

Document Number:
 402265918
 Date Received:
 12/17/2019

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: Peterson, Tom Tel: (970) 370-1281
COGCC contact: Email: tom.peterson@state.co.us

API Number 05-123-31887-00 Well Name: Ryland Well Number: 42-20D
 Location: QtrQtr: NWNW Section: 21 Township: 4N Range: 67W 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: 40.302720 Longitude: -104.904750
 GPS Data:
 Date of Measurement: 11/13/2010 PDOP Reading: 1.7 GPS Instrument Operator's Name: STEVE CURE
 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
CODELL	7452	7460	05/30/2019	B PLUG CEMENT TOP	7070
NIOBRARA	7126	7227	05/30/2019	B PLUG CEMENT TOP	7070

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	670	470	670	0	VISU
1ST	7+7/8	4+1/2	11.6	7,594	1,040	7,594	300	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 2500 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 105 sks cmt from 1380 ft. to 0 ft. Plug Type: CASING Plug Tagged:
 Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged:
 Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ 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 210 ft. with 46 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: _____ ft. _____ inch casing Cut and Cap Date: _____
 of _____
 *Wireline Contractor: _____ *Cementing Contractor: _____
 Type of Cement and Additives Used: _____
 Flowline/Pipeline has been abandoned per Rule 1105 Yes No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Ryland 42-20D (05-123-31887)/Plugging Procedure (Intent)
 Producing Formation: Niobrara/Codell: 7126'-7460'
 Upper Pierre Aquifer: 200'-1280'
 TD: 7643' PBTD: 7566' (10/5/2010)
 Surface Casing: 8 5/8" 24# @ 670' w/ 470 sxs
 Production Casing: 4 1/2" 11.6# @ 7594' w/ 1040 sxs cmt (TOC @ 300' - CBL)
 Existing CIBP @ 7070' w/ 2 sxs cmt (5/30/2019)

Tubing: No tubing set.
 Proposed Procedure:
 1. MIRU.
 2. RU wireline company. TIH and tag existing CIBP @ 7070'.
 3. TIH with CIBP. Set BP at 2500'. Top with 2 sxs 15.8#/gal CI G cement.
 4. TIH with perf gun. Shoot squeeze holes @ 210'.
 5. TIH with tubing to 1380'. RU cementing company. Mix and pump 105 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
 6. Close off casing returns. Hook up cement line to cement flange and pump 46 sxs 15.8#/gal CI G cement downhole and squeeze through perforations @ 210' into annular space. Cement should circulate to surface.
 7. 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: 12/17/2019 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 by _____
 JEWELL, STEVE

COGCC Approved: _____

Date: 12/20/2019

CONDITIONS OF APPROVAL, IF ANY: _____

Expiration Date: 6/19/2020

COA Type

Description

	<p>1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) Prior to placing the 1380' plug: verify that all fluid migration (liquid or gas) has been eliminated. If evidence of fluid migration or pressure remains, contact COGCC Engineer for an update to plugging orders. 3) After isolation has been verified, pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours then tag plug – must be at 620' or shallower and provide 10 sx plug at the surface. 4) Leave at least 100' of cement in the wellbore for each plug. 5) Properly abandon flowlines per Rule 1105. File electronic Form 42 once abandonment of on-location flowlines is complete. Within 30 days of an operator completing abandonment requirements for an off-location flowline or crude oil transfer line the operator must submit a Flowline Report, Form 44. 6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed. 7) After placing the shallowest hydrocarbon isolating plug (2500'), operator must wait a sufficient time to confirm static conditions. If at any time after placing this plug there is evidence of pressure or of fluid migration, contact COGCC engineering before continuing operations.</p>
	<p>Operator shall implement measures to control venting, to protect health and safety, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare.</p>
	<p>Prior to starting plugging operations a bradenhead test shall be performed if there has not been a reported bradenhead test within the 60 days immediately preceding the start of plugging operations. 1) If, before opening the bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required. 2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required. The Form 17 shall be submitted within 10 days of the test. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. If samples are collected, copies of all final laboratory analytical results shall be provided to the COGCC within three (3) months of collecting the samples.</p>

Attachment Check List

Att Doc Num

Name

402265918	FORM 6 INTENT SUBMITTED
402265938	WELLBORE DIAGRAM
402265939	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Well file verification not completed prior to approval of NOIA.	12/20/2019
Engineer	Surface Casing Check in the Well File.	12/20/2019
Permit	-Confirmed as-drilled well location. -Production reporting up-to-date. -Confirmed gross productive interval and bridge plug, docnum: 402129654. -Separated formations on zones tab. (Docnum: 2592490) -Reviewed WBDs. -Pass.	12/18/2019

Total: 3 comment(s)