

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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| DE | ET | OE | ES |
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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:

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 |
| 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 <u>40</u> sks cmt from <u>4446</u> ft. to <u>3917</u> ft. | Plug Type: <u>CASING</u> | Plug Tagged: <input type="checkbox"/> |
| Set <u>98</u> sks cmt from <u>318</u> ft. to <u>94</u> ft. | Plug Type: <u>CASING</u> | Plug Tagged: <input checked="" type="checkbox"/> |
| Set <u>48</u> sks cmt from <u>94</u> ft. to <u>0</u> ft. | Plug Type: <u>CASING</u> | Plug Tagged: <input type="checkbox"/> |
| Set _____ sks cmt from _____ ft. to _____ ft. | Plug Type: _____ | Plug Tagged: <input type="checkbox"/> |
| Set _____ sks cmt from _____ ft. to _____ ft. | Plug Type: _____ | Plug Tagged: <input type="checkbox"/> |

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 ½" 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

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)