

Document Number:  
 402427025

Date Received:

**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: Valerie Danson  
 Name of Operator: PDC ENERGY INC Phone: (970) 506-9272  
 Address: 1775 SHERMAN STREET - STE 3000 Fax: \_\_\_\_\_  
 City: DENVER State: CO Zip: 80203 Email: valerie.danson@pdce.com

**For "Intent" 24 hour notice required,** Name: \_\_\_\_\_ Tel: \_\_\_\_\_  
 Email: \_\_\_\_\_

Type of Well Abandonment Report:  Notice of Intent to Abandon  Subsequent Report of Abandonment

API Number 05-123-31128-00  
 Well Name: BERNHARDT STATE Well Number: 21-36  
 Location: QtrQtr: NENW Section: 36 Township: 5N Range: 67W Meridian: 6  
 County: WELD Federal, Indian or State Lease Number: 81-6923-S  
 Field Name: WATTENBERG Field Number: 90750

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

Latitude: 40.361523 Longitude: -104.843748  
 GPS Data: GPS Quality Value: 2.6 Type of GPS Quality Value: \_\_\_\_\_ Date of Measurement: 08/05/2010  
 GPS Instrument Operator's Name: Renee Doiron  
 Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems  
 Other \_\_\_\_\_  
 Casing 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
NIOBRARA-CODELL	7170	7506	05/18/2020	B PLUG CEMENT TOP	7120
J SAND	7964	7992	05/18/2020	B PLUG CEMENT TOP	7914

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	880	550	880	0	VISU
1ST	7+7/8	4+1/2	11.6	8,086	1,090	8,086	250	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7914 with 2 sacks cmt on top. CIBP #2: Depth 7120 with 2 sacks cmt on top.  
CIBP #3: Depth 2950 with 2 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 \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
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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 220 ft. with 51 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 110 sacks half in. half out surface casing from 1543 ft. to 0 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 Cut and Cap Date: 05/19/2020  
of \_\_\_\_\_

\*Wireline Contractor: Ranger Energy Services \*Cementing Contractor: NexTier

Type of Cement and Additives Used: Type III 14.8 PPG Portland Cement

Flowline/Pipeline has been abandoned per Rule 1105  Yes  No

#### Technical Detail/Comments:

Bernhardt State 21-36 (05-123-31128)/Plugging Procedure  
Producing Formation: Niobrara/Codell: 7170'-7506'  
J-Sand: 7964'-7992'  
Upper Pierre Aquifer: 360'-1430'  
TD: 8096' PBD: 8049' (12/10/2010)  
Surface Casing: 8 5/8" 24# @ 880' w/ 550 sxs  
Production Casing: 4 1/2" 11.6# @ 8086' w/ 1090 sxs cmt (TOC @ 250' - CBL)

#### Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7914'. Top with 2 sxs 15.8#/gal CI G cement. (Top of J-sand perms @ 7964')
4. TIH with CIBP. Set BP at 7120'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Nio perms @ 7170')
5. TIH with CIBP. Set BP at 2950'. Top with 2 sxs 15.8#/gal CI G cement.
6. Run a CBL from 1000' to Surface.
7. TIH with perf gun. Shoot squeeze holes @ 220'.
8. TIH with tubing to 1543'. RU cementing company. Mix and pump 110 sxs 14.8#/gal Type III cement down tubing. Cement circulate to surface.
9. Close off casing returns. Hook up cement line to cement flange and pump 51 sxs 14.8#/gal Type III cement downhole and squeeze through perforations @ 220' into annular space. Cement circulate to surface.
10. 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: Valerie Danson  
Title: Reg Tech Date: \_\_\_\_\_ Email: valerie.danson@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: \_\_\_\_\_

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

**COA Type**

**Description**

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**Attachment Check List**

**Att Doc Num**

**Name**

402427027	CEMENT BOND LOG
402427028	CEMENT JOB SUMMARY
402427029	OPERATIONS SUMMARY
402427030	WELLBORE DIAGRAM

Total Attach: 4 Files

**General Comments**

**User Group**

**Comment**

**Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)