set at 5895'. Top with 2 sxs 15.8#/gal CI G cement (Top of Niobrara @ 7066')
7. PU tubing to 4446'. RU cementing company. Mix and pump 40 sxs 15.8#/gal CI G cement down tubing (Sussex coverage 4440' - 3940'). TOC at 3917'. (Top of Sussex @ 4490')
8. PU tubing to 2007'. Mix and pump 341 sxs 15.8#/gal CI G cement down tubing. (Pierre Aquifer coverage 1730' - 1230'). Unable to PU tubing at 1944', tubing stuck in the hole.
9. RU wireline company. TIH with jet cutter. Cut tubing at 650'. Pull cut tubing.
10. PU replacement tubing and tagged TOC at 318'.
11. PU tubing to 318'. RU cementing company. Mix and pump 98 sxs 15.8#/gal CI G cement down tubing. No cement returns to surface.
12. PU tubing and tagged TOC at 94'. Mix and pump 48 sxs 15.8#/gal CI G cement down tubing. Cement circulate to surface.
13. RDMO WO unit. Remove extension of surface pipe.
14. 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: 7/22/2020 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: McFarland, Nick Date: 9/15/2020

**CONDITIONS OF APPROVAL, IF ANY:**

COA Type	Description

**Attachment Check List**

Att Doc Num	Name
402446949	FORM 6 SUBSEQUENT SUBMITTED
402448136	CEMENT BOND LOG
402448137	CEMENT JOB SUMMARY
402448138	OTHER
402448139	OTHER
402448140	OPERATIONS SUMMARY
402448141	WELLBORE DIAGRAM
402448142	WIRELINE JOB SUMMARY

Total Attach: 8 Files

**General Comments**

**User Group**

**Comment**

**Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)