

FORM
6Rev
05/18

State 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:

401054592

Date Received:

09/05/2017

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: _____ Tel: _____

COGCC contact:

Email: _____

API Number 05-001-06185-00

Well Name: ZARLENGO

Well Number: 1

Location: QtrQtr: NESW Section: 4 Township: 1S Range: 67W Meridian: 6

County: ADAMS

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: 39.993274

Longitude: -104.897949

GPS Data:

Date of Measurement: 08/06/2010

PDOP Reading: 2.0

GPS Instrument Operator's Name: Shantell Kling

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 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	8363	8380	04/20/2015	B PLUG CEMENT TOP	8315

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	131	125	131	0	VISU
1ST	7+7/8	4+1/2	10.5	8,424	150	8,424	7,510	CBL
S.C. 1.1				1,990	125	2,130	1,915	CBL
S.C. 1.2				1,150	150	1,155	981	CBL
S.C. 1.3				600	100	635	570	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8272 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 <u>10</u> sks cmt from <u>6987</u> ft. to <u>6858</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>11</u> sks cmt from <u>2131</u> ft. to <u>1990</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>11</u> sks cmt from <u>1119</u> ft. to <u>978</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>10</u> sks cmt from <u>502</u> ft. to <u>374</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>117</u> sks cmt from <u>352</u> ft. to <u>7</u> ft.	Plug Type: <u>STUB PLUG</u>	Plug Tagged: <input type="checkbox"/>

Perforate and squeeze at 7506 ft. with 240 sacks. Leave at least 100 ft. in casing 6987 CICR Depth

Perforate and squeeze at 539 ft. with 50 sacks. Leave at least 100 ft. in casing 502 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: 241 ft. of 4+1/2 inch casing Plugging Date: 03/02/2016

*Wireline Contractor: Magna *Cementing Contractor: Magna

Type of Cement and Additives Used: Class G 15.8 PPG

Flowline/Pipeline has been abandoned per Rule 1105 ☒ Yes ☐ No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Zarlengo #1 (05-011-06185)/Plugging Procedure

Producing formation: J Sand

Existing Perforations: J Sandl 8363'-8380'

TD: 8425' PBTD: 8381'

Surface Casing: 8 5/8" 24# @ 131' w/ 125 sks cmt.

Production Casing: 4 1/2" @ 8424' w/ 525 sks cmt (TOC 573').

Existing CIBP: at 8280' with 2 sxs sand.

Procedure:

1. MIRU pulling unit. PU tubing. TIH with tubing to 8315'. Circulate sand off of CIBP at 8315'.
2. TOOH with tubing. Rig up wireline company. TIH with dump bailer and dump 2 sxs of 15.8#/gal CI G cement on top of CIBP at 8315'.
3. TIH with CIBP. Set CIBP at 8272'. TIH with dump bailer. Spot 2 sxs of 15.8#/gal CI G cement on top of CIBP.
4. Perforate from 7500'-7506' and from 6964'-6972', set CICR @ 6987. Pump 250 SX g 15.8ppg, 240 sx below, 10 sx above CICR
5. Mix and pump 11 sx Class G 15.8ppg from 2131'-1990'
6. Attempt to cut casing @ 539', could not pull casing. Set CICR @ 502', TIH and pump through casing set 60 sx Class G 15.8ppg, 50 sx below 10 sx above CICR
7. TIH with casing cutter. Cut off 4 1/2" casing at 241'. Pull 4 1/2" casing.
8. TIH with tubing to 352'. RU cementers. Mix and pump 117 sxs of 15.8#/gal CI G cement. Cement circulate to surface.
9. 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: 9/5/2017 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: Bouzek, Jared

Date: 9/20/2018

CONDITIONS OF APPROVAL, IF ANY:

<u>COA Type</u>	<u>Description</u>
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Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
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2302970	WELLBORE DIAGRAM
2302971	CEMENT BOND LOG
401054592	FORM 6 SUBSEQUENT SUBMITTED
401054598	WELLBORE DIAGRAM
401054599	CEMENT JOB SUMMARY
401394471	WELLBORE DIAGRAM

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
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Engineer	Received corrected WBD and CBL.	09/20/2018
Engineer	Need copy of CBL. Update WBD to show missing plug @ 1119'.	09/13/2018
Engineer	returning to DRAFT - WBD will not open and requirement (COA) on NOIA was casing/cement in Casing History and WBD accurately reflect wellbore - unchanged from NOIA - also Form 5A acknowledged there were holes in casing as of April 2015 - NOIA from 8/15 indicated no uncemented leaks	06/25/2017

Total: 3 comment(s)