

FORM
6
Rev
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



DE	ET	OE	ES
Document Number: 401763932			
Date Received: 09/14/2018			

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 05-123-11670-00 Well Number: 1-19
 Well Name: GRAZNAK
 Location: QtrQtr: W2SW Section: 19 Township: 3N Range: 64W Meridian: 6
 County: WELD 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: 40.207000 Longitude: -104.599140
 GPS Data:
 Date of Measurement: 09/18/2007 PDOP Reading: 2.5 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: _____
 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
SUSSEX	4392	4446	03/24/2006	CEMENT	4817
NIOBRARA	6808	6824	08/02/2018	B PLUG CEMENT TOP	6758
CODELL	7039	7051	08/02/2018	B PLUG CEMENT TOP	6758
J SAND	7504	7559	07/11/2007	B PLUG CEMENT TOP	7160

Total: 4 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	515	350	515	0	VISU
1ST	7+7/8	4+1/2	11.6	7,650	260	7,650	6,732	CBL
S.C. 1.1				4,690	450	4,690	3,776	CBL
S.C. 1.2				4,446	75	4,446	4,392	CALC

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6758 with 2 sacks cmt on top. CIPB #2: Depth 7160 with 2 sacks cmt on top.
 CIBP #3: Depth _____ with _____ sacks cmt on top. CIPB #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 50 sks cmt from 4817 ft. to 4158 ft. Plug Type: CASING Plug Tagged:
 Set 152 sks cmt from 1826 ft. to 1350 ft. Plug Type: STUB PLUG Plug Tagged:
 Set 308 sks cmt from 800 ft. to 0 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 _____ 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: 1700 ft. of 4+1/2 inch casing Plugging Date: 08/02/2018
 *Wireline Contractor: Cased Hole Solutions *Cementing Contractor: C&J
 Type of Cement and Additives Used: 14.8 type III
 Flowline/Pipeline has been abandoned per Rule 1105 Yes No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Graznak 1-19 (05-123-11670)/Plugging Procedure
 Producing Formation: Sussex: 4392'-4446' Niobrara: 6808'-6824' Codell: 7039'-7051' J-Sand: 7504'-7559'
 Upper Pierre Aquifer: 617'-1556'
 TD: 7651' PBTD: 7134'
 Surface Casing: 8 5/8" 24# @ 515' w/ 350 sxs
 Production Casing: 4 1/2" 11.6# @ 7650' w/ 260 sxs cmt (TOC @ 6732' - CBL). Cement squeeze @ 4690' w/ 400 sxs cmt (TOC @ 3776' - CBL). Cement squeeze over SUSX perms @ 4392'-4446' w/ 75 sxs cmt. CIBP @ 7160' w/ 2 sxs cmt.

Tubing: 2 3/8" tubing set @ 7029' (5/1/2014).

Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6758'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with tubing to 4817'. RU cementing company. Mix and pump 50 sxs 14.8 Type III cement down tubing to 4158. TOOH with tubing.
5. TIH with casing cutter. Cut 4 1/2" casing at 1700'. Pull cut casing.
6. TIH with tubing to 1826'. Mix and pump 255 sxs 14.8 Type III cement down tubing (coverage from 1826'-1350').
7. Pick up tubing to 800'. Mix and pump 308 sxs 14.8 Type III cement down tubing. Cement 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: 9/14/2018 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: Jacobson, Eric Date: 12/31/2018

CONDITIONS OF APPROVAL, IF ANY:

<u>COA Type</u>	<u>Description</u>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401763932	FORM 6 SUBSEQUENT SUBMITTED
401763941	WELLBORE DIAGRAM
401763942	CEMENT JOB SUMMARY

Total Attach: 3 Files

General Comments

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

Total: 0 comment(s)