

FORM
6Rev
12/05State 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:

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Date Received:

01/08/2018

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: Kelsi Welch

Name of Operator: PDC ENERGY INC

Phone: (303) 831-3974

Address: 1775 SHERMAN STREET - STE 3000

Fax:

City: DENVER State: CO Zip: 80203

Email: kelsi.welch@pdce.com

For "Intent" 24 hour notice required,

Name: O'Donnell, Shaun

Tel: (720) 305-8280

COGCC contact:

Email: shaun.odonnell@state.co.us

API Number 05-123-24548-00

Well Name: BLACK GOLD

Well Number: 5

Location: QtrQtr: NESW Section: 10 Township: 6N Range: 66W Meridian: 6

County: WELD

Federal, Indian or State Lease Number:

Field Name: EATON

Field Number: 19350

☒ Notice of Intent to Abandon☐ Subsequent Report of Abandonment

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.499380

Longitude: -104.768230

GPS Data:

Date of Measurement: 12/11/2007

PDOP Reading: 4.1

GPS Instrument Operator's Name: ROBERT THOMAS

Reason for Abandonment: ☐ Dry☒ Production Sub-economic☐ Mechanical Problems☐ OtherCasing 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 | 7306 | 7322 | | | |

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 | 580 | 370 | 580 | 0 | |
| 1ST | 7+7/8 | 4+1/2 | 11.6 | 7,398 | 590 | 7,398 | 520 | CBL |

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7256 with 2 sacks cmt on top. CIBP #2: Depth 7032 with 2 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>65</u> sks cmt from <u>800</u> ft. to <u>0</u> ft. | Plug Type: <u>CASING</u> | Plug Tagged: <input checked="" type="checkbox"/> |
| Set <u>20</u> sks cmt from <u>2500</u> ft. to <u>2300</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"/> |
| Set _____ sks cmt from _____ ft. to _____ ft. | Plug Type: _____ | Plug Tagged: <input type="checkbox"/> |

Perforate and squeeze at 500 ft. with 115 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 _____ sacks half in. half out surface casing from _____ ft. to _____ 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 Plugging Date: _____
 of _____

*Wireline Contractor: _____ *Cementing Contractor: _____

Type of Cement and Additives Used: _____

Flowline/Pipeline has been abandoned per Rule 1103 ☐ Yes ☐ No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Black Gold 5 (05-123-24548)/Plugging Procedure (Intent)
 Producing Formation (Perforations): Codell: 7306'-7322'
 TD: 7408' PBDT: 7394'
 Surface Casing: 8 5/8" 24# @ 580' w/ 370 sxs
 Production Casing: 4 1/2" 11.6# @ 7398' w/ 590 sxs cmt (TOC @ 520' - CBL).

Tubing: 2 3/8" tubing set @ 7280' (3/3/2007).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7256'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 7032'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with perforation gun. Shoot 2 holes for annular squeeze at 500' @ 1 SPF or preferred.
6. TIH with tubing to 800'. RU cementing company. Mix and pump 65 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface. TOOH with tubing.
7. Close off casing returns. Hook up cement line to cement flange and pump 115 sxs 15.8#/gal CI G cement downhole and squeeze through perforations at 500' and into annular space. Cement should circulate to surface.
8. 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: Kelsi Welch

Title: Production Tech Date: 1/8/2018 Email: kelsi.welch@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: HICKEY, MIKE

Date: 1/26/2018

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 7/25/2018

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--|
| | Operator shall implement measures to control unnecessary and excessive venting, to protect the health and safety of the public, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare. |
| | 1)Submit Form 42 electronically to COGCC 48 hours prior to MIRU electronically to COGCC 48 hours prior to MIRU. 2)Prior to placing the 800' 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 requirements. . 3)After isolation has been verified, pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours and tag plug – top of plug must be not deeper than 530' and provide minimum 10 sx plug at the surface. Leave at least 100' of cement in the wellbore for each plug. 4)Properly abandon all flowlines. Once flowlines are properly abandoned, file electronic form 42. |

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------------------|
| 401477829 | FORM 6 INTENT SUBMITTED |
| 401477835 | WELLBORE DIAGRAM |
| 401477836 | WELLBORE DIAGRAM |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Engineer | Added 20 sx casing plug from 2500' to 2300' at the operator's request. Bradenhead test dated 1/9/2018 shows 3 psi initial pressure/no flow. No additional Bradenhead test is required. | 01/26/2018 |
| Permit | Pass | 01/16/2018 |
| Public Room | Document verification complete 12/22/17 | 12/22/2017 |

Total: 3 comment(s)