

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:

401451689

Date Received:

11/07/2017

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.

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: O'Donnell, Shaun

Tel: (720) 305-8280

COGCC contact:

Email: shaun.odonnell@state.co.us

API Number 05-123-23674-00

Well Name: HAZEN

Well Number: 13-28

Location: QtrQtr: NWSW Section: 28 Township: 7N Range: 65W 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: 40.544170

Longitude: -104.675310

GPS Data:

Date of Measurement: 07/29/2006

PDOP Reading: 2.5

GPS Instrument Operator's Name: H.L. Tracy

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	7202	7212			

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	496	275	496	0	VISU
1ST	7+7/8	4+1/2	10.5	7,375	823	7,375	0	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7152 with 2 sacks cmt on top. CIBP #2: Depth 6872 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 60 sks cmt from 700 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:

Hazen 13-28 (05-123-23674)/Plugging Procedure (Intent)
Producing Formation (Perforations): Codell: 7202'-7212'
TD: 7394' PBDT: 7359'
Surface Casing: 8 5/8" 24# @ 496' w/ 275 sxs
Production Casing: 4 1/2" 10.5# @ 7375' w/ 823 sxs cmt (TOC @ Surface' - CBL).

Tubing: 2 3/8" tubing set @ 7183' (5/4/2006).

Proposed Procedure:

1. Run gyro survey.
2. RU wireline company. Remove stage tool set at 4318' (2/10/2015).
3. MIRU pulling unit. Pull 2 3/8" tubing.
4. RU wireline company.
5. TIH with CIBP. Set BP at 7152'. Top with 2 sxs 15.8#/gal CI G cement.
6. TIH with CIBP. Set BP at 6872'. Top with 2 sxs 15.8#/gal CI G cement.
7. TIH with tubing to 700'. RU cementing company. Mix and pump 60 sxs 15.8#/gal CI G cement down tubing. 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: JEnifer Hakkarinen

Title: Reg Tech Date: 11/7/2017 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:

Date: 12/4/2017

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 6/3/2018

<u>COA Type</u>	<u>Description</u>
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 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. 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 446' and provide minimum 10 sx plug at the surface. Leave at least 100' of cement in the wellbore for each plug. 4) Properly abandon flowlines. Once flowlines are properly abandoned, file electronic form 42.
	Operator shall submit a written safety plan applicable to all location(s) undergoing plugging operations in Colorado, by email to Mike Leonard at mike.leonard@state.co.us. The safety plan shall describe the measures Operator will implement at the location(s) to eliminate unnecessary and excessive venting or flaring of natural gas, to protect the health and safety of the public, and to ensure that odors from well plugging operations do not constitute a nuisance or hazard to public welfare.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401451689	FORM 6 INTENT SUBMITTED
401451699	WELLBORE DIAGRAM
401451700	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Public Room	Document verification complete 11/22/17	11/22/2017
Engineer	Bradenhead test dated 11/8/2017 shows no pressure/no flow. No additional Bradenhead test is required.	11/17/2017

Total: 2 comment(s)