FORM 6 Rev 12/05

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: 400886113

Date Received: 08/18/2015

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, COGCC contact: Name: Gomez, Jason Tel: (970) 573-1277 Email: jason.gomez@state.co.us

API Number 05-123-11537-00

Well Name: CHARLES Well Number: 1

Location: QtrQtr: NESW Section: 14 Township: 6N Range: 66W Meridian: 6

County: WELD Federal, Indian or State Lease Number:

Field Name: BRACEWELL Field Number: 7487

☒ Notice of Intent to Abandon ☐ Subsequent Report of Abandonment

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.486439 Longitude: -104.747349

GPS Data:

Date of Measurement: 01/22/2010 PDOP Reading: 2.1 GPS Instrument Operator's Name: Brandon Lucason

Reason for Abandonment: ☐ Dry ☒ Production for Sub-economic ☐ Mechanical Problems

☐ Other

Casing to be pulled: ☒ Yes ☐ No Estimated Depth: 3555

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	7205	7222			
NIOBRARA	6925	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	315	300	315	0	
1ST	7+7/8	4+1/2	11.6	7,356	155	7,356	6,405	
S.C. 1.1	7+7/8	4+1/2	11.6	4,150	169	4,150	3,655	

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7155 with 2 sacks cmt on top. CIPB #2: Depth 6875 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 36 sks cmt from 4595 ft. to 4100 ft. Plug Type: CASING Plug Tagged: ☐

Set 50 sks cmt from 3605 ft. to 3391 ft. Plug Type: STUB PLUG 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 4650 ft. with 80 sacks. Leave at least 100 ft. in casing 4600 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 279 sacks half in. half out surface casing from 1000 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 Plugging Date: _____

*Wireline Contractor: _____ *Cementing Contractor: _____

Type of Cement and Additives Used: _____

Flowline/Pipeline has been abandoned per Rule 1103 ☐ Yes ☐ No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Proposed Plugging Procedure
Surface Csg: 8-5/8" - 24# - Set @ 315' w/ 300 sxs.
Production Csg: 4-1/2" - 11.6# - Set @ 7,356' w/ 155 sxs.
Production Csg Squeeze: 4-1/2" @ 4,150' w/ 169 sxs.
Original CBL TOC @ 6,405'
Original Volumetric Squeeze TOC @ 3,655'
**Need CBL run for TOC and squeeze BOC confirmations
1) MIRU WO rig.
2) Load well and make sure well is dead.
3) MIRU WL unit.
4) PU CBL tool.
5) RIH and log entire well.
6) Locate current TOC's (If current TOC's/BOC are different, then adjust and contact engineer and state for approval).
7) PU CIBP.
8) RIH w/ CIBP and set @ 7,155'.
9) POOH.
10) RU cmt services.
11) PU dump bailer w/ 2 sxs cmt.
12) RIH w/ bailer and spot cmt on CIBP from 7,154' to 7,127'.
13) POOH w/ bailer.
14) PU CIBP.
15) RIH w/ CIBP and set @ 6,875'.
16) POOH.
17) PU dump bailer w/ 2 sxs cmt.
18) RIH w/ bailer and spot cmt on CIBP from 6,874' to 6,847'.
19) POOH w/ bailer.
20) PU perf gun.
21) RIH and perforate 4.5" production csg from 4,650' to 4,648' (60 deg phase, 12 shots, .42").
22) TOOH and perforate 4.5" production csg from 4,200' to 4,198' (60 deg phase, 12 shots, .42").
23) POOH w/ perf gun.
24) Load well.
25) PU cmt retainer.
26) RIH w/ retainer and set @ 4,600'.
27) Sting into retainer.
28) Displace 80 sxs cmt through retainer (Sussex squeeze - Est. TOC @ 4,250').
29) Sting out of retainer.
30) Spot a 36 sx balance cmt plug on top of retainer from 4,595' to 4,100'.
31) POOH.
32) PU casing cutter tool.
33) RIH w/ cutter and cut 4.5" production csg @ 3,555'.
34) POOH w/ cutter.
35) POOH w/ cut section of csg.
36) RIH and spot a 50 sx balance cmt plug from 3,605' to 3,391' (Stub plug).
37) TOOH and spot a 279 sx balance cmt plug from 1,000' to surface (Surface plug).
38) Top off any remaining volume.
39) RDMO service units.
40) Cut and weld 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: Regulatory TEch Date: 8/18/2015 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: HICKEY, MIKE Date: 9/4/2015

CONDITIONS OF APPROVAL, IF ANY: Expiration Date: 3/3/2016

COA Type	Description
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) For 1000' plug: pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours and tag plug – must be 265' or shallower and provide 10 sx plug at the surface. Leave at least 100' of cement in the wellbore for each plug. 3) Properly abandon flowlines as per Rule 1103. Once flowlines are properly abandoned, file electronic form 42.

Attachment Check List

Att Doc Num	Name
400886113	FORM 6 INTENT SUBMITTED
400886132	WELLBORE DIAGRAM
400886133	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Permit	IN PROCESS - Operator added niobrara perf interval.	9/1/2015 2:43:28 PM
Permit	196408 well completion 07/01/1996 1340220 Completed Interval Report 08/29/2002 ON HOLD - Zones tab is missing perf info for the Niobrara. Contacted operator to correct.	9/1/2015 2:32:07 PM
Public Room	DOCUMENT VERIFICATION COMPLETE 8/19/15	8/19/2015 2:56:27 PM

Total: 3 comment(s)