

FORM  
6Rev  
11/20

## State 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:

402893570

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: Serna, Abe

Tel: (720) 661-7317

**COGCC contact:**

Email: abe.serna@state.co.us

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: Date of Measurement: 12/19/2009

Reason for Abandonment: ☐ Dry ☒ Production Sub-economic ☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes ☐ No Estimated Depth: 2500Fish in Hole: ☐ Yes ☒ No If yes, explain details belowWellbore 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			

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 <u>10</u> sks cmt from <u>4126</u> ft. to <u>3995</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>100</u> sks cmt from <u>2550</u> ft. to <u>2300</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>
Set <u>100</u> sks cmt from <u>1460</u> ft. to <u>1260</u> ft.	Plug Type: <u>OPEN HOLE</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"/>

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 258 sacks half in. half out surface casing from 723 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. of \_\_\_\_\_ inch casing Number of Days from Setting Surface Plug to Capping or Sealing the Well: \_\_\_\_\_  
 Surface Plug Setting Date: \_\_\_\_\_ Cut and Cap Date: \_\_\_\_\_

\*Wireline Contractor: \_\_\_\_\_ \*Cementing Contractor: \_\_\_\_\_

Type of Cement and Additives Used: \_\_\_\_\_

Flowline/Pipeline has been abandoned per Rule 1105 ☐ Yes ☐ No

#### Technical Detail/Comments:

Arens 1 (05-123-12825)/Plugging Procedure (Intent)  
 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)

Tubing: 2 3/8" tubing set @ 6520' (4/25/14)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 7472'. Top with 2 sxs 15.8#/gal CI G cement. (Top of J-Sand perms @ 7533')
4. TIH with CIBP. Set BP at 6696'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Niobrara @ 6746')
5. TIH with perf gun. Shoot lower squeeze holes at 4312' and upper squeeze holes at 4112'.
6. TIH with CIBP. 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')
7. TIH with casing cutter. Cut 4 1/2" casing @ 2500'. Pull cut casing.
8. TIH with tubing to 2550'. RU cementing company. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing. (Stub plug from 2550'-2300')
9. Wait a sufficient time to confirm static conditions. If at any time after placing this plug there is evidence of pressure or fluid migration, contact engineering before continuing operations.
10. TIH with tubing to 1460'. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing. (Pierre coverage from 1460'-1260')
11. Pick up with tubing to 723'. Mix and pump 258 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
12. 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 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: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

**COA Type** **Description**

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**Attachment List**

**Att Doc Num** **Name**

402893571	WELLBORE DIAGRAM
402893572	WELLBORE DIAGRAM

Total Attach: 2 Files

**General Comments**

**User Group** **Comment** **Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)