

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



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|-------------------------------|----|----|----|
| DE | ET | OE | ES |
| Document Number: 401459724 | | | |
| Date Received: 11/15/2017 | | | |

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.

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|--|------------------------------------|
| OGCC Operator Number: 69175 | Contact Name: Jenifer Hakkarinen |
| Name of Operator: PDC ENERGY INC | Phone: (303) 8605800 |
| Address: 1775 SHERMAN STREET - STE 3000 | Fax: |
| City: DENVER State: CO Zip: 80203 | Email: Jenifer.Hakkarinen@pdce.com |
| For "Intent" 24 hour notice required, Name: Pesicka, Conor Tel: (970) 415-0789 | |
| COGCC contact: Email: conor.pesicka@state.co.us | |

| | |
|---|--|
| API Number 05-123-24081-00 | Well Number: 11-2 |
| Well Name: BROWN | |
| Location: QtrQtr: NWNW Section: 2 Township: 6N Range: 63W 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: 40.520690 | Longitude: -104.410080 |
| GPS Data: | |
| Date of Measurement: 10/05/2006 | PDOP Reading: 4.9 GPS Instrument Operator's Name: H.L. TRACY |
| Reason for Abandonment: <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Production Sub-economic <input type="checkbox"/> Mechanical Problems | |
| <input type="checkbox"/> Other | |
| Casing to be pulled: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated Depth: |
| Fish in Hole: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, explain details below |
| Wellbore has Uncemented Casing leaks: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 | 6731 | 6739 | | | |
| NIOBRARA | 6468 | 6574 | | | |

Total: 2 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 | 409 | 225 | 409 | 0 | VISU |
| 1ST | 7+7/8 | 4+1/2 | 10.5 | 6,943 | 665 | 6,943 | 0 | CBL |

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6418 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 60 sks cmt from 650 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: ☐
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. _____ 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:

Brown 11-2 (05-123-24081)/Plugging Procedure (Intent)
Producing Formation (Perforations): Niobrara: 6468'-6574' Codell: 6731'-6739'
TD: 6966' PBD: 6887'
Surface Casing: 8 5/8" 24# @ 409' w/ 225 sxs
Production Casing: 4 1/2" 10.5# @ 6943' w/ 665 sxs cmt (TOC @ Surface' - CBL).

Tubing: 2 3/8" tubing set @ 6720' (4/28/2014).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6418'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with tubing to 650'. RU cementing company. Mix and pump 60 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
5. 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: JEnifer Hakkarinen

Title: Reg Tech Date: 11/15/2017 Email: JEnifer.Hakkarinen@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: 12/11/2017

COA Type**Description**

| | |
|--|---|
| | 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. 2) Prior to placing the 650' 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 359' 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. |
| | Prior to starting plugging operations a bradenhead test shall be performed. 1)If, before opening the bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required. 2)If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required. 3)If sampling is required contact COGCC engineering for a confirmation of plugging requirements prior to placing any plugs. 4)Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. The Form 17 shall be submitted within 10 days of the test. |

Attachment Check List**Att Doc Num****Name**

| | |
|-----------|-------------------------|
| 401459724 | FORM 6 INTENT SUBMITTED |
| 401459767 | WELLBORE DIAGRAM |
| 401459768 | WELLBORE DIAGRAM |
| 401459769 | GYRO SURVEY |

Total Attach: 4 Files

General Comments**User Group****Comment****Comment Date**

| | | |
|-------------|---|------------|
| Public Room | Document verification complete 12/01/17 | 12/01/2017 |
| Permit | Corrected top of Niobrara. | 11/30/2017 |

Total: 2 comment(s)