

Document Number:  
403006299

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04/06/2022

**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: \_\_\_\_\_

**COGCC contact:** \_\_\_\_\_

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

API Number 05-123-12825-00  
 Well Name: ARENS Well Number: 1  
 Location: QtrQtr: NWNW Section: 23 Township: 4N Range: 65W Meridian: 6  
 County: WELD Federal, Indian or State Lease Number: 66961  
 Field Name: WATTENBERG Field Number: 90750

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

Latitude: 40.302454 Longitude: -104.636225  
 GPS Data: GPS Quality Value: 2.0 Type of GPS Quality Value: PDOP Date of Measurement: 12/19/2009

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
J SAND	7533	7590	01/14/2022	B PLUG CEMENT TOP	7472
Total: 1 zone(s)					

**Casing History**

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top	Status
SURF	12+1/4	8+5/8	J55	24	0	523	400	523	0	VISU
1ST	7+7/8	4+1/2	J55	11.6	0	7659	375	7659	5975	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7472 with 2 sacks cmt on top. CIBP #2: Depth 6696 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 10 sks cmt from 4126 ft. to 3995 ft. Plug Type: CASING Plug Tagged:   
Set 100 sks cmt from 2576 ft. to 2300 ft. Plug Type: STUB PLUG Plug Tagged:   
Set 110 sks cmt from 1481 ft. to 1244 ft. Plug Type: OPEN HOLE 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 4312 ft. with 90 sacks. Leave at least 100 ft. in casing 4127 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 483 sacks half in. half out surface casing from 740 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: 2500 ft. of 4+1/2 inch casing Number of Days from Setting Surface Plug to Capping or Sealing the Well: 72  
Surface Plug Setting Date: 01/18/2022 Cut and Cap Date: 03/31/2022

\*Wireline Contractor: SureFire Wireline Services \*Cementing Contractor: DUCO Inc. Cementing Services

Type of Cement and Additives Used: Class G 15.8 PPG Cement

Flowline/Pipeline has been abandoned per Rule 1105  Yes  No

#### Technical Detail/Comments:

Arens 1 (05-123-12825)/Plugging Procedure  
Producing Formation: J-Sand: 7533'-7590'  
Upper Pierre Aquifer: 360'-1360'  
TD: 7660' PBTD: 7592' (3/12/14)  
Surface Casing: 8 5/8" 24# @ 523' w/ 400 sxs cmt  
Production Casing: 4 1/2" 11.6# @ 7659' w/ 375 sxs cmt (TOC @ 5975' - CBL)

#### Procedure:

- MIRU pulling unit. Pull 2 3/8" tubing.
- RU wireline company.
- TIH with CIBP. Set BP at 7472'. Top with 2 sxs 15.8#/gal CI G cement. (Top of J-Sand perms @ 7533')
- Ran a CBL from 7000' to Surface.
- TIH with CIBP. Set BP at 6696'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Niobrara @ 6746')
- TIH with perf gun. Shoot lower squeeze holes at 4312' and upper squeeze holes at 4112'.
- TIH with CICR. Set CICR at 4127'. RU cementing company. Sting in and pump 100 sxs 15.8#/gal CI G cement. Sting out and leave 10 sxs (of the 100 sxs) cement on top of CICR. (Top of Sussex @ 4362') TOC at 3995'.
- TIH with casing cutter. Cut 4 1/2" casing @ 2500'. Pull cut casing.
- TIH with tubing to 2576'. RU cementing company. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing. (Stub plug from 2550'-2300') TOC at 2300'.
- TIH with tubing to 1481'. Mix and pump 110 sxs 15.8#/gal CI G cement down tubing. (Pierre coverage from 1460'-1260') TOC tagged at 1244'.
- Pick up with tubing to 740'. Mix and pump 483 sxs 15.8#/gal CI G cement down tubing. Cement circulate to surface.
- Well casing cut and capped per COGCC guidelines at a depth as not to interfere with soil cultivation.

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 Analyst Date: 4/6/2022 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: Jacobson, Eric Date: 8/8/2022

**CONDITIONS OF APPROVAL, IF ANY:**

**Condition of Approval**

<b>COA Type</b>	<b>Description</b>
0 COA	

**Attachment List**

<b>Att Doc Num</b>	<b>Name</b>
403006299	FORM 6 SUBSEQUENT SUBMITTED
403006374	CEMENT BOND LOG
403006375	CEMENT JOB SUMMARY
403006376	OTHER
403006398	OPERATIONS SUMMARY
403006400	WELLBORE DIAGRAM

Total Attach: 6 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
		Stamp Upon Approval

Total: 0 comment(s)