

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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Document Number:

401540237

Date Received:

02/08/2018

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: 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 05-123-22337-00

Well Name: LANG

Well Number: 11-35

Location: QtrQtr: NWNW Section: 35 Township: 7N 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: 40.534690

Longitude: -104.525060

GPS Data:

Date of Measurement: 10/14/2010

PDOP Reading: 1.7

GPS Instrument Operator's Name: Steve Cure

Reason for Abandonment: ☐ Dry☒ Production Sub-economic☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes☐ No

Estimated Depth: 800

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	7092	7100			

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	540	300	540	0	VISU
1ST	7+7/8	4+1/2	10.5	7,290	515	7,290	2,524	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7042 with 2 sacks cmt on top. CIBP #2: Depth 6745 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>20</u> sks cmt from <u>2750</u> ft. to <u>2524</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>400</u> sks cmt from <u>850</u> ft. to <u>0</u> ft.	Plug Type: <u>STUB PLUG</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 _____ 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:

Lang 11-35 (05-123-22337)/Plugging Procedure (Intent)

Producing Formation: Codell: 7092'-7100'

Upper Pierre Aquifer: 2584'-2645'

TD: 7313' PBTD: 7240'

Surface Casing: 8 5/8" 24# @ 540' w/ 300 sxs

Production Casing: 4 1/2" 10.5# @ 7290' w/ 515 sxs cmt (TOC @ 2524' - CBL).

Tubing: 2 3/8" tubing set @ 7066' (4/1/2014).

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7042'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with CIBP. Set BP at 6745'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with tubing to 2750'. RU cementing company. Mix and pump 20 sxs 15.8#/gal CI G cement down tubing. TOOH with tubing.
6. TIH with casing cutter. Cut 4 1/2" casing at 800'. Pull cut casing.
7. TIH with tubing to 850'. Mix and pump 400 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: 2/8/2018 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: 3/9/2018

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 9/8/2018

<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 2) Prior to placing the 706' 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 406' 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>
401540237	FORM 6 INTENT SUBMITTED
401540257	WELLBORE DIAGRAM
401540258	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Bradenhead test dated 02/09/2018 shows no pressure/no flows. No additional Bradenhead test is required.	03/09/2018
Permit	pass	02/20/2018
Public Room	Pass	02/16/2018

Total: 3 comment(s)