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401865161

Date Received:
01/09/2019

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: 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: Montoya, John Tel: (970) 397-4124

COGCC contact: Email: john.montoya@state.co.us

API Number 05-123-15980-00

Well Name: BAILEY Well Number: 33-2

Location: QtrQtr: SWNW Section: 33 Township: 5N Range: 64W Meridian: 6

County: WELD Federal, Indian or State Lease Number: 69071

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: 40.357413 Longitude: -104.561784

GPS Data:
Date of Measurement: 12/14/2009 PDOP Reading: 1.8 GPS Instrument Operator's Name: Brandon Lucason

Reason for Abandonment: Dry Production Sub-economic Mechanical Problems
 Other _____

Casing to be pulled: Yes No Estimated Depth: 1600

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	6877	6887	01/29/2015	B PLUG CEMENT TOP	6555
NIOBRARA	6604	6798	01/29/2015	B PLUG CEMENT TOP	6555

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	303	230	303	0	VISU
1ST	7+7/8	3+1/2	9.3	6,992	200	6,992	5,957	CALC

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6555 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 125 sks cmt from 1715 ft. to 1500 ft. Plug Type: STUB PLUG Plug Tagged:
Set 125 sks cmt from 1500 ft. to 1300 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:
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 360 sacks half in. half out surface casing from 530 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. _____ inch casing Plugging 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:

Bailey 33-2 (05-123-15980)/Plugging Procedure (Intent)

Producing Formation: Niobrara/Codell: 6604'-6887'

Upper Pierre Aquifer: 469'-1430'

TD: 7002' PBTD: 6964'

Surface Casing: 8 5/8" 24# @ 303' w/ 230 sxs cmt

Production Casing: 3 1/2" 9.3# @ 6992'-6205', 10.3# @ 6205'-5985', 12.95# @ 5985'-3150', 10.3# @ 3150'-1607', 9.3# @ 1067'-
surface w/ 200 sxs cmt (TOC @ 5957' - Calculated).

Existing CIPB @ 6555' w/ 2 sxs cmt (1/29/2015).

Tubing: No tubing in hole.

Proposed Procedure:

1. Run CBL from 6500'- 4000' to confirm TOC.
2. TIH with casing cutter. Cut 3 1/2" casing at 1600'. Pull cut casing.
3. TIH with tubing to 1715'. RU cementing company. Mix and pump 250 sxs 15.8#/gal CL G cement w/ 2% CaCl down tubing (Pierre coverage from 1715'-1300').
4. Pickup tubing to 530'. Mix and pump 360 sxs 15.8#/gal CL G cement down tubing. Cement should circulate to surface.
5. 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: 1/9/2019 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:

Date: 2/20/2019

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 8/19/2019

COA Type

Description

	<p>Venting Operator shall implement measures to control unnecessary and excessive venting, to protect the health and safety of the public, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare.</p>
	<p>Bradenhead Testing</p> <ul style="list-style-type: none">• Prior to the start of plugging operations, a bradenhead test shall be performed and reported if there has not been a reported bradenhead test within the 60 days immediately preceding the start of plugging operations.• If any of the following conditions exist then sampling of all fluids is required and sampling methods shall comply with Operator Guidance – Bradenhead Testing and Reporting Instructions, Appendix A: Liquid and Gas Sampling as found on the COGCC website, cogcc.state.co.us.<ol style="list-style-type: none">1) The initial pressure measurement on the bradenhead is greater than 25 psi, prior to blowing down any liquid or gas from the bradenhead valve, or2) Pressure remains at the conclusion of the test, or3) Any liquids are present anytime during the test. If so, then stop the test as soon as liquids are present and sample before resuming the test.• Form 17 Bradenhead Test Report shall be submitted within 10 days of the test.• 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. Submit via a Form 43 to upload the laboratory results to the COGCC Environmental Database. Form 43 instructions are on COGCC's website under Regulation => Forms => Form 43 COGCC Environmental Database.

	<p>Plugging</p> <ul style="list-style-type: none"> • Provide 48 hour notice of plugging MIRU via electronic Form 42. • Plugs and squeezes will be placed as stated in the Plugging Procedure section of the approved NOI unless revised by COA or prior approval from COGCC is obtained. • COGCC does not have a CBL on file that demonstrates cement coverage from 6992-5957'. Operator will confirm cement coverage by CBL and submit with Form 6 SRA. If cement coverage is not as represented on the approved NOI, operator will contact COGCC Area Engineer for revised plugging orders prior to proceeding with plugging operations • Tag CIBP at 6555', add 2 sx of cement if tagged deeper than 6535'. • If there is any bradenhead pressure reported on the pre-plugging Form 17, pressure and fluid movement must be controlled before covering the bottom of the Upper Pierre Aquifer. This may be accomplished by pumping the stub plug and then the open hole plug, 1715-1500' and 1500-1300' respectively. Operator must wait 8 hrs to assure that the flow has been stopped before pumping cement above 1500'. Adjust cement volume accordingly. Contact COGCC Area Engineer for revised plugging orders if well is not static at this point, prior to proceeding with plugging operations. • Tag stub plug if circulation is not maintained while pumping and displacing plug to depth. • Check for fluid migration or shut-in pressure on the well prior to pumping any plug (open hole, annular or casing) that isolates deepest aquifer or the surface casing shoe (whichever is deeper). Contact COGCC Area Engineer for revised plugging orders if well is not static at this time prior to continuing with plugging operations. Document well conditions in operations summary attached to the Form 6 SRA. • Tag required if the shoe plug, or combined stub/shoe plug, is not circulated to the surface. Shoe plug shall be placed as specified herein and the top of cement must be a minimum 50' into the shoe, or 50' above the stub (if not cut below the shoe), whichever is shallower. • Place a 50' plug (minimum) at the surface, both inside the inner most casing and in all annular spaces. All other cement plugs, without mechanical isolation, shall have at least 100' of cement left in the casing. Confirm cement to surface in all strings during cut and cap and document in operations summary attached to the Form 6 SRA. • Properly abandon on-location flowlines as per Rule 1105. File electronic Form 42 once abandonment 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. 	
	File updated 5A for bridge plug set in 2015. File updated form 7 reporting.	

Attachment Check List

Att Doc Num	Name
401865161	FORM 6 INTENT SUBMITTED
401865229	WELLBORE DIAGRAM
401865230	WELLBORE DIAGRAM
401865231	GYRO SURVEY

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Engineer	SB Laramie-Fox Hills 4449 4630 117.2 241 60 28.14 NNT Base L-FH + 50' = 241 + 50 = 291' WW + Elev diff + 50' = 330 + 4709 - 4775 + 50 = 314' Logs 11/25/83 Base UPA 1400' 123-11479 Bailey 33-1	02/20/2019
Well File Verification	Pass	01/09/2019
Permit	Returned to draft. According to production reporting, well started producing April 2016. BP must not still be in there. There is no 5A reporting BP.	12/10/2018

Total: 3 comment(s)