

Document Number:  
401492521

Date Received:  
12/20/2017

**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: Peterson, Tom Tel: (303) 815-9641

**COGCC contact:** Email: tom.peterson@state.co.us

API Number 05-069-06334-00

Well Name: RYAN Well Number: 25-BU

Location: QtrQtr: SESW Section: 25 Township: 5N Range: 68W Meridian: 6

County: LARIMER Federal, Indian or State Lease Number: \_\_\_\_\_

Field Name: JOHNSON'S CORNER Field Number: 42570

Notice of Intent to Abandon       Subsequent Report of Abandonment

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

Latitude: 40.367280 Longitude: -104.959830

GPS Data:  
Date of Measurement: 10/31/2007 PDOP Reading: 1.9 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
J SAND	7555	7571	10/16/2017	B PLUG CEMENT TOP	7505

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	449	320	449	0	VISU
1ST	7+7/8	4+1/2	11.6	7,691	230	7,691	6,250	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6708 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 335 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:   
 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:

Ryan 25-BU (05-069-06334)/Plugging Procedure (Intent)  
 Producing Formation (Perforations): J-Sand: 7555'-7571'  
 TD: 7725' PBD: 7654'

Surface Casing: 8 5/8" 24# @ 449' w/ 320 sxs

Production Casing: 4 1/2" 11.6# @ 7691' w/ 230 sxs cmt (TOC @ 6256' - CBL). Existing CIBP @ 7505' w/ 2 sxs cmt.

Tubing: 2 3/8" tubing set @ 7184' (10/17/2017).

Proposed Procedure:

1. Run gyro survey from TOC (~7478') to surface.
2. MIRU pulling unit. Pull 2 3/8" tubing.
3. RU wireline company.
4. TIH with CIBP. Set BP at 6708'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with casing cutter. Cut 4 1/2" casing at 650'. Pull cut casing.
6. TIH with tubing to 700'. RU cementing company. Mix and pump 335 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
7. Cut surface casing 6' below ground level and weld on cap.

If there is bradenhead pressure:

1. Run gyro survey from TOC (~7478') to surface.
2. MIRU pulling unit. Pull 2 3/8" tubing.
3. RU wireline company.
4. TIH with CIBP. Set BP at 6708'. Top with 2 sxs 15.8#/gal CI G cement.
5. TIH with casing cutter. Cut 4 1/2" casing at 1500'. Pull cut casing.
6. TIH with tubing to 1550'. RU cementing company. Mix and pump 75 sxs 15.8#/gal CI G cement down tubing. Wait 8 hours or overnight. Check to see if there is any bradenhead pressure or fluid flow after stub plug is set. If there is, contact COGCC for further guidance. If there is not, move on to step 7.
7. TIH with tubing to 650'. RU cementing company. Mix and pump 450 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: 12/20/2017 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: BURN, DIANA Date: 1/21/2018

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 7/20/2018

<b>COA Type</b>	<b>Description</b>
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) For 700' plug: pump plug and displace. If surface casing shoe plug (700') not circulated to surface then tag plug – must be 250' or shallower and provide 10 sx plug at the surface. 3) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.
	Prior to starting plugging operations a bradenhead test shall be performed. If there is a need for sampling - contact COGCC engineering for verification of plugging procedures (pressure greater than 25# or any liquids flowed to surface). 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. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions, Appendix A: Liquid and Gas Sampling. The Form 17 shall be submitted within 10 days of the test.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401492521	FORM 6 INTENT SUBMITTED
401492524	WELLBORE DIAGRAM
401492525	WELLBORE DIAGRAM

Total Attach: 3 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	DIL Deepest WW 300' Corrected cutting depth per procedure; TOC	01/21/2018
Public Room	Document verification complete 01/10/18	01/10/2018

Total: 2 comment(s)