

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:

402446949

Date Received:

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 05-123-05178-00
 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
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: 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:
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 487 sacks half in. half out surface casing from 2007 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: 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: _____ 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: _____

CONDITIONS OF APPROVAL, IF ANY:

COA Type	Description

Attachment Check List

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

Total Attach: 7 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)