FORM 6 Rev 12/05

# 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: 401518901

Date Received: 01/18/2018

## 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, COGCC contact:** Name: O'Donnell, Shaun Tel: (720) 305-8280 Email: shaun.odonnell@state.co.us

API Number 05-123-21663-00

Well Name: MCINTOSH Well Number: 43-23

Location: QtrQtr: NESE Section: 23 Township: 6N Range: 64W Meridian: 6

County: WELD Federal, Indian or State Lease Number:

Field Name: WATTENBERG Field Number: 90750

☒ Notice of Intent to Abandon ☐ Subsequent Report of Abandonment

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

Latitude: 40.470220 Longitude: -104.509500

GPS Data:

Date of Measurement: 06/27/2010 PDOP Reading: 1.7 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: 650

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 | 6793 | 6801 | | | |

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 | 424 | 300 | 424 | 0 | |
| 1ST | 7+7/8 | 4+1/2 | 10.5 | 7,017 | 370 | 7,017 | 2,665 | CBL |

# Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6739 with 2 sacks cmt on top. CIPB #2: Depth 6443 with 2 sacks cmt on top.

CIBP #3: Depth _____ with _____ sacks cmt on top. CIPB #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 3165 ft. to 2665 ft. Plug Type: CASING Plug Tagged: ☐

Set 243 sks cmt from 700 ft. to 0 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: ☐

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 _____ 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. of _____ inch casing Plugging Date: _____

*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:

McIntosh 43-23 (05-123-21663)/PLUGGING PROCEDURE (INTENT)
Producing Formation: Codell: 6793'-6801'
Upper Pierre Aquifer: 2750'-2770'
TD: 7025'KB PBTD: 7017'KB Original KB: 12'
Surface Casing: 8 5/8" 24# @ 424'KB w/ 300 sxs cmt.
Production Casing: 4 1/2" 10.5# @ 7017'KB w/ 370 sxs cmt. (TOC @ 2665'KB - CBL)
Tubing: 2 3/8" tubing set @ 6775.9'KB (09/2003)

Proposed Procedure:
1. MIRU. TOOH 2 3/8" tbg.
2. RU wireline to set CIBPs.
3. RIH w/ CIBP. Set @6739'KB. Dump bail 2 sxs 15.8#/gal Cl G cmt.
4. RIH w/ CIBP. Set @6443'KB. Dump bail 2 sxs 15.8#/gal Cl G cmt.
5. TIH w/ tbg to 3165'KB. Mix and pump 40 sxs 15.8#/gal Cl G cmt.
6. TOOH tubing, TIH csg cutter and cut 4 1/2" csg @ 650'KB.
7. TIH to 700'KB. Mix and pump 243 sxs 15.8#/gal Cl G cmt. Cmt should circulate to surface.
8. Dig down and cut csg 6' below GL. Weld 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: 1/18/2018 Email: kelsi.welch@pdce.com

Based on the information provided to me, I, KOEHLER, MIKE, this Well Abandonment Report (Form 6) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Date: 2/5/2018

**CONDITIONS OF APPROVAL, IF ANY:** Expiration Date: 8/4/2018

| COA Type | Description |
|---|---|
| | Prior to starting plugging operations a bradenhead test shall be performed.<br>1)If, before opening the bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required.<br>2)If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required.<br>3)If sampling is required contact COGCC engineering for a confirmation of plugging requirements prior to placing any plugs.<br>4)Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. The Form 17 shall be submitted within 10 days of the test. |
| | 1)Submit Form 42 electronically to COGCC 48 hours prior to MIRU electronically to COGCC 48 hours prior to MIRU.<br>2)Prior to placing the 700' 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. .<br>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 374' and provide minimum 10 sx plug at the surface. Leave at least 100' of cement in the wellbore for each plug.<br>4)Properly abandon all flowlines. Once flowlines are properly abandoned, file electronic form 42. |
| | 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. |

## Attachment Check List

| Att Doc Num | Name |
|---|---|
| 401518901 | FORM 6 INTENT SUBMITTED |
| 401518917 | GYRO SURVEY |
| 401518924 | WELLBORE DIAGRAM |
| 401518929 | WELLBORE DIAGRAM |

Total Attach: 4 Files

## General Comments

| User Group | Comment | Comment Date |
|---|---|---|
| Permit | Pass. | 02/01/2018 |
| Public Room | Pass | 01/31/2018 |

Total: 2 comment(s)